

SEQUENCE LISTING

<110> GENERATION BIO CO.

<120> CLOSE-ENDED DNA (CEDNA) AND USE IN METHODS OF REDUCING GENE OR NUCLEIC ACID THERAPY RELATED IMMUNE RESPONSE

<130> 131698-03320

<140> 62/796,417

<141> 2019-01-24

<140> 62/796,450

<141> 2019-01-24

<140> 62/800,285

<141> 2019-02-01

<140> 62/800,303

<141> 2019-02-01

<140> 62/814,414

<141> 2019-03-06

<140> 62/814,424

<141> 2019-03-06

<140> 62/857,542

<141> 2019-06-05

<150>

<151>

<160> 190

<170> PatentIn version 3.5

<210> 952

<211> 141

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polynucleotide

<400> 952

aggaaccct agtgatggag ttggccactc cctctctgcg cgctcgctcg ctactgagg 60

cggggcgacc aaaggtcgcc cgacgcccgg gctttgcccg ggcggcctca gtgagcgagc 120

gagcgcgag ctgcctgcag g 141

<210> 953

<211> 141

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic

polynucleotide

<400> 953
cctgcaggca gctgcgcgct cgctcgctca ctgaggccgc ccgggcaaag cccgggcgtc 60
ggg'gcacctt tggtcgcccc gcctcagtga gcgagcgagc ggcagagag ggagtggcca 120
actccatcac taggggttcc t 141

<210> 954
<211> 130
<212> DNA
<213> Artificial Sequence

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

<400> 954
aggaacccct agtgatggag ttggccactc cctctctgcg cgctcgctcg ctactgagg 60
ccggg'gcacc aaaggtcgcc cgacgcccgg gcggcctcag tgagcgagcg agcgcgagc 120
tgctgcagg 130

<210> 955
<211> 130
<212> DNA
<213> Artificial Sequence

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

<400> 955
cctgcaggca gctgcgcgct cgctcgctca ctgaggccgc ccgggcgtcg ggcgcacctt 60
ggtcgccccg cctcagttag cgagcgagcg cgcagagagg gagtggccaa ctccatcact 120
aggggttcct 130

<210> 956
<211> 143
<212> DNA
<213> Artificial Sequence

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

<400> 956
ttgccactc cctctctgcg cgctcgctcg ctcggtgggg cctgcggacc aaaggccgc 60
agacggcaga ggtctcctct gccggcccca ccgagcgagc gacgcgcgca gagagggagt 120
gggcaactcc atcactaggg taa 143

<210> 957
 <211> 144
 <212> DNA
 <213> Artificial Sequence

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

 <400> 957
 ttggccactc cctctatgcg cactcgctcg ctcggtgggg cctggcgacc aaaggtcgcc 60
 agacggacgt gggtttccac gtccggcccc accgagcgag cgagtgcgca tagagggagt 120
 ggccaactcc atcactagag gtat 144

 <210> 958
 <211> 127
 <212> DNA
 <213> Artificial Sequence

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

 <400> 958
 ttggccactc cctctatgcg cgctcgctca ctactcggc cctggagacc aaaggtctcc 60
 agactgccgg cctctggccg gcagggccga gtgagtgagc gagcgcgcat agagggagtg 120
 gccaact 127

 <210> 959
 <211> 166
 <212> DNA
 <213> Artificial Sequence

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

 <400> 959
 tccccctgt cgcgttcgct cgctcgctgg ctcgtttggg ggggcgacgg ccagagggcc 60
 gtcgtctggc agctctttga gctgccaccc ccccaaacga gccagcgagc gagcgaacgc 120
 gacagggggg agagtgccac actctcaagc aaggggggtt tgtaag 166

 <210> 960
 <211> 144
 <212> DNA
 <213> Artificial Sequence

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

 <400> 960

ttgcccactc cctctaatagc gcgctcgctc gctcgggtggg gcctgcggac caaaggtccg	60
cagacggcag aggtctcctc tgccggcccc accgagcgag cgagcgcgca tagagggagt	120
gggcaactcc atcactaggg gtat	144

<210> 961
 <211> 143
 <212> DNA
 <213> Artificial Sequence

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

<400> 961	
ttaccctagt gatggagttg ccactccct ctctgcgcgc gtcgctcgct cggtggggcc	60
ggcagaggag acctctgccg tctgcggacc tttggtccgc agggcccacc gagcgagcga	120
gcgcgcagag agggagtggg caa	143

<210> 962
 <211> 144
 <212> DNA
 <213> Artificial Sequence

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

<400> 962	
atacctctag tgatggagtt ggccactccc tctatgcgca ctgctcgct cggtggggcc	60
ggacgtggaa acccacgtcc gtctggcgac ctttggtcgc caggcccac cgagcgagcg	120
agtgcgcata gagggagtgg ccaa	144

<210> 963
 <211> 127
 <212> DNA
 <213> Artificial Sequence

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

963	
agttggccac attagctatg cgcgctcgct cactcactcg gccctggaga ccaaaggtct	60
ccagactgcc ggcctctggc cggcagggcc gagtgagtga gcgagcgcg atagagggag	120
tggccaa	127

<210> 964
 <211> 166
 <212> DNA
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polynucleotide

<400> 964

cttacaaaac ccccttgctt gagagtgtgg cactctcccc cctgtcgcgt tcgtcgcgtc 60

gctggctcgt ttgggggggt ggcagctcaa agagctgcca gacgacggcc ctctggccgt 120

cgccccccca aacgagccag cgagcgagcg aacgcgacag ggggga 166

<210> 965

<211> 144

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polynucleotide

<400> 965

atacccttag tgatggagtt gccactccc tctatgcgcg ctgcgtcgtc cggtaggggcc 60

ggcagaggag acctctgccg tctgcggacc ttgtgtccgc aggccccacc gagcgagcga 120

gcgcgcatta gagggagtgg gcaa 144

<210> 966

<211> 120

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polynucleotide

<400> 966

aggaaccct agtgatggag ttggccactc cctctctgcg cgctcgcctc ctactgagg 60

cgcacgcccg ggtttcccgg gcggcctcag tgagcgagcg agcgcgcagc tgcctgcagg 120

<210> 967

<211> 122

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polynucleotide

<400> 967

aggaaccct agtgatggag ttggccactc cctctctgcg cgctcgcctc ctactgagg 60

ccgacgcccg ggctttgccc gggcggcctc agtgagcgag cgagcgcgca gctgcctgca 120

gg 122

<210> 968
<211> 129
<212> DNA
<213> Artificial Sequence

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

<400> 968
aggaaccct agtgatggag ttggccactc cctctctgcg cgctcgctcg ctactgagg 60
ccgggcgacc aaaggtcgcc cgacgcccgg gcgcctcagt gagcgagcga gcgcgcagct 120
gcctgcagg 129

<210> 969
<211> 101
<212> DNA
<213> Artificial Sequence

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

<400> 969
aggaaccct agtgatggag ttggccactc cctctctgcg cgctcgctcg ctactgagg 60
ctttgcctca gtgagcgagc gagcgcgag ctgcctgcag g 101

<210> 970
<211> 139
<212> DNA
<213> Artificial Sequence

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

<400> 970
aggaaccct agtgatggag ttggccactc cctctctgcg cgctcgctcg ctactgagg 60
ccgggcgaca aagtcgccc acgcccgggc tttgcccggg cggcctcagt gagcgagcga 120
gcgcgcagct gcctgcagg 139

<210> 971
<211> 137
<212> DNA
<213> Artificial Sequence

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

<400> 971
aggaaccct agtgatggag ttggccactc cctctctgcg cgctcgctcg ctactgagg 60

ccgggcgaaa atcgcccgac gcccgggctt tgcccgggcg gcctcagtga gcgagcgagc 120
gcgcagctgc ctgcagg 137

<210> 972
<211> 135
<212> DNA
<213> Artificial Sequence

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

<400> 972
aggaaccct agtgatggag ttggccactc cctctctgcg cgctcgctcg ctactgagg 60
ccgggcgaaa cgcccgacgc ccgggctttg cccgggcggc ctcagtgagc gagcgagcgc 120
gcagctgcct gcagg 135

<210> 973
<211> 133
<212> DNA
<213> Artificial Sequence

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

<400> 973
aggaaccct agtgatggag ttggccactc cctctctgcg cgctcgctcg ctactgagg 60
ccgggcaaaag cccgacgccc gggctttgcc cgggcggcct cagtgagcga gcgagcgcgc 120
agctgcctgc agg 133

<210> 974
<211> 139
<212> DNA
<213> Artificial Sequence

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

<400> 974
aggaaccct agtgatggag ttggccactc cctctctgcg cgctcgctcg ctactgagg 60
ccgggcgacc aaaggtcgcc cgacgcccgg gtttcccggg cggcctcagt gagcgagcga 120
gcgcgcagct gcctgcagg 139

<210> 975
<211> 137
<212> DNA
<213> Artificial Sequence

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

<400> 975
 aggaaccct agtgatggag ttggccactc cctctctgcg cgctcgctcg ctcaactgagg 60
 ccgggcgacc aaaggtcgcc cgacgcccgg tttccggggcg gcctcagtga gcgagcgagc 120
 gcgcagctgc ctgcagg 137

<210> 976
 <211> 135
 <212> DNA
 <213> Artificial Sequence

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

<400> 976
 aggaaccct agtgatggag ttggccactc cctctctgcg cgctcgctcg ctcaactgagg 60
 ccgggcgacc aaaggtcgcc cgacgcccgt ttcggggcggc ctcaactgagc gagcgagcgc 120
 gcagctgcct gcagg 135

<210> 977
 <211> 133
 <212> DNA
 <213> Artificial Sequence

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

<400> 977
 aggaaccct agtgatggag ttggccactc cctctctgcg cgctcgctcg ctcaactgagg 60
 ccgggcgacc aaaggtcgcc cgacgccctt tgggcggcct cagtgcgcga ggcgagcgcg 120
 agctgcctgc agg 133

<210> 978
 <211> 131
 <212> DNA
 <213> Artificial Sequence

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

<400> 978
 aggaaccct agtgatggag ttggccactc cctctctgcg cgctcgctcg ctcaactgagg 60
 ccgggcgacc aaaggtcgcc cgacgccttt ggcggcctca gtgagcgagc gagcgcgagc 120

ctgcctgcag g 131

<210> 979
 <211> 129
 <212> DNA
 <213> Artificial Sequence

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

<400> 979
 aggaaccct agtgatggag ttggccactc cctctctgcg cgctcgctcg ctactgagg 60
 ccgggcgacc aaaggtcgcc cgacgtttg cggcctcagt gagcgagcga gcgcgcagct 120
 gcctgcagg 129

<210> 980
 <211> 127
 <212> DNA
 <213> Artificial Sequence

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

<400> 980
 aggaaccct agtgatggag ttggccactc cctctctgcg cgctcgctcg ctactgagg 60
 ccgggcgacc aaaggtcgcc cgacgtttcg gcctcagtga gcgagcgagc gcgcagctgc 120
 ctgcagg 127

<210> 981
 <211> 122
 <212> DNA
 <213> Artificial Sequence

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

<400> 981
 aggaaccct agtgatggag ttggccactc cctctctgcg cgctcgctcg ctactgagg 60
 ccgggcgacc aaaggtcgcc cgacggcctc agtgagcgag cgagcgcgca gctgcctgca 120
 gg 122

<210> 982
 <211> 130
 <212> DNA
 <213> Artificial Sequence

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

polynucleotide

<400> 982
aggaaccct agtgatggag ttggccactc cctctctgcg cgctcgctcg ctactgagg 60
ccgggcgacc aaaggtcgcc cgacgcccgg gcggcctcag tgagcgagcg agcgcgagc 120
tgctgcagg 130

<210> 983
<211> 120
<212> DNA
<213> Artificial Sequence

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

<400> 983
cctgcaggca gctgcgcgct cgctcgctca ctgaggccgc ccgggaaacc cgggcgtgcg 60
cctcagttag cgagcgagcg cgcagagagg gaggggccaa ctccatcact aggggttcct 120

<210> 984
<211> 122
<212> DNA
<213> Artificial Sequence

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

<400> 984
cctgcaggca gctgcgcgct cgctcgctca ctgaggccgt cgggcgacct ttggtcgccc 60
ggcctcagtg agcgagcgag cgcgcagaga gggagtggcc aactccatca ctaggggttc 120
ct 122

<210> 985
<211> 122
<212> DNA
<213> Artificial Sequence

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

<400> 985
cctgcaggca gctgcgcgct cgctcgctca ctgaggccgc ccgggcaaag cccgggcgtc 60
ggcctcagtg agcgagcgag cgcgcagaga gggagtggcc aactccatca ctaggggttc 120
ct 122

<210> 986
<211> 129

<212> DNA
<213> Artificial Sequence

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

<400> 986
cctgcaggca gctgcgcgct cgctcgctca ctgaggcgcc cgggcgctcg gcgacctttg 60
gtcgcccggc ctcaagtgagc gagcgagcgc gcagagaggg agtggccaac tccatcacta 120
ggggttcct 129

<210> 987
<211> 101
<212> DNA
<213> Artificial Sequence

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

<400> 987
cctgcaggca gctgcgcgct cgctcgctca ctgaggcaaa gcctcagtga gcgagcgagc 60
gcgcagagag ggagtggcca actccatcac taggggttcc t 101

<210> 988
<211> 139
<212> DNA
<213> Artificial Sequence

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

<400> 988
cctgcaggca gctgcgcgct cgctcgctca ctgaggccgc ccgggcaaag cccgggcgtc 60
gggcgacttt gtcgcccggc ctcaagtgagc gagcgagcgc gcagagaggg agtggccaac 120
tccatcacta ggggttcct 139

<210> 989
<211> 137
<212> DNA
<213> Artificial Sequence

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

<400> 989
cctgcaggca gctgcgcgct cgctcgctca ctgaggccgc ccgggcaaag cccgggcgtc 60
gggcgatttt cgcccggcct cagtgagcga gcgagcgcg gcagagggag tggccaactc 120

catcactagg ggttcct 137

<210> 990
 <211> 135
 <212> DNA
 <213> Artificial Sequence

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

<400> 990
 cctgcaggca gctgcgcgct cgctcgctca ctgaggccgc ccgggcaaag cccgggcgtc 60
 gggcgtttgc cccggcctca gtgagcgagc gagcgcgag agagggagtg gccaactcca 120
 tcactagggg ttcct 135

<210> 991
 <211> 133
 <212> DNA
 <213> Artificial Sequence

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

<400> 991
 cctgcaggca gctgcgcgct cgctcgctca ctgaggccgc ccgggcaaag cccgggcgtc 60
 gggcctttgcc cggcctcagt gagcgagcga gcgcgcagag agggagtggc caactccatc 120
 actagggggtt cct 133

<210> 992
 <211> 139
 <212> DNA
 <213> Artificial Sequence

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

<400> 992
 cctgcaggca gctgcgcgct cgctcgctca ctgaggccgc ccgggaaacc cgggcgtcgg 60
 ggcacctttg gtcgcccggc ctcagtgagc gagcgagcgc gcagagaggg agtggccaac 120
 tccatcacta ggggttcct 139

<210> 993
 <211> 137
 <212> DNA
 <213> Artificial Sequence

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

polynucleotide

<400> 993
cctgcaggca gctgcgcgct cgctcgctca ctgaggccgc ccggaaccg ggcgtcgggc 60
gacctttggt cgcccggcct cagtgagcga gcgagcgcgc agagagggag tggccaactc 120
catcactagg ggttcct 137

<210> 994
<211> 135
<212> DNA
<213> Artificial Sequence

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

<400> 994
cctgcaggca gctgcgcgct cgctcgctca ctgaggccgc ccgaaacggg cgtcgggcga 60
cctttggtcg cccggcctca gtgagcgagc gagcgcgcag agagggagtg gccaaactcca 120
tcactagggg ttcct 135

<210> 995
<211> 133
<212> DNA
<213> Artificial Sequence

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

<400> 995
cctgcaggca gctgcgcgct cgctcgctca ctgaggccgc ccaaagggcg tcgggcgacc 60
tttggtcgcc cggcctcagt gagcgagcga gcgcgagag agggagtggc caactccatc 120
actaggggtt cct 133

<210> 996
<211> 131
<212> DNA
<213> Artificial Sequence

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

<400> 996
cctgcaggca gctgcgcgct cgctcgctca ctgaggccgc caaaggcgtc gggcgacctt 60
tggtcgcccg gcctcagtga gcgagcgagc gcgagagag ggagtggcca actccatcac 120
taggggttcc t 131

<210> 997
 <211> 129
 <212> DNA
 <213> Artificial Sequence

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

 <400> 997
 cctgcaggca gctgcgcgct cgctcgctca ctgaggccgc aaagcgtcgg gcgacctttg 60
 gtcgcccggc ctcaagtgagc gagcgagcgc gcagagaggg agtggccaac tccatcacta 120
 ggggttcct 129

 <210> 998
 <211> 127
 <212> DNA
 <213> Artificial Sequence

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

 <400> 998
 cctgcaggca gctgcgcgct cgctcgctca ctgaggccga aacgctcggc gacctttggt 60
 cgcccggcct cagtgagcga gcgagcgcgc agagagggag tggccaactc catcactagg 120
 ggttcct 127

 <210> 999
 <211> 122
 <212> DNA
 <213> Artificial Sequence

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

 <400> 999
 aggaaccct agtgatggag ttggccactc cctctctgcg cgctcgctcg ctcaactgagg 60
 ccgggcgacc aaaggtcgcc cgacggcctc agtgagcgag cgagcgcgca gctgcctgca 120
 gg 122

 <210> 1000
 <211> 12
 <212> DNA
 <213> Artificial Sequence

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

 <400> 1000

cgatcgttcg at	12
<210> 1001	
<211> 12	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Description of Artificial Sequence: Synthetic oligonucleotide	
<400> 1001	
atcgaaccat cg	12
<210> 1002	
<211> 12	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Description of Artificial Sequence: Synthetic oligonucleotide	
<400> 1002	
atcgaacgat cg	12
<210> 1003	
<211> 165	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Description of Artificial Sequence: Synthetic polynucleotide	
<400> 1003	
aggaaccct agtgatggag ttggccactc cctctctgcg cgctcgctcg ctcaactgagg	60
ccgcccgggc aaagcccggg cgtcgggcga cctttggtcg cccggcctca gtgagcgagc	120
gagcgcgcag agagggagtg gccaaactcca tcactagggg ttcct	165
<210> 1004	
<211> 140	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Description of Artificial Sequence: Synthetic polynucleotide	
<400> 1004	
cccctagtga tggagttggc cactccctct ctgcgcgctc gctcgctcac tgaggccgcc	60
cgggcaaagc ccgggcgtcg ggcgacctt ggctgcccgg cctcagtgag cgagcgagcg	120
cgcagagaga tcactagggg	140

<210> 1005
 <211> 91
 <212> DNA
 <213> Artificial Sequence

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

 <400> 1005
 gcgcgctcgc tcgctcactg aggccgcccg ggcaaagccc gggcgtcggg cgacctttgg 60
 tcgcccggcc tcagtgagcg agcgagcgcg c 91

 <210> 1006
 <211> 91
 <212> DNA
 <213> Artificial Sequence

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

 <400> 1006
 gcgcgctcgc tcgctcactg aggccgggcg accaaaggct gcccgacgcc cgggctttgc 60
 ccggggcgcc tcagtgagcg agcgagcgcg c 91

 <210> 1007
 <211> 1662
 <212> DNA
 <213> Artificial Sequence

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

 <400> 1007
 gccgccacca tggaagacgc caaaaacata aagaaaggcc cggcgccatt ctatccgctg 60
 gaagatggaa ccgctggaga gcaactgcat aaggctatga agagatacgc cctggttcct 120
 ggaacaattg cttttacaga tgcacatatc gaggtggaca tcacttacgc tgagtacttc 180
 gaaatgtccg ttcggttggc agaagctatg aaacgatatg ggctgaatac aaatcacaga 240
 atcgctgtat gcagtgaaaa ctctcttcaa ttctttatgc cgggtgttggg cgcgttattt 300
 atcggagttg cagttgcgcc cgcaacgac atttataatg aacgtgaatt gctcaacagt 360
 atgggcattt cgcagcctac cgtggtgttc gtttccaaaa aggggttgca aaaaattttg 420
 aacgtgcaaa aaaagctccc aatcatccaa aaaattatta tcatggattc taaaacggat 480
 taccagggat ttcagtcgat gtacacgttc gtcacatctc atctacctcc cggttttaat 540
 gaatacgatt ttgtgccaga gtccttcgat agggacaaga caattgcact gatcatgaac 600

tcctctggat ctactggtct gcctaaaggt gtcgctctgc ctcatagaac tgctgctg	660
agattctcgc atgccagaga tcctatTTTT ggcaatcaaa tcattccgga tactgcgatt	720
ttaagtgttg ttccattcca tcacggTTTT ggaatgttta ctacactcgg atatttgata	780
tgtggatttc gagtcgtctt aatgtataga tttgaagaag agctgtttct gaggagcctt	840
caggattaca agattcaaag tgcgctgctg gtgccaaccc tattctcctt cttcgccaaa	900
agcactctga ttgacaaata cgatttatct aatttacacg aaattgcttc tgggtggcgt	960
cccctctcta aggaagtcgg ggaagcgggt gccaaagagt tccatctgcc aggtatcagg	1020
caaggatatg ggctcactga gactacatca gctattctga ttacaccoga gggggatgat	1080
aaaccgggcg cggtcggtaa agttgttcca ttttttgaag cgaaggttgt ggatctggat	1140
accgggaaaa cgctgggcgt taatcaaaga ggcgaactgt gtgtgagagg tcctatgatt	1200
atgtccgggt atgtaaaca tccggaagcg accaacgcct tgattgacaa ggatggatgg	1260
ctacattctg gagacatagc ttactgggac gaagacgaac acttcttcat cgttgaccgc	1320
ctgaagtctc tgattaagta caaaggctat cagggtggctc ccgctgaatt ggaatccatc	1380
ttgctccaac accccaacat cttcgacgca ggtgtcgcag gtcttcccga cgatgacgcc	1440
ggtgaacttc ccgcccgtg tgttgttttg gagcacggaa agacgatgac ggaaaaagag	1500
atcgtggatt acgtgccag tcaagtaaca accgcgaaaa agttgcgcgg aggagtgtg	1560
tttgtggacg aagtaccgaa aggtcttacc ggaaaactcg acgcaagaaa aatcagagag	1620
atcctcataa aggccaagaa gggcggaaaag atcgccgtgt aa	1662

<210> 1008

<211> 453

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<220>

<221> MOD_RES

<222> (1)..(1)

<223> Any amino acid

<400> 1008

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

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

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

Ala Val Ile Trp Phe Asp Gly Thr Lys Lys Tyr Tyr Thr Asp Ser Val
50 55 60

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

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

Ala Arg Asp Arg Gly Ile Gly Ala Arg Arg Gly Pro Tyr Tyr Met Asp
100 105 110

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

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

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

Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr
165 170 175

Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val
180 185 190

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

Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys Arg Val Glu Pro
210 215 220

Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu
225 230 235 240

Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp
245 250 255

Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp
260 265 270

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

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

Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp
305 310 315 320

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

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

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

Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile
370 375 380

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

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

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

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

Ser Leu Ser Pro Gly
450

<210> 1009

<211> 214

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
polypeptide

<400> 1009

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

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

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

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

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

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

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

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

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

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

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

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

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

Phe Asn Arg Gly Glu Cys
210

<210> 1010

<211> 1310

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
polynucleotide

```

<400> 1010
ggagccgaga gtaattcata caaaaggagg gatcgccttc gcaaggggag agcccaggga      60
ccgtccctaa attctcacag acccaaatcc ctgtagccgc cccacgacag cgcgaggagc      120
atgcgctcag ggctgagcgc ggggagagca gagcacacaa gctcatagac cctggtcgtg      180
ggggggagga ccggggagct ggcgcggggc aaactgggaa agcgggtgtcg tgtgctggct      240
ccgccctctt cccgaggggtg ggggagaacg gtatataagt gcggcagtcg ccttggacgt      300
tctttttcgc aacggggttg ccgtcagaac gcaggtgagg gccgggtgtg gcttccgcgg      360
gccgccgagc tggaggtcct gtcctgagcg ggccggggccc cgctgtcgtc ggccggggatt      420
agctgcgagc attcccgtt cgagttgcgg gcggcgcggg aggcagagtg cgaggcctag      480
cggcaacccc gtagcctcgc ctctgttccg gcttgaggcc tagcgtggtg tccgcgccgc      540
cgccgcgtgc tactccggcc gcactctggt cttttttttt tttggtgttg ttgccctgct      600
gccttcgatt gccgttcagc aataggggct aacaaaggga ggggtgcgggg cttgctcgcc      660
cggagcccgg agaggtcatg gttggggagg aatggaggga caggagtggc ggctggggcc      720
cgcccgcctt cggagcacat gtccgacgcc acctggatgg ggcgaggcct ggggtttttc      780
ccgaagcaac caggctgggg ttagcgtgcc gaggccatgt ggccccagca cccggcacga      840
tctggcttgg cggcgccgcg ttgccctgcc tccctaacta gggtgaggcc atcccgtccg      900
gcaccagttg cgtgcgtgga aagatggccg ctcccgggcc ctgttgcaag gagtcaaaa      960
tggaggacgc ggcagcccgg tggagcgggc gggtgagtca cccacacaaa ggaagagggc     1020
ctggtccctc accggctgct gcttcctgtg acccgtggt cctatcggcc gcaatagtca     1080
cctcgggctt ttgagcacgg ctagtcgcgg cggggggagg ggatgtaatg gcgttgagtg     1140
ttgttcacat ttggtgggtg gagactagtc aggccagcct ggcgctggaa gtcatttttg     1200
gaatttgtcc ccttgagttt tgagcggagc taattctcgg gcttcttagc ggttcaaagg     1260
tatcttttaa accctttttt aggtgttgtg aaaaccaccg ctaattcaaa     1310

```

<210> 1011

<211> 16

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide

<400> 1011

gcgcgctcgc tcgctc

16

<210> 1012

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

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

<400> 1012
ggttga

6

<210> 1013
<211> 4
<212> DNA
<213> Artificial Sequence

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

<400> 1013
agtt

4

<210> 1014
<211> 6
<212> DNA
<213> Artificial Sequence

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

<400> 1014
ggttgg

6

<210> 1015
<211> 6
<212> DNA
<213> Artificial Sequence

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

<400> 1015
agttgg

6

<210> 1016
<211> 6
<212> DNA
<213> Artificial Sequence

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

<400> 1016

agttga 6

<210> 1017
<211> 6
<212> DNA
<213> Artificial Sequence

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

<400> 1017
rrttrr 6

<210> 1018
<211> 581
<212> DNA
<213> Artificial Sequence

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

<400> 1018
gagcatctta cgcacattta ttcccatatt tgttctgttt ttcttgattt gggtatacat 60
ttaaatgtta ataaaacaaa atggtggggc aatcatttac atttttaggg atatgtaatt 120
actagttcag gtgtattgcc acaagacaaa catgttaaga aactttcccg ttatttacgc 180
tctgttctcg ttaatcaacc tctggattac aaaatttggtg aaagattgac tgatattctt 240
aactatgttg ctctttttac gctgtgtgga tatgctgctt tatagcctct gtatctagct 300
attgcttccc gtacggcttt cgttttctcc tccttgata aatcctggtt gctgtctctt 360
ttagaggagt tgtggcccggt tgcctgtcaa cgtggcggtg tgtgctctgt gtttgctgac 420
gcaacccccca ctggctgggg cattgccacc acctgtcaac tcctttctgg gactttcgct 480
ttccccctcc cgatcgccac ggcagaactc atcgccgcct gccttgcccg ctgctggaca 540
ggggctaggt tgctgggcac tgataattcc gtggtgttgt c 581

<210> 1019
<211> 225
<212> DNA
<213> Artificial Sequence

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

<400> 1019
tgtgccttct agttgccagc catctgttgt ttgccccctcc cccgtgcctt ccttgaccct 60
ggaaggtgcc actcccactg tcctttccta ataaaatgag gaaattgcat cgcattgtct 120

gagtaggtgt cattctattc tggggggtgg ggtggggcag gacagcaagg gggaggattg	180
ggaagacaat agcaggcatg ctggggatgc ggtgggctct atggc	225
<210> 1020	
<211> 8	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Description of Artificial Sequence: Synthetic oligonucleotide	
<400> 1020	
actgaggc	8
<210> 1021	
<211> 8	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Description of Artificial Sequence: Synthetic oligonucleotide	
<400> 1021	
gcctcagt	8
<210> 1022	
<211> 16	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Description of Artificial Sequence: Synthetic oligonucleotide	
<400> 1022	
gagcgagcga gcgcgc	16
<210> 1023	
<211> 1923	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Description of Artificial Sequence: Synthetic polynucleotide	
<400> 1023	
tcaatattgg ccattagcca tattattcat tggttatata gcataaatca atattggcta	60
ttggccattg catacgttgt atctatatca taatatgtac atttatattg gctcatgtcc	120
aatatgaccg ccatgttggc attgattatt gactagttat taatagtaat caattacggg	180
gtcattagtt catagcccat atatggagtt ccgcgttaca taacttacgg taaatggccc	240

gcctggctga cgcaccaacg acccccgcgc attgacgtca ataatgacgt atgttcccat	300
agtaacgcca ataggggactt tccattgacg tcaatgggtg gagtatttac ggtaaaactgc	360
ccacttggca gtacatcaag tgtatcatat gccaaagtccg cccctatttg acgtcaatga	420
cggtaaattg cccgcctggc attatgcca gtacatgacc ttacgggact ttcctacttg	480
gcagtacatc tacgtattag tcatcgctat taccatgggtc gaggtgagcc ccacgttctg	540
cttcaactctc cccatctccc cccctcccc acccccaatt ttgtatttat ttatttttta	600
attatttttgt gcagcgatgg gggcgggggg gggggggggg cgcgcgccag gcggggcggg	660
gcggggcgag gggcgggggc gggcgaggcg gagagggtcg gcggcagcca atcagagcgg	720
cgcgctccga aagtttcctt ttatggcgag gcggcgggcg cggcggccct ataaaaagcg	780
aagcgcgcgg cgggcgggag tcgctgcgac gctgccttcg cccgtgccc cgctccgcgg	840
ccgcctcgcg ccgcgcgcgc cggctctgac tgaccgcgtt actcccacag gtgagcgggc	900
gggacggccc ttctcctccg ggctgtaatt agcgcttggg ttaatgacgg cttgtttctt	960
ttctgtggct gcgtgaaagc cttgaggggc tccgggaggg ccctttgtgc gggggggagc	1020
ggctcggggg gtgcgtgcgt gtgtgtgtgc gtggggagcg ccgcgtgcgg cccgcgtgc	1080
ccggcggtcg tgagcgtgc gggcgcggcg cggggctttg tgcgctccgc agtgtgcgcg	1140
aggggagcgc ggccgggggc ggtgccccgc ggtgcggggg gggtgcgag gggaacaaag	1200
gctgcgtgcg ggggtgtgtc gtgggggggt gagcaggggg tgtagggcgcg gcggtcgggc	1260
tgtaaccccc cctgcaccc cctccccga gttgctgagc acggcccggc ttcgggtgcg	1320
gggctccgta cggggcgtag cgcggggctc gccgtgccgg gcgggggggt gcggcaggtg	1380
ggggtgccgg gcggggcggg gccgcctcgg gccggggagg gctcggggga ggggcgcggc	1440
ggcccccgga gcgcggcgcg ctgtcgaggc gcggcgagcc gcagccattg ccttttatgg	1500
taatcgtgcg agagggcgca gggacttcct ttgtcccaa tctgtgcgga gccgaaatct	1560
gggaggcgcc gccgcacccc ctctagcggg cgcggggcga agcgggtgcg cgcggcgagg	1620
aaggaaatgg gcggggaggg ccttcgtgcg tcgccgcgcc gccgtcccct tctccctctc	1680
cagcctcggg gctgtcccg gcggggacggc tgcccttcggg ggggacgggg cagggcgggg	1740
ttcggcttct ggcgtgtgac cggcggtct agagcctctg ctaaccatgt tttagccttc	1800
ttctttttcc tacagctcct gggcaacgtg ctggttattg tgctgtctca tcatttgcg	1860
acagaattcc tcgaagatcc gaaggggttc aagcttggca ttccggtact gttggtaaag	1920
cca	1923

<211> 1272
<212> DNA
<213> Artificial Sequence

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

<400> 1024
aggctcagag gcacacagga gtttctgggc tcaccctgcc cccttccaac ccctcagttc 60
ccatcctcca gcagctgttt gtgtgctgcc tctgaagtcc aactgaaca aacttcagcc 120
tactcatgtc cctaaaatgg gcaaacattg caagcagcaa acagcaaaca cacagccctc 180
cctgcctgct gaccttggag ctggggcaga ggtcagagac ctctctgggc ccattgccacc 240
tccaacatcc actcgacccc ttggaatttc ggtggagagg agcagagggt gtcctggcgt 300
ggtttaggta gtgtgagagg gtccgggttc aaaaccactt gctgggtggg gagtcgtcag 360
taagtggcta tgccccgacc ccgaagcctg tttccccatc tgtacaatgg aaatgataaa 420
gacgcccata tgatagggtt tttgtggcaa ataaacattt ggtttttttg ttttgttttg 480
ttttgttttt tgagatggag gtttgctctg tcgcccaggc tggagtgcag tgacacaatc 540
tcattctacc acaaccttcc cctgcctcag cctcccaagt agctgggatt acaagcatgt 600
gccaccacac ctggctaatt ttctattttt agtagagacg ggtttctcca tgttggtcag 660
cctcagcctc ccaagtaact gggattacag gcctgtgcca ccacaccggg ctaatttttt 720
ctatttttga cagggacggg gtttcaccat gttggtcagg ctggtctaga ggtaccggat 780
cttgctacca gtggaacagc cactaaggat tctgcagtga gagcagaggg ccagctaagt 840
ggtactctcc cagagactgt ctgactcacg ccaccccctc caccttggac acaggacgct 900
gtggtttctg agccaggtag aatgactcct ttcggtaagt gcagtggaag ctgtacactg 960
cccaggcaaa gcgtccgggc agcgtaggcg ggcgactcag atcccagcca gtggacttag 1020
cccctgtttg ctctccgat aactgggggtg accttggtta atattcacca gcagcctccc 1080
ccgttgcccc tctggatcca ctgcttaaata acggacgagg acagggccct gtctcctcag 1140
cttcaggcac caccactgac ctgggacagt gaatccggac tctaaggtaa atataaaatt 1200
tttaagtgta taatgtgtta aactactgat tctaattgtt tctctctttt agattccaac 1260
ctttggaact ga 1272

<210> 1025
<211> 1177
<212> DNA
<213> Artificial Sequence

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

polynucleotide

<400> 1025

```

ggctcagagg ctcagaggca cacaggagtt tctgggctca ccctgcccc ttccaacccc      60
tcagttccca tcctccagca gctgtttggtg tgctgcctct gaagtccaca ctgaacaaac      120
ttcagcctac tcatgtccct aaaatgggca aacattgcaa gcagcaaaca gcaaacacac      180
agccctccct gcctgctgac cttggagctg gggcagaggt cagagacctc tctgggcca      240
tgccacctcc aacatccact cgaccccttg gaatttcggt ggagaggagc agaggttgtc      300
ctggcggtgt ttaggtagtg tgagaggggc cgggttcaaa accacttgct ggggtggggag      360
tcgtcagtaa gtggctatgc cccgaccccg aagcctgttt ccccatctgt acaatggaaa      420
tgataaagac gcccatctga tagggttttt gtggcaaata aacatttggt ttttttgttt      480
tgttttgttt tgttttttga gatggagggt tgctctgtcg ccaggctgg agtgagtg      540
cacaatctca tctcaccaca accttcccc gcctcagcct cccaagtagc tgggattaca      600
agcatgtgcc accacacctg gctaattttc tatttttagt agagacgggt ttctccatgt      660
tggtcagcct cagcctccca agtaactggg attacaggcc tgtgccacca cccccggcta      720
attttttcta tttttgacag ggacgggggt tcaccatggt ggtcaggctg gtctagaggt      780
accggatctt gctaccagtg gaacagccac taaggattct gcagtgagag cagagggcca      840
gctaagtggg actctcccag agactgtctg actcacgcca cccctccac cttggacaca      900
ggacgctgtg gtttctgagc caggtacaat gactcctttc ggtaagtgca gtggaagctg      960
tacactgccc aggcaaagcg tccgggcagc gtaggcgggc gactcagatc ccagccagtg      1020
gacttagccc ctgtttgctc ctccgataac tggggtgacc ttgggtaata ttcaccagca      1080
gcctcccccg ttgcccctct ggatccactg cttaaatacg gacgaggaca gggccctgtc      1140
tcctcagctt caggcaccac cactgacctg ggacagt      1177

```

<210> 1026

<211> 547

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
polynucleotide

<400> 1026

```

ccctaaaatg ggcaaacatt gcaagcagca aacagcaaac acacagccct ccctgcctgc      60
tgaccttgga gctggggcag aggtcagaga cctctctggg cccatgccac ctccaacatc      120
cactcgaccc cttggaattt ttcgggtggag aggagcagag gttgtcctgg cgtgggttag      180
gtagtgtgag aggggaatga ctcccttcgg taagtgcagt ggaagctgta cactgcccag      240

```

gcaaagcgtc cgggcagcgt aggcgggcga ctcagatccc agccagtgga cttagcccct	300
gtttgctcct cgcataactg gggtagacctt ggttaatat caccagcagc ctcccccggt	360
gcccctctgg atccactgct taaatacggg cgaggacagg gccctgtctc ctcagcttca	420
ggcaccacca ctgacctggg acagtgaatc cggactctaa ggtaaatata aaattttttaa	480
gtgtataatg tgttaaacta ctgattctaa ttgtttctct ctttttagatt ccaacctttg	540
gaactga	547

<210> 1027

<211> 556

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polynucleotide

<400> 1027

ccctaaaatg ggcaaacatt gcaagcagca aacagcaaac acacagccct ccctgcctgc	60
tgaccttgga gctggggcag aggtcagaga cctctctggg cccatgccac ctccaacatc	120
cactcgaccc cttggaatth cggtggagag gagcagaggt tgtcctggcg tggtttaggt	180
agtgtgagag gggaatgact cctttcggta agtgcagtgg aagctgtaca ctgcccaggc	240
aaagcgtccg ggcagcgtag gcgggcgact cagatcccag ccagtggact tagccccgtg	300
ttgctcctcc gataactggg gtgaccttgg ttaatatcca ccagcagcct cccccgttgc	360
ccctctggat ccactgctta aatacggacg aggacactcg agggccctgt ctctcagct	420
tcaggcacca ccactgacct gggacagtga atccggacat cgattctaag gtaaataata	480
aatttttaag tgtataatth gttaaactac tgattctaata tgtttctctc ttttagattc	540
caaccttttg aactga	556

<210> 1028

<211> 1179

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polynucleotide

<400> 1028

ggctccggtg cccgtcagtg ggcagagcgc acatcgccca cagtccccga gaagttgggg	60
ggagggggtc gcaattgaac cggtgcctag agaaggtggc gcggggtaaa ctgggaaagt	120
gatgtcgtgt actggctccg cctttttccc gaggggtgggg gagaaccgta tataagtgca	180

gtagtcgccg tgaacgttct ttttcgcaac gggtttgccg ccagaacaca ggtaagtgcc	240
gtgtgtgggt cccgcggggc tggcctcttt acgggttatg gcccttgctg gccttgaatt	300
acttccacct ggctgcagta cgtgattctt gatcccgagc ttcgggttgg aagtgggtgg	360
gagagttcga ggccttgctg ttaaggagcc ccttcgcctc gtgcttgagt tgaggcctgg	420
cctgggcgct ggggccgccg cgtgcgaatc tgggtggcacc ttcgcgcctg tctcgtgct	480
ttcgataagt ctctagccat ttaaaatttt tgatgacctg ctgcgacgct ttttttctgg	540
caagatagtc ttgtaaatgc gggccaagat ctgcacactg gtatttcggt ttttggggcc	600
gcgggcgggc acggggcccc tgcgtcccag cgcacatgtt cggcgaggcg gggcctgcga	660
gcgcgggccac cgagaatcgg acgggggtag tctcaagctg gccggcctgc tctggtgcct	720
ggtctcgcgc cgccgtgtat cggcccgccc tgggcggcaa ggctggcccg gtcggcacca	780
gttgcgtagc cggaagatg gccgcttccc ggccctgctg caggagagctc aaaatggagg	840
acgcggcgct cgggagagcg ggcgggtgag tcacccacac aaaggaaaag ggcctttccg	900
tcctcagccg tcgcttcattg tgactccacg gagtaccggg cgccgtccag gcacctcgat	960
tagttctcga gcttttggag tacgtcgtct ttaggttggg gggaggggtt ttatgcgatg	1020
gagtttcccc aactgagtg ggtggagact gaagttaggc cagcttggca cttgatgtaa	1080
ttctccttgg aatttgccct ttttgagttt ggatcttggg tcattctcaa gcctcagaca	1140
gtggttcaaa gtttttttct tccatttcag gtgtcgtga	1179

<210> 1029

<211> 141

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polynucleotide

<400> 1029

aataaacgat aacgccgttg gtggcgtgag gcatgtaaaa ggttacatca ttatcttgtt	60
cgccatccgg ttggtataaa tagacgttca tgttgggttt tgtttcagtt gcaagttggc	120
tgcggcgcgc gcagcacctt t	141

<210> 1030

<211> 317

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polynucleotide

<400> 1030
 ggtgtggaaa gtccccaggc tccccagcag gcagaagtat gcaaagcatg catctcaatt 60
 agtcagcaac caggtgtgga aagtccccag gctccccagc aggcagaagt atgcaaagca 120
 tgcatctcaa ttagtcagca accatagtcc cgcccctaac tccgcccata ccgcccctaa 180
 ctccgcccag ttccgcccata tctccgcccc atggctgact aatTTTTTTTT atttatgcag 240
 aggccgaggc cgctcggcc tctgagctat tccagaagta gtgaggaggc ttttttgag 300
 gcctaggctt ttgcaaa 317

<210> 1031
 <211> 241
 <212> DNA
 <213> Artificial Sequence

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

<400> 1031
 gagggcctat ttcccatgat tccttcatat ttgcatatac gatacaaggc tgtagagag 60
 ataattggaa ttaatttgac tgtaaacaca aagatattag tacaaaatac gtgacgtaga 120
 aagtaataat ttcttgggta gtttgcagtt taaaattat gttttaaaat ggactatcat 180
 atgcttaccg taacttgaaa gtatttcgat ttcttggctt tatatatctt gtggaaagga 240
 c 241

<210> 1032
 <211> 215
 <212> DNA
 <213> Artificial Sequence

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

<400> 1032
 gaacgctgac gtcacaaacc cgctccaagg aatcgcgggc ccagtgtcac taggcgggaa 60
 caccagcgc gcgtgcgccc tggcaggaag atggctgtga gggacagggg agtggcgccc 120
 tgcaatatatt gcatgtcgct atgtgttctg ggaaatcacc ataaacgtga aatgtctttg 180
 gatttgggaa tcgtataaga actgtatgag accac 215

<210> 1033
 <211> 546
 <212> DNA
 <213> Artificial Sequence

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

polynucleotide

<400> 1034

ccctaaaatg ggcaaacatt gcaagcagca aacagcaaac acacagccct ccctgcctgc	60
tgaccttgga gctggggcag aggtcagaga cctctctggg cccatgccac ctccaacatc	120
cactcgaccc cttggaattt ttcggtggag aggagcagag gttgtcctgg cgtggtttag	180
gtagtgtgag aggggaatga ctcctttcgg taagtgcagt ggaagctgta cactgcccag	240
gcaaagcgtc cgggcagcgt aggcggggcga ctcagatccc agccagtgga cttagcccct	300
gtttgctcct ccgataactg ggggtgacctt ggttaatat caccagcagc ctccccggt	360
gccccctctg atccactgct taaatacggc cgaggacagg gccctgtctc ctcagcttca	420
ggcaccacca ctgacctggg acagtgaatc cggactctaa ggtaaataa aaatttttaa	480
gtgtataatg tggtaaacta ctgattctaa ttgtttctct ctttttagatt ccaacctttg	540
gaactg	546

<210> 1035

<211> 576

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
polynucleotide

<400> 1035

tagtaatcaa ttacgggggtc attagttcat agcccatata tggagttccg cgttacataa	60
cttacggtaa atggcccgcc tggctgaccg cccaacgacc cccgcccatt gacgtcaata	120
atgacgtatg ttcccatagt aacgccaata gggactttcc attgacgtca atgggtggag	180
tatttacggg aaactgcccc cttggcagta catcaagtgt atcatatgcc aagtacgccc	240
cctattgacg tcaatgacgg taaatggccc gcctggcatt atgcccagta catgacctta	300
tgggactttc ctacttggca gtacatctac gtattagtca tcgctattac catggtgatg	360
cggtttttggc agtacatcaa tgggcgtgga tagcggtttg actcacgggg atttccaagt	420
ctccacccca ttgacgtcaa tgggagtttg ttttggcacc aaaatcaacg ggactttcca	480
aaatgtcgta acaactccgc cccattgacg caaatgggcg gtaggcgtgt acggtgggag	540
gtctatataa gcagagctgg tttagtgaac cgtcag	576

<210> 1036

<211> 150

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polynucleotide

<400> 1036

ataaacgata acgccgttgg tggcgtgagg catgtaaaag gttacatcat tatcttgttc	60
gccatccggg tgggtataaat agacgttcat gttgggtttt gtttcagttg caagttggct	120
gcggcgcgcg cagcaccttt gcggccatct	150

<210> 1037

<211> 1313

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polynucleotide

<400> 1037

ggagccgaga gtaattcata caaaaggagg gatcgccttc gcaaggggag agcccaggga	60
ccgtccctaa attctcacag acccaaatcc ctgtagccgc cccacgacag cgcgaggagc	120
atgcgcccag ggctgagcgc gggtagatca gagcacacaa gctcacagtc cccggcggtg	180
gggggagggg cgcgctgagc gggggccagg gagctggcgc ggggcaaact gggaaagtgg	240
tgtcgtgtgc tggctccgcc ctcttcccga ggggtggggga gaacggtata taagtgcggt	300
agtgccttg gacgttcttt ttgcgaacgg gtttgccgtc agaacgcagg tgagtggcgg	360
gtgtggcttc cgcgggcccc ggagctggag ccctgctctg agcggggccgg gctgatatgc	420
gagtgtcgtc cgcagggttt agctgtgagc attcccactt cgagtggcgg gcggtgcggg	480
ggtgagagtg cgaggcctag cggcaacccc gtagcctcgc ctctgttccg gcttgaggcc	540
tagcgtggtg tccgcgcgcg cgtgccactc cggccgcact atgcgttttt tgccttgct	600
gccctcgatt gccttcagc agcatgggct aacaaaggga ggggtgtggg ctactctta	660
aggagcccat gaagcttacg ttggatagga atggaagggc aggaggggcg actggggccc	720
gcccgccttc ggagcacatg tccgacgcca cctggatggg gcgaggcctg tggctttccg	780
aagcaatcgg gcgtgagttt agcctacctg ggccatgtgg ccctagcact gggcacggtc	840
tggcctggcg gtgccgcgtt cccttgctc ccaacaaggg tgaggccgtc ccgcccggca	900
ccagttgctt gcgcggaaag atggccgtc ccggggccct gttgcaagga gctcaaaatg	960
gaggacgcgg cagcccggg gagcgggcgg gtgagtcacc cacacaaagg aagagggcct	1020
tgcccctcgc cggccgctgc ttctgtgac cccgtggtct atcggccgca tagtcacctc	1080
gggcttctct tgagcacccg tcgtcgcggc ggggggaggg gatctaattg cgttgaggtt	1140
tgttcacatt tgggtgggtg agactagtca ggccagcctg gcgctggaag tcattcttgg	1200

aatttgcccc tttagagtttg gagcgaggct aattctcaag cctcttagcg gttcaaaggt 1260

atatttctaaa cccgttttcca ggtggttgga aagccaccgc taattcaaag caa 1313

<210> 1038

<211> 213

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
polynucleotide

<400> 1038

taagatacat tgatgagttt ggacaaacca caactagaat gcagtgaaaa aaatgcttta 60

tttgtgaaat ttgtgatgct attgctttat ttgtaaccat tataagctgc aataaacaag 120

ttaacaacaa caattgcatt cattttatgt ttcaggttca gggggagggtg tgggagggtt 180

tttaaagcaa gtaaaacctc tacaaatgtg gta 213

<210> 1039

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 1039

Pro Lys Lys Lys Arg Lys Val

1 5

<210> 1040

<211> 19

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 140

Met Asp Trp Thr Trp Arg Ile Leu Phe Leu Val Ala Ala Ala Thr Gly

1 5 10 15

Ala His Ser

<210> 1041

<211> 19

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 1041

Met Leu Pro Ser Gln Leu Ile Gly Phe Leu Leu Leu Trp Val Pro Ala
1 5 10 15

Ser Arg Gly

<210> 1042

<211> 7

<212> PRT

<213> Simian virus 40

<400> 1042

Pro Lys Lys Lys Arg Lys Val
1 5

<210> 1043

<211> 21

<212> DNA

<213> Simian virus 40

<400> 1043

cccaagaaga agaggaaggt g

21

<210> 1044

<211> 16

<212> PRT

<213> Unknown

<220>

<223> Description of Unknown:
Nucleoplasmin bipartite NLS sequence

<400> 1044

Lys Arg Pro Ala Ala Thr Lys Lys Ala Gly Gln Ala Lys Lys Lys Lys
1 5 10 15

<210> 1045

<211> 9

<212> PRT

<213> Unknown

<220>

<223> Description of Unknown:
C-myc NLS sequence

<400> 1045

Pro Ala Ala Lys Arg Val Lys Leu Asp
1 5

<210> 1046

<211> 11
<212> PRT
<213> Unknown

<220>
<223> Description of Unknown:
C-myc NLS sequence

<400> 1046
Arg Gln Arg Arg Asn Glu Leu Lys Arg Ser Pro
1 5 10

<210> 1047
<211> 38
<212> PRT
<213> Homo sapiens

<400> 1047
Asn Gln Ser Ser Asn Phe Gly Pro Met Lys Gly Gly Asn Phe Gly Gly
1 5 10 15

Arg Ser Ser Gly Pro Tyr Gly Gly Gly Gly Gln Tyr Phe Ala Lys Pro
20 25 30

Arg Asn Gln Gly Gly Tyr
35

<210> 1048
<211> 42
<212> PRT
<213> Unknown

<220>
<223> Description of Unknown:
IBB domain from importin-alpha sequence

<400> 1048
Arg Met Arg Ile Glx Phe Lys Asn Lys Gly Lys Asp Thr Ala Glu Leu
1 5 10 15

Arg Arg Arg Arg Val Glu Val Ser Val Glu Leu Arg Lys Ala Lys Lys
20 25 30

Asp Glu Gln Ile Leu Lys Arg Arg Asn Val
35 40

<210> 1049
<211> 8
<212> PRT
<213> Unknown

<220>
<223> Description of Unknown:
Myoma T protein sequence

<400> 1049
Val Ser Arg Lys Arg Pro Arg Pro
1 5

<210> 1050
<211> 8
<212> PRT
<213> Unknown

<220>
<223> Description of Unknown:
Myoma T protein sequence

<400> 1050
Pro Pro Lys Lys Ala Arg Glu Asp
1 5

<210> 1051
<211> 8
<212> PRT
<213> Homo sapiens

<400> 1051
Pro Gln Pro Lys Lys Lys Pro Leu
1 5

<210> 1052
<211> 12
<212> PRT
<213> Mus musculus

<400> 1052
Ser Ala Leu Ile Lys Lys Lys Lys Lys Met Ala Pro
1 5 10

<210> 1053
<211> 70
<212> DNA
<213> Artificial Sequence

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

<400> 1053
gcgcgctcgc tcgctcactg aggccgcccg ggaaacccgg gcgtgcgctt cagtgagcga 60
gcgagcgcgc 70

<210> 1054
<211> 70
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide

<400> 1054
gcgcgctcgc tcgctcactg aggcgcacgc ccgggtttcc cgggcggcct cagtgagcga 60
gcgagcgcg 70

<210> 1055
<211> 72
<212> DNA
<213> Artificial Sequence

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

<400> 1055
gcgcgctcgc tcgctcactg aggccgtcgg gcgacctttg gtcgcccggc ctcagtgagc 60
gagcgagcgc gc 72

<210> 1056
<211> 72
<212> DNA
<213> Artificial Sequence

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

<400> 1056
gcgcgctcgc tcgctcactg aggccggggcg accaaaggtc gcccgacggc ctcagtgagc 60
gagcgagcgc gc 72

<210> 1057
<211> 72
<212> DNA
<213> Artificial Sequence

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

<400> 1057
gcgcgctcgc tcgctcactg aggccgcccg ggcaaagccc gggcgtcggc ctcagtgagc 60
gagcgagcgc gc 72

<210> 1058
<211> 72
<212> DNA
<213> Artificial Sequence

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

oligonucleotide

<400> 1058
gcgcgctcgc tcgctcactg aggccgacgc ccgggctttg cccgggcggc ctcaagtgagc 60
gagcgagcgc gc 72

<210> 1059
<211> 83
<212> DNA
<213> Artificial Sequence

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

<400> 1059
gcgcgctcgc tcgctcactg aggccgcccg ggcaaagccc gggcgtcggg ctttgcccgg 60
cctcaagtgag cgagcgagcg cgc 83

<210> 1060
<211> 83
<212> DNA
<213> Artificial Sequence

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

<400> 1060
gcgcgctcgc tcgctcactg aggccgggca aagcccagacg cccgggcttt gcccgggcgg 60
cctcaagtgag cgagcgagcg cgc 83

<210> 1061
<211> 77
<212> DNA
<213> Artificial Sequence

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

<400> 1061
gcgcgctcgc tcgctcactg aggccgaaac gtcgggcgac ctttggtcgc ccggcctcag 60
tgagcgagcg agcgcg 77

<210> 1062
<211> 77
<212> DNA
<213> Artificial Sequence

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

<400> 1062
 gcgcgctcgc tcgctcactg aggccgggcg accaaaggct gcccgacgtt tcggcctcag 60
 tgagcgagcg agcgcg 77

<210> 1063
 <211> 51
 <212> DNA
 <213> Artificial Sequence

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

<400> 1063
 gcgcgctcgc tcgctcactg aggcaaagcc tcagtgcgagc agcgagcgcg c 51

<210> 1064
 <211> 51
 <212> DNA
 <213> Artificial Sequence

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

<400> 1064
 gcgcgctcgc tcgctcactg aggctttgcc tcagtgcgagc agcgagcgcg c 51

<210> 1065
 <211> 80
 <212> DNA
 <213> Artificial Sequence

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

<400> 1065
 gcgcgctcgc tcgctcactg aggccgcccg ggcgtcgggc gaccttttgt cggccggcct 60
 cagtgcgagc gcgagcgcg 80

<210> 1066
 <211> 80
 <212> DNA
 <213> Artificial Sequence

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

<400> 1066
 gcgcgctcgc tcgctcactg aggccgggcg accaaaggct gcccgacgcc cgggcggcct 60
 cagtgcgagc gcgagcgcg 80

<210> 1067
 <211> 79
 <212> DNA
 <213> Artificial Sequence

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

 <400> 1067
 gcgcgctcgc tcgctcactg aggcgcccgc gcgtcgggcg acctttggtc gcccggcctc 60
 agtgagcgag cgagcgcg 79

 <210> 1068
 <211> 79
 <212> DNA
 <213> Artificial Sequence

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

 <400> 1068
 gcgcgctcgc tcgctcactg aggcggggcg accaaaggtc gcccgcgcgc cgggcgccctc 60
 agtgagcgag cgagcgcg 79

 <210> 1069
 <211> 5
 <212> PRT
 <213> Influenza virus

 <400> 169
 Asp Arg Leu Arg Arg
 1 5

 <210> 1070
 <211> 7
 <212> PRT
 <213> Influenza virus

 <400> 1070
 Pro Lys Gln Lys Lys Arg Lys
 1 5

 <210> 1071
 <211> 10
 <212> PRT
 <213> Hepatitis delta virus

 <400> 1071
 Arg Lys Leu Lys Lys Lys Ile Lys Lys Leu
 1 5 10

<210> 1072

<211> 10

<212> PRT

<213> Mus musculus

<400> 1072

Arg Glu Lys Lys Lys Phe Leu Lys Arg Arg
1 5 10

<210> 1273

<211> 20

<212> PRT

<213> Homo sapiens

<400> 1073

Lys Arg Lys Gly Asp Glu Val Asp Gly Val Asp Glu Val Ala Lys Lys
1 5 10 15

Lys Ser Lys Lys
20

<210> 1074

<211> 17

<212> PRT

<213> Homo sapiens

<400> 1074

Arg Lys Cys Leu Gln Ala Gly Met Asn Leu Glu Ala Arg Lys Thr Lys
1 5 10 15

Lys

<210> 1075

<211> 8

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide

<400> 1075

gtttaa

8

<210> 1076

<211> 8

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide

<400> 1076
ttaattaa 8

<210> 1077
<211> 141
<212> DNA
<213> Artificial Sequence

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

<400> 1077
aataaacgat aacgccgttg gtggcgtgag gcatgtaaaa ggttacatca ttatcttggt 60
cgccatccgg ttggtataaa tagacgttca tgttggtttt tgtttcagtt gcaagttggc 120
tgcggcgcgc gcagcacctt t 141

<210> 1078
<211> 317
<212> DNA
<213> Artificial Sequence

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

<400> 1078
ggtgtgga aa gtccccaggc tccccagcag gcagaagtat gcaaagcatg catctcaatt 60
agtcagcaac caggtgtgga aagtccccag gctccccagc aggcagaagt atgcaaagca 120
tgcattctaa ttagtcagca accatagtcc cgcccctaac tccgcccatc ccgcccctaa 180
ctccgccag ttccgccat tctccgcccc atggctgact aatttttttt atttatgcag 240
aggccgaggc cgctcggcc tctgagctat tccagaagta gtgaggaggc ttttttgag 300
gcctaggctt ttgcaaa 317

<210> 1079
<211> 72
<212> DNA
<213> Artificial Sequence

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

<400> 1079
gcgcgctcgc tcgctcactg aggccgggcg accaaaggct gcccgacggc ctcaagtgc 60
gagcgagcgc gc 72

<210> 1080
<211> 60

<212> DNA
<213> Artificial Sequence

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

<400> 1080
gagacagaca cactcctgct atgggtactg ctgctctggg ttccagggtc cactggtgac 60

<210> 1081
<211> 1260
<212> DNA
<213> Adeno-associated virus - 2

<400> 1081
atggagctgg tcgggtggct cgtggacaag gggattacct cggagaagca gtggatccag 60
gaggaccagg cctcatatcat ctccttcaat gcggcctcca actcgcggtc ccaaatacaag 120
gctgccttgg acaatgcggg aaagattatg agcctgacta aaaccgcccc cgactacctg 180
gtggggccagc agcccgtgga ggacatttcc agcaatcgga ttataaaaat ttggaacta 240
aacgggtacg atcccccaata tgcggcttcc gtctttcttg gatggggccac gaaaaagttc 300
ggcaagagga acaccatctg gctgtttggg cctgcaacta ccgggaagac caacatcgcg 360
gaggccatag cccacactgt gcccttctac gggcgcgtaa actggaccaa tgagaacttt 420
cccttcaacg actgtgtcga caagatggtg atctgggtgg aggaggggaa gatgaccgcc 480
aaggtcgtgg agtcggccaa agccattctc ggaggaagca aggtgcgcgt ggaccagaaa 540
tgcaagtctt cggcccagat agaccgcact cccgtgatcg tcacctcaa caccaacatg 600
tgcgcctgta ttgacgggaa ctcaacgacc ttggaacacc agcagccgtt gcaagaccgg 660
atgttcaaat ttgaactcac ccgccgtctg gatcatgact ttgggaaggt caccaagcag 720
gaagtcaaag actttttccg gtgggcaaag gatcacgtgg ttgaggtgga gcatgaattc 780
tacgtcaaaa aggggtggagc caagaaaaga cccgccccca gtgacgcaga tataagtgag 840
cccaaacggg tgcgcgagtc agttgcgcag ccatcgacgt cagacgcgga agcttcgatc 900
aactacgcag acaggtacca aaacaaatgt tctcgtcacg tgggcatgaa tctgatgctg 960
tttccttgca gacaatgcga gagaatgaat cagaattcaa atatctgctt cactcacgga 1020
cagaaagact gtttagagtg ctttcccggtg tcagaatctc aaccggtttc tgtcgtcaaa 1080
aaggcgtatc agaaactgtg ctacattcat catatcatgg gaaagtgcc agacgcttgc 1140
actgcctgcg atctgggtcaa tgtggatttg gatgactgca tctttgaaca ataatgatt 1200
taaatcaggt atggctgccg atgggttatct tccagattgg ctcgaggaca ctctctctga 1260

<210> 1082

<211> 1932
<212> DNA
<213> Adeno-associated virus - 2

<400> 1082
atgccggggt tttacgagat tgtgattaag gtccccagcg accttgacga gcattctgccc 60
ggcattttctg acagctttgt gaactgggtg gccgagaagg aatgggagtt gccgccagat 120
tctgacatgg atctgaatct gattgagcag gcacccctga ccgtggccga gaagctgcag 180
cgcgactttc tgacggaatg gcgccgtgtg agtaaggccc cggaggccct tttctttgtg 240
caatttgaga agggagagag ctacttccac atgcacgtgc tcgtggaaac caccggggtg 300
aaatccatgg ttttgggacg tttcctgagt cagattcgcg aaaaactgat tcagagaatt 360
taccgcggga tcgagccgac ttgccaac tggttcgcg tcacaaagac cagaaatggc 420
gccggaggcg ggaacaagg tgggatgag tgctacatcc ccaattactt gctcccaaa 480
accagcctg agctccagt ggcgtggact aatatggaac agtatttaag cgctgtttg 540
aatctcacgg agcgtaaagc gttggtggcg cagcatctga cgcacgtgtc gcagacgcag 600
gagcagaaca aagagaatca gaatcccaat tctgatgcgc cggatgatcag atcaaaaact 660
tcagccaggt acatggagct ggtcgggtgg ctctgggaca aggggattac ctcggagaag 720
cagtggatcc aggaggacca ggcctcatac atctccttca atgcggcctc caactcgcgg 780
tcccaaatca aggtgcctt ggacaatgcg ggaaagatta tgagcctgac taaaaccgcc 840
cccgactacc tggtagggca gcagcccggt gaggacatct ccagcaatcg gatttataaa 900
attttggaaac taaacgggta cgatcccaa tatgcggctt ccgtctttct gggatgggcc 960
acgaaaaagt tcggcaagag gaacaccatc tggctgtttg ggctgcaac taccgggaag 1020
accaacatcg cggaggccat agcccacact gtgcccttct acgggtgcgt aaactggacc 1080
aatgagaact ttcccttcaa cgactgtgtc gacaagatgg tgatctggtg ggaggagggg 1140
aagatgaccg ccaaggctgt ggagtcggcc aaagccattc tcggaggaag caaggtgcgc 1200
gtggaccaga aatgcaagtc ctcgccccag atagaccoga ctcccgtgat cgtcacctcc 1260
aacaccaaca tgtgcgcgt gattgacggg aactcaacga cttcgaaca ccagcagccg 1320
ttgcaagacc ggatgttcaa atttgaactc acccgccgtc tggatcatga ctttgggaag 1380
gtcaccaagc aggaagtcaa agactttttc cggtagggcaa aggatcacgt ggttgaggtg 1440
gagcatgaat tctacgtcaa aaagggtgga gccaaagaaa gaccgcccc cagtgcgcga 1500
gatataagtg agcccaaagc ggtgcgcgag tcagttgcgc agccatcgac gtcagacgcg 1560
gaagcttcga tcaactacgc agacaggtag caaaacaaat gttctcgtca cgtgggcatg 1620
aatctgatgc tgtttccctg cagacaatgc gagagaatga atcagaattc aaatatctgc 1680

ttcactcacg gacagaaaga ctgttttagag tgctttcccg tgtcagaatc tcaacccgtt	1740
tctgtcgtca aaaaggcgta tcagaaactg tgctacattc atcatatcat gggaaagggtg	1800
ccagacgctt gcactgcctg cgatctggtc aatgtggatt tggatgactg catctttgaa	1860
caataaatga tttaaatcag gtatggctgc cgatggttat cttccagatt ggctcgagga	1920
caactctctct ga	1932

<210> 1083

<211> 1876

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polynucleotide

<400> 1083

cgcagccacc atggcggggt tttacgagat tgtgattaag gtccccagcg accttgacgg	60
gcactctgcc ggcatttctg acagctttgt gaactgggtg gccgagaagg aatgggagtt	120
gccgccagat tctgacatgg atctgaatct gattgagcag gcacccctga ccgtggccga	180
gaagctgcag cgcgactttc tgacggaatg gcgccgtgtg agtaaggccc cggaggccct	240
tttctttgtg caatttgaga agggagagag ctacttccac atgcacgtgc tcgtggaaac	300
caccgggggtg aaatccatgg ttttgggacg tttcctgagt cagattcgcg aaaaactgat	360
tcagagaatt taccgcggga tcgagccgac tttgccaaac tggttcgcg tcacaaagac	420
cagaaatggc gccggaggcg ggaacaaggt ggtggatgag tgctacatcc ccaattactt	480
gctccccaaa acccagcctg agctccagtg ggcgtggact aatatggaac agtatttaag	540
cgctgtttg aatctcacgg agcgtaaacg gttggtggcg cagcatctga cgcacgtgtc	600
gcagacgcag gagcagaaca aagagaatca gaatcccaat tctgatgcgc cggatgatcag	660
atcaaaaact tcagccaggt acatggagct ggtcgggtgg ctcgtggaca aggggattac	720
ctcggagaag cagtggatcc aggaggacca ggcctcatac atctccttca atgcggcctc	780
caactcgcg tcccaaatca aggctgcctt ggacaatgcg ggaaagatta tgagcctgac	840
taaaaccgcc cccgactacc tgggtgggcca gcagcccgtg gaggacattt ccagcaatcg	900
gatttataaa attttggaa taaacgggta cgatcccca tatgcggctt ccgtctttct	960
gggatgggac acgaaaaagt tcggcaagag gaacaccatc tggctgtttg ggcttgcaac	1020
taccgggaag accaacatcg cggaggccat agcccacact gtgcccttct acgggtgcgt	1080
aaactggacc aatgagaact ttcccttcaa cgactgtgtc gacaagatgg tgatctggtg	1140
ggaggagggg aagatgaccg ccaaggtcgt ggagtcggcc aaagccattc tcggaggaag	1200

caaggtgcgc gtggaccaga aatgcaagtc ctcggcccag atagaccgga ctcccgtgat	1260
cgtcacctcc aacaccaaca tgtgcgccgt gattgacggg aactcaacga ccttcgaaca	1320
ccagcagccg ttgcaagacc ggatgttcaa atttgaactc acccgccgtc tggatcatga	1380
ctttgggaag gtcaccaagc aggaagtcaa agactttttc cggtgggcaa aggatcacgt	1440
ggttgagggtg gagcatgaat tctacgtcaa aaaggggtgga gccaagaaaa gacccgcccc	1500
cagtgcgcga gatataagtg agcccaaacg ggtgcgcgag tcagttgcgc agccatcgac	1560
gtcagacgcg gaagcttcga tcaactacgc agacagggtac caaaacaaat gttctcgtca	1620
cgtgggcatg aatctgatgc tgtttccctg cagacaatgc gagagaatga atcagaattc	1680
aaatatctgc ttcactcacg gacagaaaga ctgttttagag tgctttcccg tgtcagaatc	1740
tcaacccggtt tctgtcgtca aaaaggcgta tcagaaactg tgctacattc atcatatcat	1800
gggaaagggtg ccagacgctt gcactgcctg cgatctgggtc aatgtggatt tggatgactg	1860
catctttgaa caataa	1876

<210> 1084

<211> 1194

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
polynucleotide

<400> 1084

atggagctgg tcgggtggct cgtggacaag gggattacct cggagaagca gtggatccag	60
gaggaccagg cctcatacat ctccttcaat gcggcctcca actcgcggtc ccaaatacaag	120
gctgccttgg acaatgcggg aaagattatg agcctgacta aaaccgcccc cgactacctg	180
gtgggccagc agcccgtgga ggacatttcc agcaatcgga ttataaaaat tttggaacta	240
aacgggtacg atccccaata tgcggcttcc gtctttctgg gatgggccac gaaaaagttc	300
ggcaagagga acaccatctg gctgtttggg cctgcaacta ccgggaagac caacatcgcg	360
gaggccatag ccacactgt gcccttctac gggcgcgtaa actggaccaa tgagaacttt	420
cccttcaacg actgtgtcga caagatgggt atctgggtggg aggaggggaa gatgaccgcc	480
aaggctcgtg agtcggccaa agccattctc ggaggaagca aggtgcgcgt ggaccagaaa	540
tgcaagtctt cggcccagat agacccgact cccgtgatcg tcacctcaa caccaacatg	600
tcgcgcgtga ttgacgggaa ctcaacgacc ttcgaacacc agcagccgtt gcaagaccgg	660
atgttcaaat ttgaactcac ccgccgtctg gatcatgact ttgggaaggt caccaagcag	720
gaagtcaaag actttttccg gtgggcaaag gatcacgtgg ttgaggtgga gcatgaattc	780

tacgtcaaaa aggggtggagc caagaaaaga cccgccccca gtgacgcaga tataagtgag	840
cccaaacggg tgcgcgagtc agttgcgcag ccatcgacgt cagacgcgga agcttcgatc	900
aactacgcag accgctacca aaacaaatgt tctcgtcacg tgggcatgaa tctgatgctg	960
tttccctgca gacaatgcga gagaatgaat cagaattcaa atatctgctt cactcacgga	1020
cagaaagact gtttagagtg ctttcccgtg tcagaatctc aacccgtttc tgtcgtcaaa	1080
aaggcgtatc agaaactgtg ctacattcat catatcatgg gaaagggtgc agacgcttgc	1140
actgcctgcg atctgggtcaa tgtggatttg gatgactgca tctttgaaca ataa	1194

<210> 1085

<211> 1876

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polynucleotide

<400> 1085

cgcagccacc atggcggggt tttacgagat tgtgattaag gtccccagcg accttgacgg	60
gcatctgccc ggcatttctg acagctttgt gaactgggtg gccgagaagg aatgggagtt	120
gccgccagat tctgacatgg atctgaatct gattgagcag gcaccctga ccgtggccga	180
gaagctgcag cgcgactttc tgacggaatg gcgccgtgtg agtaaggccc cggaggccct	240
tttctttgtg caatttgaga agggagagag ctacttcac atgcacgtgc tcgtggaaac	300
caccgggggtg aaatccatgg ttttgggacg tttcctgagt cagattcgcg aaaaactgat	360
tcagagaatt taccgcggga tcgagccgac tttgcaaac tggttcgcgg tcacaaagac	420
cagaaatggc gccggaggcg ggaacaaggt ggtggatgag tgctacatcc ccaattactt	480
gtccccaaa acccagcctg agctccagtg ggcgtggact aatatggaac agtatttaag	540
cgctgtttg aatctcacgg agcgtaaacg gttggtggcg cagcatctga cgcacgtgtc	600
gcagacgcag gagcagaaca aagagaatca gaatcccaat tctgatgcgc cggatgatcag	660
atcaaaaact tcagccaggt acatggagct ggtcgggtgg ctctgggaca aggggattac	720
ctcggagaag cagtggatcc aggaggacca ggcctcatac atctccttca atgcggcctc	780
caactcgcgg tcccaaatca aggctgcctt ggacaatgcg ggaaagatta tgagcctgac	840
taaaaccgcc cccgactacc tgggtggcca gcagcccgtg gaggacattt ccagcaatcg	900
gatttataaa attttggaac taaacgggta cgatcccca tatgcggctt ccgtctttct	960
gggatgggcc acgaaaaagt tcggcaagag gaacaccatc tggctgtttg ggcctgcaac	1020
taccgggaag accaacatcg cggaggccat agcccacact gtgcccttct acgggtgcgt	1080

aaactggacc aatgagaact ttcccttcaa cgactgtgtc gacaagatgg tgatctggtg	1140
ggaggagggg aagatgaccg ccaaggtcgt ggagtcggcc aaagccattc tcggaggaag	1200
caaggtgctc gtggaccaga aatgcaagtc ctcggtccag atagaccgga ctcccgatg	1260
cgtcacctcc aacaccaaca tgtgcgcgtg gattgacggg aactcaacga ccttcgaaca	1320
ccagcagccg ttgcaagacc ggatgttcaa atttgaactc acccgccgtc tggatcatga	1380
ctttgggaag gtcaccaagc aggaagtcaa agactttttc cggtgggcaa aggatcacgt	1440
ggttgaggtg gagcatgaat tctacgtcaa aaagggtgga gccaagaaaa gacccgcccc	1500
cagtgcgcga gatataagtg agcccaaacg ggtgcgcgag tcagttgcgc agccatcgac	1560
gtcagacgcg gaagcttcga tcaactacgc agacaggtag caaaacaaat gttctcgta	1620
cgtgggcatg aatctgatgc tgtttccctg cagacaatgc gagagaatga atcagaattc	1680
aaatatctgc ttcactcacg gacagaaaga ctgttttagag tgctttcccg tgtcagaatc	1740
tcaaccggtt tctgtcgtca aaaaggcgta tcagaaactg tgctacattc atcatatcat	1800
gggaaagggtg ccagacgctt gcactgcctg cgatctggtc aatgtggatt tggatgactg	1860
catctttgaa caataa	1876

<210> 1086

<211> 51

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide

<400> 1086

ctaggccgcc cgggcaaagc ccgggcgtcg ggcgaccttt ggtcgcccgg c	51
--	----

<210> 1087

<211> 65

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide

<400> 1087

ctaggactga ggccgcccgg gcaaagcccg ggcgtcgggc gacctttggt cgcccggcct	60
---	----

cagtc	65
-------	----

<210> 1088

<211> 67

<212> DNA

<213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 oligonucleotide
 0

ggactgagggc cgcccgggca aagcccgggc gtcgggagac ctttggtcgc ccggcctcag 60
 tcctgca 67

<210> 1099
 <211> 41
 <212> DNA
 <213> Artificial Sequence

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

<400> 1099
 gtgcggggcga ccaaagggtcg cccgacgccc gggcgcactc a 41

<210> 1100
 <211> 56
 <212> DNA
 <213> Artificial Sequence

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

<400> 1100
 ggactgagggc cgggagacca aaggtagccc gacggccggg ccgcctcagt cctgca 56

<210> 1111
 <211> 54
 <212> DNA
 <213> Artificial Sequence

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

<400> 1111
 ctaggactga ggccgcccgg gcgtcgggag acctttggtc gcccggcctc agtc 54

<210> 1112
 <211> 48
 <212> DNA
 <213> Artificial Sequence

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

<400> 1112
 ggactgagggc cgggagacca aaggtagccc gacggcctca gtcctgca 48

<210> 1112
 <211> 46
 <212> DNA
 <213> Artificial Sequence

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

 <400> 1112
 ctaggactga ggccgtcggg cgacctttgg tcgcccggcc tcagtc 46

 <210> 1113
 <211> 67
 <212> DNA
 <213> Artificial Sequence

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

 <400> 1113
 ggactgaggc ccgggcgacc aaaggctgcc cgacgcccgg gctttgcccg ggcgcctcag 60
 tcctgca 67

 <210> 1114
 <211> 47
 <212> DNA
 <213> Artificial Sequence

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

 <400> 1114
 atacctaggc acgcgtgtta ctagttatta atagtaatca attacgg 47

 <210> 1115
 <211> 29
 <212> DNA
 <213> Artificial Sequence

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

 <400> 1115
 atacctaggg gccgcacgcg tggtactag 29

 <210> 1116
 <211> 42
 <212> DNA
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide

<400> 1116

atacactcag tgcctgcagg cacgtgggtcc ggagatccag ac

42

<210> 1117

<211> 3754

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
polynucleotide

<400> 1117

cctaggtgag cgagcgagcg cgcagagagg gagtggccaa ctccatcact aggggttcct	60
tgtagttaat gattaacccg ccatgctact tatcgcggcc gctcaatatt ggccattagc	120
catattattc attggttata tagcataaat caatattggc tattggccat tgcatacggt	180
gtatctatat cataatatgt acatttataat tggctcatgt ccaatatgac cgccatgttg	240
gcattgatta ttgactagtt attaatagta atcaattacg gggtcattag ttcatagccc	300
atatatggag ttccgcgtta cataacttac ggtaaattggc ccgcctggct gaccgcccaa	360
cgacccccgc ccattgacgt caataatgac gtatgttccc atagtaacgc caatagggac	420
tttccattga cgtcaatggg tggagtatit acggtaaaact gcccaattgg cagtacatca	480
agtgtatcat atgccaagtc cgccccctat tgacgtcaat gacggtaaatt ggccgcctg	540
gcattatgcc cagtacatga ccttacggga ctttctact tggcagtaca tctacgtatt	600
agtcacgcgt attaccatgg tcgaggtgag cccacggttc tgcttactc tccccatctc	660
ccccccctcc ccacccccaa ttttgtatit atttatitit taattatitit gtgcagcgat	720
gggggcgggg gggggggggg ggcgcgcgcc aggcggggcg gggcggggcg aggggcgggg	780
cggggcgagg cggagaggtg cggcggcagc caatcagagc ggcgcgctcc gaaagtttcc	840
ttttatggcg aggcggcggc ggcggcggcc ctataaaaag cgaagcgcgc ggcgggcggg	900
agtcgctgcg acgctgcctt cgccccgtgc cccgctccgc cgccgcctcg cgccgccgc	960
cccggtctg actgaccgcy ttactccac aggtgagcgg gcgggacggc ctttctctc	1020
cgggctgtaa ttagcgcttg gtttaatgac ggcttggttc ttttctgttg ctgctgaaa	1080
gccttgaggg gctccgggag ggccctttgt gcggggggga gcggctcggg gggcgctgc	1140
gtgtgtgtgt gcgtggggag cgccgcgtgc ggccgcgct gcccggcggc tgtgagcgct	1200
gcgggcgcgg cgcggggctt tgtgcgctcc gcagtgtgcg cgaggggagc gcggccgggg	1260
gcggtgcccc gcggtgcggg gggggctgcg aggggaacaa aggctgcgtg cggggtgtgt	1320

gcgtgggggg	gtgagcaggg	ggtgtggg	cggcggtcg	gctgtaaccc	ccccctgcac	1380
ccccctcccc	gagttgctga	gcacggcccc	gcttcgggtg	cggggctccg	tacggggcgt	1440
ggcgcggggc	tcgccgtgcc	gggcgggggg	tggcggcagg	tgggggtgcc	gggcggggcg	1500
gggcccctc	gggcggggga	gggctcgggg	gaggggcgcg	gcggcccccg	gagcgccggc	1560
ggctgtcgag	gcgcggcgag	ccgcagccat	tgccttttat	ggtaatcgtg	cgagagggcg	1620
cagggacttc	ctttgtccca	aatctgtg	gagccgaaat	ctgggaggcg	ccgccgcacc	1680
ccctctagcg	ggcgcggggc	gaagcggtgc	ggcgccggca	ggaaggaaat	gggcggggag	1740
ggccttcgtg	cgtcgcgcg	ccgccgtccc	cttctccctc	tccagcctcg	gggctgtccg	1800
cggggggacg	gctgccttcg	ggggggacgg	ggcagggcgg	ggttcggcct	ctggcgtgtg	1860
accggcgggt	ctagagcctc	tgctaaccat	gttttagcct	tcttcttttt	cctacagctc	1920
ctgggcaacg	tgctggttat	tgtgctgtct	catcatttgt	cgacagaatt	cctcgaagat	1980
ccgaaggggt	tcaagcttgg	cattccggta	ctgttggtaa	agccagttta	aacgccgcca	2040
ccatggtgag	caagggcgag	gagctgttca	ccggggtggt	gcccatacctg	gtcgagctgg	2100
acggcgacgt	aaacggccac	aagttcagcg	tgtccggcga	gggcgagggc	gatgccacct	2160
acggcaagct	gacctgaag	ttcatctgca	ccaccggcaa	gctgcccgtg	ccctggccca	2220
ccctcgtgac	cacctgacc	tacggcgtgc	agtgttcag	ccgtacccc	gaccacatga	2280
agcagcacga	cttcttcaag	tccgccatgc	ccgaaggcta	cgtccaggag	cgcaccatct	2340
tcttcaagga	cgacggcaac	tacaagaccc	gcgccgaggt	gaagttcgag	ggcgacaccc	2400
tggtgaaccg	catcgagctg	aagggcatcg	acttcaagga	ggacggcaac	atcctggggc	2460
acaagctgga	gtacaactac	aacagccaca	acgtctatat	catggccgac	aagcagaaga	2520
acggcatcaa	ggtgaacttc	aagatccgcc	acaacatcga	ggacggcagc	gtgcagctcg	2580
ccgaccacta	ccagcagaac	acccccatcg	gcgacggccc	cgtgctgctg	cccgacaacc	2640
actacctgag	caccagtc	gccctgagca	aagaccccaa	cgagaagcgc	gatcacatgg	2700
tcctgctgga	gttcgtgacc	gccgcccggga	tcactctcgg	catggacgag	ctgtacaagt	2760
aattaattaa	gagcatctta	ccgccattta	ttcccatatt	tgttctgttt	ttcttgattt	2820
gggtatacat	ttaaattgta	ataaaacaaa	atgggtggggc	aatcattttac	atttttaggg	2880
atatgtaatt	actagttcag	gtgtattgcc	acaagacaaa	catgttaaga	aactttcccg	2940
ttattttacg	tctgttcctg	ttaatcaacc	tctggattac	aaaatttgtg	aaagattgac	3000
tgatattctt	aactatgttg	ctcctttttac	gctgtgtgga	tatgctgctt	tatagcctct	3060
gtatctagct	attgcttccc	gtacggcttt	cgttttctcc	tccttgata	aatcctggtt	3120

gctgtctctt ttagaggagt tgtggcccggt tgtccgtcaa cgtggcgtgg tgtgctctgt	3180
gtttgctgac gcaacccccca ctggctgggg cattgccacc acctgtcaac tcctttctgtg	3240
gactttcgct ttccccctcc cgatcgccac ggcagaactc atcgccgcct gccttgccccg	3300
ctgctggaca ggggctaggt tgctgggcac tgataattcc gtggtgttgt ctgtgccttc	3360
tagttgccag ccatctgttg ttgccccctc ccccgctgcct tccttgaccc tggaagggtgc	3420
cactcccact gtcctttcct aataaaatga ggaaattgca tcgcattgtc tgagtaggtg	3480
tcattctatt ctgggggggtg ggggtggggca ggacagcaag ggggaggatt gggaagacaa	3540
tagcaggcat gctgggggatg cgggtgggctc tatggctcta gagcatggct acgtagataa	3600
gtagcatggc gggttaatca ttaactacac ctgcagcagg aacccctagt gatggagttg	3660
gccactccct ctctgcgcgc tcgctcgctc cctgcaggac tgaggccggg cgaccaaagg	3720
tcgcccgaag ccggggcggc ctcagtcctg cagg	3754

<210> 1118

<211> 8418

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polynucleotide

<400> 1118

ggcagctgcg cgctcgctcg ctcacctagg ccgcccgggc aaagcccggg cgtcgggcga	60
cctttggctg cccggcctag gtgagcgcgc gagcgcgcag agagggagtg gccaaactcca	120
tcactagggg ttccctgtag ttaatgatta acccgccatg ctacttatcg cggccgctca	180
atattggcca ttagccatat tattcattgg ttatatagca taaatcaata ttggctattg	240
gccattgcat acgttgtatc tatatcataa tatgtacatt tatattggct catgtccaat	300
atgaccgcca tgttggcatt gattattgac tagttattaa tagtaatcaa ttacggggtc	360
attagttcat agcccatata tggagttccg cgttacataa cttacggtaa atggcccggc	420
tggtcgaccg cccaacgacc cccgcccatt gacgtcaata atgacgtatg ttcccatagt	480
aacgccaata gggactttcc attgacgtca atgggtggag tatttacggt aaactgccca	540
cttggcagta catcaagtgt atcatatgcc aagtccgccc cctattgacg tcaatgacgg	600
taaatggccc gcctggcatt atgcccagta catgacctta cgggactttc ctacttggca	660
gtacatctac gtattagtca tcgctattac catggtcgag gtgagcccca cgttctgctt	720
cactctcccc atctcccccc cctccccacc cccaattttg tattttattta ttttttaatt	780
attttgtgca gcgatggggg cggggggggg gggggggcgc gcgccaggcg gggcggggcg	840

gggcgagggg	cggggcgggg	cgagggcgag	aggtgcggcg	gcagccaatc	agagcgggcg	900
gctccgaaag	tttcctttta	tggcgagggc	gcggcgggcg	cggccctata	aaaagcgaag	960
cgcgcgggcg	gcgggagtcg	ctgcgacgct	gccttcgccc	cgtgccccgc	tccgccgccc	1020
cctcgcgccg	cccgcgcccg	ctctgactga	ccgcgttact	cccacagggtg	agcggggcggg	1080
acggcccttc	tcttcggggc	tgttaattagc	gcttggttta	atgacggctt	gtttcttttc	1140
tgtggctgcg	tgaagcctt	gaggggctcc	gggagggccc	tttgtgcggg	ggggagcggc	1200
tcggggggtg	cgtgcgtgtg	tgtgtgcgtg	gggagcgccg	cgtgcggccc	gcgctgcccg	1260
gcggctgtga	gcgctgcggg	cgcgggcgcg	ggctttgtgc	gctccgcagt	gtgcgcgagg	1320
ggagcgcggc	cgggggcggt	gccccgcggt	gcgggggggg	ctgcgagggg	aacaaaggct	1380
gcgtgcgggg	tgtgtgcgtg	ggggggtgag	cagggggtgt	gggcgcggcg	gtcgggctgt	1440
aacccccccc	tgcaccccc	tccccgagtt	gctgagcacg	gcccggcttc	gggtgcgggg	1500
ctccgtacgg	ggcgtggcgc	ggggctcgcc	gtgccgggcg	gggggtggcg	gcaggtgggg	1560
gtgcggggcg	gggcggggcc	gcctcgggcc	ggggagggct	cgggggaggg	gcgcggcggc	1620
ccccggagcg	ccggcggtcg	tcgaggcgcg	gcgagccgca	gccattgcct	tttatggtaa	1680
tcgtgcgaga	gggcgcaggg	acttcctttg	tcccaaactct	gtgcggagcc	gaaatctggg	1740
aggcgccgcc	gcaccccctc	tagcgggcgc	ggggcggaagc	ggtgcggcgc	cggcaggaag	1800
gaaatggggc	gggagggcct	tcgtgcgtcg	ccgcgcgcc	gtccccctct	ccctctccag	1860
cctcggggct	gtccgcgggg	ggacggctgc	cttcgggggg	gacggggcag	ggcggggttc	1920
ggcttctggc	gtgtgaccgg	cggctctaga	gcctctgcta	accatgtttt	agccttcttc	1980
tttttccctac	agctcctggg	caacgtgctg	gttattgtgc	tgtctcatca	tttgtcgaca	2040
gaattcctcg	aagatccgaa	ggggttcaag	cttggcattc	cgggtactgtt	ggtaaagcca	2100
gtttaaacgc	cgccaccatg	gtgagcaagg	gcgaggagct	gttcaccggg	gtggtgcccc	2160
tcttggtcga	gctggacggc	gacgtaaacg	gccacaagtt	cagcgtgtcc	ggcgagggcg	2220
agggcgatgc	cacctacggc	aagctgaccc	tgaagttcat	ctgcaccacc	ggcaagctgc	2280
ccgtgccctg	gccacccctc	gtgaccaccc	tgacctacgg	cgtgcagtgc	ttcagccgct	2340
accccgacca	catgaagcag	cacgacttct	tcaagtccgc	catgcccgaa	ggctacgtcc	2400
aggagcgcac	catcttcttc	aaggacgacg	gcaactacaa	gaccgcgcc	gaggtgaagt	2460
tcgagggcga	caccctgggtg	aaccgcatcg	agctgaaggg	catcgacttc	aaggaggacg	2520
gcaacatcct	ggggcacaag	ctggagtaca	actacaacag	ccacaacgtc	tatatcatgg	2580
ccgacaagca	gaagaacggc	atcaagggtga	acttcaagat	ccgccacaac	atcgaggacg	2640
gcagcgtgca	gctcgccgac	cactaccagc	agaacacccc	catcggcgac	ggccccgtgc	2700

tgctgcccga caaccactac ctgagcaccc agtccgccct gagcaaagac cccaacgaga	2760
agcgcgatca catgggtcctg ctggagttcg tgaccgccgc cgggatcact ctcggcacatgg	2820
acgagctgta caagtaatta attaagagca tcttaccgcc atttattccc atattttgttc	2880
tgtttttctt gatttgggta tacatttaaa tgtaataaaa acaaaatggt ggggcaatca	2940
tttacatttt tagggatatg taattactag ttcagggtgta ttgccacaag acaaacatgt	3000
taagaaactt tcccgttatt tacgctctgt tcctgttaat caacctctgg attacaaaat	3060
ttgtgaaaga ttgactgata ttcttaacta tgttgctcct ttacgctgt gtggatatgc	3120
tgctttatag cctctgtatc tagctattgc ttcccgtagc gctttcgttt tctcctcctt	3180
gtataaatcc tgggtgctgt ctcttttaga ggagttgtgg ccggttgtcc gtcaacgtgg	3240
cgtggtgtgc tctgtgtttg ctgacgcaac cccactggc tggggcattg ccaccacctg	3300
tcaactcctt tctgggactt tcgctttccc cctcccgatc gccacggcag aactcatcgc	3360
cgctgcctt gcccgctgct ggacaggggc taggttgctg ggcaactgata attccgtggg	3420
gttgtctgtg ccttctagtt gccagccatc tgttgtttgc ccctcccccg tgccttcctt	3480
gacctggaa ggtgccactc ccactgtcct ttctaataa aatgaggaaa ttgcatcgca	3540
ttgtctgagt aggtgtcatt ctattctggg ggggtggggtg gggcaggaca gcaaggggga	3600
ggattgggaa gacaatagca ggcatgctgg ggatgcgggtg ggctctatgg ctctagagca	3660
tggctacgta gataagtagc atggcggtt aatcattaac tacacctgca gcagggaaccc	3720
ctagtgatgg agttggccac tccctctctg cgcgctcgtc cgctccctgc aggactgagg	3780
ccggggcgacc aaaggctgcc cgacgcccgg gcggcctcag tcctgcaggg agcgagcgag	3840
cgcgcagctg cctgcacggg cgcgccggta ccgggagatg ggggaggcta actgaaacac	3900
ggaaggagac aataccggaa ggaacccgcg ctatgacggc aataaaaaaaga cagaataaaa	3960
cgcacgggtg ttgggtcggt tgttcataaa cgcgggggtt ggtcccaggg ctggcactct	4020
gtcgataccc caccgagacc ccattgggac caatacgccc gcgtttcttc cttttcccca	4080
ccccaacccc caagttcggg tgaaggccca gggctcgcag ccaacgtcgg gcggaagc	4140
cctgccatag ccaactacggg tacgtaggcc aaccactaga actatagcta ggtcctggg	4200
cgaacaaacg atgctcgct tccagaaaac cgaggatgcg aaccacttca tccgggggtca	4260
gcaccaccgg caagcgccgc gacggccgag gtctaccgat ctctgaagc cagggcagat	4320
ccgtgcacag caccttgccg tagaagaaca gcaaggccgc caatgcctga cgatgcgtgg	4380
agaccgaaac cttgcgctcg ttccgagcc aggacagaaa tgctcgcact tcgctgctgc	4440
ccaaggttgc cgggtgacgc acaccgtgga aacggatgaa ggcacgaacc cagttgacat	4500

aagcctgttc ggttcgtaaa ctgtaatgca agtagcgtat gcgctcacgc aactgggtcca	4560
gaaccttgac cgaacgcagc ggtggtaacg gcgcagtggc ggttttcatg gcttgttatg	4620
actgtttttt tgtacagtct atgcctcggg catccaagca gcaagcgcgt tacgccgtgg	4680
gtcgatgttt gatgttatgg agcagcaacg atgttacgca gcagcaacga tgttacgcag	4740
cagggcagtc gccctaaaac aaagttaggt ggctcaagta tgggcatcat tcgcacatgt	4800
aggctcggcc ctgaccaagt caaatccatg cgggctgctc ttgatctttt cggtcgtgag	4860
ttcggagacg tagccaccta ctcccaacat cagccggact ccgattacct cgggaacttg	4920
ctcgttagta agacattcat cgcgcttgct gccttcgacc aagaagcggg tgttggcgct	4980
ctcgcggctt acgttctgcc caggtttgag cagccgcgta gtgagatcta tatctatgat	5040
ctcgcagtct ccggcgagca ccggaggcag ggcattgcca ccgcgctcat caatctcctc	5100
aagcatgagg ccaacgcgct tgggtgcttat gtgatctacg tgcaagcaga ttacggtgac	5160
gatcccgagc tggctctcta taaaagttg ggcatacggg aagaagtgat gcactttgat	5220
atcgacccaa gtaccgccac ctaacaattc gttcaagccg agatcggctt cccggccgcg	5280
gagttgttcg gtaaattgtc acaacgccgc gaatatagtc tttaccatgc ccttggccac	5340
gccccctctt aatacgacgg gcaatttgca cttcagaaaa tgaagagttt gctttagcca	5400
taacaaaagt ccagtatgct ttttcacagc ataactggac tgatttcagt ttacaactat	5460
tctgtctagt ttaagacttt attgtcatag tttagatcta ttttgttcag ttaagactt	5520
tattgtccgc ccacacccgc ttacgcaggg catccattta ttactcaacc gtaaccgatt	5580
ttgccaggtt acgcggctgg tctgcggtgt gaaataccgc acagatgcgt aaggagaaaa	5640
taccgcatca ggcgctcttc cgcttcctcg ctcaactgact cgctgcgctc ggtcgttcgg	5700
ctgcggcgag cggtatcagc tcaactcaaag gcggaatac ggttatccac agaatcaggg	5760
gataacgcag gaaagaacat gtgagcaaaa ggccagcaaa aggccaggaa ccgtaaaaag	5820
gccgcgttgc tggcgttttt ccataggctc cgccccctg acgagcatca caaaaatcga	5880
cgctcaagtc agaggtggcg aaacccgaca ggactataaa gataccaggc gtttccccct	5940
ggaagctccc tcgtgcgctc tcctgttccg accctgccgc ttaccggata cctgtccgcc	6000
tttctccctt cgggaagcgt ggcgctttct caatgctcac gctgtaggta tctcagttcg	6060
gtgtaggtcg ttcgtccaa gctgggctgt gtgcacgaac cccccgttca gcccgaccgc	6120
tgcgccttat ccggtaacta tcgtcttgag tccaacccgg taagacacga cttatcgcca	6180
ctggcagcag ccactggtaa caggattagc agagcgaggc atgtaggcgg tgctacagag	6240
ttcttgaagt ggtggcctaa ctacggctac actagaagga cagtatttgg tatctgcgct	6300
ctgctgaagc cagttacctt cggaaaaaga gttggtagct cttgatccgg caaacaacc	6360

accgctggta gcggtggttt ttttgtttgc aagcagcaga ttacgcgcag aaaaaaagga	6420
tctcaagaag atcctttgat cttttctacg ggggtctgacg ctcaagtggaa cgaaaactca	6480
cgttaaggga ttttggtcat gagattatca aaaaggatct tcacctagat ctttttaaatt	6540
taaaaatgaa gttttaaatc aatctaaagt atatatgagt aaacttggtc tgacagttac	6600
caatgcttaa tcagtgaggc acctatctca gcgatctgtc tatttcgttc atccatagtt	6660
gcctgactcc ccgtcgtgta gataactacg atacgggagg gcttaccatc tggccccagt	6720
gctgcaatga taccgcgaga cccacgctca ccggctccag atttatcagc aataaaccag	6780
ccagccggaa gggccgagcg cagaagtggc cctgcaactt tatccgcctc catccagtct	6840
attaattggt gccgggaagc tagagtaagt agttcgccag ttaatagttt gcgcaacggt	6900
gttgccattg ctacaggcat cgtggtgtca cgctcgctgt ttggtatggc ttcattcagc	6960
tccggttccc aacgatcaag gcgagttaca tgatccccca tgttggtgcaa aaaagcgggt	7020
agctccttcg gtccctccgat cgttgtcaga agtaagttgg ccgcagtgtt atcactcatg	7080
gttatggcag cactgcataa ttctcttact gtcatgccat ccgtaagatg cttttctgtg	7140
actggtgagt actcaaccaa gtcattctga gaatagtgtg tgcggcgacc gagttgctct	7200
tgcccggcgt caatacggga taataccgcg ccacatagca gaactttaaa agtgctcatc	7260
atttgaaaac gttcttcggg gcgaaaactc tcaaggatct taccgctgtt gagatccagt	7320
tcgatgtaac ccactcgtgc acccaactga tcttcagcat cttttacttt caccagcgtt	7380
tctgggtgag caaaaacagg aaggcaaaat gccgcaaaaa agggaataag ggcgacacgg	7440
aaatgttgaa tactcatact cttccttttt caatattatt gaagcattta tcagggttat	7500
tgtctcatga gcggatacat atttgaatgt atttagaaaa ataaacaaat aggggttccg	7560
cgcacatttc cccgaaaagt gccacctgaa attgtaaacg ttaatatatt gttaaaattc	7620
gcgttaaatt tttgttaaatt cagctcattt tttaaccaat aggccgaaat cggcaaaatc	7680
ccttataaat caaaagaata gaccgagata gggttgagtg ttgttccagt ttggaacaag	7740
agtccactat taaagaacgt ggactccaac gtcaaagggc gaaaaaccgt ctatcagggc	7800
gatggcccac tacgtgaacc atcacccata tcaagttttt tggggtcgag gtgccgtaaa	7860
gcactaaatc ggaaccctaa agggagcccc cgatttagag cttgacgggg aaagccggcg	7920
aacgtggcga gaaaggaagg gaagaaagcg aaaggagcgg gcgctagggc gctggcaagt	7980
gtagcgggtc cgctgcgcgt aaccaccaca cccgccgcgc ttaatgcgcc gctacagggc	8040
gcgtcccatt cgccattcag gctgcaaata agcgttgata ttcagtcaat taaaaacatt	8100
aataacgaag agatgacaga aaaattttca ttctgtgaca gagaaaaagt agccgaagat	8160

gacggtttgt cacatggagt tggcaggatg tttgattaaa aacataacag gaagaaaaat	8220
gccccgctgt gggcggacaa aatagttggg aactgggagg ggtggaaatg gagtttttaa	8280
ggattattta gggaagagtg acaaaataga tgggaactgg gtgtagcgtc gtaagctaata	8340
acgaaaatta aaaatgacaa aatagtttgg aactagatgt cacttatctg gttcggatct	8400
cctagtgagc tccctgca	8418

<210> 1119

<211> 225

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polynucleotide

<400> 1119

tgtgccttct agttgccagc catctgttgt ttgcccctcc cccgtgcctt ccttgaccct	60
ggaaggtgcc actcccactg tcctttccta ataaaatgag gaaattgcat cgcattgtct	120
gagtaggtgt cattctattc tggggggtgg ggtggggcag gacagcaagg gggaggattg	180
ggaagacaat agcaggcatg ctggggatgc ggtgggctct atggc	225

<210> 1120

<211> 1177

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polynucleotide

<400> 1120

ggctcagagg ctcagaggca cacaggagtt tctgggctca ccctgcccc ttccaacccc	60
tcagttccca tctccagca gctgtttgtg tgctgcctct gaagtccaca ctgaacaaac	120
ttcagcctac tcatgtccct aaaatgggca aacattgcaa gcagcaaaca gcaaacacac	180
agccctccct gcctgctgac cttggagctg gggcagaggt cagagacctc tctgggcca	240
tgccacctcc aacatccact cgaccccttg gaatttcggt ggagaggagc agaggttgtc	300
ctggcggtgt ttaggtagtg tgagagggtc cgggttcaaa accacttgct ggggtggggag	360
tcgtcagtaa gtggctatgc cccgaccccg aagcctgttt ccccatctgt acaatggaaa	420
tgataaagac gcccatctga tagggttttt gtggcaaata aacatttggt ttttttgttt	480
tgttttgttt tgttttttga gatggaggtt tgctctgtcg cccaggctgg agtgcagtga	540
cacaatctca tctcaccaca accttcccct gcctcagcct cccaagtagc tgggattaca	600
agcatgtgcc accacacctg gctaattttc tatttttagt agagacgggt ttctccatgt	660

tggtcagcct cagcctccca agtaactggg attacaggcc tgtgccacca caccggcta	720
atTTTTtcta tttttgacag ggacgggggtt tcaccatggt ggtcaggctg gtctagaggt	780
accggatctt gctaccagtg gaacagccac taaggattct gcagtgagag cagagggcca	840
gctaagtggg actctcccag agactgtctg actcacgcca cccctccac cttggacaca	900
ggacgctgtg gtttctgagc caggtacaat gactcctttc ggtaagtga gtggaagctg	960
tacactgccc aggcaaagcg tccgggcagc gtaggcgggc gactcagatc ccagccagtg	1020
gacttagccc ctgtttgctc ctccgataac tggggtgacc ttggttaata ttcaccagca	1080
gcctcccccg ttgccccctc ggatccactg cttaaatacg gacgaggaca gggccctgtc	1140
tcctcagctt caggcaccac cactgacctg ggacagt	1177

<210> 1121

<211> 1326

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polynucleotide

<400> 1121

ctgcagggcc cactagtgga gccgagagta attcatacaa aaggagggat cgccttcgca	60
aggggagagc ccagggaccg tccctaaatt ctcacagacc caaatccctg tagccgcccc	120
acgacagcgc gaggagcatg cgcccagggc tgagcgcggg tagatcagag cacacaagct	180
cacagtcccc ggcggtgggg ggaggggcgc gctgagcggg ggccaggag ctggcgcggg	240
gcaaactggg aaagtgggtg cgtgtgctgg ctccgccctc ttcccgaggg tgggggagaa	300
cggatatataa gtgcggtagt cgccttggaac gttctttttc gcaacgggtt tgccgtcaga	360
acgcagggtga gtggcgggtg tggcttccgc gggccccgga gctggagccc tgctctgagc	420
gggccgggct gatatgcgag tgtcgtccgc agggtttagc tgtgagcatt ccacttcga	480
gtggcgggcg gtgcgggggt gagagtgcga ggcctagcgg caaccccgtg gcctcgcctc	540
gtgtccggct tgaggcctag cgtgggtgtc gccgccgcgt gccactccgg ccgcactatg	600
cgttttttgt ccttgctgcc ctcgattgcc ttccagcagc atgggctaac aaaggaggag	660
tgtggggctc actcttaagg agcccatgaa gcttacgttg gataggaatg gaagggcagg	720
aggggagact gggggccgcc cgccttcgga gcacatgtcc gacgccacct ggatggggcg	780
aggcctgtgg ctttccgaag caatcgggcg tgagtttagc ctacctgggc catgtggccc	840
tagcactggg cacggctctg cctggcgggt ccgcgttccc ttgcctcca acaagggtga	900
ggccgtcccg cccggcacca gttgcttgcg cggaaagatg gccgctcccg gggccctgtt	960

gcaaggagct caaaatggag gacgcggcag cccggtggag cgggcgggtg agtcacccac	1020
acaaaggaag agggccttgc ccctcgccgg ccgctgcttc ctgtgacccc gtggtctatc	1080
ggccgcatag tcacctcggg cttctcttga gcaccgctcg tcgcggcggg gggaggggat	1140
ctaattggcgt tggagtttgt tcacatttgg tgggtggaga ctagtcaggc cagcctggcg	1200
ctggaagtca ttcttggaaat ttgccccctt gagtttggag cgaggctaata tctcaagcct	1260
cttagcgggt caaagggtatt ttctaaaccc gtttccagggt gttgtgaaag ccaccgctaa	1320
ttcaaa	1326

<210> 1122
 <211> 573
 <212> DNA
 <213> Mus musculus

<400> 1122	
gtaagagttt tatgtttttt catctctgct tgtatttttc tagtaatgga agcctgggtat	60
tttaaaatag ttaaattttc ctttagtgct gatttctaga ttattattac tgttggtgtt	120
gttattattg tcattatttg catctgagaa cccttaggtg gttatattat tgatatattt	180
ttggtatctt tgatgacaat aatgggggat tttgaaagct tagctttaaa tttcttttaa	240
ttaaaaaaaa atgctaggca gaatgactca aattacgttg gatacagttg aatttattac	300
ggtctcatag ggccctgcctg ctgcaccatg ctatactaaa aattaaaagt gtgtgttact	360
aattttataa atggagtttc catttatatt tacctttatt tcttatttac cattgtctta	420
gtagatattt acaaacatga cagaaacact aaatcttgag tttgaatgca cagatataaa	480
cacttaacgg gttttaaaaa taataatggt ggtgaaaaaa tataactttg agtgtagcag	540
agaggaacca ttgccacctt cagattttcc tgt	573

<210> 1123
 <211> 1993
 <212> DNA
 <213> Mus musculus

<400> 1123	
acgatcggga actggcatct tcaggagta gcttaggtca gtgaagagaa gaacaaaaag	60
cagcatatta cagttagttg tcttcatcaa tctttaaata tgttggtgtg ttttctctc	120
cctgtttcca cagacaagag tgagatcgcc catcggtata atgatttggg agaacaacat	180
ttcaaaggcc tgtaagttat aatgctgaaa gccacttaa tatttctggt agtattagtt	240
aaagttttaa aacacctttt tccaccttga gtgtgagaat tgtagagcag tgctgtccag	300
tagaaatgtg tgcattgaca gaaagactgt ggatctgtgc tgagcaatgt ggcagccaga	360

gatcacaagg ctatcaagca ctttgcacat ggcaagtgtg actgagaagc acacattcaa	420
ataatagtta attttaattg aatgtatcta gccatgtgtg gctagtagct cctttcctgg	480
agagagaatc tggagcccac atctaacttg ttaagtctgg aatcttattt tttatttctg	540
gaaaggtcta tgaactatag ttttgggggc agctcactta ctaactttta atgcaataag	600
atctcatggt atcttgagaa cattattttg tctctttgta gtactgaaac cttatacatg	660
tgaagtaagg ggtctatact taagtcacat ctccaacctt agtaatgttt taatgtagta	720
aaaaaatgag taattaattt attttttagaa ggtcaatagt atcatgtatt ccaaataaca	780
gaggatatatg gttagaaaag aaacaattca aaggacttat ataatatcta gccttgacaa	840
tgaataaatt tagagagtag tttgcctgtt tgccctcatgt tcataaatct attgacacat	900
atgtgcatct gcacttcagc atggtagaag tccatattcc tttgcttgga aaggcaggtg	960
ttcccattac gcctcagaga atagctgacg ggaagaggct ttctagatag ttgtatgaaa	1020
gatatacaaa atctcgcagg tatacacagg catgatttgc tggttgggag agccacttgc	1080
ctcatactga ggTTTTTgtg tctgcttttc agagtccctga ttgccttttc ccagtatctc	1140
cagaaatgct catacgatga gcatgccaaa ttagtgcagg aagtaacaga ctttgcaaag	1200
acgtgtgttg ccgatgagtc tgccgccaac tgtgacaaat cccttgtgag taccttctga	1260
ttttgtggat ctactttcct gctttctgga actctgtttc aaagccaatc atgactccat	1320
cacttaaggc cccgggaaca ctgtggcaga gggcagcaga gagattgata aagccagggg	1380
gatgggaatt ttctgtggga ctccatttca tagtaattgc agaagctaca atacactcaa	1440
aaagtctcac cacatgactg cccaaatggg agcttgacag tgacagtgc agtagatatg	1500
ccaaagtgga tgaggggaaag accacaagag ctaaaccctg taaaaagaac tgtaggcaac	1560
taaggaatgc agagagaaga agttgccttg gaagagcata ccaactgcct ctccaatacc	1620
aatggtcac cctaaaacat acgtatgaat aacatgcaga ctaagcaggc tacatttagg	1680
aatatacatg tatttacata aatgtatatg catgtaacaa caatgaatga aaactgaggt	1740
catggatctg aaagagagca agggggctta catgagaggg tttggaggga ggggttgag	1800
ggagggaggt attattcttt agttttacag ggaacgtagt aaaaacatag gcttctccca	1860
aaggagcaga gcccatgagg agctgtgcaa ggttccccag cttgatttta cctgctcctc	1920
aaattccctt gatttgTTTT tattataatg actttactcc tagcttttag tgtcagatag	1980
aaaacatgga agg	1993

<210> 1124

<211> 1350

<212> DNA

<213> Homo sapiens

<400> 1124
taggaggctg aggcaggagg atcgcttgag cccaggagtt cgagaccagc ctgggcaaca 60
tagtgtgata ttgtatctat aaaaataaac aaaattagct tgggtgtggtg gcgcctgtag 120
tccccagcca cttggagggg tgaggtgaga ggattgcttg agcccgggat ggtccaggct 180
gcagtgagcc atgatcgtgc cactgcactc cagcctgggc gacagagtga gaccctgtct 240
cacaacaaca acaacaacaa caaaaaggct gagctgcacc atgcttgacc cagtttctta 300
aaattgttgt caaagcttca ttcactccat ggtgctatag agcacaagat tttatttggg 360
gagatgggtgc tttcatgaat tcccccaaca gagccaagct ctccatctag tggacagggg 420
agctagcagc aaaccttccc ttcactacaa aacttcattg cttggccaaa aagagagtta 480
attcaatgta gacatctatg taggcaatta aaaacctatt gatgtataaa acagtttgca 540
ttcatggagg gcaactaaat acattctagg actttataaa agatcacttt ttatttatgc 600
acagggtgga acaagatgga ttatcaagtg tcaagtccaa tctatgacat caattattat 660
acatcggagc cctgccaaaa aatcaatgtg aagcaaatcg cagcccgct cctgcctccg 720
ctctactcac tgggtgttcat ctttggtttt gtgggcaaca tgctggtcat cctcatcctg 780
ataaactgca aaaggctgaa gagcatgact gacatctacc tgctcaacct ggccatctct 840
gacctgtttt tcttctttac tgtccccttc tgggctcact atgctgccgc ccagtgggac 900
tttggaaata caatgtgtca actcttgaca gggctctatt ttataggctt cttctctgga 960
atcttcttca tcatcctcct gacaatcgat aggtacctgg ctgtcgtcca tgctgtgttt 1020
gctttaaaag ccaggacggg cacctttggg gtggtgacaa gtgtgatcac ttgggtggtg 1080
gctgtgtttg cgtctctccc aggaatcatc tttaccagat ctcaaaaaga aggtcttcat 1140
tacacctgca gctctcattt tccatacagt cagtatcaat tctggaagaa tttccagaca 1200
ttaaagatag tcatcttggg gctggtcctg ccgctgcttg tcatgggtcat ctgctactcg 1260
ggaatcctaa aaactctgct tcggtgtcga aatgagaaga agaggcacag ggctgtgagg 1320
cttatcttca ccatcatgat tgtttatttt 1350

<210> 1125
<211> 1223
<212> DNA
<213> Homo sapiens

<400> 1125
tgacagagac tcttgggatg acgcactgct gcatcaaccc catcatctat gcctttgtcg 60
gggagaagtt cagaaactac ctcttagtct tcttccaaaa gcacattgcc aaacgcttct 120
gcaaagtctg ttctattttc cagcaagagg ctcccagcgc agcaagctca gtttacaccc 180

gatccactgg ggagcaggaa atatctgtgg gcttgtgaca cggactcaag tgggctggtg	240
accagtcag agttgtgcac atggccttagt tttcatacac agcctgggct gggggtggg	300
tgggagaggt cttttttaaa aggaagttac tgttatagag ggtctaagat tcatccattt	360
atttggcatc tgtttaaaagt agattagatc ttttaagccc atcaattata gaaagccaaa	420
tcaaaatatg ttgatgaaaa atagcaacct ttttatctcc ccttcacatg catcaagtta	480
ttgacaaact ctcccttcac tccgaaagtt ccttatgtat atttaaaaga aagcctcaga	540
gaattgctga ttcttgagtt tagtgatctg aacagaaata ccaaaattat ttcagaaatg	600
tacaactttt tacctagtac aaggcaacat atagggttgta aatgtgttta aaacaggtct	660
ttgtcttgct atggggagaa aagacatgaa tatgattagt aaagaaatga cacttttcat	720
gtgtgatttc cctccaagg tatggttaat aagtttctact gacttagaac caggcgagag	780
acttgtggcc tgggagagct ggggaagctt cttaaagag aaggaatttg agttggatca	840
tctattgctg gcaaagacag aagcctcact gcaagcactg catgggcaag cttggctgta	900
gaaggagaca gagctggttg ggaagacatg gggaggaagg acaaggctag atcatgaaga	960
accttgacgg cattgctccg tctaagtcac gagctgagca gggagatcct ggttggtggt	1020
gcagaagggt tactctgtgg ccaaaggagg gtcaggaagg atgagcattt agggcaagga	1080
gaccaccaac agccctcagg tcagggtgag gatggcctct gctaagctca aggcgtgagg	1140
atgggaagga gggaggtatt cgtaaggatg ggaaggaggg aggtattcgt gcagcatatg	1200
aggatgcaga gtcagcagaa ctg	1223

<210> 1126

<211> 215

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polynucleotide

<400> 1126

gaacgctgac gtcacaaacc cgctccaagg aatcgcgggc ccagtgtcac taggcgggaa	60
caccagcgc gcgtgcgcc tggcaggaag atggctgtga gggacagggg agtggcgccc	120
tgcaatatat gcattgtcgt atgtgttctg ggaaatcacc ataaacgtga aatgtctttg	180
gatttgggaa tcttataagt tctgtatgag accac	215

<210> 1127

<211> 141

<212> DNA

<213> Artificial Sequence

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

<400> 1127
 cctgcaggca gctgcgcgct cgctcgctca cctaggccgc ccgggcaaag cccgggcgtc 60
 gggcgacctt tggtcgcccc gcctaggtga gcgagcgagc gcgcagagag ggagtggcca 120
 actccatcac taggggttcc t 141

<210> 1128
 <211> 19
 <212> DNA
 <213> Artificial Sequence

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

<400> 1128
 gcgcgctcgc tcgctcacc 19

<210> 1129
 <211> 22
 <212> DNA
 <213> Artificial Sequence

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

<400> 1129
 ctaggtgagc gagcgagcgc gc 22

<210> 1130
 <211> 75
 <212> DNA
 <213> Artificial Sequence

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

<400> 1130
 cctgcaggac ttagggccgcc cgggcaaagc ccgggcgctcg ggcgaccttt ggtcgccccg 60
 cctcagtcct gcagg 75

<210> 1131
 <211> 130
 <212> DNA
 <213> Artificial Sequence

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

<400> 1131
 aggaacccct agtgatggag ttggccactc cctctctgcg cgctcgctcg ctactgagt 60
 gcgggcgacc aaaggtcgcc cgacgcccgg gcgcactcag tgagcgagcg agcgcgcagc 120
 tgccctgcagg 130

<210> 1132
 <211> 142
 <212> DNA
 <213> Artificial Sequence

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

<400> 1132
 cctgcaggca gctgcgcgt cgctcgctcc ctaggactga ggccgcccgg gcgtcgggcg 60
 acctttggtc gcccggcctc agtcctaggg agcgagcgag cgcgcagaga gggagtggcc 120
 aactccatca ctaggggttc ct 142

<210> 1133
 <211> 80
 <212> DNA
 <213> Artificial Sequence

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

<400> 1133
 gcgcgctcgc tcgctcactg agtgcgggcg accaaaggtc gcccgacgcc cgggcgcact 60
 cagtgagcga gcgagcgcg 80

<210> 1134
 <211> 21
 <212> DNA
 <213> Artificial Sequence

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

<400> 1134
 gcgcgctcgc tcgctcactg a 21

<210> 16135
 <211> 18
 <212> DNA
 <213> Artificial Sequence

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

oligonucleotide

<400> 1135
gtgagcgagc gagcgcg 18

<210> 1136
<211> 89
<212> DNA
<213> Artificial Sequence

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

<400> 1136
gcgcgctcgc tcgctcactg aggccgcccg ggcaaagccc gggcgtcggg cgactttgtc 60
gcccggcctc agtgagcgag cgagcgcg 89

<210> 1137
<211> 89
<212> DNA
<213> Artificial Sequence

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

<400> 1137
gcgcgctcgc tcgctcactg aggccgggcg acaaagtcgc ccgacgcccg ggctttgccc 60
gggcggcctc agtgagcgag cgagcgcg 89

<210> 1138
<211> 87
<212> DNA
<213> Artificial Sequence

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

<400> 1138
gcgcgctcgc tcgctcactg aggccgcccg ggcaaagccc gggcgtcggg cgattttcgc 60
ccggcctcag tgagcgagcg agcgcg 87

<210> 1139
<211> 87
<212> DNA
<213> Artificial Sequence

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

<400> 1139

gcgcgctcgc tcgctcactg aggccgggcg aaaatcgccc gacgcccggg ctttgcccgg 60

gcggcctcag tgagcgagcg agcgcg 87

<210> 1140
 <211> 85
 <212> DNA
 <213> Artificial Sequence

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

<400> 1140
 gcgcgctcgc tcgctcactg aggccgcccg ggcaaagccc gggcgtcggg cgtttcgccc 60
 ggccctcagtg agcgagcgag cgcgc 85

<210> 1141
 <211> 85
 <212> DNA
 <213> Artificial Sequence

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

<400> 1141
 gcgcgctcgc tcgctcactg aggccgggcg aaacgcccga cgcccgggct ttgcccgggc 60
 ggccctcagtg agcgagcgag cgcgc 85

<210> 1142
 <211> 89
 <212> DNA
 <213> Artificial Sequence

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

<400> 1142
 gcgcgctcgc tcgctcactg aggccgcccg ggaaaccgcg gcgtcgggcg acctttggtc 60
 gcccggcctc agtgagcgag cgagcgcg 89

<210> 1143
 <211> 89
 <212> DNA
 <213> Artificial Sequence

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

<400> 1143
 gcgcgctcgc tcgctcactg aggccgggcg accaaagggtc gcccgacgcc cgggtttccc 60

gggcggcctc agtgagcgag cgagcgcg 89

<210> 1144

<211> 87

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide

<400> 1144

gcgcgctcgc tcgctcactg aggccgcccg gaaaccgggc gtcgggacac ctttggtcgc 60

ccggcctcag tgagcgagcg agcgcg 87

<210> 1145

<211> 87

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide

<400> 1145

gcgcgctcgc tcgctcactg aggccgggac accaaaggac gcccgacgcc cggtttccgg 60

gcggcctcag tgagcgagcg agcgcg 87

<210> 1146

<211> 85

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide

<400> 1146

gcgcgctcgc tcgctcactg aggccgcccg aaacgggagc cggcgacac ttggtcgccc 60

ggcctcagtg agcgagcgag cgcgcg 85

<210> 1147

<211> 85

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide

<400> 1147

gcgcgctcgc tcgctcactg aggccgggac accaaaggac gcccgacgcc cggtttcgggc 60

ggcctcagtg agcgagcgag cgcgc 85

<210> 1148
 <211> 83
 <212> DNA
 <213> Artificial Sequence

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

<400> 1149
 gcgcgctcgc tcgctcactg aggccgccca aagggcgctcg ggcgaccttt ggtcgcccgg 60
 cctcagtgag cgagcgagcg cgc 83

<210> 11150
 <211> 83
 <212> DNA
 <213> Artificial Sequence

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

<400> 1151
 gcgcgctcgc tcgctcactg aggccggggcg accaaagggtc gcccgacgcc ctttggggcg 60
 cctcagtgag cgagcgagcg cgc 83

<210> 1151
 <211> 81
 <212> DNA
 <213> Artificial Sequence

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

<400> 1152
 gcgcgctcgc tcgctcactg aggccgccaa aggcgtcggg cgacctttgg tcgcccggcc 60
 tcagtgagcg agcgagcgcg c 81

<210> 1153
 <211> 81
 <212> DNA
 <213> Artificial Sequence

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

<400> 1153
 gcgcgctcgc tcgctcactg aggccggggcg accaaagggtc gcccgacgcc tttggcgggc 60
 tcagtgagcg agcgagcgcg c 81

<210> 1154
 <211> 79
 <212> DNA
 <213> Artificial Sequence

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

 <400> 1154
 gcgcgctcgc tcgctcactg aggccgcaaa gcgtcgggcg acctttggtc gcccggcctc 60
 agtgagcgag cgagcgcgc 79

 <210> 1155
 <211> 79
 <212> DNA
 <213> Artificial Sequence

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

 <400> 1155
 gcgcgctcgc tcgctcactg aggccgggcg accaaaggct gcccgcgctc 60
 agtgagcgag cgagcgcgc 79

 <210> 1156
 <211> 81
 <212> DNA
 <213> Artificial Sequence

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

 <400> 1156
 ctgcgcgctc gctcgctcac tgaggccgaa acgtcgggcg acctttggtc gcccggcctc 60
 agtgagcgag cgagcgcgca g 81

 <210> 1157
 <211> 81
 <212> DNA
 <213> Artificial Sequence

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

 <400> 1157
 ctgcgcgctc gctcgctcac tgaggccggg cgaccaaagg tcgcccgcg tttcggcctc 60
 agtgagcgag cgagcgcgca g 81

<210> 18158
 <211> 72
 <212> DNA
 <213> Artificial Sequence

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

 <400> 1158
 gcgcgctcgc tcgctcactg aggccgggcg accaaaggct gcccgacggc ctcagtgagc 60
 gagcgagcgc gc 72

 <210> 1159
 <211> 80
 <212> DNA
 <213> Artificial Sequence

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

 <400> 1159
 gcgcgctcgc tcgctcactg aggccgggcg accaaaggct gcccgacgcc cgggcggcct 60
 cagtgagcga gcgagcgcgc 80

 <210> 1160
 <211> 79
 <212> DNA
 <213> Artificial Sequence

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

 <400> 11160
 gcgcgctcgc tcgctcactg aggcgcccgg gcgtcgggcg acctttggct gcccggcctc 60
 agtgagcgag cgagcgcgc 79

 <210> 1161
 <211> 48
 <212> DNA
 <213> Artificial Sequence

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

 <400> 1151
 ggagtcaaag ttctgtttgc cctgatctgc atcgctgtgg ccgaggcc 48

 <210> 1162
 <211> 99

<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide

<400> 1162
attcatacca acttgaagaa aaagttcagc ctcttcatcc tggctcttct cctgttcgca 60
gtcatctgtg tttggaagaa agggagcgac tatgaggcc 99

<210> 1163
<211> 588
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
polynucleotide

<400> 1163
gccccctctcc ctcccccccc cctaacgtta ctggccgaag ccgcttggaa taaggccggt 60
gtgcggttgt ctatatgtta ttttccacca tattgccgtc ttttggcaat gtgagggccc 120
ggaaacctgg ccctgtcttc ttgacgagca ttcctagggg tctttcccct ctgcctaaag 180
gaatgcaagg tctgttgaat gtcgtgaagg aagcagttcc tctggaagct tcttgaagac 240
aaacaacgtc tgtagcgacc ctttgcaggc agcggaaccc cccacctggc gacaggtgcc 300
tctgcggcca aaagccacgt gtataagata cacctgcaaa ggcggcaciaa ccccagtgcc 360
acgttgtgag ttggatagtt gtggaaagag tcaaatggct ctctcaagc gtattcaaca 420
aggggctgaa ggatgcccag aaggtacccc attgtatggg atctgatctg gggcctcggt 480
gcacatgctt tacatgtgtt tagtcgaggt taaaaaacg tctaggcccc ccgaaccacg 540
gggacgtggt tttcctttga aaaacacgat gataatatgg ccacaacc 588

