SEQUENCE LISTING

<110> CeMM – FORSCHUNGSZENTRUM FÜR MOLEKULARE MEDIZIN GmbH

<120> Mutant calreticulin for the diagnosis of myeloid malignancies

<130> W2495 PCT S3

<150> US 61/909,313
<151> 2013-11-26

<150> EP 13 18 6939.8
<151> 2013-10-01

<150> EP 13 18 4632.1
<151> 2013-09-16

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ggcuggacug aggccuga 138

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35 40 45

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gaggcctgcc tccagggctg gactgaggcc tga 153

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gaggccugcc uccagggcug gacugaggcc uga 153

<210> 20
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<212> PRT
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35 40 45
Glu Ala
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<210> 21
<211> 147
<212> DNA
<213> Homo sapiens

<400> 21
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tgcctccagg gctggactga ggcctga 147

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<400> 22
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aggaggaaga tgaggaggaa gatgtccccg gccaggccaa ggacgagctg tagagaggcc 120

tgcctccagg gctggactga ggcctga 147

<210> 23
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<400> 23
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ugccuccagg gcuggacuga ggccuga 147

<210> 24
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20 25 30
Pro Arg Thr Ser Cys Arg Glu Ala Cys Leu Gln Gly Trp Thr Glu Ala
35 40 45

<210> 25
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<212> DNA

<213> Homo sapiens

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gcctgcctcc agggctggac tgaggcctga 150

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<212> DNA
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acaaggagga agatgaggag gaagatgtcc ccggccaggc caaggacgag ctgtagagag 120

gcctgcctcc agggctggac tgaggcctga 150

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<211> 150
<212> RNA
<213> Homo sapiens

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35 40 45
Ala

<210> 29
<211> 135
<212> DNA
<213> Homo sapiens

<400> 29
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tggactgagg cctga 135

<210> 30
<211> 135
<212> DNA
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tggactgagg cctga 135

<210> 31
<211> 135
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<400> 31
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uggacugagg ccuga 135

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<212> PRT
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<400> 32
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Arg Arg Lys Met Arg Arg Lys Met Ser Pro Ala Arg Pro Arg Thr Ser
20 25 30
Cys Arg Glu Ala Cys Leu Gln Gly Trp Thr Glu Ala
35 40

<210> 33
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<212> DNA
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gcctgcctcc agggctggac tgaggcctga 150

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<400> 34
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gcctgcctcc agggctggac tgaggcctga 150

<210> 35
<211> 150
<212> RNA
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<400> 35
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gccugccucc agggcuggac ugaggccuga 150

<210> 36
<211> 49
<212> PRT
<213> Homo sapiens

<400> 36
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Arg Met Arg Arg Thr Arg Arg Lys Met Arg Arg Lys Met Ser Pro Ala
20 25 30
Arg Pro Arg Thr Ser Cys Arg Glu Ala Cys Leu Gln Gly Trp Thr Glu
35 40 45
Ala

<210> 37
<211> 147
<212> DNA
<213> Homo sapiens

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<400> 38
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tgcctccagg gctggactga ggcctga 147

<210> 39
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ugccuccagg gcuggacuga ggccuga 147

<210> 40
<211> 48
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20 25 30
Pro Arg Thr Ser Cys Arg Glu Ala Cys Leu Gln Gly Trp Thr Glu Ala
35 40 45

<210> 41
<211> 141
<212> DNA
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cagggctgga ctgaggcctg a 141

<210> 42
<211> 141
<212> DNA
<213> Homo sapiens

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aagatgagga ggaagatgtc cccggccagg ccaaggacga gctgtagaga ggcctgcctc 120

cagggctgga ctgaggcctg a 141

<210> 43
<211> 141
<212> RNA
<213> Homo sapiens

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cagggcugga cugaggccug a 141

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<211> 46
<212> PRT
<213> Homo sapiens

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Thr Ser Cys Arg Glu Ala Cys Leu Gln Gly Trp Thr Glu Ala
35 40 45

<210> 45
<211> 153
<212> DNA
<213> Homo sapiens

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gaggcctgcc tccagggctg gactgaggcc tga 153

<210> 46
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<212> DNA
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<400> 46
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aggacaagga ggaagatgag gaggaagatg tccccggcca ggccaaggac gagctgtaga 120

gaggcctgcc tccagggctg gactgaggcc tga 153

<210> 47
<211> 153
<212> RNA
<213> Homo sapiens

<400> 47
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aggacaagga ggaagaugag gaggaagaug uccccggcca ggccaaggac gagcuguaga 120

gaggccugcc uccagggcug gacugaggcc uga 153

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<211> 50
<212> PRT
<213> Homo sapiens

<400> 48
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Arg Arg Met Arg Arg Thr Arg Arg Lys Met Arg Arg Lys Met Ser Pro
20 25 30
Ala Arg Pro Arg Thr Ser Cys Arg Glu Ala Cys Leu Gln Gly Trp Thr
35 40 45
Glu Ala
50

<210> 49
<211> 156
<212> DNA
<213> Homo sapiens

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aggaggacaa ggaggaagat gaggaggaag atgtccccgg ccaggccaag gacgagctgt 120

agagaggcct gcctccaggg ctggactgag gcctga 156

<210> 50
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<212> DNA
<213> Homo sapiens

<400> 50
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aggaggacaa ggaggaagat gaggaggaag atgtccccgg ccaggccaag gacgagctgt 120

agagaggcct gcctccaggg ctggactgag gcctga 156

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<211> 156
<212> RNA
<213> Homo sapiens

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aggaggacaa ggaggaagau gaggaggaag auguccccgg ccaggccaag gacgagcugu 120

agagaggccu gccuccaggg cuggacugag gccuga 156

<210> 52
<211> 51
<212> PRT
<213> Homo sapiens

<400> 52
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Met Arg Arg Met Arg Arg Thr Arg Arg Lys Met Arg Arg Lys Met Ser
20 25 30
Pro Ala Arg Pro Arg Thr Ser Cys Arg Glu Ala Cys Leu Gln Gly Trp
35 40 45
Thr Glu Ala
50

<210> 53
<211> 156
<212> DNA
<213> Homo sapiens

<400> 53
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aggaggacaa ggaggaagat gaggaggaag atgtccccgg ccaggccaag gacgagctgt 120

agagaggcct gcctccaggg ctggactgag gcctga 156

<210> 54
<211> 156
<212> DNA
<213> Homo sapiens

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aggaggacaa ggaggaagat gaggaggaag atgtccccgg ccaggccaag gacgagctgt 120

agagaggcct gcctccaggg ctggactgag gcctga 156

<210> 55
<211> 156
<212> RNA
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agagaggccu gccuccaggg cuggacugag gccuga 156

<210> 56
<211> 51
<212> PRT
<213> Homo sapiens

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            20   25   30
Pro Ala Arg Pro Arg Thr Ser Cys Arg Glu Ala Cys Leu Gln Gly Trp
        35   40   45
Thr Glu Ala
    50

<210> 57
<211> 153
<212> DNA
<213> Homo sapiens

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gaggcctgcc tccagggctg gactgaggcc tga 153

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<211> 153
<212> DNA
<213> Homo sapiens

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aggacaagga ggaagatgag gaggaagatg tccccggcca ggccaaggac gagctgtaga 120

gaggcctgcc tccagggctg gactgaggcc tga 153

<210> 59
<211> 153
<212> RNA
<213> Homo sapiens

<400> 59
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aggacaagga ggaagaugag gaggaagaug uccccggcca ggccaaggac gagcuguaga 120

gaggccugcc uccagggcug gacugaggcc uga 153

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<211> 50
<212> PRT
<213> Homo sapiens

<400> 60
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            20   25   30
Ala Arg Pro Arg Thr Ser Cys Arg Glu Ala Cys Leu Gln Gly Trp Thr
        35   40   45

Glu Ala
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<210> 61
<211> 153
<212> DNA
<213> Homo sapiens

<400> 61
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aggacaagga ggaagatgag gaggaagatg tccccggcca ggccaaggac gagctgtaga 120

gaggcctgcc tccagggctg gactgaggcc tga 153

<210> 62
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<212> DNA
<213> Homo sapiens

<400> 62
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gaggcctgcc tccagggctg gactgaggcc tga 153

<210> 63
<211> 153
<212> RNA
<213> Homo sapiens

<400> 63
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aggacaagga ggaagaugag gaggaagaug uccccggcca ggccaaggac gagcuguaga 120

gaggccugcc uccagggcug gacugaggcc uga 153

<210> 64
<211> 50
<212> PRT
<213> Homo sapiens

<400> 64
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Arg Arg Met Arg Arg Thr Arg Arg Lys Met Arg Arg Lys Met Ser Pro
            20   25   30
Ala Arg Pro Arg Thr Ser Cys Arg Glu Ala Cys Leu Gln Gly Trp Thr
        35   40   45
Glu Ala
    50

<210> 65
<211> 153
<212> DNA
<213> Homo sapiens

<400> 65
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gaggcctgcc tccagggctg gactgaggcc tga 153

<210> 66
<211> 153
<212> DNA
<213> Homo sapiens

<400> 66
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aggacaagga ggaagatgag gaggaagatg tccccggcca ggccaaggac gagctgtaga 120

gaggcctgcc tccagggctg gactgaggcc tga 153

<210> 67
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<212> RNA
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gaggccugcc uccagggcug gacugaggcc uga 153

<210> 68
<211> 50
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<213> Homo sapiens

<400> 68
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Arg Arg Met Arg Arg Thr Arg Arg Lys Met Arg Arg Lys Met Ser Pro
20 25 30
Ala Arg Pro Arg Thr Ser Cys Arg Glu Ala Cys Leu Gln Gly Trp Thr
35 40 45
Glu Ala
50

<210> 69
<211> 150
<212> DNA
<213> Homo sapiens

<400> 69
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gcctgcctcc agggctggac tgaggcctga 150

<210> 70
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<212> DNA
<213> Homo sapiens

<400> 70
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acaaggagga agatgaggag gaagatgtcc ccggccaggc caaggacgag ctgtagagag 120

gcctgcctcc agggctggac tgaggcctga 150

<210> 71
<211> 150
<212> RNA
<213> Homo sapiens

<400> 71
aggaggcagu ggacaaggag gaugaugagg acaaagauga ggaugaggag gaugaggagg 60

acaaggagga agaugaggag gaagaugucc ccggccaggc caaggacgag cuguagagag 120

gccugccucc agggcuggac ugaggccuga 150

<210> 72
<211> 49
<212> PRT
<213> Homo sapiens

<400> 72
Arg Arg Gln Trp Thr Arg Arg Met Met Arg Thr Lys Met Arg Met Arg
1 5 10 15
Arg Met Arg Arg Thr Arg Arg Lys Met Arg Arg Lys Met Ser Pro Ala
20 25 30
Arg Pro Arg Thr Ser Cys Arg Glu Ala Cys Leu Gln Gly Trp Thr Glu
35 40 45
Ala

<210> 73
<211> 147
<212> DNA
<213> Homo sapiens

<400> 73
aggcagagga caaggaggat gatgaggaca aagatgagga tgaggaggat gaggaggaca 60

aggaggaaga tgaggaggaa gatgtccccg gccaggccaa ggacgagctg tagagaggcc 120

tgcctccagg gctggactga ggcctga 147

<210> 74
<211> 147
<212> DNA
<213> Homo sapiens

<400> 74
aggcagagga caaggaggat gatgaggaca aagatgagga tgaggaggat gaggaggaca 60

aggaggaaga tgaggaggaa gatgtccccg gccaggccaa ggacgagctg tagagaggcc 120

tgcctccagg gctggactga ggcctga 147

<210> 75
<211> 147
<212> RNA
<213> Homo sapiens

<400> 75
aggcagagga caaggaggau gaugaggaca aagaugagga ugaggaggau gaggaggaca 60

aggaggaaga ugaggaggaa gauguccccg gccaggccaa ggacgagcug uagagaggcc 120

ugccuccagg gcuggacuga ggccuga 147

<210> 76
<211> 48
<212> PRT
<213> Homo sapiens

<400> 76
Arg Gln Arg Thr Arg Arg Met Met Arg Thr Lys Met Arg Met Arg Arg
1 5 10 15
Met Arg Arg Thr Arg Arg Lys Met Arg Arg Lys Met Ser Pro Ala Arg
20 25 30
Pro Arg Thr Ser Cys Arg Glu Ala Cys Leu Gln Gly Trp Thr Glu Ala
35 40 45

<210> 77
<211> 153
<212> DNA
<213> Homo sapiens

<400> 77
gggaggaggc agaggacaag gaggatgatg aggacaaaga tgaggatgag gaggatgagg 60

aggacaagga ggaagatgag gaggaagatg tccccggcca ggccaaggac gagctgtaga 120

gaggcctgcc tccagggctg gactgaggcc tga 153

<210> 78
<211> 153
<212> DNA
<213> Homo sapiens

<400> 78
gggaggaggc agaggacaag gaggatgatg aggacaaaga tgaggatgag gaggatgagg 60

aggacaagga ggaagatgag gaggaagatg tccccggcca ggccaaggac gagctgtaga 120

gaggcctgcc tccagggctg gactgaggcc tga 153

<210> 79
<211> 153
<212> RNA
<213> Homo sapiens

<400> 79
gggaggaggc agaggacaag gaggaugaug aggacaaaga ugaggaugag gaggaugagg 60

aggacaagga ggaagaugag gaggaagaug uccccggcca ggccaaggac gagcuguaga 120

gaggccugcc uccagggcug gacugaggcc uga 153

<210> 80
<211> 50
<212> PRT
<213> Homo sapiens

<400> 80
Gly Arg Arg Gln Arg Thr Arg Arg Met Met Arg Thr Lys Met Arg Met
1 5 10 15
Arg Arg Met Arg Arg Thr Arg Arg Lys Met Arg Arg Lys Met Ser Pro
20 25 30
Ala Arg Pro Arg Thr Ser Cys Arg Glu Ala Cys Leu Gln Gly Trp Thr
35 40 45
Glu Ala
50

<210> 81
<211> 150
<212> DNA
<213> Homo sapiens

<400> 81
gcgtttaaga ggacaaggag gatgatgagg acaaagatga ggatgaggag gatgaggagg 60

acaaggagga agatgaggag gaagatgtcc ccggccaggc caaggacgag ctgtagagag 120

gcctgcctcc agggctggac tgaggcctga 150

<210> 82
<211> 150
<212> DNA
<213> Homo sapiens

<400> 82
gcgtttaaga ggacaaggag gatgatgagg acaaagatga ggatgaggag gatgaggagg 60

acaaggagga agatgaggag gaagatgtcc ccggccaggc caaggacgag ctgtagagag 120

gcctgcctcc agggctggac tgaggcctga 150

<210> 83
<211> 150
<212> RNA
<213> Homo sapiens

<400> 83
gcguuuaaga ggacaaggag gaugaugagg acaaagauga ggaugaggag gaugaggagg 60

acaaggagga agaugaggag gaagaugucc ccggccaggc caaggacgag cuguagagag 120

gccugccucc agggcuggac ugaggccuga 150

<210> 84
<211> 49
<212> PRT
<213> Homo sapiens

<400> 84
Ala Phe Lys Arg Thr Arg Arg Met Met Arg Thr Lys Met Arg Met Arg
1 5 10 15
Arg Met Arg Arg Thr Arg Arg Lys Met Arg Arg Lys Met Ser Pro Ala
20 25 30
Arg Pro Arg Thr Ser Cys Arg Glu Ala Cys Leu Gln Gly Trp Thr Glu
35 40 45
Ala

<210> 85
<211> 165
<212> DNA
<213> Homo sapiens

<400> 85
aacgcaaaga ggaggaggag gcagaggaca aggaggatga tgaggacaaa gatgaggatg 60

aggaggatga ggaggacaag gaggaagatg aggaggaaga tgtccccggc caggccaagg 120

acgagctgta gagaggcctg cctccagggc tggactgagg cctga 165

<210> 86
<211> 165
<212> DNA
<213> Homo sapiens

<400> 86
aacgcaaaga ggaggaggag gcagaggaca aggaggatga tgaggacaaa gatgaggatg 60

aggaggatga ggaggacaag gaggaagatg aggaggaaga tgtccccggc caggccaagg 120

acgagctgta gagaggcctg cctccagggc tggactgagg cctga 165

<210> 87
<211> 165
<212> RNA
<213> Homo sapiens

<400> 87
aacgcaaaga ggaggaggag gcagaggaca aggaggauga ugaggacaaa gaugaggaug 60

aggaggauga ggaggacaag gaggaagaug aggaggaaga ugucccggc caggccaagg 120

acgagcugua gagaggccug ccuccagggc uggacugagg ccuga 165

<210> 88
<211> 54
<212> PRT
<213> Homo sapiens

<400> 88
Asn Ala Lys Arg Arg Arg Arg Gln Arg Thr Arg Arg Met Met Arg Thr
1 5 10 15
Lys Met Arg Met Arg Arg Met Arg Arg Thr Arg Arg Lys Met Arg Arg
20 25 30
Lys Met Ser Pro Ala Arg Pro Arg Thr Ser Cys Arg Glu Ala Cys Leu
35 40 45
Gln Gly Trp Thr Glu Ala
50

<210> 89
<211> 162
<212> DNA
<213> Homo sapiens

<400> 89
tgcgtgagga ggaggaggca gaggacaagg aggatgatga ggacaaagat gaggatgagg 60

aggatgagga ggacaaggag gaagatgagg aggaagatgt ccccggccag gccaaggacg 120

agctgtagag aggcctgcct ccagggctgg actgaggcct ga 162

<210> 90
<211> 162
<212> DNA
<213> Homo sapiens

<400> 90
tgcgtgagga ggaggaggca gaggacaagg aggatgatga ggacaaagat gaggatgagg 60

aggatgagga ggacaaggag gaagatgagg aggaagatgt ccccggccag gccaaggacg 120

agctgtagag aggcctgcct ccagggctgg actgaggcct ga 162

<210> 91

<211> 162
<212> RNA
<213> Homo sapiens

<400> 91
ugcgugagga ggaggaggca gaggacaagg aggaugauga ggacaaagau gaggaugagg 60

aggaugagga ggacaaggag gaagaugagg aggaagaugu ccccggccag gccaaggacg 120

agcuguagag aggccugccu ccagggcugg acugaggccu ga 162

<210> 92
<211> 53
<212> PRT
<213> Homo sapiens

<400> 92
Cys Val Arg Arg Arg Arg Gln Arg Thr Arg Arg Met Met Arg Thr Lys
1 5 10 15
Met Arg Met Arg Arg Met Arg Arg Thr Arg Arg Lys Met Arg Arg Lys
20 25 30
Met Ser Pro Ala Arg Pro Arg Thr Ser Cys Arg Glu Ala Cys Leu Gln
35 40 45
Gly Trp Thr Glu Ala
50

<210> 93
<211> 150
<212> DNA
<213> Homo sapiens

<400> 93
aggaggcaga ggacaaggag gatgatgagg acaaagatga ggatgaggag gatgaggagg 60

acaaggagga agatgaggag gaagatgtcc ccggccaggc caaggacgag ctgtagagag 120

gcctgcctcc agggctggac tgaggcctga 150

<210> 94
<211> 150
<212> DNA
<213> Homo sapiens

<400> 94
aggaggcaga ggacaaggag gatgatgagg acaaagatga ggatgaggag gatgaggagg 60

acaaggagga agatgaggag gaagatgtcc ccggccaggc caaggacgag ctgtagagag 120

gcctgcctcc agggctggac tgaggcctga 150

<210> 95
<211> 150
<212> RNA
<213> Homo sapiens

<400> 95
aggaggcaga ggacaaggag gaugaugagg acaaagauga ggaugaggag gaugaggagg 60

acaaggagga agaugaggag gaagaugucc ccggccaggc caaggacgag cuguagagag 120

gccugccucc agggcuggac ugaggccuga 150

<210> 96
<211> 49

<212> PRT
<213> Homo sapiens

<400> 96
Arg Arg Gln Arg Thr Arg Arg Met Met Arg Thr Lys Met Arg Met Arg
1 5 10 15
Arg Met Arg Arg Thr Arg Arg Lys Met Arg Arg Lys Met Ser Pro Ala
20 25 30
Arg Pro Arg Thr Ser Cys Arg Glu Ala Cys Leu Gln Gly Trp Thr Glu
35 40 45
Ala

<210> 97
<211> 147
<212> DNA
<213> Homo sapiens

<400> 97
aggcagagga caaggaggat gatgaggaca aagatgagga tgaggaggat gaggaggaca 60

aggaggaaga tgaggaggaa gatgtccccg gccaggccaa ggacgagctg tagagaggcc 120

tgcctccagg gctggactga ggcctga 147

<210> 98
<211> 147
<212> DNA
<213> Homo sapiens

<400> 98
aggcagagga caaggaggat gatgaggaca aagatgagga tgaggaggat gaggaggaca 60

aggaggaaga tgaggaggaa gatgtccccg gccaggccaa ggacgagctg tagagaggcc 120

tgcctccagg gctggactga ggcctga 147

<210> 99
<211> 147
<212> RNA
<213> Homo sapiens

<400> 99
aggcagagga caaggaggau gaugaggaca aagaugagga ugaggaggau gaggaggaca 60

aggaggaaga ugaggaggaa gauguccccg gccaggccaa ggacgagcug uagagaggcc 120

ugccuccagg gcuggacuga ggccuga 147

<210> 100
<211> 48
<212> PRT
<213> Homo sapiens

<400> 100
Arg Gln Arg Thr Arg Arg Met Met Arg Thr Lys Met Arg Met Arg Arg
1 5 10 15
Met Arg Arg Thr Arg Arg Lys Met Arg Arg Lys Met Ser Pro Ala Arg
20 25 30
Pro Arg Thr Ser Cys Arg Glu Ala Cys Leu Gln Gly Trp Thr Glu Ala
35 40 45

<210> 101

<211> 165
<212> DNA
<213> Homo sapiens

<400> 101
aacgcaaaga ggaggaggag gcagaggaca aggaggatga tgaggacaaa gatgaggatg 60

aggaggatga ggaggacaag gaggaagatg aggaggaaga tgtccccggc caggccaagg 120

acgagctgta gagaggcctg cctccagggc tggactgagg cctga 165

<210> 102
<211> 165
<212> DNA
<213> Homo sapiens

<400> 102
aacgcaaaga ggaggaggag gcagaggaca aggaggatga tgaggacaaa gatgaggatg 60

aggaggatga ggaggacaag gaggaagatg aggaggaaga tgtccccggc caggccaagg 120

acgagctgta gagaggcctg cctccagggc tggactgagg cctga 165

<210> 103
<211> 165
<212> RNA
<213> Homo sapiens

<400> 103
aacgcaaaga ggaggaggag gcagaggaca aggaggauga ugaggacaaa gaugaggaug 60

aggaggauga ggaggacaag gaggaagaug aggaggaaga ugucccggc caggccaagg 120

acgagcugua gagaggccug ccuccagggc uggacugagg ccuga 165

<210> 104
<211> 54
<212> PRT
<213> Homo sapiens

<400> 104
Asn Ala Lys Arg Arg Arg Arg Gln Arg Thr Arg Arg Met Met Arg Thr
1 5 10 15
Lys Met Arg Met Arg Arg Met Arg Arg Thr Arg Arg Lys Met Arg Arg
20 25 30
Lys Met Ser Pro Ala Arg Pro Arg Thr Ser Cys Arg Glu Ala Cys Leu
35 40 45
Gln Gly Trp Thr Glu Ala
50

<210> 105
<211> 168
<212> DNA
<213> Homo sapiens

<400> 105
tgtttcgcaa agaggaggag gaggcagagg acaaggagga tgatgaggac aaagatgagg 60

atgaggagga tgaggaggac aaggaggaag atgaggagga agatgtcccc ggccaggcca 120

aggacgagct gtagagaggc ctgcctccag ggctggactg aggcctga 168

<210> 106
<211> 168

<212> DNA
<213> Homo sapiens

<400> 106
tgtttcgcaa agaggaggag gaggcagagg acaaggagga tgatgaggac aaagatgagg 60

atgaggagga tgaggaggac aaggaggaag atgaggagga agatgtcccc ggccaggcca 120

aggacgagct gtagagaggc ctgcctccag ggctggactg aggcctga 168

<210> 107
<211> 168
<212> RNA
<213> Homo sapiens

<400> 107
uguuucgcaa agaggaggag gaggcagagg acaaggagga ugaugaggac aaagaugagg 60

augaggagga ugaggaggac aaggaggaag augaggagga agaugucccc ggccaggcca 120

aggacgagcu guagagaggc cugccuccag ggcuggacug aggccuga 168

<210> 108
<211> 55
<212> PRT
<213> Homo sapiens

<400> 108
Cys Phe Ala Lys Arg Arg Arg Arg Gln Arg Thr Arg Arg Met Met Arg
1 5 10 15
Thr Lys Met Arg Met Arg Arg Met Arg Arg Thr Arg Arg Lys Met Arg
20 25 30
Arg Lys Met Ser Pro Ala Arg Pro Arg Thr Ser Cys Arg Glu Ala Cys
35 40 45
Leu Gln Gly Trp Thr Glu Ala
50 55

<210> 109
<211> 135
<212> DNA
<213> Homo sapiens

<400> 109
aggaggatga tgaggacaaa gatgaggatg aggaggatga ggaggacaag gaggaagatg 60

aggaggaaga tgtccccggc caggccaagg acgagctgta gagaggcctg cctccagggc 120

tggactgagg cctga 135

<210> 110
<211> 135
<212> DNA
<213> Homo sapiens

<400> 110
aggaggatga tgaggacaaa gatgaggatg aggaggatga ggaggacaag gaggaagatg 60

aggaggaaga tgtccccggc caggccaagg acgagctgta gagaggcctg cctccagggc 120

tggactgagg cctga 135

<210> 111
<211> 135
<212> RNA

<213> Homo sapiens

<400> 111
aggaggauga ugaggacaaa gaugaggaug aggaggauga ggaggacaag gaggaagaug 60

aggaggaaga ugucccggc caggccaagg acgagcugua gagaggccug ccuccagggc 120

uggacugagg ccuga 135

<210> 112
<211> 44
<212> PRT
<213> Homo sapiens

<400> 112
Arg Arg Met Met Arg Thr Lys Met Arg Met Arg Arg Met Arg Arg Thr
1 5 10 15
Arg Arg Lys Met Arg Arg Lys Met Ser Pro Ala Arg Pro Arg Thr Ser
20 25 30
Cys Arg Glu Ala Cys Leu Gln Gly Trp Thr Glu Ala
35 40

<210> 113
<211> 150
<212> DNA
<213> Homo sapiens

<400> 113
cctcctcttt gtctaaggag gatgatgagg acaaagatga ggatgaggag gatgaggagg 60

acaaggagga agatgaggag gaagatgtcc ccggccaggc caaggacgag ctgtagagag 120

gcctgcctcc agggctggac tgaggcctga 150

<210> 114
<211> 150
<212> DNA
<213> Homo sapiens

<400> 114
cctcctcttt gtctaaggag gatgatgagg acaaagatga ggatgaggag gatgaggagg 60

acaaggagga agatgaggag gaagatgtcc ccggccaggc caaggacgag ctgtagagag 120

gcctgcctcc agggctggac tgaggcctga 150

<210> 115
<211> 150
<212> RNA
<213> Homo sapiens

<400> 115
ccuccucuuu gucuaaggag gaugaugagg acaaagauga ggaugaggag gaugaggagg 60

acaaggagga agaugaggag gaagaugucc ccggccaggc caaggacgag cuguagagag 120

gccugccucc agggcuggac ugaggccuga 150

<210> 116
<211> 49
<212> PRT
<213> Homo sapiens

<400> 116

Pro Pro Leu Cys Leu Arg Arg Met Met Arg Thr Lys Met Arg Met Arg
1 5 10 15
Arg Met Arg Arg Thr Arg Arg Lys Met Arg Arg Lys Met Ser Pro Ala
20 25 30
Arg Pro Arg Thr Ser Cys Arg Glu Ala Cys Leu Gln Gly Trp Thr Glu
35 40 45
Ala

<210> 117
<211> 147
<212> DNA
<213> Homo sapiens

<400> 117
gaccatcctt gtcggaggat gatgaggaca aagatgagga tgaggaggat gaggaggaca 60

aggaggaaga tgaggaggaa gatgtccccg gccaggccaa ggacgagctg tagagaggcc 120

tgcctccagg gctggactga ggcctga 147

<210> 118
<211> 147
<212> DNA
<213> Homo sapiens

<400> 118
gaccatcctt gtcggaggat gatgaggaca aagatgagga tgaggaggat gaggaggaca 60

aggaggaaga tgaggaggaa gatgtccccg gccaggccaa ggacgagctg tagagaggcc 120

tgcctccagg gctggactga ggcctga 147

<210> 119
<211> 147
<212> RNA
<213> Homo sapiens

<400> 119
gaccauccuu gucggaggau gaugaggaca aagaugagga ugaggaggau gaggaggaca 60

aggaggaaga ugaggaggaa gauguccccg gccaggccaa ggacgagcug uagagaggcc 120

ugccuccagg gcuggacuga ggccuga 147

<210> 120
<211> 48
<212> PRT
<213> Homo sapiens

<400> 120
Asp His Pro Cys Arg Arg Met Met Arg Thr Lys Met Arg Met Arg Arg
1 5 10 15
Met Arg Arg Thr Arg Arg Lys Met Arg Arg Lys Met Ser Pro Ala Arg
20 25 30
Pro Arg Thr Ser Cys Arg Glu Ala Cys Leu Gln Gly Trp Thr Glu Ala
35 40 45

<210> 121
<211> 144
<212> DNA
<213> Homo sapiens

<400> 121
ggcaattgtc ggaggatgat gaggacaaag atgaggatga ggaggatgag gaggacaagg 60

aggaagatga ggaggaagat gtccccggcc aggccaagga cgagctgtag agaggcctgc 120

ctccagggct ggactgaggc ctga 144

<210> 122
<211> 144
<212> DNA
<213> Homo sapiens

<400> 122
ggcaattgtc ggaggatgat gaggacaaag atgaggatga ggaggatgag gaggacaagg 60

aggaagatga ggaggaagat gtccccggcc aggccaagga cgagctgtag agaggcctgc 120

ctccagggct ggactgaggc ctga 144

<210> 123
<211> 144
<212> RNA
<213> Homo sapiens

<400> 123
ggcaauuguc ggaggaugau gaggacaaag augaggauga ggaggaugag gaggacaagg 60

aggaagauga ggaggaagau gucccggcc aggccaagga cgagcuguag agaggccugc 120

cuccagggcu ggacugaggc cuga 144

<210> 124
<211> 47
<212> PRT
<213> Homo sapiens

<400> 124
Gly Asn Cys Arg Arg Met Met Arg Thr Lys Met Arg Met Arg Arg Met
1 5 10 15
Arg Arg Thr Arg Arg Lys Met Arg Arg Lys Met Ser Pro Ala Arg Pro
20 25 30
Arg Thr Ser Cys Arg Glu Ala Cys Leu Gln Gly Trp Thr Glu Ala
35 40 45

<210> 125
<211> 138
<212> DNA
<213> Homo sapiens

<400> 125
tgtcggagga tgatgaggac aaagatgagg atgaggagga tgaggaggac aaggaggaag 60

atgaggagga agatgtcccc ggccaggcca aggacgagct gtagagaggc ctgcctccag 120

ggctggactg aggcctga 138

<210> 126
<211> 138
<212> DNA
<213> Homo sapiens

<400> 126
tgtcggagga tgatgaggac aaagatgagg atgaggagga tgaggaggac aaggaggaag 60

atgaggagga agatgtcccc ggccaggcca aggacgagct gtagagaggc ctgcctccag 120

ggctggactg aggcctga 138

<210> 127
<211> 138
<212> RNA
<213> Homo sapiens

<400> 127
ugucggagga ugaugaggac aaagaugagg augaggagga ugaggaggac aaggaggaag 60

augaggagga agaugucccc ggccaggcca aggacgagcu guagagaggc cugccuccag 120

ggcuggacug aggccuga 138

<210> 128
<211> 45
<212> PRT
<213> Homo sapiens

<400> 128
Cys Arg Arg Met Met Arg Thr Lys Met Arg Met Arg Arg Met Arg Arg
1 5 10 15
Thr Arg Arg Lys Met Arg Arg Lys Met Ser Pro Ala Arg Pro Arg Thr
20 25 30
Ser Cys Arg Glu Ala Cys Leu Gln Gly Trp Thr Glu Ala
35 40 45

<210> 129
<211> 138
<212> DNA
<213> Homo sapiens

<400> 129
tgtcggagga tgatgaggac aaagatgagg atgaggagga tgaggaggac aaggaggaag 60

atgaggagga agatgtcccc ggccaggcca aggacgagct gtagagaggc ctgcctccag 120

ggctggactg aggcctga 138

<210> 130
<211> 138
<212> DNA
<213> Homo sapiens

<400> 130
tgtcggagga tgatgaggac aaagatgagg atgaggagga tgaggaggac aaggaggaag 60

atgaggagga agatgtcccc ggccaggcca aggacgagct gtagagaggc ctgcctccag 120

ggctggactg aggcctga 138

<210> 131
<211> 138
<212> RNA
<213> Homo sapiens

<400> 131
ugucggagga ugaugaggac aaagaugagg augaggagga ugaggaggac aaggaggaag 60

augaggagga agaugucccc ggccaggcca aggacgagcu guagagaggc cugccuccag 120

ggcuggacug aggccuga 138

<210> 132
<211> 45
<212> PRT
<213> Homo sapiens

<400> 132
Cys Arg Arg Met Met Arg Thr Lys Met Arg Met Arg Arg Met Arg Arg
1   5   10   15
Thr Arg Arg Lys Met Arg Arg Lys Met Ser Pro Ala Arg Pro Arg Thr
            20   25   30
Ser Cys Arg Glu Ala Cys Leu Gln Gly Trp Thr Glu Ala
        35   40   45

<210> 133
<211> 141
<212> DNA
<213> Homo sapiens

<400> 133
acttgtcgga ggatgatgag gacaaagatg aggatgagga ggatgaggag gacaaggagg 60

aagatgagga ggaagatgtc cccggccagg ccaaggacga gctgtagaga ggcctgcctc 120

cagggctgga ctgaggcctg a 141

<210> 134
<211> 141
<212> DNA
<213> Homo sapiens

<400> 134
acttgtcgga ggatgatgag gacaaagatg aggatgagga ggatgaggag gacaaggagg 60

aagatgagga ggaagatgtc cccggccagg ccaaggacga gctgtagaga ggcctgcctc 120

cagggctgga ctgaggcctg a 141

<210> 135
<211> 141
<212> RNA
<213> Homo sapiens

<400> 135
acuugucgga ggaugaugag gacaaagaug aggaugagga ggaugaggag gacaaggagg 60

aagaugagga ggaagauguc cccggccagg ccaaggacga gcuguagaga ggccugccuc 120

cagggcugga cugaggccug a 141

<210> 136
<211> 46
<212> PRT
<213> Homo sapiens

<400> 136
Thr Cys Arg Arg Met Met Arg Thr Lys Met Arg Met Arg Arg Met Arg
1   5   10   15
Arg Thr Arg Arg Lys Met Arg Arg Lys Met Ser Pro Ala Arg Pro Arg
            20   25   30
Thr Ser Cys Arg Glu Ala Cys Leu Gln Gly Trp Thr Glu Ala
        35   40   45

<210> 137

<211> 141
<212> DNA
<213> Homo sapiens

<400> 137
atttgtcgga ggatgatgag gacaaagatg aggatgagga ggatgaggag gacaaggagg 60

aagatgagga ggaagatgtc cccggccagg ccaaggacga gctgtagaga ggcctgcctc 120

cagggctgga ctgaggcctg a 141

<210> 138
<211> 141
<212> DNA
<213> Homo sapiens

<400> 138
atttgtcgga ggatgatgag gacaaagatg aggatgagga ggatgaggag gacaaggagg 60

aagatgagga ggaagatgtc cccggccagg ccaaggacga gctgtagaga ggcctgcctc 120

cagggctgga ctgaggcctg a 141

<210> 139
<211> 141
<212> RNA
<213> Homo sapiens

<400> 139
auuugucgga ggaugaugag gacaaagaug aggaugagga ggaugaggag gacaaggagg 60

aagaugagga ggaagauguc cccggccagg ccaaggacga gcuguagaga ggccugccuc 120

cagggcugga cugaggccug a 141

<210> 140
<211> 46
<212> PRT
<213> Homo sapiens

<400> 140
Ile Cys Arg Arg Met Met Arg Thr Lys Met Arg Met Arg Arg Met Arg
1 5 10 15
Arg Thr Arg Arg Lys Met Arg Arg Lys Met Ser Pro Ala Arg Pro Arg
20 25 30
Thr Ser Cys Arg Glu Ala Cys Leu Gln Gly Trp Thr Glu Ala
35 40 45

<210> 141
<211> 138
<212> DNA
<213> Homo sapiens

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Ser Gly Ser Leu Glu Asp Asp Trp Asp Phe Leu Pro Pro Lys Lys Ile
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Met Asp Gly Glu Trp Glu Pro Pro Val Ile Gln Asn Pro Glu Tyr Lys
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Gly Glu Trp Lys Pro Arg Gln Ile Asp Asn Pro Asp Tyr Lys Gly Thr
        275                 280                 285
Trp Ile His Pro Glu Ile Asp Asn Pro Glu Tyr Ser Pro Asp Pro Ser
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Ile Tyr Ala Tyr Asp Asn Phe Gly Val Leu Gly Leu Asp Leu Trp Gln
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Val Lys Ser Gly Thr Ile Phe Asp Asn Phe Leu Ile Thr Asn Asp Glu
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Gly Glu Trp Lys Pro Arg Gln Ile Asp Asn Pro Asp Tyr Lys Gly Thr
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Trp Ile His Pro Glu Ile Asp Asn Pro Glu Tyr Ser Pro Asp Pro Ser
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Gly Leu Gln Thr Ser Gln Asp Ala Arg Phe Tyr Ala Leu Ser Ala Ser
65                  70                  75                  80
Phe Glu Pro Phe Ser Asn Lys Gly Gln Thr Leu Val Val Gln Phe Thr
                85                  90                  95
Val Lys His Glu Gln Asn Ile Asp Cys Gly Gly Gly Tyr Val Lys Leu
            100                 105                 110
Phe Pro Asn Ser Leu Asp Gln Thr Asp Met His Gly Asp Ser Glu Tyr
        115                 120                 125
Asn Ile Met Phe Gly Pro Asp Ile Cys Gly Pro Gly Thr Lys Lys Val
    130                 135                 140
His Val Ile Phe Asn Tyr Lys Gly Lys Asn Val Leu Ile Asn Lys Asp
145                 150                 155                 160
Ile Arg Cys Lys Asp Asp Glu Phe Thr His Leu Tyr Thr Leu Ile Val
                165                 170                 175
Arg Pro Asp Asn Thr Tyr Glu Val Lys Ile Asp Asn Ser Gln Val Glu
            180                 185                 190
Ser Gly Ser Leu Glu Asp Asp Trp Asp Phe Leu Pro Pro Lys Lys Ile
        195                 200                 205
Lys Asp Pro Asp Ala Ser Lys Pro Glu Asp Trp Asp Glu Arg Ala Lys
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Ile Asp Asp Pro Thr Asp Ser Lys Pro Glu Asp Trp Asp Lys Pro Glu
225                 230                 235                 240
His Ile Pro Asp Pro Asp Ala Lys Lys Pro Glu Asp Trp Asp Glu Glu
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Met Asp Gly Glu Trp Glu Pro Pro Val Ile Gln Asn Pro Glu Tyr Lys
            260                 265                 270
Gly Glu Trp Lys Pro Arg Gln Ile Asp Asn Pro Asp Tyr Lys Gly Thr
        275                 280                 285
Trp Ile His Pro Glu Ile Asp Asn Pro Glu Tyr Ser Pro Asp Pro Ser
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Ile Tyr Ala Tyr Asp Asn Phe Gly Val Leu Gly Leu Asp Leu Trp Gln
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Gly Leu Gln Thr Ser Gln Asp Ala Arg Phe Tyr Ala Leu Ser Ala Ser
65                  70                  75                  80
Phe Glu Pro Phe Ser Asn Lys Gly Gln Thr Leu Val Val Gln Phe Thr
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            100                 105                 110
Phe Pro Asn Ser Leu Asp Gln Thr Asp Met His Gly Asp Ser Glu Tyr
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Asn Ile Met Phe Gly Pro Asp Ile Cys Gly Pro Gly Thr Lys Lys Val
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Ser Gly Ser Leu Glu Asp Asp Trp Asp Phe Leu Pro Pro Lys Lys Ile
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Lys Asp Pro Asp Ala Ser Lys Pro Glu Asp Trp Asp Glu Arg Ala Lys
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Ile Asp Asp Pro Thr Asp Ser Lys Pro Glu Asp Trp Asp Lys Pro Glu
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His Ile Pro Asp Pro Asp Ala Lys Lys Pro Glu Asp Trp Asp Glu Glu
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Met Asp Gly Glu Trp Glu Pro Pro Val Ile Gln Asn Pro Glu Tyr Lys
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Gly Glu Trp Lys Pro Arg Gln Ile Asp Asn Pro Asp Tyr Lys Gly Thr
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Trp Ile His Pro Glu Ile Asp Asn Pro Glu Tyr Ser Pro Asp Pro Ser
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Ile Tyr Ala Tyr Asp Asn Phe Gly Val Leu Gly Leu Asp Leu Trp Gln
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Val Lys Ser Gly Thr Ile Phe Asp Asn Phe Leu Ile Thr Asn Asp Glu
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Ala Tyr Ala Glu Glu Phe Gly Asn Glu Thr Trp Gly Val Thr Lys Ala
            340                 345                 350
Ala Glu Lys Gln Met Lys Asp Lys Gln Asp Glu Glu Gln Arg Leu Lys
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Arg Arg Gln Arg Thr Arg Arg Met Met Arg Thr Lys Met Arg Met Arg
    370                 375                 380
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<212> DNA
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Ser Gly Ser Leu Glu Asp Asp Trp Asp Phe Leu Pro Pro Lys Lys Ile
        195                 200                 205
Lys Asp Pro Asp Ala Ser Lys Pro Glu Asp Trp Asp Glu Arg Ala Lys
    210                 215                 220
Ile Asp Asp Pro Thr Asp Ser Lys Pro Glu Asp Trp Asp Lys Pro Glu
225                 230                 235                 240
His Ile Pro Asp Pro Asp Ala Lys Lys Pro Glu Asp Trp Asp Glu Glu
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Met Asp Gly Glu Trp Glu Pro Pro Val Ile Gln Asn Pro Glu Tyr Lys
            260                 265                 270
Gly Glu Trp Lys Pro Arg Gln Ile Asp Asn Pro Asp Tyr Lys Gly Thr
        275                 280                 285
Trp Ile His Pro Glu Ile Asp Asn Pro Glu Tyr Ser Pro Asp Pro Ser
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Ile Tyr Ala Tyr Asp Asn Phe Gly Val Leu Gly Leu Asp Leu Trp Gln
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Val Lys Ser Gly Thr Ile Phe Asp Asn Phe Leu Ile Thr Asn Asp Glu
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Phe Val Leu Ser Ser Gly Lys Phe Tyr Gly Asp Glu Glu Lys Asp Lys
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Gly Leu Gln Thr Ser Gln Asp Ala Arg Phe Tyr Ala Leu Ser Ala Ser
65                  70                  75                  80
Phe Glu Pro Phe Ser Asn Lys Gly Gln Thr Leu Val Val Gln Phe Thr
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Val Lys His Glu Gln Asn Ile Asp Cys Gly Gly Gly Tyr Val Lys Leu
            100                 105                 110
Phe Pro Asn Ser Leu Asp Gln Thr Asp Met His Gly Asp Ser Glu Tyr
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Asn Ile Met Phe Gly Pro Asp Ile Cys Gly Pro Gly Thr Lys Lys Val
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His Val Ile Phe Asn Tyr Lys Gly Lys Asn Val Leu Ile Asn Lys Asp
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Ile Asp Asp Pro Thr Asp Ser Lys Pro Glu Asp Trp Asp Lys Pro Glu
225                 230                 235                 240
His Ile Pro Asp Pro Asp Ala Lys Lys Pro Glu Asp Trp Asp Glu Glu
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Met Asp Gly Glu Trp Glu Pro Pro Val Ile Gln Asn Pro Glu Tyr Lys
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Gly Glu Trp Lys Pro Arg Gln Ile Asp Asn Pro Asp Tyr Lys Gly Thr
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Ile Tyr Ala Tyr Asp Asn Phe Gly Val Leu Gly Leu Asp Leu Trp Gln
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Val Lys Ser Gly Thr Ile Phe Asp Asn Phe Leu Ile Thr Asn Asp Glu
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His Val Ile Phe Asn Tyr Lys Gly Lys Asn Val Leu Ile Asn Lys Asp
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Ile Arg Cys Lys Asp Asp Glu Phe Thr His Leu Tyr Thr Leu Ile Val
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Gly Glu Trp Lys Pro Arg Gln Ile Asp Asn Pro Asp Tyr Lys Gly Thr
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Asn Ile Met Phe Gly Pro Asp Ile Cys Gly Pro Gly Thr Lys Lys Val
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His Val Ile Phe Asn Tyr Lys Gly Lys Asn Val Leu Ile Asn Lys Asp
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Arg Pro Asp Asn Thr Tyr Glu Val Lys Ile Asp Asn Ser Gln Val Glu
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50 55 60
Gly Leu Gln Thr Ser Gln Asp Ala Arg Phe Tyr Ala Leu Ser Ala Ser
65 70 75 80
Phe Glu Pro Phe Ser Asn Lys Gly Gln Thr Leu Val Val Gln Phe Thr
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115 120 125
Asn Ile Met Phe Gly Pro Asp Ile Cys Gly Pro Gly Thr Lys Lys Val
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225                 230                 235                 240
His Ile Pro Asp Pro Asp Ala Lys Lys Pro Glu Asp Trp Asp Glu Glu
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Gly Glu Trp Lys Pro Arg Gln Ile Asp Asn Pro Asp Tyr Lys Gly Thr
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Trp Ile His Pro Glu Ile Asp Asn Pro Glu Tyr Ser Pro Asp Pro Ser
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Ile Tyr Ala Tyr Asp Asn Phe Gly Val Leu Gly Leu Asp Leu Trp Gln
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Val Lys Ser Gly Thr Ile Phe Asp Asn Phe Leu Ile Thr Asn Asp Glu
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Ala Tyr Ala Glu Glu Phe Gly Asn Glu Thr Trp Gly Val Thr Lys Ala
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Glu Glu Glu Glu Ala Phe Lys Arg Thr Arg Arg Met Met Arg Thr Lys
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Ile Asp Asp Pro Thr Asp Ser Lys Pro Glu Asp Trp Asp Lys Pro Glu
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His Ile Pro Asp Pro Asp Ala Lys Lys Pro Glu Asp Trp Asp Glu Glu
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Gly Leu Gln Thr Ser Gln Asp Ala Arg Phe Tyr Ala Leu Ser Ala Ser
65                  70                  75                  80
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Val Lys His Glu Gln Asn Ile Asp Cys Gly Gly Gly Tyr Val Lys Leu
            100                 105                 110
Phe Pro Asn Ser Leu Asp Gln Thr Asp Met His Gly Asp Ser Glu Tyr
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Ser Gly Ser Leu Glu Asp Asp Trp Asp Phe Leu Pro Pro Lys Lys Ile
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Lys Cys Arg Arg Met Met Arg Thr Lys Met Arg Met Arg Arg Met Arg
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gacatgcacg gagactcaga atacaacatc atgtttggtc ccgacatctg tggccctggc 420

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gaggcagagg acaagtgtcg gaggatgatg aggacaaaga tgaggatgag gaggatgagg 1200

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<212> RNA
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aaacacaagu cagauuuugg caaauucguu cucaguuccg gcaaguucua cggugacgag 180

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accuaugagg ugaagauuga caacagccag guggaguccg gcuccuugga agacgauugg 600

gacuuccugc cacccaagaa gauaaaggau ccugaugcuu caaaaccgga agacugggau 660

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<212> PRT
<213> Homo sapiens

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35 40 45
Phe Val Leu Ser Ser Gly Lys Phe Tyr Gly Asp Glu Glu Lys Asp Lys
50 55 60
Gly Leu Gln Thr Ser Gln Asp Ala Arg Phe Tyr Ala Leu Ser Ala Ser
65 70 75 80
Phe Glu Pro Phe Ser Asn Lys Gly Gln Thr Leu Val Val Gln Phe Thr
85 90 95
Val Lys His Glu Gln Asn Ile Asp Cys Gly Gly Gly Tyr Val Lys Leu
100 105 110
Phe Pro Asn Ser Leu Asp Gln Thr Asp Met His Gly Asp Ser Glu Tyr
115 120 125

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Asn Ile Met Phe Gly Pro Asp Ile Cys Gly Pro Gly Thr Lys Lys Val
    130                 135                 140
His Val Ile Phe Asn Tyr Lys Gly Lys Asn Val Leu Ile Asn Lys Asp
145                 150                 155                 160
Ile Arg Cys Lys Asp Asp Glu Phe Thr His Leu Tyr Thr Leu Ile Val
                165                 170                 175
Arg Pro Asp Asn Thr Tyr Glu Val Lys Ile Asp Asn Ser Gln Val Glu
            180                 185                 190
Ser Gly Ser Leu Glu Asp Asp Trp Asp Phe Leu Pro Pro Lys Lys Ile
        195                 200                 205
Lys Asp Pro Asp Ala Ser Lys Pro Glu Asp Trp Asp Glu Arg Ala Lys
    210                 215                 220
Ile Asp Asp Pro Thr Asp Ser Lys Pro Glu Asp Trp Asp Lys Pro Glu
225                 230                 235                 240
His Ile Pro Asp Pro Asp Ala Lys Lys Pro Glu Asp Trp Asp Glu Glu
                245                 250                 255
Met Asp Gly Glu Trp Glu Pro Pro Val Ile Gln Asn Pro Glu Tyr Lys
            260                 265                 270
Gly Glu Trp Lys Pro Arg Gln Ile Asp Asn Pro Asp Tyr Lys Gly Thr
        275                 280                 285
Trp Ile His Pro Glu Ile Asp Asn Pro Glu Tyr Ser Pro Asp Pro Ser
    290                 295                 300
Ile Tyr Ala Tyr Asp Asn Phe Gly Val Leu Gly Leu Asp Leu Trp Gln
305                 310                 315                 320
Val Lys Ser Gly Thr Ile Phe Asp Asn Phe Leu Ile Thr Asn Asp Glu
                325                 330                 335
Ala Tyr Ala Glu Glu Phe Gly Asn Glu Thr Trp Gly Val Thr Lys Ala
            340                 345                 350
Ala Glu Lys Gln Met Lys Asp Lys Gln Asp Glu Glu Gln Arg Leu Lys
        355                 360                 365
Glu Glu Glu Glu Asp Lys Lys Arg Lys Glu Glu Glu Glu Ala Glu Asp
    370                 375                 380
Lys Cys Arg Arg Met Met Arg Thr Lys Met Arg Met Arg Arg Met Arg
385                 390                 395                 400
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<210> 289
<211> 5891
<212> DNA
<213> Homo sapiens

<400> 289

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gagtgtcggg gatctccttt cctgtcccca gcagcttgtg gctctcggca gatgtttggt      480

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<211> 417
<212> PRT
<213> Homo sapiens

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

Arg Pro Asp Asn Thr Tyr Glu Val Lys Ile Asp Asn Ser Gln Val Glu
180 185 190
Ser Gly Ser Leu Glu Asp Asp Trp Asp Phe Leu Pro Pro Lys Lys Ile
195 200 205
Lys Asp Pro Asp Ala Ser Lys Pro Glu Asp Trp Asp Glu Arg Ala Lys
210 215 220
Ile Asp Asp Pro Thr Asp Ser Lys Pro Glu Asp Trp Asp Lys Pro Glu
225 230 235 240
His Ile Pro Asp Pro Asp Ala Lys Lys Pro Glu Asp Trp Asp Glu Glu
245 250 255
Met Asp Gly Glu Trp Glu Pro Pro Val Ile Gln Asn Pro Glu Tyr Lys
260 265 270
Gly Glu Trp Lys Pro Arg Gln Ile Asp Asn Pro Asp Tyr Lys Gly Thr
275 280 285
Trp Ile His Pro Glu Ile Asp Asn Pro Glu Tyr Ser Pro Asp Pro Ser
290 295 300
Ile Tyr Ala Tyr Asp Asn Phe Gly Val Leu Gly Leu Asp Leu Trp Gln
305 310 315 320
Val Lys Ser Gly Thr Ile Phe Asp Asn Phe Leu Ile Thr Asn Asp Glu
325 330 335
Ala Tyr Ala Glu Glu Phe Gly Asn Glu Thr Trp Gly Val Thr Lys Ala
340 345 350
Ala Glu Lys Gln Met Lys Asp Lys Gln Asp Glu Glu Gln Arg Leu Lys
355 360 365
Glu Glu Glu Glu Asp Lys Lys Arg Lys Glu Glu Glu Glu Ala Glu Asp
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385 390 395 400
Lys Glu Glu Asp Glu Glu Glu Asp Val Pro Gly Gln Ala Lys Asp Glu
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Leu

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<211> 726
<212> DNA
<213> Homo sapiens

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tccccggcca ggccaaggac gagctgtaga gaggcctgcc tccagggctg gactgaggcc 180

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<212> DNA
<213> Homo sapiens

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tccccggcca ggccaaggac gagctgtaga gaggcctgcc tccagggctg gactgaggcc 180

tga 183

<210> 293
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<212> RNA
<213> Homo sapiens

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uccccggcca ggccaaggac gagcuguaga gaggccugcc uccagggcug gacugaggcc 180

uga 183

<210> 294
<211> 60
<212> PRT
<213> Homo sapiens

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35 40 45
Cys Arg Glu Ala Cys Leu Gln Gly Trp Thr Glu Ala
50 55 60

<210> 295
<211> 783
<212> DNA
<213> Homo sapiens

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acaaagatga ggatgaggag gatgaggagg acaaggagga agatgaggag gaagatgtcc 180

ccggccaggc caaggacgag ctgtagagag gcctgcctcc agggctggac tgaggcctga 240

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<212> DNA
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gaagacaaga aacgcaaaga ggaggaggag gcagaggaca attgtcggag gatgatgagg 120

acaaagatga ggatgaggag gatgaggagg acaaggagga agatgaggag gaagatgtcc 180

ccggccaggc caaggacgag ctgtagagag gcctgcctcc agggctggac tgaggcctga 240

<210> 297
<211> 240
<212> RNA
<213> Homo sapiens

<400> 297
gcagcagaga aacaaaugaa ggacaaacag gacgaggagc agaggcuuaa ggaggaggaa 60

gaagacaaga aacgcaaaga ggaggaggag gcagaggaca auugucggag gaugaugagg 120

acaaagauga ggaugaggag gaugaggagg acaaggagga agaugaggag gaagaugucc 180

ccggccaggc caaggacgag cuguagagag gccugccucc agggcuggac ugaggccuga 240

<210> 298
<211> 79
<212> PRT
<213> Homo sapiens

<400> 298
Ala Ala Glu Lys Gln Met Lys Asp Lys Gln Asp Glu Glu Gln Arg Leu
1 5 10 15
Lys Glu Glu Glu Glu Asp Lys Lys Arg Lys Glu Glu Glu Glu Ala Glu
20 25 30
Asp Asn Cys Arg Arg Met Met Arg Thr Lys Met Arg Met Arg Arg Met
35 40 45
Arg Arg Thr Arg Arg Lys Met Arg Arg Lys Met Ser Pro Ala Arg Pro
50 55 60
Arg Thr Ser Cys Arg Glu Ala Cys Leu Gln Gly Trp Thr Glu Ala
65 70 75

<210> 299
<211> 732
<212> DNA
<213> Homo sapiens

<400> 299
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcagag gacaaggagg 60

atgatgagga caaagatgag gatgaggagg atgaggagga caaggaggaa gatgaggagg 120

aagatgtccc cggccaggcc aaggacgagc tgtagagagg cctgcctcca gggctggact 180

gaggcctgag cgctcctgcc gcagagctgg ccgcgccaaa taatgtctct gtgagactcg 240

agaactttca ttttttcca ggctggttcg gatttggggt ggattttggt tttgttcccc 300

tcctccactc tcccccaccc cctccccgcc ctttttttt ttttttttta aactggtatt 360

ttatctttga ttctccttca gccctcaccc ctggttctca tctttcttga tcaacatctt 420

ttcttgcctc tgtccccttc tctcatctct tagctcccct ccaacctggg gggcagtggt 480

gtggagaagc cacaggcctg agatttcatc tgctctcctt cctggagccc agaggagggc 540

agcagaaggg ggtggtgtct ccaacccccc agcactgagg aagaacgggg ctcttctcat 600

ttcacccctc cctttctccc ctgcccccag gactgggcca cttctgggtg gggcagtggg 660

tcccagattg gctcacactg agaatgtaag aactacaaac aaaatttcta ttaaattaaa 720

ttttgtgtct cc 732

<210> 300
<211> 189
<212> DNA
<213> Homo sapiens

<400> 300
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcagag gacaaggagg 60

atgatgagga caaagatgag gatgaggagg atgaggagga caaggaggaa gatgaggagg 120

aagatgtccc cggccaggcc aaggacgagc tgtagagagg cctgcctcca gggctggact 180

gaggcctga 189

<210> 301
<211> 189
<212> RNA
<213> Homo sapiens

<400> 301
gcagcagaga aacaaaugaa ggacaaacag gacgaggagc agaggcagag gacaaggagg 60

augaugagga caaagaugag gaugaggagg augaggagga caaggaggaa gaugaggagg 120

aagauguccc cggccaggcc aaggacgagc uguagagagg ccugccucca gggcuggacu 180

gaggccuga 189

<210> 302
<211> 62
<212> PRT
<213> Homo sapiens

<400> 302
Ala Ala Glu Lys Gln Met Lys Asp Lys Gln Asp Glu Glu Gln Arg Gln
1 5 10 15
Arg Thr Arg Arg Met Met Arg Thr Lys Met Arg Met Arg Arg Met Arg
20 25 30
Arg Thr Arg Arg Lys Met Arg Arg Lys Met Ser Pro Ala Arg Pro Arg
35 40 45
Thr Ser Cys Arg Glu Ala Cys Leu Gln Gly Trp Thr Glu Ala
50 55 60

<210> 303

<211> 744
<212> DNA
<213> Homo sapiens

<400> 303
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttag gaggaggcag 60

aggacaagga ggatgatgag gacaaagatg aggatgagga ggatgaggag gacaaggagg 120

aagatgagga ggaagatgtc cccggccagg ccaaggacga gctgtagaga ggcctgcctc 180

cagggctgga ctgaggcctg agcgctcctg ccgcagagct ggccgcgcca aataatgtct 240

ctgtgagact cgagaacttt catttttttc caggctggtt cggatttggg gtggattttg 300

gttttgttcc cctcctccac tctcccccac cccctccccg ccctttttt ttttttttt 360

taaactggta ttttatcttt gattctcctt cagccctcac ccctggttct catctttctt 420

gatcaacatc ttttcttgcc tctgtcccct tctctcatct cttagctccc ctccaacctg 480

gggggcagtg gtgtggagaa gccacaggcc tgagatttca tctgctctcc ttcctggagc 540

ccagaggagg gcagcagaag ggggtggtgt ctccaacccc ccagcactga ggaagaacgg 600

ggctcttctc atttcacccc tccctttctc ccctgccccc aggactgggc cacttctggg 660

tggggcagtg ggtcccagat tggctcacac tgagaatgta agaactacaa acaaaatttc 720

tattaaatta aattttgtgt ctcc 744

<210> 304
<211> 201
<212> DNA
<213> Homo sapiens

<400> 304
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttag gaggaggcag 60

aggacaagga ggatgatgag gacaaagatg aggatgagga ggatgaggag gacaaggagg 120

aagatgagga ggaagatgtc cccggccagg ccaaggacga gctgtagaga ggcctgcctc 180

cagggctgga ctgaggcctg a 201

<210> 305
<211> 201
<212> RNA
<213> Homo sapiens

<400> 305
gcagcagaga aacaaaugaa ggacaaacag gacgaggagc agaggcuuag gaggaggcag 60

aggacaagga ggaugaugag gacaaagaug aggaugagga ggaugaggag gacaaggagg 120

aagaugagga ggaagauguc cccggccagg ccaaggacga gcuguagaga ggccugccuc 180

cagggcugga cugaggccug a 201

<210> 306
<211> 66
<212> PRT
<213> Homo sapiens

<400> 306

Ala Ala Glu Lys Gln Met Lys Asp Lys Gln Asp Glu Glu Gln Arg Leu
1 5 10 15
Arg Arg Arg Gln Arg Thr Arg Arg Met Met Arg Thr Lys Met Arg Met
20 25 30
Arg Arg Met Arg Arg Thr Arg Arg Lys Met Arg Arg Lys Met Ser Pro
35 40 45
Ala Arg Pro Arg Thr Ser Cys Arg Glu Ala Cys Leu Gln Gly Trp Thr
50 55 60
Glu Ala
65

<210> 307
<211> 726
<212> DNA
<213> Homo sapiens

<400> 307
gcagcagaga aacaaatgaa ggacaaacag gacgaggggc agaggacaag gaggatgatg 60

aggacaaaga tgaggatgag gaggatgagg aggacaagga ggaagatgag gaggaagatg 120

tccccggcca ggccaaggac gagctgtaga gaggcctgcc tccagggctg gactgaggcc 180

tgagcgctcc tgccgcagag ctggccgcgc caaataatgt ctctgtgaga ctcgagaact 240

ttcatttttt tccaggctgg ttcggatttg gggtggattt tggttttgtt cccctcctcc 300

actctccccc acccccctccc cgccctttttt ttttttttt tttaaactgg tattttatct 360

ttgattctcc ttcagccctc acccctggtt ctcatctttc ttgatcaaca tcttttcttg 420

cctctgtccc cttctctcat ctcttagctc ccctccaacc tgggggggcag tggtgtggag 480

aagccacagg cctgagattt catctgctct ccttcctgga gcccagagga gggcagcaga 540

aggggtggt gtctccaacc ccccagcact gaggaagaac ggggctcttc tcatttcacc 600

cctccctttc tcccctgccc ccaggactgg gccacttctg ggtggggcag tgggtcccag 660

attggctcac actgagaatg taagaactac aaacaaaatt tctattaaat taaattttgt 720

gtctcc 726

<210> 308
<211> 183
<212> DNA
<213> Homo sapiens

<400> 308
gcagcagaga aacaaatgaa ggacaaacag gacgaggggc agaggacaag gaggatgatg 60

aggacaaaga tgaggatgag gaggatgagg aggacaagga ggaagatgag gaggaagatg 120

tccccggcca ggccaaggac gagctgtaga gaggcctgcc tccagggctg gactgaggcc 180

tga 183

<210> 309
<211> 183
<212> RNA
<213> Homo sapiens

<400> 309
gcagcagaga aacaaaugaa ggacaaacag gacgaggggc agaggacaag gaggaugaug 60

aggacaaaga ugaggaugag gaggaugagg aggacaagga ggaagaugag gaggaagaug 120

ucccggcca ggccaaggac gagcuguaga gaggccugcc uccagggcug gacugaggcc 180

uga 183

<210> 310
<211> 60
<212> PRT
<213> Homo sapiens

<400> 310
Ala Ala Glu Lys Gln Met Lys Asp Lys Gln Asp Glu Gly Gln Arg Thr
1 5 10 15
Arg Arg Met Met Arg Thr Lys Met Arg Met Arg Arg Met Arg Arg Thr
20 25 30
Arg Arg Lys Met Arg Arg Lys Met Ser Pro Ala Arg Pro Arg Thr Ser
35 40 45
Cys Arg Glu Ala Cys Leu Gln Gly Trp Thr Glu Ala
50 55 60

<210> 311
<211> 732
<212> DNA
<213> Homo sapiens

<400> 311
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc ggaggcagag gacaaggagg 60

atgatgagga caaagatgag gatgaggagg atgaggagga caaggaggaa gatgaggagg 120

aagatgtccc cggccaggcc aaggacgagc tgtagagagg cctgcctcca gggctggact 180

gaggcctgag cgctcctgcc gcagagctgg ccgcgccaaa taatgtctct gtgagactcg 240

agaactttca ttttttcca ggctggttcg gatttggggt ggattttggt tttgttcccc 300

tcctccactc tcccccaccc cctccccgcc ctttttttt ttttttttta aactggtatt 360

ttatctttga ttctccttca gccctcaccc ctggttctca tctttcttga tcaacatctt 420

ttcttgcctc tgtccccttc tctcatctct tagctcccct ccaacctggg gggcagtggt 480

gtggagaagc cacaggcctg agatttcatc tgctctcctt cctggagccc agaggagggc 540

agcagaaggg ggtggtgtct ccaacccccc agcactgagg aagaacgggg ctcttctcat 600

ttcacccctc cctttctccc ctgcccccag gactgggcca cttctgggtg gggcagtggg 660

tcccagattg gctcacactg agaatgtaag aactacaaac aaaatttcta ttaaattaaa 720

ttttgtgtct cc 732

<210> 312
<211> 189
<212> DNA
<213> Homo sapiens

<400> 312
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc ggaggcagag gacaaggagg 60

atgatgagga caaagatgag gatgaggagg atgaggagga caaggaggaa gatgaggagg 120

aagatgtccc cggccaggcc aaggacgagc tgtagagagg cctgcctcca gggctggact 180

gaggcctga 189

<210> 313
<211> 189
<212> RNA
<213> Homo sapiens

<400> 313
gcagcagaga aacaaaugaa ggacaaacag gacgaggagc ggaggcagag gacaaggagg 60

augaugagga caaagaugag gaugaggagg augaggagga caaggaggaa gaugaggagg 120

aagauguccc cggccaggcc aaggacgagc uguagagagg ccugccucca gggcuggacu 180

gaggccuga 189

<210> 314
<211> 62
<212> PRT
<213> Homo sapiens

<400> 314
Ala Ala Glu Lys Gln Met Lys Asp Lys Gln Asp Glu Glu Arg Arg Gln
1 5 10 15
Arg Thr Arg Arg Met Met Arg Thr Lys Met Arg Met Arg Arg Met Arg
20 25 30
Arg Thr Arg Arg Lys Met Arg Arg Lys Met Ser Pro Ala Arg Pro Arg
35 40 45
Thr Ser Cys Arg Glu Ala Cys Leu Gln Gly Trp Thr Glu Ala
50 55 60

<210> 315
<211> 726
<212> DNA
<213> Homo sapiens

<400> 315
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttag gaggatgatg 60

aggacaaaga tgaggatgag gaggatgagg aggacaagga ggaagatgag gaggaagatg 120

tccccggcca ggccaaggac gagctgtaga gaggcctgcc tccagggctg gactgaggcc 180

tgagcgctcc tgccgcagag ctggccgcgc caaataatgt ctctgtgaga ctcgagaact 240

ttcatttttt tccaggctgg ttcggatttg gggtggattt tggttttgtt cccctcctcc 300

actctccccc acccccctccc cgccctttttt ttttttttt tttaaactgg tattttatct 360

ttgattctcc ttcagccctc acccctggtt ctcatctttc ttgatcaaca tcttttcttg 420

cctctgtccc cttctctcat ctcttagctc ccctccaacc tgggggggcag tggtgtggag 480

aagccacagg cctgagattt catctgctct ccttcctgga gcccagagga gggcagcaga 540

agggggtggt gtctccaacc ccccagcact gaggaagaac ggggctcttc tcatttcacc 600

cctccctttc tcccctgccc ccaggactgg gccacttctg ggtggggcag tgggtcccag 660

attggctcac actgagaatg taagaactac aaacaaaatt tctattaaat taaattttgt 720

gtctcc 726

<210> 316
<211> 183
<212> DNA
<213> Homo sapiens

<400> 316
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttag gaggatgatg 60

aggacaaaga tgaggatgag gaggatgagg aggacaagga ggaagatgag gaggaagatg 120

tccccggcca ggccaaggac gagctgtaga gaggcctgcc tccagggctg gactgaggcc 180

tga 183

<210> 317
<211> 183
<212> RNA
<213> Homo sapiens

<400> 317
gcagcagaga aacaaaugaa ggacaaacag gacgaggagc agaggcuuag gaggaugaug 60

aggacaaaga ugaggaugag gaggaugagg aggacaagga ggaagaugag gaggaagaug 120

uccccggcca ggccaaggac gagcuguaga gaggccugcc uccagggcug gacugaggcc 180

uga 183

<210> 318
<211> 60
<212> PRT
<213> Homo sapiens

<400> 318
Ala Ala Glu Lys Gln Met Lys Asp Lys Gln Asp Glu Glu Gln Arg Leu
1 5 10 15
Arg Arg Met Met Arg Thr Lys Met Arg Met Arg Arg Met Arg Arg Thr
20 25 30
Arg Arg Lys Met Arg Arg Lys Met Ser Pro Ala Arg Pro Arg Thr Ser
35 40 45
Cys Arg Glu Ala Cys Leu Gln Gly Trp Thr Glu Ala
50 55 60

<210> 319
<211> 744
<212> DNA
<213> Homo sapiens

<400> 319
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttaa gaggaggcag 60

aggacaagga ggatgatgag gacaaagatg aggatgagga ggatgaggag gacaaggagg 120

aagatgagga ggaagatgtc cccggccagg ccaaggacga gctgtagaga ggcctgcctc 180

cagggctgga ctgaggcctg agcgctcctg ccgcagagct ggccgcgcca aataatgtct 240

ctgtgagact cgagaacttt catttttttc caggctggtt cggatttggg gtggattttg 300

gttttgttcc cctcctccac tctcccccac cccctccccg ccctttttt ttttttttt 360

taaactggta ttttatcttt gattctcctt cagccctcac ccctggttct catctttctt 420

gatcaacatc ttttcttgcc tctgtcccct tctctcatct cttagctccc ctccaacctg 480

gggggcagtg gtgtggagaa gccacaggcc tgagatttca tctgctctcc ttcctggagc 540

ccagaggagg gcagcagaag ggggtggtgt ctccaacccc ccagcactga ggaagaacgg 600

ggctcttctc atttcacccc tccctttctc ccctgccccc aggactgggc cacttctggg 660

tggggcagtg ggtcccagat tggctcacac tgagaatgta agaactacaa acaaaatttc 720

tattaaatta aattttgtgt ctcc 744

<210> 320
<211> 201
<212> DNA
<213> Homo sapiens

<400> 320
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttaa gaggaggcag 60

aggacaagga ggatgatgag gacaaagatg aggatgagga ggatgaggag gacaaggagg 120

aagatgagga ggaagatgtc cccggccagg ccaaggacga gctgtagaga ggcctgcctc 180

cagggctgga ctgaggcctg a 201

<210> 321
<211> 201
<212> RNA
<213> Homo sapiens

<400> 321
gcagcagaga aacaaaugaa ggacaaacag gacgaggagc agaggcuuaa gaggaggcag 60

aggacaagga ggaugaugag gacaaagaug aggaugagga ggaugaggag gacaaggagg 120

aagaugagga ggaagauguc cccggccagg ccaaggacga gcuguagaga ggccugccuc 180

cagggcugga cugaggccug a 201

<210> 322
<211> 66
<212> PRT
<213> Homo sapiens

<400> 322
Ala Ala Glu Lys Gln Met Lys Asp Lys Gln Asp Glu Glu Gln Arg Leu
1 5 10 15
Lys Arg Arg Gln Arg Thr Arg Arg Met Met Arg Thr Lys Met Arg Met
20 25 30
Arg Arg Met Arg Arg Thr Arg Arg Lys Met Arg Arg Lys Met Ser Pro
35 40 45
Ala Arg Pro Arg Thr Ser Cys Arg Glu Ala Cys Leu Gln Gly Trp Thr
50 55 60
Glu Ala
65

<210> 323
<211> 777
<212> DNA
<213> Homo sapiens

<400> 323
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttaa ggaggaggaa 60

gaagacaaga aacgcaaaga ggaggagagg cagaggacaa ggaggatgat gaggacaaag 120

atgaggatga ggaggatgag gaggacaagg aggaagatga ggaggaagat gtccccggcc 180

aggccaagga cgagctgtag agaggcctgc ctccagggct ggactgaggc ctgagcgctc 240

ctgccgcaga gctggccgcg ccaaataatg tctctgtgag actcgagaac tttcattttt 300

ttccaggctg gttcggattt ggggtggatt ttggttttgt tcccctcctc cactctcccc 360

caccccctcc ccgccctttt ttttttttt ttttaaactg gtattttatc tttgattctc 420

cttcagccct cacccctggt tctcatcttt cttgatcaac atcttttctt gcctctgtcc 480

ccttctctca tctcttagct cccctccaac ctgggggca gtggtgtgga gaagccacag 540

gcctgagatt tcatctgctc tccttcctgg agcccagagg agggcagcag aaggggtgg 600

tgtctccaac cccccagcac tgaggaagaa cggggctctt ctcatttcac ccctcccttt 660

ctcccctgcc cccaggactg ggccacttct gggtggggca gtgggtccca gattggctca 720

cactgagaat gtaagaacta caaacaaaat ttctattaaa ttaaattttg tgtctcc 777

<210> 324
<211> 234
<212> DNA
<213> Homo sapiens

<400> 324
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttaa ggaggaggaa 60

gaagacaaga aacgcaaaga ggaggagagg cagaggacaa ggaggatgat gaggacaaag 120

atgaggatga ggaggatgag gaggacaagg aggaagatga ggaggaagat gtccccggcc 180

aggccaagga cgagctgtag agaggcctgc ctccagggct ggactgaggc ctga 234

<210> 325
<211> 234
<212> RNA
<213> Homo sapiens

<400> 325
gcagcagaga aacaaaugaa ggacaaacag gacgaggagc agaggcuuaa ggaggaggaa 60

gaagacaaga aacgcaaaga ggaggagagg cagaggacaa ggaggaugau gaggacaaag 120

augaggauga ggaggaugag gaggacaagg aggaagauga ggaggaagau gucccggcc 180

aggccaagga cgagcuguag agaggccugc cuccagggcu ggacugaggc cuga 234

<210> 326
<211> 77
<212> PRT
<213> Homo sapiens

<400> 326
Ala Ala Glu Lys Gln Met Lys Asp Lys Gln Asp Glu Glu Gln Arg Leu
1 5 10 15
Lys Glu Glu Glu Glu Asp Lys Lys Arg Lys Glu Glu Glu Arg Gln Arg
20 25 30
Thr Arg Arg Met Met Arg Thr Lys Met Arg Met Arg Arg Met Arg Arg
35 40 45
Thr Arg Arg Lys Met Arg Arg Lys Met Ser Pro Ala Arg Pro Arg Thr
50 55 60
Ser Cys Arg Glu Ala Cys Leu Gln Gly Trp Thr Glu Ala
65 70 75

<210> 327
<211> 783
<212> DNA

<213> Homo sapiens

<400> 327
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttaa ggaggaggaa 60

gaagacaaga aacgcaaaga ggaggaggag gcagaggaca tgtgtcggag gatgatgagg 120

acaaagatga ggatgaggag gatgaggagg acaaggagga agatgaggag gaagatgtcc 180

ccggccaggc caaggacgag ctgtagagag gcctgcctcc agggctggac tgaggcctga 240

gcgctcctgc cgcagagctg gccgcgccaa ataatgtctc tgtgagactc gagaactttc 300

atttttttcc aggctggttc ggatttgggg tggattttgg ttttgttccc ctcctccact 360

ctcccccacc ccctccccgc cctttttttt ttttttttt aaactggtat tttatctttg 420

attctccttc agccctcacc cctggttctc atctttcttg atcaacatct tttcttgcct 480

ctgtcccctt ctctcatctc ttagctcccc tccaacctgg ggggcagtgg tgtggagaag 540

ccacaggcct gagatttcat ctgctctcct tcctggagcc cagaggaggg cagcagaagg 600

gggtggtgtc tccaaccccc cagcactgag gaagaacggg gctcttctca tttcacccct 660

ccctttctcc cctgccccca ggactgggcc acttctgggt ggggcagtgg gtcccagatt 720

ggctcacact gagaatgtaa gaactacaaa caaaatttct attaaattaa attttgtgtc 780

tcc 783

<210> 328
<211> 240
<212> DNA
<213> Homo sapiens

<400> 328
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttaa ggaggaggaa 60

gaagacaaga aacgcaaaga ggaggaggag gcagaggaca tgtgtcggag gatgatgagg 120

acaaagatga ggatgaggag gatgaggagg acaaggagga agatgaggag gaagatgtcc 180

ccggccaggc caaggacgag ctgtagagag gcctgcctcc agggctggac tgaggcctga 240

<210> 329
<211> 240
<212> RNA
<213> Homo sapiens

<400> 329
gcagcagaga aacaaaugaa ggacaaacag gacgaggagc agaggcuuaa ggaggaggaa 60

gaagacaaga aacgcaaaga ggaggaggag gcagaggaca ugugucggag gaugaugagg 120

acaaagauga ggaugaggag gaugaggagg acaaggagga agaugaggag gaagaugucc 180

ccggccaggc caaggacgag cuguagagag gccugccucc agggcuggac ugaggccuga 240

<210> 330
<211> 79
<212> PRT
<213> Homo sapiens

<400> 330

Ala Ala Glu Lys Gln Met Lys Asp Lys Gln Asp Glu Glu Gln Arg Leu
1 5 10 15
Lys Glu Glu Glu Glu Asp Lys Lys Arg Lys Glu Glu Glu Glu Ala Glu
20 25 30
Asp Met Cys Arg Arg Met Met Arg Thr Lys Met Arg Met Arg Arg Met
35 40 45
Arg Arg Thr Arg Arg Lys Met Arg Arg Lys Met Ser Pro Ala Arg Pro
50 55 60
Arg Thr Ser Cys Arg Glu Ala Cys Leu Gln Gly Trp Thr Glu Ala
65 70 75

<210> 331
<211> 732
<212> DNA
<213> Homo sapiens

<400> 331
gcagcagaga aacaaatgaa ggacaaacag gacgaggacc agaggcagag gacaaggagg 60

atgatgagga caaagatgag gatgaggagg atgaggagga caaggaggaa gatgaggagg 120

aagatgtccc cggccaggcc aaggacgagc tgtagagagg cctgcctcca gggctggact 180

gaggcctgag cgctcctgcc gcagagctgg ccgcgccaaa taatgtctct gtgagactcg 240

agaactttca ttttttcca ggctggttcg gatttggggt ggattttggt tttgttcccc 300

tcctccactc tcccccaccc cctccccgcc ctttttttt ttttttttta aactggtatt 360

ttatctttga ttctccttca gccctcaccc ctggttctca tctttcttga tcaacatctt 420

ttcttgcctc tgtccccttc tctcatctct tagctcccct ccaacctggg gggcagtggt 480

gtggagaagc cacaggcctg agatttcatc tgctctcctt cctggagccc agaggagggc 540

agcagaaggg ggtggtgtct ccaaccccc agcactgagg aagaacgggg ctcttctcat 600

ttcacccctc cctttctccc ctgcccccag gactgggcca cttctgggtg gggcagtggg 660

tcccagattg gctcacactg agaatgtaag aactacaaac aaaatttcta ttaaattaaa 720

ttttgtgtct cc 732

<210> 332
<211> 189
<212> DNA
<213> Homo sapiens

<400> 332
gcagcagaga aacaaatgaa ggacaaacag gacgaggacc agaggcagag gacaaggagg 60

atgatgagga caaagatgag gatgaggagg atgaggagga caaggaggaa gatgaggagg 120

aagatgtccc cggccaggcc aaggacgagc tgtagagagg cctgcctcca gggctggact 180

gaggcctga 189

<210> 333
<211> 189
<212> RNA
<213> Homo sapiens

<400> 333
gcagcagaga aacaaaugaa ggacaaacag gacgaggacc agaggcagag gacaaggagg 60

augaugagga caaagaugag gaugaggagg augaggagga caaggaggaa gaugaggagg 120

aagauguccc cggccaggcc aaggacgagc uguagagagg ccugccucca gggcuggacu 180

gaggccuga 189

<210> 334
<211> 62
<212> PRT
<213> Homo sapiens

<400> 334
Ala Ala Glu Lys Gln Met Lys Asp Lys Gln Asp Glu Asp Gln Arg Gln
1 5 10 15
Arg Thr Arg Arg Met Met Arg Thr Lys Met Arg Met Arg Arg Met Arg
20 25 30
Arg Thr Arg Arg Lys Met Arg Arg Lys Met Ser Pro Ala Arg Pro Arg
35 40 45
Thr Ser Cys Arg Glu Ala Cys Leu Gln Gly Trp Thr Glu Ala
50 55 60

<210> 335
<211> 744
<212> DNA
<213> Homo sapiens

<400> 335
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggaggag gaggaggcag 60

aggacaagga ggatgatgag gacaaagatg aggatgagga ggatgaggag gacaaggagg 120

aagatgagga ggaagatgtc cccggccagg ccaaggacga gctgtagaga ggcctgcctc 180

cagggctgga ctgaggcctg agcgctcctg ccgcagagct ggccgcgcca aataatgtct 240

ctgtgagact cgagaacttt catttttttc caggctggtt cggatttggg gtggattttg 300

gttttgttcc cctcctccac tctcccccac cccctccccg ccctttttt ttttttttt 360

taaactggta ttttatcttt gattctcctt cagccctcac ccctggttct catctttctt 420

gatcaacatc ttttcttgcc tctgtcccct tctctcatct cttagctccc ctccaacctg 480

gggggcagtg gtgtggagaa gccacaggcc tgagatttca tctgctctcc ttcctggagc 540

ccagaggagg gcagcagaag ggggtggtgt ctccaacccc ccagcactga ggaagaacgg 600

ggctcttctc atttcacccc tccctttctc ccctgccccc aggactgggc cacttctggg 660

tggggcagtg ggtcccagat tggctcacac tgagaatgta agaactacaa acaaaatttc 720

tattaaatta aattttgtgt ctcc 744

<210> 336
<211> 201
<212> DNA
<213> Homo sapiens

<400> 336
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggaggag gaggaggcag 60

aggacaagga ggatgatgag gacaaagatg aggatgagga ggatgaggag gacaaggagg 120

aagatgagga ggaagatgtc cccggccagg ccaaggacga gctgtagaga ggcctgcctc 180

cagggctgga ctgaggcctg a 201

<210> 337
<211> 201
<212> RNA
<213> Homo sapiens

<400> 337
gcagcagaga aacaaaugaa ggacaaacag gacgaggagc agaggaggag gaggaggcag 60

aggacaagga ggaugaugag gacaaagaug aggaugagga ggaugaggag gacaaggagg 120

aagaugagga ggaagauguc cccggccagg ccaaggacga gcuguagaga ggccugccuc 180

cagggcugga cugaggccug a 201

<210> 338
<211> 66
<212> PRT
<213> Homo sapiens

<400> 338
Ala Ala Glu Lys Gln Met Lys Asp Lys Gln Asp Glu Glu Gln Arg Arg
1 5 10 15
Arg Arg Arg Gln Arg Thr Arg Arg Met Met Arg Thr Lys Met Arg Met
20 25 30
Arg Arg Met Arg Arg Thr Arg Arg Lys Met Arg Arg Lys Met Ser Pro
35 40 45
Ala Arg Pro Arg Thr Ser Cys Arg Glu Ala Cys Leu Gln Gly Trp Thr
50 55 60
Glu Ala
65

<210> 339
<211> 744
<212> DNA
<213> Homo sapiens

<400> 339
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcagag gaggaggcag 60

aggacaagga ggatgatgag gacaaagatg aggatgagga ggatgaggag gacaaggagg 120

aagatgagga ggaagatgtc cccggccagg ccaaggacga gctgtagaga ggcctgcctc 180

cagggctgga ctgaggcctg agcgctcctg ccgcagagct ggccgcgcca aataatgtct 240

ctgtgagact cgagaacttt catttttttc caggctggtt cggatttggg gtggattttg 300

gttttgttcc cctcctccac tctcccccac cccctccccg cccttttttt ttttttttt 360

taaactggta ttttatcttt gattctcctt cagccctcac ccctggttct catctttctt 420

gatcaacatc ttttcttgcc tctgtcccct tctctcatct cttagctccc ctccaacctg 480

gggggcagtg gtgtggagaa gccacaggcc tgagatttca tctgctctcc ttcctggagc 540

ccagaggagg gcagcagaag ggggtggtgt ctccaacccc ccagcactga ggaagaacgg 600

ggctcttctc atttcacccc tccctttctc ccctgccccc aggactgggc cacttctggg 660

tggggcagtg ggtcccagat tggctcacac tgagaatgta agaactacaa acaaaatttc 720

tattaaatta aattttgtgt ctcc 744

<210> 340
<211> 201

<212> DNA
<213> Homo sapiens

<400> 340
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcagag gaggaggcag 60

aggacaagga ggatgatgag gacaaagatg aggatgagga ggatgaggag gacaaggagg 120

aagatgagga ggaagatgtc cccggccagg ccaaggacga gctgtagaga ggcctgcctc 180

cagggctgga ctgaggcctg a 201

<210> 341
<211> 201
<212> RNA
<213> Homo sapiens

<400> 341
gcagcagaga aacaaaugaa ggacaaacag gacgaggagc agaggcagag gaggaggcag 60

aggacaagga ggaugaugag gacaaagaug aggaugagga ggaugaggag gacaaggagg 120

aagaugagga ggaagauguc cccggccagg ccaaggacga gcuguagaga ggccugccuc 180

cagggcugga cugaggccug a 201

<210> 342
<211> 66
<212> PRT
<213> Homo sapiens

<400> 342
Ala Ala Glu Lys Gln Met Lys Asp Lys Gln Asp Glu Glu Gln Arg Gln
1 5 10 15
Arg Arg Arg Gln Arg Thr Arg Arg Met Met Arg Thr Lys Met Arg Met
20 25 30
Arg Arg Met Arg Arg Thr Arg Arg Lys Met Arg Arg Lys Met Ser Pro
35 40 45
Ala Arg Pro Arg Thr Ser Cys Arg Glu Ala Cys Leu Gln Gly Trp Thr
50 55 60
Glu Ala
65

<210> 343
<211> 744
<212> DNA
<213> Homo sapiens

<400> 343
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggctgag gaggaggcag 60

aggacaagga ggatgatgag gacaaagatg aggatgagga ggatgaggag gacaaggagg 120

aagatgagga ggaagatgtc cccggccagg ccaaggacga gctgtagaga ggcctgcctc 180

cagggctgga ctgaggcctg agcgctcctg ccgcagagct ggccgcgcca aataatgtct 240

ctgtgagact cgagaacttt catttttttc caggctggtt cggatttggg gtggattttg 300

gttttgttcc cctcctccac tctcccccac cccctccccg ccctttttt ttttttttt 360

taaactggta ttttatcttt gattctcctt cagccctcac ccctggttct catctttctt 420

gatcaacatc ttttcttgcc tctgtcccct tctctcatct cttagctccc ctccaacctg 480

gggggcagtg gtgtggagaa gccacaggcc tgagatttca tctgctctcc ttcctggagc 540

ccagaggagg gcagcagaag ggggtggtgt ctccaacccc ccagcactga ggaagaacgg 600

ggctcttctc atttcacccc tccctttctc ccctgccccc aggactgggc cacttctggg 660

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tattaaatta aattttgtgt ctcc 744

<210> 344
<211> 201
<212> DNA
<213> Homo sapiens

<400> 344
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aggacaagga ggatgatgag gacaaagatg aggatgagga ggatgaggag gacaaggagg 120

aagatgagga ggaagatgtc cccggccagg ccaaggacga gctgtagaga ggcctgcctc 180

cagggctgga ctgaggcctg a 201

<210> 345
<211> 201
<212> RNA
<213> Homo sapiens

<400> 345
gcagcagaga aacaaaugaa ggacaaacag gacgaggagc agaggcugag gaggaggcag 60

aggacaagga ggaugaugag gacaaagaug aggaugagga ggaugaggag gacaaggagg 120

aagaugagga ggaagauguc cccggccagg ccaaggacga gcuguagaga ggccugccuc 180

cagggcugga cugaggccug a 201

<210> 346
<211> 66
<212> PRT
<213> Homo sapiens

<400> 346
Ala Ala Glu Lys Gln Met Lys Asp Lys Gln Asp Glu Glu Gln Arg Leu
1 5 10 15
Arg Arg Arg Gln Arg Thr Arg Arg Met Met Arg Thr Lys Met Arg Met
20 25 30
Arg Arg Met Arg Arg Thr Arg Arg Lys Met Arg Arg Lys Met Ser Pro
35 40 45
Ala Arg Pro Arg Thr Ser Cys Arg Glu Ala Cys Leu Gln Gly Trp Thr
50 55 60
Glu Ala
65

<210> 347
<211> 744
<212> DNA
<213> Homo sapiens

<400> 347
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttag gaggagggag 60

aggacaagga ggatgatgag gacaaagatg aggatgagga ggatgaggag gacaaggagg 120

aagatgagga ggaagatgtc cccggccagg ccaaggacga gctgtagaga ggcctgcctc 180

cagggctgga ctgaggcctg agcgctcctg ccgcagagct ggccgcgcca aataatgtct 240

ctgtgagact cgagaacttt catttttttc caggctggtt cggatttggg gtggattttg 300

gttttgttcc cctcctccac tctcccccac cccctccccg ccctttttt ttttttttt 360

taaactggta ttttatcttt gattctcctt cagccctcac ccctggttct catctttctt 420

gatcaacatc ttttcttgcc tctgtcccct tctctcatct cttagctccc ctccaacctg 480

gggggcagtg gtgtggagaa gccacaggcc tgagatttca tctgctctcc ttcctggagc 540

ccagaggagg gcagcagaag ggggtggtgt ctccaacccc ccagcactga ggaagaacgg 600

ggctcttctc atttcacccc tccctttctc ccctgccccc aggactgggc cacttctggg 660

tggggcagtg ggtcccagat tggctcacac tgagaatgta agaactacaa acaaaatttc 720

tattaaatta aattttgtgt ctcc 744

<210> 348
<211> 201
<212> DNA
<213> Homo sapiens

<400> 348
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttag gaggagggag 60

aggacaagga ggatgatgag gacaaagatg aggatgagga ggatgaggag gacaaggagg 120

aagatgagga ggaagatgtc cccggccagg ccaaggacga gctgtagaga ggcctgcctc 180

cagggctgga ctgaggcctg a 201

<210> 349
<211> 201
<212> RNA
<213> Homo sapiens

<400> 349
gcagcagaga aacaaaugaa ggacaaacag gacgaggagc agaggcuuag gaggagggag 60

aggacaagga ggaugaugag gacaaagaug aggaugagga ggaugaggag gacaaggagg 120

aagaugagga ggaagauguc cccggccagg ccaaggacga gcuguagaga ggccugccuc 180

cagggcugga cugaggccug a 201

<210> 350
<211> 66
<212> PRT
<213> Homo sapiens

<400> 350
Ala Ala Glu Lys Gln Met Lys Asp Lys Gln Asp Glu Glu Gln Arg Leu
1 5 10 15
Arg Arg Arg Glu Arg Thr Arg Arg Met Met Arg Thr Lys Met Arg Met
20 25 30
Arg Arg Met Arg Arg Thr Arg Arg Lys Met Arg Arg Lys Met Ser Pro
35 40 45
Ala Arg Pro Arg Thr Ser Cys Arg Glu Ala Cys Leu Gln Gly Trp Thr
50 55 60
Glu Ala
65

<210> 351
<211> 744
<212> DNA
<213> Homo sapiens

<400> 351
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttca gaggaggcag 60

aggacaagga ggatgatgag gacaaagatg aggatgagga ggatgaggag gacaaggagg 120

aagatgagga ggaagatgtc cccggccagg ccaaggacga gctgtagaga ggcctgcctc 180

cagggctgga ctgaggcctg agcgctcctg ccgcagagct ggccgcgcca aataatgtct 240

ctgtgagact cgagaacttt catttttttc caggctggtt cggatttggg gtggattttg 300

gttttgttcc cctcctccac tctcccccac cccctccccg ccctttttt ttttttttt 360

taaactggta ttttatcttt gattctcctt cagccctcac ccctggttct catctttctt 420

gatcaacatc ttttcttgcc tctgtcccct tctctcatct cttagctccc ctccaacctg 480

gggggcagtg gtgtggagaa gccacaggcc tgagatttca tctgctctcc ttcctggagc 540

ccagaggagg gcagcagaag ggggtggtgt ctccaacccc ccagcactga ggaagaacgg 600

ggctcttctc atttcacccc tccctttctc ccctgccccc aggactgggc cacttctggg 660

tggggcagtg ggtcccagat tggctcacac tgagaatgta agaactacaa acaaaatttc 720

tattaaatta aattttgtgt ctcc 744

<210> 352
<211> 235
<212> DNA
<213> Homo sapiens

<400> 352
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttca gaggaggcag 60

aggacaagga ggatgatgag gacaaagatg aggatgagga ggatgaggag gacaaggagg 120

aagatgagga ggaagatgtc cccggccagg ccaaggacga gctgtagaga ggcctgcctc 180

cagggctgga ctgaggcctg aagaggcctg cctccagggc tggactgagg cctga 235

<210> 353
<211> 235
<212> RNA
<213> Homo sapiens

<400> 353
gcagcagaga aacaaaugaa ggacaaacag gacgaggagc agaggcuuca gaggaggcag 60

aggacaagga ggaugaugag gacaaagaug aggaugagga ggaugaggag gacaaggagg 120

aagaugagga ggaagauguc cccggccagg ccaaggacga gcuguagaga ggccugccuc 180

cagggcugga cugaggccug aagaggccug ccuccagggc uggacugagg ccuga 235

<210> 354
<211> 66
<212> PRT
<213> Homo sapiens

<400> 354
Ala Ala Glu Lys Gln Met Lys Asp Lys Gln Asp Glu Glu Gln Arg Leu
1   5   10   15
Gln Arg Arg Gln Arg Thr Arg Arg Met Met Arg Thr Lys Met Arg Met
            20   25   30
Arg Arg Met Arg Arg Thr Arg Arg Lys Met Arg Arg Lys Met Ser Pro
        35   40   45
Ala Arg Pro Arg Thr Ser Cys Arg Glu Ala Cys Leu Gln Gly Trp Thr
    50   55   60
Glu Ala
65

<210> 355
<211> 744
<212> DNA
<213> Homo sapiens

<400> 355
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttaa gaggaggcag 60

tggacaagga ggatgatgag gacaaagatg aggatgagga ggatgaggag gacaaggagg 120

aagatgagga ggaagatgtc cccggccagg ccaaggacga gctgtagaga ggcctgcctc 180

cagggctgga ctgaggcctg agcgctcctg ccgcagagct ggccgcgcca aataatgtct 240

ctgtgagact cgagaacttt catttttttc caggctggtt cggatttggg gtggattttg 300

gttttgttcc cctcctccac tctcccccac cccctccccg cccttttttt ttttttttt 360

taaactggta ttttatcttt gattctcctt cagccctcac ccctggttct catctttctt 420

gatcaacatc ttttcttgcc tctgtcccct tctctcatct cttagctccc ctccaacctg 480

gggggcagtg gtgtggagaa gccacaggcc tgagatttca tctgctctcc ttcctggagc 540

ccagaggagg gcagcagaag ggggtggtgt ctccaacccc ccagcactga ggaagaacgg 600

ggctcttctc atttcacccc tccctttctc ccctgccccc aggactgggc cacttctggg 660

tggggcagtg ggtcccagat tggctcacac tgagaatgta agaactacaa acaaaatttc 720

tattaaatta aattttgtgt ctcc 744

<210> 356
<211> 201
<212> DNA
<213> Homo sapiens

<400> 356
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttaa gaggaggcag 60

tggacaagga ggatgatgag gacaaagatg aggatgagga ggatgaggag gacaaggagg 120

aagatgagga ggaagatgtc cccggccagg ccaaggacga gctgtagaga ggcctgcctc 180

cagggctgga ctgaggcctg a 201

<210> 357
<211> 201
<212> RNA
<213> Homo sapiens

<400> 357
gcagcagaga aacaaaugaa ggacaaacag gacgaggagc agaggcuuaa gaggaggcag 60

uggacaagga ggaugaugag gacaaagaug aggaugagga ggaugaggag gacaaggagg 120

aagaugagga ggaagauguc cccggccagg ccaaggacga gcuguagaga ggccugccuc 180

cagggcugga cugaggccug a 201

<210> 358
<211> 66
<212> PRT
<213> Homo sapiens

<400> 358
Ala Ala Glu Lys Gln Met Lys Asp Lys Gln Asp Glu Glu Gln Arg Leu
1 5 10 15
Lys Arg Arg Gln Trp Thr Arg Arg Met Met Arg Thr Lys Met Arg Met
20 25 30
Arg Arg Met Arg Arg Thr Arg Arg Lys Met Arg Arg Lys Met Ser Pro
35 40 45
Ala Arg Pro Arg Thr Ser Cys Arg Glu Ala Cys Leu Gln Gly Trp Thr
50 55 60
Glu Ala
65

<210> 359
<211> 726
<212> DNA
<213> Homo sapiens

<400> 359
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttaa gaggatgatg 60

aggacaaaga tgaggatgag gaggatgagg aggacaagga ggaagatgag gaggaagatg 120

tccccggcca ggccaaggac gagctgtaga gaggcctgcc tccagggctg gactgaggcc 180

tgagcgctcc tgccgcagag ctggccgcgc caaataatgt ctctgtgaga ctcgagaact 240

ttcatttttt tccaggctgg ttcggatttg gggtggattt tggttttgtt cccctcctcc 300

actctccccc acccccctccc cgccctttttt ttttttttt tttaaactgg tattttatct 360

ttgattctcc ttcagccctc acccctggtt ctcatctttc ttgatcaaca tcttttcttg 420

cctctgtccc cttctctcat ctcttagctc ccctccaacc tgggggggcag tggtgtggag 480

aagccacagg cctgagattt catctgctct ccttcctgga gcccagagga gggcagcaga 540

agggggtggt gtctccaacc ccccagcact gaggaagaac ggggctcttc tcatttcacc 600

cctccctttc tcccctgccc ccaggactgg gccacttctg ggtggggcag tgggtcccag 660

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gtctcc 726

<210> 360
<211> 183
<212> DNA
<213> Homo sapiens

<400> 360
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttaa gaggatgatg 60

aggacaaaga tgaggatgag gaggatgagg aggacaagga ggaagatgag gaggaagatg 120

tccccggcca ggccaaggac gagctgtaga gaggcctgcc tccagggctg gactgaggcc 180

tga 183

<210> 361
<211> 183
<212> RNA
<213> Homo sapiens

<400> 361
gcagcagaga aacaaaugaa ggacaaacag gacgaggagc agaggcuuaa gaggaugaug 60

aggacaaaga ugaggaugag gaggaugagg aggacaagga ggaagaugag gaggaagaug 120

uccccggcca ggccaaggac gagcuguaga gaggccugcc uccagggcug gacugaggcc 180

uga 183

<210> 362
<211> 60
<212> PRT
<213> Homo sapiens

<400> 362
Ala Ala Glu Lys Gln Met Lys Asp Lys Gln Asp Glu Glu Gln Arg Leu
1 5 10 15
Lys Arg Met Met Arg Thr Lys Met Arg Met Arg Arg Met Arg Arg Thr
20 25 30
Arg Arg Lys Met Arg Arg Lys Met Ser Pro Ala Arg Pro Arg Thr Ser
35 40 45
Cys Arg Glu Ala Cys Leu Gln Gly Trp Thr Glu Ala
50 55 60

<210> 363
<211> 747
<212> DNA
<213> Homo sapiens

<400> 363
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttaa ggaggagagg 60

cagaggacaa ggaggatgat gaggacaaag atgaggatga ggaggatgag gaggacaagg 120

aggaagatga ggaggaagat gtccccggcc aggccaagga cgagctgtag agaggcctgc 180

ctccagggct ggactgaggc ctgagcgctc ctgccgcaga gctggccgcg ccaaataatg 240

tctctgtgag actcgagaac tttcattttt ttccaggctg gttcggattt ggggtggatt 300

ttggttttgt tcccctcctc cactctcccc cacccccctcc ccgccctttt ttttttttt 360

ttttaaactg gtattttatc tttgattctc cttcagccct cacccctggt tctcatcttt 420

cttgatcaac atcttttctt gcctctgtcc ccttctctca tctcttagct cccctccaac 480

ctgggggca gtggtgtgga gaagccacag gcctgagatt tcatctgctc tccttcctgg 540

agcccagagg agggcagcag aaggggtgg tgtctccaac cccccagcac tgaggaagaa 600

cggggctctt ctcatttcac ccctcccttt ctcccctgcc cccaggactg ggccacttct 660

gggtggggca gtgggtccca gattggctca cactgagaat gtaagaacta caaacaaaat 720

ttctattaaa ttaaattttg tgtctcc 747

<210> 364
<211> 204
<212> DNA
<213> Homo sapiens

<400> 364
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttaa ggaggagagg 60

cagaggacaa ggaggatgat gaggacaaag atgaggatga ggaggatgag gaggacaagg 120

aggaagatga ggaggaagat gtccccggcc aggccaagga cgagctgtag agaggcctgc 180

ctccagggct ggactgaggc ctga 204

<210> 365
<211> 204
<212> RNA
<213> Homo sapiens

<400> 365
gcagcagaga aacaaaugaa ggacaaacag gacgaggagc agaggcuuaa ggaggagagg 60

cagaggacaa ggaggaugau gaggacaaag augaggauga ggaggaugag gaggacaagg 120

aggaagauga ggaggaagau gucccggcc aggccaagga cgagcuguag agaggccugc 180

cuccagggcu ggacugaggc cuga 204

<210> 366
<211> 67
<212> PRT
<213> Homo sapiens

<400> 366
Ala Ala Glu Lys Gln Met Lys Asp Lys Gln Asp Glu Glu Gln Arg Leu
1 5 10 15
Lys Glu Glu Arg Gln Arg Thr Arg Arg Met Met Arg Thr Lys Met Arg
20 25 30
Met Arg Arg Met Arg Arg Thr Arg Arg Lys Met Arg Arg Lys Met Ser
35 40 45
Pro Ala Arg Pro Arg Thr Ser Cys Arg Glu Ala Cys Leu Gln Gly Trp
50 55 60
Thr Glu Ala
65

<210> 367
<211> 759
<212> DNA
<213> Homo sapiens

<400> 367
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttaa ggaggaggaa 60

gaagggagga ggcagaggac aaggaggatg atgaggacaa agatgaggat gaggaggatg 120

aggaggacaa ggaggaagat gaggaggaag atgtccccgg ccaggccaag gacgagctgt 180

agagaggcct gcctccaggg ctggactgag gcctgagcgc tcctgccgca gagctggccg 240

cgccaaataa tgtctctgtg agactcgaga actttcattt ttttccaggc tggttcggat 300

ttggggtgga ttttggtttt gttcccctcc tccactctcc cccaccccct ccccgccctt 360

ttttttttt ttttttaaac tggtatttta tctttgattc tccttcagcc ctcacccctg 420

gttctcatct ttcttgatca acatcttttc ttgcctctgt ccccttctct catctcttag 480

ctcccctcca acctgggggg cagtggtgtg gagaagccac aggcctgaga tttcatctgc 540

tctccttcct ggagcccaga ggagggcagc agaaaggggt ggtgtctcca acccccagc 600

actgaggaag aacggggctc ttctcatttc acccctccct ttctcccctg cccccaggac 660

tgggccactt ctgggtgggg cagtgggtcc cagattggct cacactgaga atgtaagaac 720

tacaaacaaa atttctatta aattaaattt tgtgtctcc 759

<210> 368
<211> 216
<212> DNA
<213> Homo sapiens

<400> 368
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttaa ggaggaggaa 60

gaagggagga ggcagaggac aaggaggatg atgaggacaa agatgaggat gaggaggatg 120

aggaggacaa ggaggaagat gaggaggaag atgtccccgg ccaggccaag gacgagctgt 180

agagaggcct gcctccaggg ctggactgag gcctga 216

<210> 369
<211> 216
<212> RNA
<213> Homo sapiens

<400> 369
gcagcagaga aacaaaugaa ggacaaacag gacgaggagc agaggcuuaa ggaggaggaa 60

gaagggagga ggcagaggac aaggaggaug augaggacaa agaugaggau gaggaggaug 120

aggaggacaa ggaggaagau gaggaggaag auguccccgg ccaggccaag gacgagcugu 180

agagaggccu gccuccaggg cuggacugag gccuga 216

<210> 370
<211> 71
<212> PRT
<213> Homo sapiens

<400> 370
Ala Ala Glu Lys Gln Met Lys Asp Lys Gln Asp Glu Glu Gln Arg Leu
1 5 10 15
Lys Glu Glu Glu Glu Gly Arg Arg Gln Arg Thr Arg Arg Met Met Arg
20 25 30
Thr Lys Met Arg Met Arg Arg Met Arg Arg Thr Arg Arg Lys Met Arg
35 40 45
Arg Lys Met Ser Pro Ala Arg Pro Arg Thr Ser Cys Arg Glu Ala Cys
50 55 60
Leu Gln Gly Trp Thr Glu Ala
65 70

<210> 371
<211> 756
<212> DNA
<213> Homo sapiens

<400> 371
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttaa ggaggaggaa 60

gaagcgttta agaggacaag gaggatgatg aggacaaaga tgaggatgag gaggatgagg 120

aggacaagga ggaagatgag gaggaagatg tccccggcca ggccaaggac gagctgtaga 180

gaggcctgcc tccagggctg gactgaggcc tgagcgctcc tgccgcagag ctggccgcgc 240

caaataatgt ctctgtgaga ctcgagaact ttcatttttt tccaggctgg ttcggatttg 300

gggtggattt tggttttgtt cccctcctcc actctccccc acccccctccc cgccctttt 360

ttttttttt tttaaactgg tattttatct ttgattctcc ttcagccctc acccctggtt 420

ctcatctttc ttgatcaaca tcttttcttg cctctgtccc cttctctcat ctcttagctc 480

ccctccaacc tgggggggcag tggtgtggag aagccacagg cctgagattt catctgctct 540

ccttcctgga gcccagagga gggcagcaga agggggtggt gtctccaacc ccccagcact 600

gaggaagaac ggggctcttc tcatttcacc cctccctttc tcccctgccc ccaggactgg 660

gccacttctg ggtggggcag tgggtcccag attggctcac actgagaatg taagaactac 720

aaacaaaatt tctattaaat taaattttgt gtctcc 756

<210> 372
<211> 213
<212> DNA
<213> Homo sapiens

<400> 372
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttaa ggaggaggaa 60

gaagcgttta agaggacaag gaggatgatg aggacaaaga tgaggatgag gaggatgagg 120

aggacaagga ggaagatgag gaggaagatg tccccggcca ggccaaggac gagctgtaga 180

gaggcctgcc tccagggctg gactgaggcc tga 213

<210> 373
<211> 213
<212> RNA
<213> Homo sapiens

<400> 373
gcagcagaga aacaaaugaa ggacaaacag gacgaggagc agaggcuuaa ggaggaggaa 60

gaagcguuua agaggacaag gaggaugaug aggacaaaga ugaggaugag gaggaugagg 120

aggacaagga ggaagaugag gaggaagaug uccccggcca ggccaaggac gagcuguaga 180

gaggccugcc uccagggcug gacugaggcc uga 213

<210> 374
<211> 70
<212> PRT
<213> Homo sapiens

<400> 374
Ala Ala Glu Lys Gln Met Lys Asp Lys Gln Asp Glu Glu Gln Arg Leu
1 5 10 15
Lys Glu Glu Glu Glu Ala Phe Lys Arg Thr Arg Arg Met Met Arg Thr
20 25 30
Lys Met Arg Met Arg Arg Met Arg Arg Thr Arg Arg Lys Met Arg Arg
35 40 45
Lys Met Ser Pro Ala Arg Pro Arg Thr Ser Cys Arg Glu Ala Cys Leu
50 55 60

Gln Gly Trp Thr Glu Ala
65 70

<210> 375
<211> 774
<212> DNA
<213> Homo sapiens

<400> 375
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttaa ggaggaggaa 60

gaagacaacg caaagaggag gaggaggcag aggacaagga ggatgatgag gacaaagatg 120

aggatgagga ggatgaggag gacaaggagg aagatgagga ggaagatgtc cccggccagg 180

ccaaggacga gctgtagaga ggcctgcctc cagggctgga ctgaggcctg agcgctcctg 240

ccgcagagct ggccgcgcca aataatgtct ctgtgagact cgagaacttt catttttttc 300

caggctggtt cggatttggg gtggattttg gttttgttcc cctcctccac tctcccccac 360

cccctccccg ccctttttt ttttttttt taaactggta ttttatcttt gattctcctt 420

cagccctcac ccctggttct catctttctt gatcaacatc ttttcttgcc tctgtcccct 480

tctctcatct cttagctccc ctccaacctg gggggcagtg gtgtggagaa gccacaggcc 540

tgagatttca tctgctctcc ttcctggagc ccagaggagg gcagcagaag ggggtggtgt 600

ctccaacccc ccagcactga ggaagaacgg ggctcttctc atttcacccc tccctttctc 660

ccctgccccc aggactgggc cacttctggg tggggcagtg ggtcccagat tggctcacac 720

tgagaatgta agaactacaa acaaaatttc tattaaatta aattttgtgt ctcc 774

<210> 376
<211> 231
<212> DNA
<213> Homo sapiens

<400> 376
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttaa ggaggaggaa 60

gaagacaacg caaagaggag gaggaggcag aggacaagga ggatgatgag gacaaagatg 120

aggatgagga ggatgaggag gacaaggagg aagatgagga ggaagatgtc cccggccagg 180

ccaaggacga gctgtagaga ggcctgcctc cagggctgga ctgaggcctg a 231

<210> 377
<211> 231
<212> RNA
<213> Homo sapiens

<400> 377
gcagcagaga aacaaaugaa ggacaaacag gacgaggagc agaggcuuaa ggaggaggaa 60

gaagacaacg caaagaggag gaggaggcag aggacaagga ggaugaugag gacaaagaug 120

aggaugagga ggaugaggag gacaaggagg aagaugagga ggaagauguc cccggccagg 180

ccaaggacga gcuguagaga ggccugccuc cagggcugga cugaggccug a 231

<210> 378
<211> 76

<212> PRT
<213> Homo sapiens

<400> 378
Ala Ala Glu Lys Gln Met Lys Asp Lys Gln Asp Glu Glu Gln Arg Leu
1   5   10   15
Lys Glu Glu Glu Glu Asp Asn Ala Lys Arg Arg Arg Arg Gln Arg Thr
            20   25   30
Arg Arg Met Met Arg Thr Lys Met Arg Met Arg Arg Met Arg Arg Thr
        35   40   45
Arg Arg Lys Met Arg Arg Lys Met Ser Pro Ala Arg Pro Arg Thr Ser
    50   55   60
Cys Arg Glu Ala Cys Leu Gln Gly Trp Thr Glu Ala
65   70   75

<210> 379
<211> 771
<212> DNA
<213> Homo sapiens

<400> 379
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttaa ggaggaggaa 60

gaagactgcg tgaggaggag gaggcagagg acaaggagga tgatgaggac aaagatgagg 120

atgaggagga tgaggaggac aaggaggaag atgaggagga agatgtcccc ggccaggcca 180

aggacgagct gtagagaggc ctgcctccag ggctggactg aggcctgagc gctcctgccg 240

cagagctggc cgcgccaaat aatgtctctg tgagactcga gaactttcat ttttttccag 300

gctggttcgg atttggggtg gattttggtt ttgttcccct cctccactct cccccacccc 360

ctccccgccc ttttttttt ttttttttaa actggtattt tatctttgat tctccttcag 420

ccctcacccc tggttctcat ctttcttgat caacatcttt tcttgcctct gtccccttct 480

ctcatctctt agctcccctc caacctgggg ggcagtggtg tggagaagcc acaggcctga 540

gatttcatct gctctccttc ctggagccca gaggagggca gcagaagggg gtggtgtctc 600

caacccccca gcactgagga agaacggggc tcttctcatt tcacccctcc ctttctcccc 660

tgcccccagg actgggccac ttctgggtgg ggcagtgggt cccagattgg ctcacactga 720

gaatgtaaga actacaaaca aaatttctat taaattaaat tttgtgtctc c 771

<210> 380
<211> 228
<212> DNA
<213> Homo sapiens

<400> 380
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttaa ggaggaggaa 60

gaagactgcg tgaggaggag gaggcagagg acaaggagga tgatgaggac aaagatgagg 120

atgaggagga tgaggaggac aaggaggaag atgaggagga agatgtcccc ggccaggcca 180

aggacgagct gtagagaggc ctgcctccag ggctggactg aggcctga 228

<210> 381
<211> 228
<212> RNA
<213> Homo sapiens

<400> 381
gcagcagaga aacaaaugaa ggacaaacag gacgaggagc agaggcuuaa ggaggaggaa 60

gaagacugcg ugaggaggag gaggcagagg acaaggagga ugaugaggac aaagaugagg 120

augaggagga ugaggaggac aaggaggaag augaggagga agaugucccc ggccaggcca 180

aggacgagcu guagagaggc cugccuccag ggcuggacug aggccuga 228

<210> 382
<211> 75
<212> PRT
<213> Homo sapiens

<400> 382
Ala Ala Glu Lys Gln Met Lys Asp Lys Gln Asp Glu Glu Gln Arg Leu
1 5 10 15
Lys Glu Glu Glu Glu Asp Cys Val Arg Arg Arg Arg Gln Arg Thr Arg
20 25 30
Arg Met Met Arg Thr Lys Met Arg Met Arg Arg Met Arg Arg Thr Arg
35 40 45
Arg Lys Met Arg Arg Lys Met Ser Pro Ala Arg Pro Arg Thr Ser Cys
50 55 60
Arg Glu Ala Cys Leu Gln Gly Trp Thr Glu Ala
65 70 75

<210> 383
<211> 759
<212> DNA
<213> Homo sapiens

<400> 383
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttaa ggaggaggaa 60

gaagacagga ggcagaggac aaggaggatg atgaggacaa agatgaggat gaggaggatg 120

aggaggacaa ggaggaagat gaggaggaag atgtccccgg ccaggccaag gacgagctgt 180

agagaggcct gcctccaggg ctggactgag gcctgagcgc tcctgccgca gagctggccg 240

cgccaaataa tgtctctgtg agactcgaga actttcattt ttttccaggc tggttcggat 300

ttggggtgga ttttggtttt gttcccctcc tccactctcc cccaccccct ccccgccctt 360

ttttttttt ttttttaaac tggtatttta tctttgattc tccttcagcc ctcacccctg 420

gttctcatct ttcttgatca acatcttttc ttgcctctgt ccccttctct catctcttag 480

ctcccctcca acctgggggg cagtggtgtg gagaagccac aggcctgaga tttcatctgc 540

tctccttcct ggagcccaga ggagggcagc agaaggggt ggtgtctcca acccccagc 600

actgaggaag aacggggctc ttctcatttc acccctccct ttctcccctg cccccaggac 660

tgggccactt ctgggtgggg cagtgggtcc cagattggct cacactgaga atgtaagaac 720

tacaaacaaa atttctatta aattaaattt tgtgtctcc 759

<210> 384
<211> 216
<212> DNA
<213> Homo sapiens

<400> 384
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttaa ggaggaggaa 60

gaagacagga ggcagaggac aaggaggatg atgaggacaa agatgaggat gaggaggatg 120

aggaggacaa ggaggaagat gaggaggaag atgtccccgg ccaggccaag gacgagctgt 180

agagaggcct gcctccaggg ctggactgag gcctga 216

<210> 385
<211> 216
<212> RNA
<213> Homo sapiens

<400> 385
gcagcagaga aacaaaugaa ggacaaacag gacgaggagc agaggcuuaa ggaggaggaa 60

gaagacagga ggcagaggac aaggaggaug augaggacaa agaugaggau gaggaggaug 120

aggaggacaa ggaggaagau gaggaggaag auguccccgg ccaggccaag gacgagcugu 180

agagaggccu gccuccaggg cuggacugag gccuga 216

<210> 386
<211> 71
<212> PRT
<213> Homo sapiens

<400> 386
Ala Ala Glu Lys Gln Met Lys Asp Lys Gln Asp Glu Glu Gln Arg Leu
1 5 10 15
Lys Glu Glu Glu Glu Asp Arg Arg Gln Arg Thr Arg Arg Met Met Arg
20 25 30
Thr Lys Met Arg Met Arg Arg Met Arg Arg Thr Arg Arg Lys Met Arg
35 40 45
Arg Lys Met Ser Pro Ala Arg Pro Arg Thr Ser Cys Arg Glu Ala Cys
50 55 60
Leu Gln Gly Trp Thr Glu Ala
65 70

<210> 387
<211> 759
<212> DNA
<213> Homo sapiens

<400> 387
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttaa ggaggaggaa 60

gaagacaaaa ggcagaggac aaggaggatg atgaggacaa agatgaggat gaggaggatg 120

aggaggacaa ggaggaagat gaggaggaag atgtccccgg ccaggccaag gacgagctgt 180

agagaggcct gcctccaggg ctggactgag gcctgagcgc tcctgccgca gagctggccg 240

cgccaaataa tgtctctgtg agactcgaga actttcattt ttttccaggc tggttcggat 300

ttggggtgga ttttggtttt gttcccctcc tccactctcc cccaccccct ccccgccctt 360

ttttttttt ttttttaaac tggtatttta tctttgattc tccttcagcc ctcacccctg 420

gttctcatct ttcttgatca acatcttttc ttgcctctgt ccccttctct catctcttag 480

ctcccctcca acctgggggg cagtggtgtg gagaagccac aggcctgaga tttcatctgc 540

tctccttcct ggagcccaga ggagggcagc agaaaggggt ggtgtctcca acccccagc 600

actgaggaag aacggggctc ttctcatttc acccctccct ttctcccctg cccccaggac 660

tgggccactt ctgggtgggg cagtgggtcc cagattggct cacactgaga atgtaagaac 720

tacaaacaaa atttctatta aattaaattt tgtgtctcc 759

<210> 388
<211> 216
<212> DNA
<213> Homo sapiens

<400> 388
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttaa ggaggaggaa 60

gaagacaaaa ggcagaggac aaggaggatg atgaggacaa agatgaggat gaggaggatg 120

aggaggacaa ggaggaagat gaggaggaag atgtccccgg ccaggccaag gacgagctgt 180

agagaggcct gcctccaggg ctggactgag gcctga 216

<210> 389
<211> 216
<212> RNA
<213> Homo sapiens

<400> 389
gcagcagaga aacaaaugaa ggacaaacag gacgaggagc agaggcuuaa ggaggaggaa 60

gaagacaaaa ggcagaggac aaggaggaug augaggacaa agaugaggau gaggaggaug 120

aggaggacaa ggaggaagau gaggaggaag auguccccgg ccaggccaag gacgagcugu 180

agagaggccu gccuccaggg cuggacugag gccuga 216

<210> 390
<211> 71
<212> PRT
<213> Homo sapiens

<400> 390
Ala Ala Glu Lys Gln Met Lys Asp Lys Gln Asp Glu Glu Gln Arg Leu
1 5 10 15
Lys Glu Glu Glu Glu Asp Lys Arg Gln Arg Thr Arg Arg Met Met Arg
20 25 30
Thr Lys Met Arg Met Arg Arg Met Arg Arg Thr Arg Arg Lys Met Arg
35 40 45
Arg Lys Met Ser Pro Ala Arg Pro Arg Thr Ser Cys Arg Glu Ala Cys
50 55 60
Leu Gln Gly Trp Thr Glu Ala
65 70

<210> 391
<211> 777
<212> DNA
<213> Homo sapiens

<400> 391
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttaa ggaggaggaa 60

gaagacaaaa acgcaaagag gaggaggagg cagaggacaa ggaggatgat gaggacaaag 120

atgaggatga ggaggatgag gaggacaagg aggaagatga ggaggaagat gtccccggcc 180

aggccaagga cgagctgtag agaggcctgc ctccagggct ggactgaggc ctgagcgctc 240

ctgccgcaga gctggccgcg ccaaataatg tctctgtgag actcgagaac tttcattttt 300

ttccaggctg gttcggattt ggggtggatt ttggttttgt tcccctcctc cactctcccc 360

caccccctcc ccgccctttt ttttttttt ttttaaactg gtattttatc tttgattctc 420

cttcagccct cacccctggt tctcatcttt cttgatcaac atcttttctt gcctctgtcc 480

ccttctctca tctcttagct cccctccaac ctgggggca gtggtgtgga gaagccacag 540

gcctgagatt tcatctgctc tccttcctgg agcccagagg agggcagcag aaggggtgg 600

tgtctccaac cccccagcac tgaggaagaa cggggctctt ctcatttcac ccctcccttt 660

ctcccctgcc cccaggactg ggccacttct gggtggggca gtgggtccca gattggctca 720

cactgagaat gtaagaacta caaacaaaat ttctattaaa ttaaattttg tgtctcc 777

<210> 392
<211> 234
<212> DNA
<213> Homo sapiens

<400> 392
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttaa ggaggaggaa 60

gaagacaaaa acgcaaagag gaggaggagg cagaggacaa ggaggatgat gaggacaaag 120

atgaggatga ggaggatgag gaggacaagg aggaagatga ggaggaagat gtccccggcc 180

aggccaagga cgagctgtag agaggcctgc ctccagggct ggactgaggc ctga 234

<210> 393
<211> 234
<212> RNA
<213> Homo sapiens

<400> 393
gcagcagaga aacaaaugaa ggacaaacag gacgaggagc agaggcuuaa ggaggaggaa 60

gaagacaaaa acgcaaagag gaggaggagg cagaggacaa ggaggaugau gaggacaaag 120

augaggauga ggaggaugag gaggacaagg aggaagauga ggaggaagau gucccggcc 180

aggccaagga cgagcuguag agaggccugc cuccagggcu ggacugaggc cuga 234

<210> 394
<211> 77
<212> PRT
<213> Homo sapiens

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

<210> 395
<211> 780
<212> DNA
<213> Homo sapiens

<400> 395
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttaa ggaggaggaa 60

gaagacaagt gtttcgcaaa gaggaggagg aggcagagga caaggaggat gatgaggaca 120

aagatgagga tgaggaggat gaggaggaca aggaggaaga tgaggaggaa gatgtccccg 180

gccaggccaa ggacgagctg tagagaggcc tgcctccagg gctggactga ggcctgagcg 240

ctcctgccgc agagctggcc gcgccaaata atgtctctgt gagactcgag aactttcatt 300

tttttccagg ctggttcgga tttggggtgg attttggttt tgttcccctc ctccactctc 360

ccccaccccc tccccgccct ttttttttt ttttttaaa ctggtatttt atctttgatt 420

ctccttcagc cctcacccct ggttctcatc tttcttgatc aacatctttt cttgcctctg 480

tccccttctc tcatctctta gctcccctcc aacctggggg gcagtggtgt ggagaagcca 540

caggcctgag atttcatctg ctctccttcc tggagcccag aggagggcag cagaaggggg 600

tggtgtctcc aacccccag cactgaggaa gaacggggct cttctcattt cacccctccc 660

tttctcccct gcccccagga ctgggccact tctgggtggg gcagtgggtc ccagattggc 720

tcacactgag aatgtaagaa ctacaaacaa aatttctatt aaattaaatt ttgtgtctcc 780

<210> 396
<211> 237
<212> DNA
<213> Homo sapiens

<400> 396
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttaa ggaggaggaa 60

gaagacaagt gtttcgcaaa gaggaggagg aggcagagga caaggaggat gatgaggaca 120

aagatgagga tgaggaggat gaggaggaca aggaggaaga tgaggaggaa gatgtccccg 180

gccaggccaa ggacgagctg tagagaggcc tgcctccagg gctggactga ggcctga 237

<210> 397
<211> 237
<212> RNA
<213> Homo sapiens

<400> 397
gcagcagaga aacaaaugaa ggacaaacag gacgaggagc agaggcuuaa ggaggaggaa 60

gaagacaagu guuucgcaaa gaggaggagg aggcagagga caaggaggau gaugaggaca 120

aagaugagga ugaggaggau gaggaggaca aggaggaaga ugaggaggaa gauguccccg 180

gccaggccaa ggacgagcug uagagaggcc ugccuccagg gcuggacuga ggccuga 237

<210> 398
<211> 78
<212> PRT
<213> Homo sapiens

<400> 398
Ala Ala Glu Lys Gln Met Lys Asp Lys Gln Asp Glu Glu Gln Arg Leu
1 5 10 15
Lys Glu Glu Glu Glu Asp Lys Cys Phe Ala Lys Arg Arg Arg Arg Gln
20 25 30

Arg Thr Arg Arg Met Met Arg Thr Lys Met Arg Met Arg Arg Met Arg
35 40 45
Arg Thr Arg Arg Lys Met Arg Arg Lys Met Ser Pro Ala Arg Pro Arg
50 55 60
Thr Ser Cys Arg Glu Ala Cys Leu Gln Gly Trp Thr Glu Ala
65 70 75

<210> 399
<211> 756
<212> DNA
<213> Homo sapiens

<400> 399
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttaa ggaggaggaa 60

gaagacaaga aacgcaaaag gaggatgatg aggacaaaga tgaggatgag gaggatgagg 120

aggacaagga ggaagatgag gaggaagatg tccccggcca ggccaaggac gagctgtaga 180

gaggcctgcc tccagggctg gactgaggcc tgagcgctcc tgccgcagag ctggccgcgc 240

caaataatgt ctctgtgaga ctcgagaact ttcatttttt tccaggctgg ttcggatttg 300

gggtggattt tggttttgtt cccctcctcc actctccccc acccccctcc cgccctttt 360

ttttttttt tttaaactgg tattttatct ttgattctcc ttcagccctc acccctggtt 420

ctcatctttc ttgatcaaca tcttttcttg cctctgtccc cttctctcat ctcttagctc 480

ccctccaacc tgggggggcag tggtgtggag aagccacagg cctgagattt catctgctct 540

ccttcctgga gcccagagga gggcagcaga agggggtggt gtctccaacc ccccagcact 600

gaggaagaac ggggctcttc tcatttcacc cctccctttc tcccctgccc ccaggactgg 660

gccacttctg ggtggggcag tgggtcccag attggctcac actgagaatg taagaactac 720

aaacaaaatt tctattaaat taaattttgt gtctcc 756

<210> 400
<211> 213
<212> DNA
<213> Homo sapiens

<400> 400
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttaa ggaggaggaa 60

gaagacaaga aacgcaaaag gaggatgatg aggacaaaga tgaggatgag gaggatgagg 120

aggacaagga ggaagatgag gaggaagatg tccccggcca ggccaaggac gagctgtaga 180

gaggcctgcc tccagggctg gactgaggcc tga 213

<210> 401
<211> 213
<212> RNA
<213> Homo sapiens

<400> 401
gcagcagaga aacaaaugaa ggacaaacag gacgaggagc agaggcuuaa ggaggaggaa 60

gaagacaaga aacgcaaaag gaggaugaug aggacaaaga ugaggaugag gaggaugagg 120

aggacaagga ggaagaugag gaggaagaug uccccggcca ggccaaggac gagcuguaga 180

gaggccugcc uccagggcug gacugaggcc uga 213

<210> 402
<211> 70
<212> PRT
<213> Homo sapiens

<400> 402
Ala Ala Glu Lys Gln Met Lys Asp Lys Gln Asp Glu Glu Gln Arg Leu
1   5   10   15
Lys Glu Glu Glu Glu Asp Lys Lys Arg Lys Arg Arg Met Met Arg Thr
            20   25   30
Lys Met Arg Met Arg Arg Met Arg Arg Thr Arg Arg Lys Met Arg Arg
        35   40   45
Lys Met Ser Pro Ala Arg Pro Arg Thr Ser Cys Arg Glu Ala Cys Leu
    50   55   60
Gln Gly Trp Thr Glu Ala
65   70

<210> 403
<211> 774
<212> DNA
<213> Homo sapiens

<400> 403
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttaa ggaggaggaa 60

gaagacaaga aacgcaaaga gcctcctctt tgtctaagga ggatgatgag gacaaagatg 120

aggatgagga ggatgaggag gacaaggagg aagatgagga ggaagatgtc cccggccagg 180

ccaaggacga gctgtagaga ggcctgcctc cagggctgga ctgaggcctg agcgctcctg 240

ccgcagagct ggccgcgcca aataatgtct ctgtgagact cgagaacttt catttttttc 300

caggctggtt cggatttggg gtggattttg gttttgttcc cctcctccac tctcccccac 360

cccctccccg ccctttttt ttttttttt taaactggta ttttatcttt gattctcctt 420

cagccctcac ccctggttct catctttctt gatcaacatc ttttcttgcc tctgtcccct 480

tctctcatct cttagctccc ctccaacctg gggggcagtg gtgtggagaa gccacaggcc 540

tgagatttca tctgctctcc ttcctggagc ccagaggagg gcagcagaag ggggtggtgt 600

ctccaacccc ccagcactga ggaagaacgg ggctcttctc atttcacccc tccctttctc 660

ccctgccccc aggactgggc cacttctggg tggggcagtg ggtcccagat tggctcacac 720

tgagaatgta agaactacaa acaaaatttc tattaaatta aattttgtgt ctcc 774

<210> 404
<211> 231
<212> DNA
<213> Homo sapiens

<400> 404
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttaa ggaggaggaa 60

gaagacaaga aacgcaaaga gcctcctctt tgtctaagga ggatgatgag gacaaagatg 120

aggatgagga ggatgaggag gacaaggagg aagatgagga ggaagatgtc cccggccagg 180

ccaaggacga gctgtagaga ggcctgcctc cagggctgga ctgaggcctg a 231

<210> 405

<211> 231
<212> RNA
<213> Homo sapiens

<400> 405
gcagcagaga aacaaaugaa ggacaaacag gacgaggagc agaggcuuaa ggaggaggaa 60

gaagacaaga aacgcaaaga gccuccucuu ugucuaagga ggaugaugag gacaaagaug 120

aggaugagga ggaugaggag gacaaggagg aagaugagga ggaagauguc cccggccagg 180

ccaaggacga gcuguagaga ggccugccuc cagggcugga cugaggccug a 231

<210> 406
<211> 76
<212> PRT
<213> Homo sapiens

<400> 406
Ala Ala Glu Lys Gln Met Lys Asp Lys Gln Asp Glu Glu Gln Arg Leu
1 5 10 15
Lys Glu Glu Glu Glu Asp Lys Lys Arg Lys Glu Pro Pro Leu Cys Leu
20 25 30
Arg Arg Met Met Arg Thr Lys Met Arg Met Arg Arg Met Arg Arg Thr
35 40 45
Arg Arg Lys Met Arg Arg Lys Met Ser Pro Ala Arg Pro Arg Thr Ser
50 55 60
Cys Arg Glu Ala Cys Leu Gln Gly Trp Thr Glu Ala
65 70 75

<210> 407
<211> 771
<212> DNA
<213> Homo sapiens

<400> 407
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttaa ggaggaggaa 60

gaagacaaga aacgcaaaga ggaccatcct tgtcggagga tgatgaggac aaagatgagg 120

atgaggagga tgaggaggac aaggaggaag atgaggagga agatgtcccc ggccaggcca 180

aggacgagct gtagagaggc ctgcctccag ggctggactg aggcctgagc gctcctgccg 240

cagagctggc cgcgccaaat aatgtctctg tgagactcga gaactttcat ttttttccag 300

gctggttcgg atttggggtg gattttggtt ttgttcccct cctccactct cccccacccc 360

ctccccgccc ttttttttt ttttttttaa actggtattt tatctttgat tctccttcag 420

ccctcacccc tggttctcat ctttcttgat caacatcttt tcttgcctct gtccccttct 480

ctcatctctt agctcccctc caacctgggg ggcagtggtg tggagaagcc acaggcctga 540

gatttcatct gctctccttc ctggagccca gaggagggca gcagaagggg gtggtgtctc 600

caacccccca gcactgagga agaacggggc tcttctcatt tcacccctcc ctttctcccc 660

tgcccccagg actgggccac ttctgggtgg ggcagtgggt cccagattgg ctcacactga 720

gaatgtaaga actacaaaca aaatttctat taaattaaat tttgtgtctc c 771

<210> 408
<211> 228
<212> DNA
<213> Homo sapiens

<400> 408
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttaa ggaggaggaa 60

gaagacaaga aacgcaaaga ggaccatcct tgtcggagga tgatgaggac aaagatgagg 120

atgaggagga tgaggaggac aaggaggaag atgaggagga agatgtcccc ggccaggcca 180

aggacgagct gtagagaggc ctgcctccag ggctggactg aggcctga 228

<210> 409
<211> 228
<212> RNA
<213> Homo sapiens

<400> 409
gcagcagaga aacaaaugaa ggacaaacag gacgaggagc agaggcuuaa ggaggaggaa 60

gaagacaaga aacgcaaaga ggaccauccu ugucggagga ugaugaggac aaagaugagg 120

augaggagga ugaggaggac aaggaggaag augaggagga agaugucccc ggccaggcca 180

aggacgagcu guagagaggc cugccuccag ggcuggacug aggccuga 228

<210> 410
<211> 75
<212> PRT
<213> Homo sapiens

<400> 410
Ala Ala Glu Lys Gln Met Lys Asp Lys Gln Asp Glu Glu Gln Arg Leu
1 5 10 15
Lys Glu Glu Glu Glu Asp Lys Lys Arg Lys Glu Asp His Pro Cys Arg
20 25 30
Arg Met Met Arg Thr Lys Met Arg Met Arg Arg Met Arg Arg Thr Arg
35 40 45
Arg Lys Met Arg Arg Lys Met Ser Pro Ala Arg Pro Arg Thr Ser Cys
50 55 60
Arg Glu Ala Cys Leu Gln Gly Trp Thr Glu Ala
65 70 75

<210> 411
<211> 783
<212> DNA
<213> Homo sapiens

<400> 411
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttaa ggaggaggaa 60

gaagacaaga aacgcaaaga ggaggaggag gcagagggca attgtcggag gatgatgagg 120

acaaagatga ggatgaggag gatgaggagg acaaggagga agatgaggag gaagatgtcc 180

ccggccaggc caaggacgag ctgtagagag gcctgcctcc agggctggac tgaggcctga 240

gcgctcctgc cgcagagctg gccgcgccaa ataatgtctc tgtgagactc gagaactttc 300

atttttttcc aggctggttc ggatttgggg tggattttgg ttttgttccc ctcctccact 360

ctcccccacc ccctccccgc cctttttttt ttttttttt aaactggtat tttatctttg 420

attctccttc agccctcacc cctggttctc atctttcttg atcaacatct tttcttgcct 480

ctgtcccctt ctctcatctc ttagctcccc tccaacctgg ggggcagtgg tgtggagaag 540

ccacaggcct gagatttcat ctgctctcct tcctggagcc cagaggaggg cagcagaagg 600

gggtggtgtc tccaaccccc cagcactgag gaagaacggg gctcttctca tttcacccct 660

ccctttctcc cctgccccca ggactgggcc acttctgggt ggggcagtgg gtcccagatt 720

ggctcacact gagaatgtaa gaactacaaa caaaatttct attaaattaa attttgtgtc 780

tcc 783

<210> 412
<211> 240
<212> DNA
<213> Homo sapiens

<400> 412
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttaa ggaggaggaa 60

gaagacaaga aacgcaaaga ggaggaggag gcagagggca attgtcggag gatgatgagg 120

acaaagatga ggatgaggag gatgaggagg acaaggagga agatgaggag gaagatgtcc 180

ccggccaggc caaggacgag ctgtagagag gcctgcctcc agggctggac tgaggcctga 240

<210> 413
<211> 240
<212> RNA
<213> Homo sapiens

<400> 413
gcagcagaga aacaaaugaa ggacaaacag gacgaggagc agaggcuuaa ggaggaggaa 60

gaagacaaga aacgcaaaga ggaggaggag gcagagggca auugucggag gaugaugagg 120

acaaagauga ggaugaggag gaugaggagg acaaggagga agaugaggag gaagaugucc 180

ccggccaggc caaggacgag cuguagagag gccugccucc agggcuggac ugaggccuga 240

<210> 414
<211> 79
<212> PRT
<213> Homo sapiens

<400> 414
Ala Ala Glu Lys Gln Met Lys Asp Lys Gln Asp Glu Glu Gln Arg Leu
1 5 10 15
Lys Glu Glu Glu Glu Asp Lys Lys Arg Lys Glu Glu Glu Glu Ala Glu
20 25 30
Gly Asn Cys Arg Arg Met Met Arg Thr Lys Met Arg Met Arg Arg Met
35 40 45
Arg Arg Thr Arg Arg Lys Met Arg Arg Lys Met Ser Pro Ala Arg Pro
50 55 60
Arg Thr Ser Cys Arg Glu Ala Cys Leu Gln Gly Trp Thr Glu Ala
65 70 75

<210> 415
<211> 780
<212> DNA
<213> Homo sapiens

<400> 415
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttaa ggaggaggaa 60

gaagacaaga aacgcaaaga ggaggaggag gcagaggact gtcggaggat gatgaggaca 120

aagatgagga tgaggaggat gaggaggaca aggaggaaga tgaggaggaa gatgtccccg 180

gccaggccaa ggacgagctg tagagaggcc tgcctccagg gctggactga ggcctgagcg 240

ctcctgccgc agagctggcc gcgccaaata atgtctctgt gagactcgag aactttcatt 300

tttttccagg ctggttcgga tttggggtgg attttggttt tgttcccctc ctccactctc 360

ccccaccccc tccccgccct ttttttttt ttttttaaa ctggtatttt atctttgatt 420

ctccttcagc cctcacccct ggttctcatc tttcttgatc aacatctttt cttgcctctg 480

tccccttctc tcatctctta gctcccctcc aacctggggg gcagtggtgt ggagaagcca 540

caggcctgag atttcatctg ctctccttcc tggagcccag aggagggcag cagaaggggg 600

tggtgtctcc aaccccccag cactgaggaa gaacggggct cttctcattt cacccctccc 660

tttctcccct gcccccagga ctgggccact tctgggtggg gcagtgggtc ccagattggc 720

tcacactgag aatgtaagaa ctacaaacaa aatttctatt aaattaaatt ttgtgtctcc 780

<210> 416
<211> 237
<212> DNA
<213> Homo sapiens

<400> 416
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttaa ggaggaggaa 60

gaagacaaga aacgcaaaga ggaggaggag gcagaggact gtcggaggat gatgaggaca 120

aagatgagga tgaggaggat gaggaggaca aggaggaaga tgaggaggaa gatgtccccg 180

gccaggccaa ggacgagctg tagagaggcc tgcctccagg gctggactga ggcctga 237

<210> 417
<211> 237
<212> RNA
<213> Homo sapiens

<400> 417
gcagcagaga aacaaaugaa ggacaaacag gacgaggagc agaggcuuaa ggaggaggaa 60

gaagacaaga aacgcaaaga ggaggaggag gcagaggacu gucggaggau gaugaggaca 120

aagaugagga ugaggaggau gaggaggaca aggaggaaga ugaggaggaa gaugucccg 180

gccaggccaa ggacgagcug uagagaggcc ugccuccagg gcuggacuga ggccuga 237

<210> 418
<211> 78
<212> PRT
<213> Homo sapiens

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

<210> 419
<211> 783
<212> DNA
<213> Homo sapiens

<400> 419
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttaa ggaggaggaa 60

gaagacaaga aacgcaaaga ggaggaggag gcagaggaca aatgtcggag gatgatgagg 120

acaaagatga ggatgaggag gatgaggagg acaaggagga agatgaggag gaagatgtcc 180

ccggccaggc caaggacgag ctgtagagag gcctgcctcc agggctggac tgaggcctga 240

gcgctcctgc cgcagagctg gccgcgccaa ataatgtctc tgtgagactc gagaactttc 300

atttttttcc aggctggttc ggatttgggg tggattttgg ttttgttccc ctcctccact 360

ctcccccacc ccctccccgc cctttttttt ttttttttt aaactggtat tttatctttg 420

attctccttc agccctcacc cctggttctc atctttcttg atcaacatct tttcttgcct 480

ctgtcccctt ctctcatctc ttagctcccc tccaacctgg ggggcagtgg tgtggagaag 540

ccacaggcct gagatttcat ctgctctcct tcctggagcc cagaggaggg cagcagaagg 600

gggtggtgtc tccaaccccc cagcactgag gaagaacggg gctcttctca tttcacccct 660

ccctttctcc cctgccccca ggactgggcc acttctgggt ggggcagtgg gtcccagatt 720

ggctcacact gagaatgtaa gaactacaaa caaaatttct attaaattaa attttgtgtc 780

tcc 783

<210> 420
<211> 240
<212> DNA
<213> Homo sapiens

<400> 420
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttaa ggaggaggaa 60

gaagacaaga aacgcaaaga ggaggaggag gcagaggaca aatgtcggag gatgatgagg 120

acaaagatga ggatgaggag gatgaggagg acaaggagga agatgaggag gaagatgtcc 180

ccggccaggc caaggacgag ctgtagagag gcctgcctcc agggctggac tgaggcctga 240

<210> 421
<211> 240
<212> RNA
<213> Homo sapiens

<400> 421
gcagcagaga aacaaaugaa ggacaaacag gacgaggagc agaggcuuaa ggaggaggaa 60

gaagacaaga aacgcaaaga ggaggaggag gcagaggaca aaugucggag gaugaugagg 120

acaaagauga ggaugaggag gaugaggagg acaaggagga agaugaggag gaagaugucc 180

ccggccaggc caaggacgag cuguagagag gccugccucc agggcuggac ugaggccuga 240

<210> 422
<211> 79

<212> PRT
<213> Homo sapiens

<400> 422
Ala Ala Glu Lys Gln Met Lys Asp Lys Gln Asp Glu Glu Gln Arg Leu
1   5   10   15
Lys Glu Glu Glu Glu Asp Lys Lys Arg Lys Glu Glu Glu Glu Ala Glu
            20   25   30
Asp Lys Cys Arg Arg Met Met Arg Thr Lys Met Arg Met Arg Arg Met
        35   40   45
Arg Arg Thr Arg Arg Lys Met Arg Arg Lys Met Ser Pro Ala Arg Pro
    50   55   60
Arg Thr Ser Cys Arg Glu Ala Cys Leu Gln Gly Trp Thr Glu Ala
65   70   75

<210> 423
<211> 783
<212> DNA
<213> Homo sapiens

<400> 423
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttaa ggaggaggaa 60

gaagacaaga aacgcaaaga ggaggaggag gcagaggaca cttgtcggag gatgatgagg 120

acaaagatga ggatgaggag gatgaggagg acaaggagga agatgaggag gaagatgtcc 180

ccggccaggc caaggacgag ctgtagagag gcctgcctcc agggctggac tgaggcctga 240

gcgctcctgc cgcagagctg gccgcgccaa ataatgtctc tgtgagactc gagaactttc 300

atttttttcc aggctggttc ggatttgggg tggattttgg ttttgttccc ctcctccact 360

ctcccccacc ccctccccgc cctttttttt ttttttttt aaactggtat tttatctttg 420

attctccttc agccctcacc cctggttctc atctttcttg atcaacatct tttcttgcct 480

ctgtcccctt ctctcatctc ttagctcccc tccaacctgg ggggcagtgg tgtggagaag 540

ccacaggcct gagatttcat ctgctctcct tcctggagcc cagaggaggg cagcagaagg 600

gggtggtgtc tccaaccccc cagcactgag gaagaacggg gctcttctca tttcacccct 660

ccctttctcc cctgccccca ggactgggcc acttctgggt ggggcagtgg gtcccagatt 720

ggctcacact gagaatgtaa gaactacaaa caaaatttct attaaattaa attttgtgtc 780

tcc 783

<210> 424
<211> 240
<212> DNA
<213> Homo sapiens

<400> 424
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttaa ggaggaggaa 60

gaagacaaga aacgcaaaga ggaggaggag gcagaggaca cttgtcggag gatgatgagg 120

acaaagatga ggatgaggag gatgaggagg acaaggagga agatgaggag gaagatgtcc 180

ccggccaggc caaggacgag ctgtagagag gcctgcctcc agggctggac tgaggcctga 240

<210> 425
<211> 240
<212> RNA

<213> Homo sapiens

<400> 425
gcagcagaga aacaaaugaa ggacaaacag gacgaggagc agaggcuuaa ggaggaggaa 60

gaagacaaga aacgcaaaga ggaggaggag gcagaggaca cuugucggag gaugaugagg 120

acaaagauga ggaugaggag gaugaggagg acaaggagga agaugaggag gaagaugucc 180

ccggccaggc caaggacgag cuguagagag gccugccucc agggcuggac ugaggccuga 240

<210> 426
<211> 79
<212> PRT
<213> Homo sapiens

<400> 426
Ala Ala Glu Lys Gln Met Lys Asp Lys Gln Asp Glu Glu Gln Arg Leu
1 5 10 15
Lys Glu Glu Glu Asp Lys Lys Arg Lys Glu Glu Glu Glu Ala Glu
20 25 30
Asp Thr Cys Arg Arg Met Met Arg Thr Lys Met Arg Met Arg Arg Met
35 40 45
Arg Arg Thr Arg Arg Lys Met Arg Arg Lys Met Ser Pro Ala Arg Pro
50 55 60
Arg Thr Ser Cys Arg Glu Ala Cys Leu Gln Gly Trp Thr Glu Ala
65 70 75

<210> 427
<211> 783
<212> DNA
<213> Homo sapiens

<400> 427
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttaa ggaggaggaa 60

gaagacaaga aacgcaaaga ggaggaggag gcagaggaca tttgtcggag gatgatgagg 120

acaaagatga ggatgaggag gatgaggagg acaaggagga agatgaggag gaagatgtcc 180

ccggccaggc caaggacgag ctgtagagag gcctgcctcc agggctggac tgaggcctga 240

gcgctcctgc cgcagagctg gccgcgccaa ataatgtctc tgtgagactc gagaactttc 300

atttttttcc aggctggttc ggatttgggg tggattttgg ttttgttccc ctcctccact 360

ctcccccacc ccctccccgc cctttttttt ttttttttt aaactggtat tttatctttg 420

attctccttc agccctcacc cctggttctc atctttcttg atcaacatct tttcttgcct 480

ctgtcccctt ctctcatctc ttagctcccc tccaacctgg ggggcagtgg tgtggagaag 540

ccacaggcct gagatttcat ctgctctcct tcctggagcc cagaggaggg cagcagaagg 600

gggtggtgtc tccaaccccc cagcactgag gaagaacggg gctcttctca tttcacccct 660

ccctttctcc cctgccccca ggactgggcc acttctgggt ggggcagtgg gtcccagatt 720

ggctcacact gagaatgtaa gaactacaaa caaaatttct attaaattaa attttgtgtc 780

tcc 783

<210> 428
<211> 240
<212> DNA
<213> Homo sapiens

<400> 428
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttaa ggaggaggaa 60

gaagacaaga aacgcaaaga ggaggaggag gcagaggaca tttgtcggag gatgatgagg 120

acaaagatga ggatgaggag gatgaggagg acaaggagga agatgaggag gaagatgtcc 180

ccggccaggc caaggacgag ctgtagagag gcctgcctcc agggctggac tgaggcctga 240

<210> 429
<211> 240
<212> RNA
<213> Homo sapiens

<400> 429
gcagcagaga aacaaaugaa ggacaaacag gacgaggagc agaggcuuaa ggaggaggaa 60

gaagacaaga aacgcaaaga ggaggaggag gcagaggaca uuugucggag gaugaugagg 120

acaaagauga ggaugaggag gaugaggagg acaaggagga agaugaggag gaagaugucc 180

ccggccaggc caaggacgag cuguagagag gccugccucc agggcuggac ugaggccuga 240

<210> 430
<211> 79
<212> PRT
<213> Homo sapiens

<400> 430
Ala Ala Glu Lys Gln Met Lys Asp Lys Gln Asp Glu Glu Gln Arg Leu
1 5 10 15
Lys Glu Glu Glu Glu Asp Lys Lys Arg Lys Glu Glu Glu Glu Ala Glu
20 25 30
Asp Ile Cys Arg Arg Met Met Arg Thr Lys Met Arg Met Arg Arg Met
35 40 45
Arg Arg Thr Arg Arg Lys Met Arg Arg Lys Met Ser Pro Ala Arg Pro
50 55 60
Arg Thr Ser Cys Arg Glu Ala Cys Leu Gln Gly Trp Thr Glu Ala
65 70 75

<210> 431
<211> 783
<212> DNA
<213> Homo sapiens

<400> 431
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttaa ggaggaggaa 60

gaagacaaga aacgcaaaga ggaggaggag gcagaggaca agtgtcggag gatgatgagg 120

acaaagatga ggatgaggag gatgaggagg acaaggagga agatgaggag gaagatgtcc 180

ccggccaggc caaggacgag ctgtagagag gcctgcctcc agggctggac tgaggcctga 240

gcgctcctgc cgcagagctg gccgcgccaa ataatgtctc tgtgagactc gagaactttc 300

atttttttcc aggctggttc ggatttgggg tggattttgg ttttgttccc ctcctccact 360

ctcccccacc ccctccccgc cttttttttt ttttttttt aaactggtat tttatctttg 420

attctccttc agccctcacc cctggttctc atctttcttg atcaacatct tttcttgcct 480

ctgtcccctt ctctcatctc ttagctcccc tccaacctgg ggggcagtgg tgtggagaag 540

ccacaggcct gagatttcat ctgctctcct tcctggagcc cagaggaggg cagcagaagg 600

gggtggtgtc tccaaccccc cagcactgag gaagaacggg gctcttctca tttcacccct 660

ccctttctcc cctgccccca ggactgggcc acttctgggt ggggcagtgg gtcccagatt 720

ggctcacact gagaatgtaa gaactacaaa caaaatttct attaaattaa attttgtgtc 780

tcc 783

<210> 432
<211> 240
<212> DNA
<213> Homo sapiens

<400> 432
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttaa ggaggaggaa 60

gaagacaaga aacgcaaaga ggaggaggag gcagaggaca agtgtcggag gatgatgagg 120

acaaagatga ggatgaggag gatgaggagg acaaggagga agatgaggag gaagatgtcc 180

ccggccaggc caaggacgag ctgtagagag gcctgcctcc agggctggac tgaggcctga 240

<210> 433
<211> 240
<212> RNA
<213> Homo sapiens

<400> 433
gcagcagaga aacaaaugaa ggacaaacag gacgaggagc agaggcuuaa ggaggaggaa 60

gaagacaaga aacgcaaaga ggaggaggag gcagaggaca agugucggag gaugaugagg 120

acaaagauga ggaugaggag gaugaggagg acaaggagga agaugaggag gaagaugucc 180

ccggccaggc caaggacgag cuguagagag gccugccucc agggcuggac ugaggccuga 240

<210> 434
<211> 79
<212> PRT
<213> Homo sapiens

<400> 434
Ala Ala Glu Lys Gln Met Lys Asp Lys Gln Asp Glu Glu Gln Arg Leu
1 5 10 15
Lys Glu Glu Glu Glu Asp Lys Lys Arg Lys Glu Glu Glu Glu Ala Glu
20 25 30
Asp Lys Cys Arg Arg Met Met Arg Thr Lys Met Arg Met Arg Arg Met
35 40 45
Arg Arg Thr Arg Arg Lys Met Arg Arg Lys Met Ser Pro Ala Arg Pro
50 55 60
Arg Thr Ser Cys Arg Glu Ala Cys Leu Gln Gly Trp Thr Glu Ala
65 70 75

<210> 435
<211> 778
<212> DNA
<213> Homo sapiens

<400> 435
gcagcagaga aacaaatgaa ggacaaacag gacgaggagc agaggcttaa ggaggaggaa 60

gaagacaaga aacgcaaaga ggaggaggag gcagaggaca aggaggatga tgaggacaaa 120

gatgaggatg aggaggatga ggaggacaag gaggaagatg aggaggaaga tgtccccggc 180

caggccaagg acgagctgta gagaggcctg cctccagggc tggactgagg cctgagcgct 240

cctgccgcag agctggccgc gccaaataat gtctctgtga gactcgagaa ctttcatttt 300

tttccaggct ggttcggatt tggggtggat tttggttttg ttcccctcct ccactctccc 360

ccacccccctc cccgcccttt ttttttttt tttttaaact ggtattttat ctttgattct 420

ccttcagccc tcacccctgg ttctcatctt tcttgatcaa catcttttct tgcctctgtc 480

cccttctctc atctcttagc tcccctccaa cctgggggc agtggtgtgg agaagccaca 540

ggcctgagat ttcatctgct ctccttcctg gagcccagag gagggcagca gaaggggtg 600

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ggacacttgt cggaggatga t 21

<210> 1251
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gacacttgtc ggaggatgat g 21

<210> 1252
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<400> 1252
acacttgtcg gaggatgatg a 21

<210> 1253
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<400> 1253
cacttgtcgg aggatgatga g 21

<210> 1254
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acttgtcgga ggatgatgag g 21

<210> 1255
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<400> 1255
cttgtcggag gatgatgagg a 21

<210> 1256
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<400> 1256
ttgtcggagg atgatgagga c 21

<210> 1257
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tgtcggagga tgatgaggac a 21

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gtcggaggat gatgaggaca a 21

<210> 1259
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tcggaggatg atgaggacaa a 21

<210> 1260
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<400> 1260
cggaggatga tgaggacaaa g 21

<210> 1261
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<400> 1261
ggaggaggag gcagaggaca t 21

<210> 1262
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<400> 1262
gaggaggagg cagaggacat t 21

<210> 1263
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<400> 1263
aggaggaggc agaggacatt t 21

<210> 1264
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<400> 1264
ggaggaggca gaggacattt g 21

<210> 1265
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<400> 1265
gaggaggcag aggacatttg t 21

<210> 1266
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<400> 1266
aggaggcaga ggacatttgt c 21

<210> 1267
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<400> 1267
ggaggcagag gacatttgtc g 21

<210> 1268
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gaggcagagg acatttgtcg g 21

<210> 1269
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<400> 1269
aggcagagga catttgtcgg a 21

<210> 1270
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<213> Homo sapiens

<400> 1270
ggcagaggac atttgtcgga g 21

<210> 1271
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gcagaggaca tttgtcggag g 21

<210> 1272
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cagaggacat ttgtcggagg a 21

<210> 1273
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agaggacatt tgtcggagga t 21

<210> 1274
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gaggacattt gtcggaggat g 21

<210> 1275
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<400> 1275
aggacatttg tcggaggatg a 21

<210> 1276
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<400> 1276
ggacatttgt cggaggatga t 21

<210> 1277
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<400> 1277
gacatttgtc ggaggatgat g 21

<210> 1278
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<400> 1278
acatttgtcg gaggatgatg a 21

<210> 1279
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<213> Homo sapiens

<400> 1279
catttgtcgg aggatgatga g 21

<210> 1280
<211> 21
<212> DNA
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<400> 1280
atttgtcgga ggatgatgag g 21

<210> 1281
<211> 21
<212> DNA
<213> Homo sapiens

<400> 1281
tttgtcggag gatgatgagg a 21

<210> 1282
<211> 21
<212> DNA
<213> Homo sapiens

<400> 1282
ttgtcggagg atgatgagga c 21

<210> 1283
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<400> 1283
tgtcggagga tgatgaggac a 21

<210> 1284
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<212> DNA
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<400> 1284
gtcggaggat gatgaggaca a 21

<210> 1285
<211> 21
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<213> Homo sapiens

<400> 1285
tcggaggatg atgaggacaa a 21

<210> 1286
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<400> 1286
cggaggatga tgaggacaaa g 21

<210> 1287
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<400> 1287
ggaggaggca gaggacaagt g 21

<210> 1288
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<212> DNA
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<400> 1288
gaggaggcag aggacaagtg t 21

<210> 1289
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<400> 1289
aggaggcaga ggacaagtgt c 21

<210> 1290
<211> 21
<212> DNA
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<400> 1290
ggaggcagag gacaagtgtc g 21

<210> 1291
<211> 21
<212> DNA
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<400> 1291
gaggcagagg acaagtgtcg g 21

<210> 1292
<211> 21
<212> DNA
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<400> 1292
aggcagagga caagtgtcgg a 21

<210> 1293
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<400> 1293
ggcagaggac aagtgtcgga g 21

<210> 1294
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<400> 1294
gcagaggaca agtgtcggag g 21

<210> 1295
<211> 21
<212> DNA
<213> Homo sapiens

<400> 1295
cagaggacaa gtgtcggagg a 21

<210> 1296
<211> 21
<212> DNA
<213> Homo sapiens

<400> 1296
agaggacaag tgtcggagga t 21

<210> 1297
<211> 21
<212> DNA
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<400> 1297
gaggacaagt gtcggaggat g 21

<210> 1298
<211> 21
<212> DNA
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<400> 1298
aggacaagtg tcggaggatg a 21

<210> 1299
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<212> DNA
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<400> 1299
ggacaagtgt cggaggatga t 21

<210> 1300
<211> 21
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<400> 1300
gacaagtgtc ggaggatgat g 21

<210> 1301
<211> 21
<212> DNA
<213> Homo sapiens

<400> 1301
acaagtgtcg gaggatgatg a 21

<210> 1302
<211> 21
<212> DNA
<213> Homo sapiens

<400> 1302
caagtgtcgg aggatgatga g 21

<210> 1303
<211> 21
<212> DNA
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<400> 1303
aagtgtcgga ggatgatgag g 21

<210> 1304
<211> 21
<212> DNA
<213> Homo sapiens

<400> 1304
agtgtcggag gatgatgagg a 21

<210> 1305
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<213> Homo sapiens

<400> 1305
gtgtcggagg atgatgagga c 21

<210> 1306
<211> 21
<212> DNA
<213> Homo sapiens

<400> 1306
tgtcggagga tgatgaggac a 21

<210> 1307
<211> 21
<212> DNA
<213> Homo sapiens

<400> 1307
gtcggaggat gatgaggaca a 21

<210> 1308

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

<400> 1308
tcggaggatg atgaggacaa a 21

<210> 1309
<211> 21
<212> DNA
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<400> 1309
cggaggatga tgaggacaaa g 21

<210> 1310
<211> 20
<212> DNA
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<220>
<223> forward primer

<400> 1310
gtcaggttgg tttgagaggc 20

<210> 1311
<211> 19
<212> DNA
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<220>
<223> reverse primer

<400> 1311
gctaacccta actcccgcc 19

<210> 1312
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> forward primer

<400> 1312
ggatctcctt tcctgtcccc 20

<210> 1313
<211> 19
<212> DNA
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<220>
<223> reverse primer

<400> 1313
ccacctgtcc tcctccaag 19

<210> 1314
<211> 20
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<213> Artificial Sequence

<220>
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<400> 1314
gaggacaggt ggaggaagtg 20

<210> 1315
<211> 22
<212> DNA
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<220>
<223> reverse primer

<400> 1315
aaattgttgc tgggacttat tc 22

<210> 1316
<211> 20
<212> DNA
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<220>
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<400> 1316
cagacccgag ttgaagaacc 20

<210> 1317
<211> 20
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<220>
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<400> 1317
agaaggaaga aggtgagcgg 20

<210> 1318
<211> 20
<212> DNA
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<400> 1318
ctgatcaaca aggacatccg 20

<210> 1319
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<400> 1319
ctcgggcttc ttagcatcag 20

<210> 1320
<211> 20
<212> DNA
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<220>
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<400> 1320
aagcctgagg ttggtgtttg 20

<210> 1321
<211> 19
<212> DNA
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<220>
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<400> 1321
ctcacctggg gtgcctacc 19

<210> 1322
<211> 19
<212> DNA
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<220>
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<400> 1322
gtgtcagcgg tgttccttg 19

<210> 1323
<211> 20
<212> DNA
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<220>
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<400> 1323
ttaagcctct gctcctcgtc 20

<210> 1324
<211> 77
<212> DNA
<213> Homo sapiens

<400> 1324
cgaggagcag aggcttaagg aggaggaaga agacaagaaa cgcatagagg aggaggaggc 60

agaggacaag gaggatg 77

<210> 1325
<211> 78
<212> DNA
<213> Homo sapiens

<400> 1325
cgaggagcag aggacaagga ggatgatgag gacaaagatg aggatgagga ggatgaggag 60

gacaaggagg aagatgag 78

<210> 1326
<211> 79
<212> DNA
<213> Homo sapiens

<400> 1326
aggacgagga gcagaggctt aaggaggagg aagaagacaa gaaacgcaaa gaggaggagg 60

aggcagagga caaggagga 79

<210> 1327
<211> 79
<212> DNA
<213> Homo sapiens

<400> 1327
aggacgagga gcagaggctt aaggaggagg aagaagacaa aaacgcaaag aggaggagga 60

ggcagaggac aaggaggat 79

<210> 1328
<211> 17
<212> DNA
<213> Homo sapiens

<400> 1328
gcagcagaga aacaaat 17

<210> 1329
<211> 15
<212> DNA
<213> Homo sapiens

<400> 1329
aaggacgagc tgtag 15

<210> 1330
<211> 5
<212> PRT
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<400> 1330
Ala Ala Glu Lys Gln
1 5

<210> 1331
<211> 4
<212> PRT
<213> Homo sapiens

<400> 1331
Lys Asp Glu Leu
1

<210> 1332
<211> 5
<212> PRT
<213> Homo sapiens

<400> 1332
Gln Gln Arg Asn Lys

1 5

<210> 1333
<211> 4
<212> PRT
<213> Homo sapiens

<400> 1333
Arg Thr Ser Cys
1

<210> 1334
<211> 5
<212> PRT
<213> Homo sapiens

<400> 1334
Ser Arg Glu Thr Asn
1 5

<210> 1335
<211> 4
<212> PRT
<213> Homo sapiens

<400> 1335
Gly Arg Ala Val
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<210> 1336
<211> 10
<212> DNA
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<400> 1336
aggaggaggg 10

<210> 1337
<211> 11
<212> DNA
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<400> 1337
gaggaggcag t 11

<210> 1338
<211> 14
<212> DNA
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<400> 1338
cctcctcttt gtct 14

<210> 1339
<211> 11
<212> DNA
<213> Homo sapiens

<400> 1339
ccatccttgt c 11

<210> 1340
<211> 29
<212> DNA

<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic forward primer

<400> 1340
gtttcttagt gcatctttat tatggcaga 29

<210> 1341
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic reverse primer

<400> 1341
ttactctcgt ctccacagac 20

<210> 1342
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic reverse primer

<400> 1342
aaattactct cgtctccaca gaa 23

<210> 1343
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic forward primer

<400> 1343
gtttcttccg aagtctgacc ctttttg 27

<210> 1344
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic reverse primer

<400> 1344
gtagtgtgca ggaaactgcc 20

<210> 1345
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic reverse primer

<400> 1345
aaagtagtgt gcaggaaact gca 23

<210> 1346
<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic primer

<400> 1346
atgcctcgag ccgccaccat gctgctatcc gtgccgctgc tgctc 45

<210> 1347
<211> 34
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic primer

<400> 1347
atgcgaattc ctacagctcg tccttggcct ggcc 34

<210> 1348
<211> 36
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic primer

<400> 1348
cctcatcatc ctccttgtcc tctgctcctc gtcctg 36

<210> 1349
<211> 36
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic primer

<400> 1349
caggacgagg agcagaggac aaggaggatg atgagg 36

<210> 1350
<211> 35
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic primer

<400> 1350
atgcccgcgg ctaggcctca gtccagccct ggagg 35

<210> 1351
<211> 24
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic peptide of C-terminal amino

acid sequence of mutant
calreticulin protein

<400> 1351
Arg Arg Lys Met Ser Pro Ala Arg Pro Arg Thr Ser Cys Arg Glu Ala
1 5 10 15
Cys Leu Gln Gly Trp Thr Glu Ala
20