SEQUENCE LISTING

<110> KARKERA, JAYAPRAKASH
PLATERO, SUSO JESUS
VERONA, RALUCA
LORENZI, MATTHEW V.

<120> FGFR/PD-1 COMBINATION THERAPY FOR THE TREATMENT OF CANCER

<130> PRD3366USNP

<140>
<141>

<150> 62/142,569
<151> 2015-04-03

<160> 27

<170> PatentIn version 3.5

<210> 1
<211> 21
<212> DNA
<213> Artificial Sequence

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

<400> 1
gacctggacc gtgtccttac c 21

<210> 2
<211> 21
<212> DNA
<213> Artificial Sequence

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

<400> 2
cttccccagt tccaggttct t 21

<210> 3
<211> 20
<212> DNA
<213> Artificial Sequence

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

<400> 3
aggacctgga ccgtgtcctt 20

<210> 4
<211> 20
<212> DNA
<213> Artificial Sequence

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

<400> 4
tataggtccg gtggacaggg 20

<210> 5
<211> 15
<212> DNA
<213> Artificial Sequence

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

<400> 5
ggccatcctg ccccc 15

<210> 6
<211> 20
<212> DNA
<213> Artificial Sequence

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

<400> 6
gagcagtcca ggtcagccag 20

<210> 7
<211> 20
<212> DNA
<213> Artificial Sequence

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

<400> 7
ctggaccgtg tccttaccgt 20

<210> 8
<211> 20
<212> DNA
<213> Artificial Sequence

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

<400> 8
gcagcccagg attgaactgt 20

<210> 9
<211> 23
<212> DNA
<213> Artificial Sequence

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

<400> 9
tggatcgaat tctcactctc aca 23

<210> 10
<211> 21
<212> DNA
<213> Artificial Sequence

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

<400> 10
gccaagcaat ctgcgtattt g 21

<210> 11
<211> 25
<212> DNA
<213> Artificial Sequence

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

<400> 11
tggtagaaga cttggatcga attct 25

<210> 12
<211> 23
<212> DNA
<213> Artificial Sequence

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

<400> 12
tctcccggat tatttcttca aca 23

<210> 13
<211> 23
<212> DNA
<213> Artificial Sequence

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

<400> 13
gctcttcaat acagccctga tca 23

<210> 14
<211> 24
<212> DNA
<213> Artificial Sequence

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

<400> 14
acttggatcg aattctcact ctca 24

<210> 15

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

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

<400> 15
tggatcgaat tctcactctc aca 23

<210> 16
<211> 25
<212> DNA
<213> Artificial Sequence

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

<400> 16
gcaaagcctg aattttcttg aataa 25

<210> 17
<211> 24
<212> DNA
<213> Artificial Sequence

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

<400> 17
agggtgcatc aactcatgaa ttag 24

<210> 18
<211> 24
<212> DNA
<213> Artificial Sequence

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

<400> 18
acttggatcg aattctcact ctca 24

<210> 19
<211> 2850
<212> DNA
<213> Artificial Sequence

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

<400> 19
atgggcgccc ctgcctgcgc cctcgcgctc tgcgtggccg tggccatcgt ggccggcgcc 60

tcctcggagt ccttggggac ggagcagcgc gtcgtggggc gagcggcaga agtcccgggc 120

ccagagcccg gccagcagga gcagttggtc ttcggcagcg gggatgctgt ggagctgagc 180

tgtcccccgc ccgggggtgg tcccatgggg cccactgtct gggtcaagga tggcacaggg 240

ctggtgccct cggagcgtgt cctggtgggg ccccagcggc tgcaggtgct gaatgcctcc 300

cacgaggact ccggggccta cagctgccgg cagcggctca cgcagcgcgt actgtgccac 360

ttcagtgtgc gggtgacaga cgctccatcc tcgggagatg acgaagacgg ggaggacgag 420

gctgaggaca caggtgtgga cacaggggcc ccttactgga cacggcccga gcggatggac 480

aagaagctgc tggccgtgcc ggccgccaac accgtccgct tccgctgccc agccgctggc 540

aaccccactc cctccatctc ctggctgaag aacggcaggg agttccgcgg cgagcaccgc 600

attggaggca tcaagctgcg gcatcagcag tggagcctgg tcatggaaag cgtggtgccc 660

tcggaccgcg gcaactacac ctgcgtcgtg gagaacaagt ttggcagcat ccggcagacg 720

tacacgctgg acgtgctgga gcgctccccg caccggccca tcctgcaggc ggggctgccg 780

gccaaccaga cggcggtgct gggcagcgac gtggagttcc actgcaaggt gtacagtgac 840

gcacagcccc acatccagtg gctcaagcac gtggaggtga atggcagcaa ggtgggcccg 900

gacggcacac cctacgttac cgtgctcaag acggcgggcg ctaacaccac cgacaaggag 960

ctagaggttc tctccttgca caacgtcacc tttgaggacg ccggggagta cacctgcctg 1020

gcgggcaatt ctattgggtt ttctcatcac tctgcgtggc tggtggtgct gccagccgag 1080

gaggagctgg tggaggctga cgaggcgggc agtgtgtatg caggcatcct cagctacggg 1140

gtgggcttct tcctgttcat cctggtggtg gcggctgtga cgctctgccg cctgcgcagc 1200

ccccccaaga aaggcctggg ctcccccacc gtgcacaaga tctcccgctt cccgctcaag 1260

cgacaggtgt ccctggagtc caacgcgtcc atgagctcca acacaccact ggtgcgcatc 1320

gcaaggctgt cctcagggga gggccccacg ctggccaatg tctccgagct cgagctgcct 1380

gccgacccca aatgggagct gtctcgggcc cggctgaccc tgggcaagcc ccttggggag 1440

ggctgcttcg gccaggtggt catggcggag gccatcggca ttgacaagga ccgggccgcc 1500

aagcctgtca ccgtagccgt gaagatgctg aaagacgatg ccactgacaa ggacctgtcg 1560

gacctggtgt ctgagatgga gatgatgaag atgatcggga aacacaaaaa catcatcaac 1620

ctgctgggcg cctgcacgca gggcgggccc ctgtacgtgc tggtggagta cgcggccaag 1680

ggtaacctgc gggagtttct gcgggcgcgg cggcccccgg gcctggacta ctccttcgac 1740

acctgcaagc cgcccgagga gcagctcacc ttcaaggacc tggtgtcctg tgcctaccag 1800

gtggcccggg gcatggagta cttggcctcc cagaagtgca tccacaggga cctggctgcc 1860

cgcaatgtgc tggtgaccga ggacaacgtg atgaagatcg cagacttcgg gctggcccgg 1920

gacgtgcaca acctcgacta ctacaagaag acgaccaacg gccggctgcc cgtgaagtgg 1980

atggcgcctg aggccttgtt tgaccgagtc tacactcacc agagtgacgt ctggtccttt 2040

ggggtcctgc tctgggagat cttcacgctg gggggctccc cgtaccccgg catccctgtg 2100

gaggagctct tcaagctgct gaaggagggc caccgcatgg acaagcccgc caactgcaca 2160

cacgacctgt acatgatcat gcgggagtgc tggcatgccg cgccctccca gaggcccacc 2220

ttcaagcagc tggtggagga cctggaccgt gtccttaccg tgacgtccac cgacgtaaag 2280

gcgacacagg aggagaaccg ggagctgagg agcaggtgtg aggagctcca cgggaagaac 2340

ctggaactgg ggaagatcat ggacaggttc gaagaggttg tgtaccaggc catggaggaa 2400

gttcagaagc agaaggaact ttccaaagct gaaatccaga aagttctaaa agaaaaagac 2460

caacttacca cagatctgaa ctccatggag aagtccttct ccgacctctt caagcgtttt 2520

gagaaacaga aagaggtgat cgagggctac cgcaagaacg aagagtcact gaagaagtgc 2580

gtggaggatt acctggcaag gatcacccag gagggccaga ggtaccaagc cctgaaggcc 2640

cacgcggagg agaagctgca gctggcaaac gaggagatcg cccaggtccg gagcaaggcc 2700

caggcggaag cgttggccct ccaggccagc ctgaggaagg agcagatgcg catccagtcg 2760

ctggagaaga cagtggagca gaagactaaa gagaacgagg agctgaccag gatctgcgac 2820

gacctcatct ccaagatgga gaagatctga 2850

<210> 20
<211> 2955
<212> DNA
<213> Artificial Sequence

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

<400> 20
atgggcgccc ctgcctgcgc cctcgcgctc tgcgtggccg tggccatcgt ggccggcgcc 60

tcctcggagt ccttggggac ggagcagcgc gtcgtggggc gagcggcaga agtcccgggc 120

ccagagcccg gccagcagga gcagttggtc ttcggcagcg gggatgctgt ggagctgagc 180

tgtcccccgc ccgggggtgg tcccatgggg cccactgtct gggtcaagga tggcacaggg 240

ctggtgccct cggagcgtgt cctggtgggg ccccagcggc tgcaggtgct gaatgcctcc 300

cacgaggact ccggggccta cagctgccgg cagcggctca cgcagcgcgt actgtgccac 360

ttcagtgtgc gggtgacaga cgctccatcc tcgggagatg acgaagacgg ggaggacgag 420

gctgaggaca caggtgtgga cacaggggcc ccttactgga cacggcccga gcggatggac 480

aagaagctgc tggccgtgcc ggccgccaac accgtccgct tccgctgccc agccgctggc 540

aaccccactc cctccatctc ctggctgaag aacggcaggg agttccgcgg cgagcaccgc 600

attggaggca tcaagctgcg gcatcagcag tggagcctgg tcatggaaag cgtggtgccc 660

tcggaccgcg gcaactacac ctgcgtcgtg gagaacaagt ttggcagcat ccggcagacg 720

tacacgctgg acgtgctgga gcgctccccg caccggccca tcctgcaggc ggggctgccg 780

gccaaccaga cggcggtgct gggcagcgac gtggagttcc actgcaaggt gtacagtgac 840

gcacagcccc acatccagtg gctcaagcac gtggaggtga atggcagcaa ggtgggcccg 900

gacggcacac cctacgttac cgtgctcaag acggcgggcg ctaacaccac cgacaaggag 960

ctagaggttc tctccttgca caacgtcacc tttgaggacg ccggggagta cacctgcctg 1020

gcgggcaatt ctattgggtt ttctcatcac tctgcgtggc tggtggtgct gccagccgag 1080

gaggagctgg tggaggctga cgaggcgggc agtgtgtatg caggcatcct cagctacggg 1140

gtgggcttct tcctgttcat cctggtggtg gcggctgtga cgctctgccg cctgcgcagc 1200

ccccccaaga aaggcctggg ctcccccacc gtgcacaaga tctcccgctt cccgctcaag 1260

cgacaggtgt ccctggagtc caacgcgtcc atgagctcca acacaccact ggtgcgcatc 1320

gcaaggctgt cctcagggga gggccccacg ctggccaatg tctccgagct cgagctgcct 1380

gccgacccca aatgggagct gtctcgggcc cggctgaccc tgggcaagcc ccttggggag 1440

ggctgcttcg gccaggtggt catggcggag gccatcggca ttgacaagga ccgggccgcc 1500

aagcctgtca ccgtagccgt gaagatgctg aaagacgatg ccactgacaa ggacctgtcg 1560

gacctggtgt ctgagatgga gatgatgaag atgatcggga aacacaaaaa catcatcaac 1620

ctgctgggcg cctgcacgca gggcgggccc ctgtacgtgc tggtggagta cgcggccaag 1680

ggtaacctgc gggagtttct gcgggcgcgg cggcccccgg gcctggacta ctccttcgac 1740

acctgcaagc cgcccgagga gcagctcacc ttcaaggacc tggtgtcctg tgcctaccag 1800

gtggcccggg gcatggagta cttggcctcc cagaagtgca tccacaggga cctggctgcc 1860

cgcaatgtgc tggtgaccga ggacaacgtg atgaagatcg cagacttcgg gctggcccgg 1920

gacgtgcaca acctcgacta ctacaagaag acgaccaacg gccggctgcc cgtgaagtgg 1980

atggcgcctg aggccttgtt tgaccgagtc tacactcacc agagtgacgt ctggtccttt 2040

ggggtcctgc tctgggagat cttcacgctg gggggctccc cgtaccccgg catccctgtg 2100

gaggagctct tcaagctgct gaaggagggc caccgcatgg acaagcccgc caactgcaca 2160

cacgacctgt acatgatcat gcgggagtgc tggcatgccg cgccctccca gaggcccacc 2220

ttcaagcagc tggtggagga cctggaccgt gtccttaccg tgacgtccac cgacgtgcca 2280

ggcccacccc caggtgttcc cgcgcctggg ggcccacccc tgtccaccgg acctatagtg 2340

gacctgctcc agtacagcca gaaggacctg gatgcagtgg taaaggcgac acaggaggag 2400

aaccgggagc tgaggagcag gtgtgaggag ctccacggga agaacctgga actggggaag 2460

atcatggaca ggttcgaaga ggttgtgtac caggccatgg aggaagttca gaagcagaag 2520

gaactttcca aagctgaaat ccagaaagtt ctaaaagaaa aagaccaact taccacagat 2580

ctgaactcca tggagaagtc cttctccgac ctcttcaagc gttttgagaa acagaaagag 2640

gtgatcgagg gctaccgcaa gaacgaagag tcactgaaga agtgcgtgga ggattacctg 2700

gcaaggatca cccaggaggg ccagaggtac caagccctga aggcccacgc ggaggagaag 2760

ctgcagctgg caaacgagga gatcgcccag gtccggagca aggcccaggc ggaagcgttg 2820

gccctccagg ccagcctgag gaaggagcag atgcgcatcc agtcgctgga gaagacagtg 2880

gagcagaaga ctaaagagaa cgaggagctg accaggatct gcgacgacct catctccaag 2940

atggagaaga tctga 2955

<210> 21
<211> 4462
<212> DNA

<213> Artificial Sequence

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

<400> 21
atgggcgccc ctgcctgcgc cctcgcgctc tgcgtggccg tggccatcgt ggccggcgcc 60

tcctcggagt ccttggggac ggagcagcgc gtcgtggggc gagcggcaga agtcccgggc 120

ccagagcccg gccagcagga gcagttggtc ttcggcagcg gggatgctgt ggagctgagc 180

tgtcccccgc ccgggggtgg tcccatgggg cccactgtct gggtcaagga tggcacaggg 240

ctggtgccct cggagcgtgt cctggtgggg ccccagcggc tgcaggtgct gaatgcctcc 300

cacgaggact ccggggccta cagctgccgg cagcggctca cgcagcgcgt actgtgccac 360

ttcagtgtgc gggtgacaga cgctccatcc tcgggagatg acgaagacgg ggaggacgag 420

gctgaggaca caggtgtgga cacaggggcc ccttactgga cacggcccga gcggatggac 480

aagaagctgc tggccgtgcc ggccgccaac accgtccgct tccgctgccc agccgctggc 540

aaccccactc cctccatctc ctggctgaag aacggcaggg agttccgcgg cgagcaccgc 600

attggaggca tcaagctgcg gcatcagcag tggagcctgg tcatggaaag cgtggtgccc 660

tcggaccgcg gcaactacac ctgcgtcgtg gagaacaagt ttggcagcat ccggcagacg 720

tacacgctgg acgtgctgga gcgctccccg caccggccca tcctgcaggc ggggctgccg 780

gccaaccaga cggcggtgct gggcagcgac gtggagttcc actgcaaggt gtacagtgac 840

gcacagcccc acatccagtg gctcaagcac gtggaggtga atggcagcaa ggtgggcccg 900

gacggcacac cctacgttac cgtgctcaag acggcgggcg ctaacaccac cgacaaggag 960

ctagaggttc tctccttgca caacgtcacc tttgaggacg ccggggagta cacctgcctg 1020

gcgggcaatt ctattgggtt ttctcatcac tctgcgtggc tggtggtgct gccagccgag 1080

gaggagctgg tggaggctga cgaggcgggc agtgtgtatg caggcatcct cagctacggg 1140

gtgggcttct tcctgttcat cctggtggtg gcggctgtga cgctctgccg cctgcgcagc 1200

ccccccaaga aaggcctggg ctcccccacc gtgcacaaga tctcccgctt cccgctcaag 1260

cgacaggtgt ccctggagtc caacgcgtcc atgagctcca acacaccact ggtgcgcatc 1320

gcaaggctgt cctcagggga gggccccacg ctggccaatg tctccgagct cgagctgcct 1380

gccgacccca aatgggagct gtctcgggcc cggctgaccc tgggcaagcc ccttggggag 1440

ggctgcttcg gccaggtggt catggcggag gccatcggca ttgacaagga ccgggccgcc 1500

aagcctgtca ccgtagccgt gaagatgctg aaagacgatg ccactgacaa ggacctgtcg 1560

gacctggtgt ctgagatgga gatgatgaag atgatcggga aacacaaaaa catcatcaac 1620

ctgctgggcg cctgcacgca gggcgggccc ctgtacgtgc tggtggagta cgcggccaag 1680

ggtaacctgc gggagtttct gcgggcgcgg cggcccccgg gcctggacta ctccttcgac 1740

acctgcaagc cgcccgagga gcagctcacc ttcaaggacc tggtgtcctg tgcctaccag 1800

gtggcccggg gcatggagta cttggcctcc cagaagtgca tccacaggga cctggctgcc 1860

cgcaatgtgc tggtgaccga ggacaacgtg atgaagatcg cagacttcgg gctggcccgg 1920

gacgtgcaca acctcgacta ctacaagaag acgaccaacg gccggctgcc cgtgaagtgg 1980

atggcgcctg aggccttgtt tgaccgagtc tacactcacc agagtgacgt ctggtccttt 2040

ggggtcctgc tctgggagat cttcacgctg gggggctccc cgtaccccgg catccctgtg 2100

gaggagctct tcaagctgct gaaggagggc caccgcatgg acaagcccgc caactgcaca 2160

cacgacctgt acatgatcat gcgggagtgc tggcatgccg cgccctccca gaggcccacc 2220

ttcaagcagc tggtggagga cctggaccgt gtccttaccg tgacgtccac cgacgtgagt 2280

gctggctctg gcctggtgcc acccgcctat gcccctcccc ctgccgtccc cggccatcct 2340

gccccccaga gtgctgaggt gtggggcggg cctttctggc ccaggtgccc tggctgacct 2400

ggactgctca agctcttccc agagcccagg aagttctgag aaccaaatgg tgtctccagg 2460

aaaagtgtct ggcagccctg agcaagccgt ggaggaaaac cttagttcct attccttaga 2520

cagaagagtg acacccgcct ctgagaccct agaagaccct tgcaggacag agtcccagca 2580

caaagcggag actccgcacg gagccgagga agaatgcaaa gcggagactc cgcacggagc 2640

cgaggaggaa tgccggcacg gtggggtctg tgctcccgca gcagtggcca cttcgcctcc 2700

tggtgcaatc cctaaggaag cctgcggagg agcacccctg cagggtctgc ctggcgaagc 2760

cctgggctgc cctgcgggtg tgggcacccc cgtgccagca gatggcactc agacccttac 2820

ctgtgcacac acctctgctc ctgagagcac agccccaacc aaccacctgg tggctggcag 2880

ggccatgacc ctgagtcctc aggaagaagt ggctgcaggc caaatggcca gctcctcgag 2940

gagcggacct gtaaaactag aatttgatgt atctgatggc gccaccagca aaagggcacc 3000

cccaccaagg agactgggag agaggtccgg cctcaagcct cccttgagga aagcagcagt 3060

gaggcagcaa aaggccccgc aggaggtgga ggaggacgac ggtaggagcg gagcaggaga 3120

ggacccccc atgccagctt ctcggggctc ttaccacctc gactgggaca aaatggatga 3180

cccaaacttc atcccgttcg gaggtgacac caagtctggt tgcagtgagg cccagccccc 3240

agaaagccct gagaccaggc tgggccagcc agcggctgaa cagttgcatg ctgggcctgc 3300

cacggaggag ccaggtccct gtctgagcca gcagctgcat tcagcctcag cggaggacac 3360

gcctgtggtg cagttggcag ccgagacccc aacagcagag agcaaggaga gagccttgaa 3420

ctctgccagc acctcgcttc ccacaagctg tccaggcagt gagccagtgc ccacccatca 3480

gcaggggcag cctgccttgg agctgaaaga ggagagcttc agagaccccg ctgaggttct 3540

aggcacgggc gcggaggtgg attacctgga gcagtttgga acttcctcgt ttaaggagtc 3600

ggccttgagg aagcagtcct tatacctcaa gttcgacccc ctcctgaggg acagtcctgg 3660

tagaccagtg cccgtggcca ccgagaccag cagcatgcac ggtgcaaatg agactccctc 3720

aggacgtccg cgggaagcca agcttgtgga gttcgatttc ttgggagcac tggacattcc 3780

tgtgccaggc ccacccccag gtgttcccgc gcctgggggc ccacccctgt ccaccggacc 3840

tatagtggac ctgctccagt acagccagaa ggacctggat gcagtggtaa aggcgacaca 3900

ggaggagaac cgggagctga ggagcaggtg tgaggagctc cacgggaaga acctggaact 3960

ggggaagatc atggacaggt tcgaagaggt tgtgtaccag gccatggagg aagttcagaa 4020

gcagaaggaa ctttccaaag ctgaaatcca gaaagttcta aaagaaaaag accaacttac 4080

cacagatctg aactccatgg agaagtcctt ctccgacctc ttcaagcgtt ttgagaaaca 4140

gaaagaggtg atcgagggct accgcaagaa cgaagagtca ctgaagaagt gcgtggagga 4200

ttacctggca aggatcaccc aggagggcca gaggtaccaa gccctgaagg cccacgcgga 4260

ggagaagctg cagctggcaa acgaggagat cgcccaggtc cggagcaagg cccaggcgga 4320

agcgttggcc ctccaggcca gcctgaggaa ggagcagatg cgcatccagt cgctggagaa 4380

gacagtggag cagaagacta aagagaacga ggagctgacc aggatctgcg acgacctcat 4440

ctccaagatg gagaagatct ga 4462

<210> 22
<211> 3765
<212> DNA
<213> Artificial Sequence

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

<400> 22
atgggcgccc ctgcctgcgc cctcgcgctc tgcgtggccg tggccatcgt ggccggcgcc 60

tcctcggagt ccttggggac ggagcagcgc gtcgtggggc gagcggcaga agtcccgggc 120

ccagagcccg gccagcagga gcagttggtc ttcggcagcg gggatgctgt ggagctgagc 180

tgtcccccgc ccgggggtgg tcccatgggg cccactgtct gggtcaagga tggcacaggg 240

ctggtgccct cggagcgtgt cctggtgggg ccccagcggc tgcaggtgct gaatgcctcc 300

cacgaggact ccggggccta cagctgccgg cagcggctca cgcagcgcgt actgtgccac 360

ttcagtgtgc gggtgacaga cgctccatcc tcgggagatg acgaagacgg ggaggacgag 420

gctgaggaca caggtgtgga cacaggggcc ccttactgga cacggcccga gcggatggac 480

aagaagctgc tggccgtgcc ggccgccaac accgtccgct tccgctgccc agccgctggc 540

aaccccactc cctccatctc ctggctgaag aacggcaggg agttccgcgg cgagcaccgc 600

attggaggca tcaagctgcg gcatcagcag tggagcctgg tcatggaaag cgtggtgccc 660

tcggaccgcg gcaactacac ctgcgtcgtg gagaacaagt ttggcagcat ccggcagacg 720

tacacgctgg acgtgctgga gcgctccccg caccggccca tcctgcaggc ggggctgccg 780

gccaaccaga cggcggtgct gggcagcgac gtggagttcc actgcaaggt gtacagtgac 840

gcacagcccc acatccagtg gctcaagcac gtggaggtga atggcagcaa ggtgggcccg 900

gacggcacac cctacgttac cgtgctcaag tcctggatca gtgagagtgt ggaggccgac 960

gtgcgcctcc gcctggccaa tgtgtcggag cgggacgggg gcgagtacct ctgtcgagcc 1020

accaatttca taggcgtggc cgagaaggcc ttttggctga gcgttcacgg gccccgagca 1080

gccgaggagg agctggtgga ggctgacgag gcgggcagtg tgtatgcagg catcctcagc 1140

tacggggtgg gcttcttcct gttcatcctg gtggtggcgg ctgtgacgct ctgccgcctg 1200

cgcagccccc ccaagaaagg cctgggctcc cccaccgtgc acaagatctc ccgcttcccg 1260

ctcaagcgac aggtgtccct ggagtccaac gcgtccatga gctccaacac accactggtg 1320

cgcatcgcaa ggctgtcctc aggggagggc cccacgctgg ccaatgtctc cgagctcgag 1380

ctgcctgccg accccaaatg ggagctgtct cgggcccggc tgaccctggg caagcccctt 1440

ggggagggct gcttcggcca ggtggtcatg gcggaggcca tcggcattga caaggaccgg 1500

gccgccaagc ctgtcaccgt agccgtgaag atgctgaaag acgatgccac tgacaaggac 1560

ctgtcggacc tggtgtctga gatggagatg atgaagatga tcgggaaaca caaaaacatc 1620

atcaacctgc tgggcgcctg cacgcagggc gggcccctgt acgtgctggt ggagtacgcg 1680

gccaagggta acctgcggga gtttctgcgg gcgcggcggc ccccgggcct ggactactcc 1740

ttcgacacct gcaagccgcc cgaggagcag ctcaccttca aggacctggt gtcctgtgcc 1800

taccaggtgg cccggggcat ggagtacttg gcctcccaga agtgcatcca cagggacctg 1860

gctgcccgca atgtgctggt gaccgaggac aacgtgatga agatcgcaga cttcgggctg 1920

gcccgggacg tgcacaacct cgactactac aagaagacga ccaacggccg gctgcccgtg 1980

aagtggatgg cgcctgaggc cttgtttgac cgagtctaca ctcaccagag tgacgtctgg 2040

tcctttgggg tcctgctctg ggagatcttc acgctggggg gctccccgta ccccggcatc 2100

cctgtggagg agctcttcaa gctgctgaag gagggccacc gcatggacaa gcccgccaac 2160

tgcacacacg acctgtacat gatcatgcgg gagtgctggc atgccgcgcc ctcccagagg 2220

cccaccttca agcagctggt ggaggacctg gaccgtgtcc ttaccgtgac gtccaccgac 2280

aatgttatgg aacagttcaa tcctgggctg cgaaatttaa taaacctggg gaaaaattat 2340

gagaaagctg taaacgctat gatcctggca ggaaaagcct actacgatgg agtggccaag 2400

atcggtgaga ttgccactgg gtcccccgtg tcaactgaac tgggacatgt cctcatagag 2460

atttcaagta cccacaagaa actcaacgag agtcttgatg aaaattttaa aaaattccac 2520

aaagagatta tccatgagct ggagaagaag atagaacttg acgtgaaata tatgaacgca 2580

actctaaaaa gataccaaac agaacacaag aataaattag agtctttgga gaaatcccaa 2640

gctgagttga agaagatcag aaggaaaagc caaggaagcc gaaacgcact caaatatgaa 2700

cacaaagaaa ttgagtatgt ggagaccgtt acttctcgtc agagtgaaat ccagaaattc 2760

attgcagatg gttgcaaaga ggctctgctt gaagagaaga ggcgcttctg ctttctggtt 2820

gataagcact gtggctttgc aaaccacata cattattatc acttacagtc tgcagaacta 2880

ctgaattcca agctgcctcg gtggcaggag acctgtgttg atgccatcaa agtgccagag 2940

aaaatcatga atatgatcga agaaataaag accccagcct ctacccccgt gtctggaact 3000

cctcaggctt cacccatgat cgagagaagc aatgtggtta ggaaagatta cgacaccctt 3060

tctaaatgct caccaaagat gccccccgct ccttcaggca gagcatatac cagtcccttg 3120

atcgatatgt ttaataaccc agccacggct gccccgaatt cacaaagggt aaataattca 3180

acaggtactt ccgaagatcc cagtttacag cgatcagttt cggttgcaac gggactgaac 3240

atgatgaaga agcagaaagt gaagaccatc ttcccgcaca ctgcgggctc caacaagacc 3300

ttactcagct ttgcacaggg agatgtcatc acgctgctca tccccgagga gaaggatggc 3360

tggctctatg gagaacacga cgtgtccaag gcgaggggtt ggttcccgtc gtcgtacacg 3420

aagttgctgg aagaaaatga gacagaagca gtgaccgtgc ccacgccaag ccccacacca 3480

gtgagaagca tcagcaccgt gaacttgtct gagaatagca gtgttgtcat ccccccaccc 3540

gactacttgg aatgcttgtc catgggggca gctgccgaca ggagagcaga ttcggccagg 3600

acgacatcca cctttaaggc cccagcgtcc aagcccgaga ccgcggctcc taacgatgcc 3660

aacgggactg caaagccgcc ttttctcagc ggagaaaacc cctttgccac tgtgaaactc 3720

cgcccgactg tgacgaatga tcgctcggca cccatcattc gatga 3765

<210> 23
<211> 4989
<212> DNA
<213> Artificial Sequence

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

<400> 23
atggtcagct ggggtcgttt catctgcctg gtcgtggtca ccatggcaac cttgtccctg 60

gcccggccct ccttcagttt agttgaggat accacattag agccagaaga gccaccaacc 120

aaataccaaa tctctcaacc agaagtgtac gtggctgcgc caggggagtc gctagaggtg 180

cgctgcctgt tgaaagatgc cgccgtgatc agttggacta aggatggggt gcacttgggg 240

cccaacaata ggacagtgct tattggggag tacttgcaga taaagggcgc cacgcctaga 300

gactccggcc tctatgcttg tactgccagt aggactgtag acagtgaaac ttggtacttc 360

atggtgaatg tcacagatgc catctcatcc ggagatgatg aggatgacac cgatggtgcg 420

gaagattttg tcagtgagaa cagtaacaac aagagagcac catactggac caacacagaa 480

aagatggaaa agcggctcca tgctgtgcct gcggccaaca ctgtcaagtt tcgctgccca 540

gccgggggga acccaatgcc aaccatgcgg tggctgaaaa acgggaagga gtttaagcag 600

gagcatcgca ttggaggcta caaggtacga aaccagcact ggagcctcat tatggaaagt 660

gtggtcccat ctgacaaggg aaattatacc tgtgtagtgg agaatgaata cgggtccatc 720

aatcacacgt accacctgga tgttgtggag cgatcgcctc accggcccat cctccaagcc 780

ggactgccgg caaatgcctc cacagtggtc ggaggagacg tagagtttgt ctgcaaggtt 840

tacagtgatg cccagcccca catccagtgg atcaagcacg tggaaaagaa cggcagtaaa 900

tacgggcccg acgggctgcc ctacctcaag gttctcaagg ccgccggtgt taacaccacg 960

gacaaagaga ttgaggttct ctatattcgg aatgtaactt ttgaggacgc tggggaatat 1020

acgtgcttgg cgggtaattc tattgggata tcctttcact ctgcatggtt gacagttctg 1080

ccagcgcctg gaagagaaaa ggagattaca gcttccccag actacctgga gatagccatt 1140

tactgcatag gggtcttctt aatcgcctgt atggtggtaa cagtcatcct gtgccgaatg 1200

aagaacacga ccaagaagcc agacttcagc agccagccgg ctgtgcacaa gctgaccaaa 1260

cgtatccccc tgcggagaca ggtaacagtt tcggctgagt ccagctcctc catgaactcc 1320

aacaccccgc tggtgaggat aacaacacgc ctctcttcaa cggcagacac ccccatgctg 1380

gcaggggtct ccgagtatga acttccagag gacccaaaat gggagtttcc aagagataag 1440

ctgacactgg gcaagcccct gggagaaggt tgctttgggc aagtggtcat ggcggaagca 1500

gtgggaattg acaaagacaa gcccaaggag gcggtcaccg tggccgtgaa gatgttgaaa 1560

gatgatgcca cagagaaaga cctttctgat ctggtgtcag agatggagat gatgaagatg 1620

attgggaaac acaagaatat cataaatctt cttggagcct gcacacagga tgggcctctc 1680

tatgtcatag ttgagtatgc ctctaaaggc aacctccgag aatacctccg agcccggagg 1740

ccacccggga tggagtactc ctatgacatt aaccgtgttc ctgaggagca gatgaccttc 1800

aaggacttgg tgtcatgcac ctaccagctg gccagaggca tggagtactt ggcttcccaa 1860

aaatgtattc atcgagattt agcagccaga aatgttttgg taacagaaaa caatgtgatg 1920

aaaatagcag actttggact cgccagagat atcaacaata tagactatta caaaaagacc 1980

accaatgggc ggcttccagt caagtggatg gctccagaag ccctgtttga tagagtatac 2040

actcatcaga gtgatgtctg gtccttcggg gtgttaatgt gggagatctt cactttaggg 2100

ggctcgccct acccagggat tcccgtggag gaacttttta agctgctgaa ggaaggacac 2160

agaatggata agccagccaa ctgcaccaac gaactgtaca tgatgatgag ggactgttgg 2220

catgcagtgc cctcccagag accaacgttc aagcagttgg tagaagactt ggatcgaatt 2280

ctcactctca caaccaatga gatcatggag gaaacaaata cgcagattgc ttggccatca 2340

aaactgaaga tcggagccaa atccaagaaa gatccccata ttaaggtttc tggaaagaaa 2400

gaagatgtta aagaagccaa ggaaatgatc atgtctgtct tagacacaaa aagcaatcga 2460

gtcacactga agatggatgt ttcacataca gaacattcac atgtaatcgg caaaggtggc 2520

aacaatatta aaaaagtgat ggaagaaacc ggatgccata tccactttcc agattccaac 2580

aggaataacc aagcagaaaa aagcaaccag gtatctatag cgggacaacc agcaggagta 2640

gaatctgccc gagttagaat tcgggagctg cttcctttgg tgctgatgtt tgagctacca 2700

attgctggaa ttcttcaacc ggttcctgat cctaattccc cctctattca gcatatatca 2760

caaacgtaca atatttcagt atcatttaaa cagcgttccc gaatgtatgg tgctactgtc 2820

atagtacgag ggtctcagaa taacactagt gctgtgaagg aaggaactgc catgctgtta 2880

gaacatcttg ctgggagctt agcatcagct attcctgtga gcacacaact agatattgca 2940

gctcaacatc atctctttat gatgggtcga aatgggagca acatcaaaca tatcatgcag 3000

agaacaggtg ctcagatcca ctttcctgat cccagtaatc cacaaaagaa atctaccgtc 3060

tacctccagg gcaccattga gtctgtctgt cttgcaaggc aatatctcat gggttgtctt 3120

cctcttgtgt tgatgtttga tatgaaggaa gaaattgaag tagatccaca attcattgcg 3180

cagttgatgg aacagcttga tgtcttcatc agtattaaac caaagcccaa acagccaagc 3240

aagtctgtga ttgtgaaaag tgttgagcga aatgccttaa atatgtatga agcaaggaaa 3300

tgtctcctcg gacttgaaag cagtggggtt accatagcaa ccagtccatc cccagcatcc 3360

tgccctgccg gcctggcatg tcccagcctg gatatcttag cttcagcagg ccttggactc 3420

actggactag gtcttttggg acccaccacc ttatctctga acacttcaac aaccccaaac 3480

tcactcttga atgctcttaa tagctcagtc agtcctttgc aaagtccaag ttctggtaca 3540

cccagcccca cattatgggc acccccactt gctaatactt caagtgccac aggtttttct 3600

gctataccac accttatgat tccatctact gcccaagcca cattaactaa tattttgttg 3660

tctggagtgc ccacctatgg gcacacagct ccatctcccc ctcctggctt gactcctgtt 3720

gatgtccata tcaacagtat gcagaccgaa ggcaaaaaaa tctctgctgc tttaaatgga 3780

catgcacagt ctccagatat aaaatatggt gcaatatcca cttcatcact tggagaaaaa 3840

gtgctgagtg caaatcacgg ggatccgtcc atccagacaa gtgggtctga gcagacatct 3900

cccaaatcaa gccccactga aggttgtaat gatgcttttg ttgaagtagg catgcctcga 3960

agtccttccc attctgggaa tgctggtgac ttgaaacaga tgatgtgtcc ctccaaggtt 4020

tcctgtgcca aaaggcagac agtggaacta ttgcaaggca cgaaaaactc acacttacac 4080

agcactgaca ggttgctctc agaccctgaa ctgagtgcta ccgaaagccc tttggctgac 4140

aagaaggctc cagggagtga gcgcgctgca gagagggcag cagctgccca gcaaaactcc 4200

gaaagggccc accttgctcc acggtcatca tatgtcaaca tgcaggcatt tgactatgaa 4260

cagaagaagc tattagccac caaagctatg ttaaagaaac cagtggtgac ggaggtcaga 4320

acgcccacaa atacctggag tggcctgggt ttttctaaat ccatgccagc tgaaactatc 4380

aaggagttga gaagggccaa tcatgtgtcc tataagccca caatgacaac cacttatgag 4440

ggctcatcca tgtccctttc acggtccaac agtcgtgagc acttgggagg tggaagcgaa 4500

tctgataact ggagagaccg aaatggaatt ggacctggaa gtcatagtga atttgcagct 4560

tctattggca gccctaagcg taaacaaaac aaatcaacgg aacactatct cagcagtagc 4620

aattacatgg actgcatttc ctcgctgaca ggaagcaatg gctgtaactt aaatagctct 4680

ttcaaaggtt ctgacctccc tgagctcttc agcaaactgg gcctgggcaa atacacagat 4740

gttttccagc aacaagagat cgatcttcag acattcctca ctctcacaga tcaggatctg 4800

aaggagctgg gaataactac ttttggtgcc aggaggaaaa tgctgcttgc aatttcagaa 4860

ctaaataaaa accgaagaaa gctttttgaa tcgccaaatg cacgcacctc tttcctggaa 4920

ggtggagcga gtggaaggct accccgtcag tatcactcag acattgctag tgtcagtggc 4980

cgctggtag 4989

<210> 24
<211> 5109

<212> DNA
<213> Artificial Sequence

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

<400> 24
atggtcagct ggggtcgttt catctgcctg gtcgtggtca ccatggcaac cttgtccctg 60

gcccggccct ccttcagttt agttgaggat accacattag agccagaaga gccaccaacc 120

aaataccaaa tctctcaacc agaagtgtac gtggctgcgc caggggagtc gctagaggtg 180

cgctgcctgt tgaaagatgc cgccgtgatc agttggacta aggatggggt gcacttgggg 240

cccaacaata ggacagtgct tattggggag tacttgcaga taaagggcgc cacgcctaga 300

gactccggcc tctatgcttg tactgccagt aggactgtag acagtgaaac ttggtacttc 360

atggtgaatg tcacagatgc catctcatcc ggagatgatg aggatgacac cgatggtgcg 420

gaagattttg tcagtgagaa cagtaacaac aagagagcac catactggac caacacagaa 480

aagatggaaa agcggctcca tgctgtgcct gcggccaaca ctgtcaagtt tcgctgccca 540

gccgggggga acccaatgcc aaccatgcgg tggctgaaaa acgggaagga gtttaagcag 600

gagcatcgca ttggaggcta caaggtacga aaccagcact ggagcctcat tatggaaagt 660

gtggtcccat ctgacaaggg aaattatacc tgtgtagtgg agaatgaata cgggtccatc 720

aatcacacgt accacctgga tgttgtggag cgatcgcctc accggcccat cctccaagcc 780

ggactgccgg caaatgcctc cacagtggtc ggaggagacg tagagtttgt ctgcaaggtt 840

tacagtgatg cccagcccca catccagtgg atcaagcacg tggaaaagaa cggcagtaaa 900

tacgggcccg acgggctgcc ctacctcaag gttctcaagg ccgccggtgt taacaccacg 960

gacaaagaga ttgaggttct ctatattcgg aatgtaactt ttgaggacgc tggggaatat 1020

acgtgcttgg cgggtaattc tattgggata tcctttcact ctgcatggtt gacagttctg 1080

ccagcgcctg gaagagaaaa ggagattaca gcttccccag actacctgga gatagccatt 1140

tactgcatag gggtcttctt aatcgcctgt atggtggtaa cagtcatcct gtgccgaatg 1200

aagaacacga ccaagaagcc agacttcagc agccagccgg ctgtgcacaa gctgaccaaa 1260

cgtatccccc tgcggagaca ggtaacagtt tcggctgagt ccagctcctc catgaactcc 1320

aacaccccgc tggtgaggat aacaacacgc ctctcttcaa cggcagacac ccccatgctg 1380

gcaggggtct ccgagtatga acttccagag gacccaaaat gggagtttcc aagagataag 1440

ctgacactgg gcaagcccct gggagaaggt tgctttgggc aagtggtcat ggcggaagca 1500

gtgggaattg acaaagacaa gcccaaggag gcggtcaccg tggccgtgaa gatgttgaaa 1560

gatgatgcca cagagaaaga cctttctgat ctggtgtcag agatggagat gatgaagatg 1620

attgggaaac acaagaatat cataaatctt cttggagcct gcacacagga tgggcctctc 1680

tatgtcatag ttgagtatgc ctctaaaggc aacctccgag aatacctccg agcccggagg 1740

ccacccggga tggagtactc ctatgacatt aaccgtgttc ctgaggagca gatgaccttc 1800

aaggacttgg tgtcatgcac ctaccagctg gccagaggca tggagtactt ggcttcccaa 1860

aaatgtattc atcgagattt agcagccaga aatgttttgg taacagaaaa caatgtgatg 1920

aaaatagcag actttggact cgccagagat atcaacaata tagactatta caaaaagacc 1980

accaatgggc ggcttccagt caagtggatg gctccagaag ccctgtttga tagagtatac 2040

actcatcaga gtgatgtctg gtccttcggg gtgttaatgt gggagatctt cactttaggg 2100

ggctcgccct acccagggat tcccgtggag gaacttttta agctgctgaa ggaaggacac 2160

agaatggata agccagccaa ctgcaccaac gaactgtaca tgatgatgag ggactgttgg 2220

catgcagtgc cctcccagag accaacgttc aagcagttgg tagaagactt ggatcgaatt 2280

ctcactctca caaccaatga ggagagtaga tctggagaaa ccaacagctg tgttgaagaa 2340

ataatccggg agatgacctg gcttccacca ctttctgcta ttcaagcacc tggcaaagtg 2400

gaaccaacca aatttccatt tccaaataag gactctcagc ttgtatcctc tggacacaat 2460

aatccaaaga aaggtgatgc agagccagag agtccagaca gtggcacatc gaatacatca 2520

atgctggaag atgaccttaa gctaagcagt gatgaagagg agaatgaaca gcaggcagct 2580

cagagaacgg ctctccgcgc tctctctgac agcgccgtgg tccagcagcc caactgcaga 2640

acctcggtgc cttccagcaa gggcagcagc agcagcagca gcagcggcag cagcagctcc 2700

tccagcgact cagagagcag ctccggatct gactcggaga ccgagagcag ctccagcgag 2760

agtgagggca gcaagccccc ccacttctcc agccccgagg ctgaaccggc atcctctaac 2820

aagtggcagc tggataaatg gctaaacaaa gttaatcccc acaagcctcc tattctgatc 2880

caaaatgaaa gccacgggtc agagagcaat cagtactaca acccggtgaa agaggacgtc 2940

caggactgtg ggaaagtccc cgacgtttgc cagcccagcc tgagagagaa ggagatcaag 3000

agcacttgca aggaggagca aaggccaagg acagccaaca aggcccctgg gagtaaaggc 3060

gtgaagcaga agtccccgcc cgcggccgtg gccgtggcgg tgagcgcagc cgccccgcca 3120

cccgcagtgc cctgtgcgcc cgcggagaac gcgcccgcgc ctgcccggag gtccgcgggc 3180

aagaagccca ccaggcgcac cgagaggacc tcagccgggg acggcgccaa ctgccaccgg 3240

cccgaggagc ccgcggccgc ggacgcgctg gggacgagcg tggtggtccc cccggagccc 3300

accaaaacca ggccctgtgg caacaacaga gcgagccacc gcaaggagct gcgctcctcc 3360

gtgacctgcg agaagcgccg cacgcggggg ctaagcagga tcgtccccaa atccaaggag 3420

ttcattgaga cagagtcgtc atcttcatcc tcctcctcgg actccgacct ggagtccgag 3480

caggaggagt accctctgtc caaagcacag accgtggctg cctctgcctc ctccgggaat 3540

gatcagaggc tgaaggaggc cgctgccaac gggggcagtg gtcctagggc ccctgtaggc 3600

tccatcaacg ccaggaccac cagtgacatc gccaaggagc tggaggagca gttctacaca 3660

ctggtcccct ttggccggaa cgaacttctc tcccctctaa aggacagtga tgagatcagg 3720

tctctctggg tcaaaatcga cctgaccctc ctgtccagga tcccagaaca cctgccccag 3780

gagccagggg tattgagcgc ccctgccacc aaggactctg agagcgcacc gcccagccac 3840

acctcggaca cacctgcaga aaaggctttg ccaaaatcca agaggaaacg caagtgtgac 3900

aacgaagacg actacaggga gatcaagaag tcccagggag agaaagacag ctcttcaaga 3960

ctggccacct ccaccagtaa tactttgtct gcaaaccact gcaacatgaa catcaacagt 4020

gtggcaatac caataaataa aaatgaaaaa atgcttcggt cgcccatctc acccctctct 4080

gatgcatcta aacacaaata caccagcgag gacttaactt cttccagccg acctaatggc 4140

aacagtttgt ttacttcagc ctcttccagc aaaaagccta aggccgacag ccagctgcag 4200

cctcacggcg gagacctcac gaaagcagct cacaacaatt ctgaaaacat tcccctccac 4260

aagtcacggc cgcagacgaa gccgtggtct ccaggctcca acggccacag ggactgcaag 4320

aggcagaaac ttgtcttcga tgatatgcct cgcagtgccg attattttat gcaagaagct 4380

aaacgaatga agcataaagc agatgcaatg gtggaaaagt ttggaaaggc tttgaactat 4440

gctgaagcag cattgtcgtt tatcgagtgt ggaaatgcaa tggaacaagg ccccatggaa 4500

tccaaatctc cttatacgat gtattcagaa acagtagagc tcatcaggta tgctatgaga 4560

ctaaaaaccc actcaggccc caatgccaca ccagaagaca aacaactggc tgcattatgt 4620

taccgatgcc tggccctcct gtactggcgg atgtttcgac tcaaaaggga ccacgctgta 4680

aagtattcaa aagcactaat cgactatttc aagaactcat ctaaagccgc ccaagcccca 4740

tctccgtggg gggccagtgg aaagagcact ggaaccccat cccccatgtc tcccaacccc 4800

tctcccgcca gctccgtggg gtctcagggc agcctctcca acgccagcgc cctgtccccg 4860

tcgaccatcg tcagcatccc acagcgcatc caccagatgg cggccaacca cgtcagcatc 4920

accaacagca tcctgcacag ctacgactac tgggagatgg ccgacaacct ggccaaggaa 4980

aaccgagaat tcttcaacga cctggatctg ctcatggggc cggtcaccct gcacagcagc 5040

atggagcacc tggtccagta ctcccaacag ggcctgcact ggctgcggaa cagcgcccac 5100

ctgtcatag 5109

<210> 25
<211> 3213
<212> DNA
<213> Artificial Sequence

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

<400> 25
atggtcagct ggggtcgttt catctgcctg gtcgtggtca ccatggcaac cttgtccctg 60

gcccggccct ccttcagttt agttgaggat accacattag agccagaaga gccaccaacc 120

aaataccaaa tctctcaacc agaagtgtac gtggctgcgc caggggagtc gctagaggtg 180

cgctgcctgt tgaaagatgc cgccgtgatc agttggacta aggatggggt gcacttgggg 240

cccaacaata ggacagtgct tattggggag tacttgcaga taaagggcgc cacgcctaga 300

gactccggcc tctatgcttg tactgccagt aggactgtag acagtgaaac ttggtacttc 360

atggtgaatg tcacagatgc catctcatcc ggagatgatg aggatgacac cgatggtgcg 420

gaagattttg tcagtgagaa cagtaacaac aagagagcac catactggac caacacagaa 480

aagatggaaa agcggctcca tgctgtgcct gcggccaaca ctgtcaagtt tcgctgccca 540

gccgggggga acccaatgcc aaccatgcgg tggctgaaaa acgggaagga gtttaagcag 600

gagcatcgca ttggaggcta caaggtacga aaccagcact ggagcctcat tatggaaagt 660

gtggtcccat ctgacaaggg aaattatacc tgtgtagtgg agaatgaata cgggtccatc 720

aatcacacgt accacctgga tgttgtggag cgatcgcctc accggcccat cctccaagcc 780

ggactgccgg caaatgcctc cacagtggtc ggaggagacg tagagtttgt ctgcaaggtt 840

tacagtgatg cccagcccca catccagtgg atcaagcacg tggaaaagaa cggcagtaaa 900

tacgggcccg acgggctgcc ctacctcaag gttctcaagg ccgccggtgt taacaccacg 960

gacaaagaga ttgaggttct ctatattcgg aatgtaactt ttgaggacgc tggggaatat 1020

acgtgcttgg cgggtaattc tattgggata tcctttcact ctgcatggtt gacagttctg 1080

ccagcgcctg gaagagaaaa ggagattaca gcttccccag actacctgga gatagccatt 1140

tactgcatag gggtcttctt aatcgcctgt atggtggtaa cagtcatcct gtgccgaatg 1200

aagaacacga ccaagaagcc agacttcagc agccagccgg ctgtgcacaa gctgaccaaa 1260

cgtatccccc tgcggagaca ggtaacagtt tcggctgagt ccagctcctc catgaactcc 1320

aacaccccgc tggtgaggat aacaacacgc ctctcttcaa cggcagacac ccccatgctg 1380

gcaggggtct ccgagtatga acttccagag gacccaaaat gggagtttcc aagagataag 1440

ctgacactgg gcaagcccct gggagaaggt tgctttgggc aagtggtcat ggcggaagca 1500

gtgggaattg acaaagacaa gcccaaggag gcggtcaccg tggccgtgaa gatgttgaaa 1560

gatgatgcca cagagaaaga cctttctgat ctggtgtcag agatggagat gatgaagatg 1620

attgggaaac acaagaatat cataaatctt cttggagcct gcacacagga tgggcctctc 1680

tatgtcatag ttgagtatgc ctctaaaggc aacctccgag aatacctccg agcccggagg 1740

ccacccggga tggagtactc ctatgacatt aaccgtgttc ctgaggagca gatgaccttc 1800

aaggacttgg tgtcatgcac ctaccagctg gccagaggca tggagtactt ggcttcccaa 1860

aaatgtattc atcgagattt agcagccaga aatgttttgg taacagaaaa caatgtgatg 1920

aaaatagcag actttggact cgccagagat atcaacaata tagactatta caaaaagacc 1980

accaatgggc ggcttccagt caagtggatg gctccagaag ccctgtttga tagagtatac 2040

actcatcaga gtgatgtctg gtccttcggg gtgttaatgt gggagatctt cactttaggg 2100

ggctcgccct acccagggat tcccgtggag gaacttttta agctgctgaa ggaaggacac 2160

agaatggata agccagccaa ctgcaccaac gaactgtaca tgatgatgag ggactgttgg 2220

catgcagtgc cctcccagag accaacgttc aagcagttgg tagaagactt ggatcgaatt 2280

ctcactctca caaccaatga gatggcagat gatcagggct gtattgaaga gcaggggtt 2340

gaggattcag caaatgaaga ttcagtggat gctaagccag accggtcctc gtttgtaccg 2400

tccctcttca gtaagaagaa gaaaaatgtc accatgcgat ccatcaagac cacccgggac 2460

cgagtgccta catatcagta caacatgaat tttgaaaagc tgggcaaatg catcataata 2520

aacaacaaga actttgataa agtgacaggt atgggcgttc gaaacggaac agacaaagat 2580

gccgaggcgc tcttcaagtg cttccgaagc ctgggttttg acgtgattgt ctataatgac 2640

tgctcttgtg ccaagatgca agatctgctt aaaaaagctt ctgaagagga ccatacaaat 2700

gccgcctgct tcgcctgcat cctcttaagc catggagaag aaaatgtaat ttatgggaaa 2760

gatggtgtca caccaataaa ggatttgaca gcccacttta ggggggatag atgcaaaacc 2820

cttttagaga aacccaaact cttcttcatt caggcttgcc gagggaccga gcttgatgat 2880

ggcatccagg ccgactcggg gcccatcaat gacacagatg ctaatcctcg atacaagatc 2940

ccagtggaag ctgacttcct cttcgcctat tccacggttc caggctatta ctcgtggagg 3000

agcccaggaa gaggctcctg gtttgtgcaa gccctctgct ccatcctgga ggagcacgga 3060

aaagacctgg aaatcatgca gatcctcacc agggtgaatg acagagttgc caggcacttt 3120

gagtctcagt ctgatgaccc acacttccat gagaagaagc agatcccctg tgtggtctcc 3180

atgctcacca aggaactcta cttcagtcaa tag 3213

<210> 26
<211> 3423
<212> DNA
<213> Artificial Sequence

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

<400> 26
atggtcagct ggggtcgttt catctgcctg gtcgtggtca ccatggcaac cttgtccctg 60

gcccggccct ccttcagttt agttgaggat accacattag agccagaaga gccaccaacc 120

aaataccaaa tctctcaacc agaagtgtac gtggctgcgc caggggagtc gctagaggtg 180

cgctgcctgt tgaaagatgc cgccgtgatc agttggacta aggatggggt gcacttgggg 240

cccaacaata ggacagtgct tattggggag tacttgcaga taaagggcgc cacgcctaga 300

gactccggcc tctatgcttg tactgccagt aggactgtag acagtgaaac ttggtacttc 360

atggtgaatg tcacagatgc catctcatcc ggagatgatg aggatgacac cgatggtgcg 420

gaagattttg tcagtgagaa cagtaacaac aagagagcac catactggac caacacagaa 480

aagatggaaa agcggctcca tgctgtgcct gcggccaaca ctgtcaagtt tcgctgccca 540

gccgggggga acccaatgcc aaccatgcgg tggctgaaaa acgggaagga gtttaagcag 600

gagcatcgca ttggaggcta caaggtacga aaccagcact ggagcctcat tatggaaagt 660

gtggtcccat ctgacaaggg aaattatacc tgtgtagtgg agaatgaata cgggtccatc 720

aatcacacgt accacctgga tgttgtggag cgatcgcctc accggcccat cctccaagcc 780

ggactgccgg caaatgcctc cacagtggtc ggaggagacg tagagtttgt ctgcaaggtt 840

tacagtgatg cccagcccca catccagtgg atcaagcacg tggaaaagaa cggcagtaaa 900

tacgggcccg acgggctgcc ctacctcaag gttctcaagg ccgccggtgt taacaccacg 960

gacaaagaga ttgaggttct ctatattcgg aatgtaactt ttgaggacgc tggggaatat 1020

acgtgcttgg cgggtaattc tattgggata tcctttcact ctgcatggtt gacagttctg 1080

ccagcgcctg gaagagaaaa ggagattaca gcttccccag actacctgga gatagccatt 1140

tactgcatag gggtcttctt aatcgcctgt atggtggtaa cagtcatcct gtgccgaatg 1200

aagaacacga ccaagaagcc agacttcagc agccagccgg ctgtgcacaa gctgaccaaa 1260

cgtatccccc tgcggagaca ggtaacagtt tcggctgagt ccagctcctc catgaactcc 1320

aacaccccgc tggtgaggat aacaacacgc ctctcttcaa cggcagacac ccccatgctg 1380

gcaggggtct ccgagtatga acttccagag gacccaaaat gggagtttcc aagagataag 1440

ctgacactgg gcaagcccct gggagaaggt tgctttgggc aagtggtcat ggcggaagca 1500

gtgggaattg acaaagacaa gcccaaggag gcggtcaccg tggccgtgaa gatgttgaaa 1560

gatgatgcca cagagaaaga cctttctgat ctggtgtcag agatggagat gatgaagatg 1620

attgggaaac acaagaatat cataaatctt cttggagcct gcacacagga tgggcctctc 1680

tatgtcatag ttgagtatgc ctctaaaggc aacctccgag aatacctccg agcccggagg 1740

ccacccggga tggagtactc ctatgacatt aaccgtgttc ctgaggagca gatgaccttc 1800

aaggacttgg tgtcatgcac ctaccagctg gccagaggca tggagtactt ggcttcccaa 1860

aaatgtattc atcgagattt agcagccaga aatgttttgg taacagaaaa caatgtgatg 1920

aaaatagcag actttggact cgccagagat atcaacaata tagactatta caaaaagacc 1980

accaatgggc ggcttccagt caagtggatg gctccagaag ccctgtttga tagagtatac 2040

actcatcaga gtgatgtctg gtccttcggg gtgttaatgt gggagatctt cactttaggg 2100

ggctcgccct acccagggat tcccgtggag gaacttttta agctgctgaa ggaaggacac 2160

agaatggata agccagccaa ctgcaccaac gaactgtaca tgatgatgag ggactgttgg 2220

catgcagtgc cctcccagag accaacgttc aagcagttgg tagaagactt ggatcgaatt 2280

ctcactctca caaccaatga gcaagccagg gctgagcagg aagaagaatt cattagtaac 2340

actttattca agaaaattca ggctttgcag aaggagaaag aaacccttgc tgtaaattat 2400

gagaaagaag aagaattcct cactaatgag ctctccagaa aattgatgca gttgcagcat 2460

gagaaagccg aactagaaca gcatcttgaa caagagcagg aatttcaggt caacaaactg 2520

atgaagaaaa ttaaaaaact ggagaatgac accatttcta agcaacttac attagaacag 2580

ttgagacggg agaagattga ccttgaaaat acattggaac aagaacaaga agcactagtt 2640

aatcgcctct ggaaaaggat ggataagctt gaagctgaaa agcgaatcct gcaggaaaaa 2700

ttagaccagc ccgtctctgc tccaccatcg cctagagata tctccatgga gattgattct 2760

ccagaaaata tgatgcgtca catcaggttt ttaaagaatg aagtggaacg gctgaagaag 2820

caactgagag ctgctcagtt acagcattca gagaaaatgg cacagtatct ggaggaggaa 2880

cgtcacatga gagaagagaa cttgaggctc cagaggaagc tgcagaggga gatggagaga 2940

agagaagccc tctgtcgaca gctctccgag agtgagtcca gcttagaaat ggacgacgaa 3000

aggtatttta atgagatgtc tgcacaagga ttaagacctc gcactgtgtc cagcccgatc 3060

ccttacacac cttctccgag ttcaagcagg cctatatcac ctggtctatc atatgcaagt 3120

cacacggttg gtttcacgcc accaacttca ctgactagag ctggaatgtc ttattacaat 3180

tccccgggtc ttcacgtgca gcacatggga acatcccatg gtatcacaag gccttcacca 3240

cggagaagca acagtcctga caaattcaaa cggcccacgc cgcctccatc tcccaacaca 3300

cagaccccag tccagccacc tccgcctcca cctccgccac ccatgcagcc cacggtcccc 3360

tcagcagcca cctcgcagcc tactccttcg caacattcgg cgcacccctc ctcccagcct 3420

taa 3423

<210> 27
<211> 5229
<212> DNA
<213> Artificial Sequence

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

<400> 27
atggtcagct ggggtcgttt catctgcctg gtcgtggtca ccatggcaac cttgtccctg 60

gcccggccct ccttcagttt agttgaggat accacattag agccagaaga gccaccaacc 120

aaataccaaa tctctcaacc agaagtgtac gtggctgcgc caggggagtc gctagaggtg 180

cgctgcctgt tgaaagatgc cgccgtgatc agttggacta aggatggggt gcacttgggg 240

cccaacaata ggacagtgct tattggggag tacttgcaga taaagggcgc cacgcctaga 300

gactccggcc tctatgcttg tactgccagt aggactgtag acagtgaaac ttggtacttc 360

atggtgaatg tcacagatgc catctcatcc ggagatgatg aggatgacac cgatggtgcg 420

gaagattttg tcagtgagaa cagtaacaac aagagagcac catactggac caacacagaa 480

aagatggaaa agcggctcca tgctgtgcct gcggccaaca ctgtcaagtt tcgctgccca 540

gccgggggga acccaatgcc aaccatgcgg tggctgaaaa acgggaagga gtttaagcag 600

gagcatcgca ttggaggcta caaggtacga aaccagcact ggagcctcat tatggaaagt 660

gtggtcccat ctgacaaggg aaattatacc tgtgtagtgg agaatgaata cgggtccatc 720

aatcacacgt accacctgga tgttgtggag cgatcgcctc accggcccat cctccaagcc 780

ggactgccgg caaatgcctc cacagtggtc ggaggagacg tagagtttgt ctgcaaggtt 840

tacagtgatg cccagcccca catccagtgg atcaagcacg tggaaaagaa cggcagtaaa 900

tacgggcccg acgggctgcc ctacctcaag gttctcaagg ccgccggtgt taacaccacg 960

gacaaagaga ttgaggttct ctatattcgg aatgtaactt ttgaggacgc tggggaatat 1020

acgtgcttgg cgggtaattc tattgggata tcctttcact ctgcatggtt gacagttctg 1080

ccagcgcctg gaagagaaaa ggagattaca gcttccccag actacctgga gatagccatt 1140

tactgcatag gggtcttctt aatcgcctgt atggtggtaa cagtcatcct gtgccgaatg 1200

aagaacacga ccaagaagcc agacttcagc agccagccgg ctgtgcacaa gctgaccaaa 1260

cgtatccccc tgcggagaca ggtaacagtt tcggctgagt ccagctcctc catgaactcc 1320

aacaccccgc tggtgaggat aacaacacgc ctctcttcaa cggcagacac ccccatgctg 1380

gcaggggtct ccgagtatga acttccagag gacccaaaat gggagtttcc aagagataag 1440

ctgacactgg gcaagcccct gggagaaggt tgctttgggc aagtggtcat ggcggaagca 1500

gtgggaattg acaaagacaa gcccaaggag gcggtcaccg tggccgtgaa gatgttgaaa 1560

gatgatgcca cagagaaaga cctttctgat ctggtgtcag agatggagat gatgaagatg 1620

attgggaaac acaagaatat cataaatctt cttggagcct gcacacagga tgggcctctc 1680

tatgtcatag ttgagtatgc ctctaaaggc aacctccgag aatacctccg agcccggagg 1740

ccacccggga tggagtactc ctatgacatt aaccgtgttc ctgaggagca gatgaccttc 1800

aaggacttgg tgtcatgcac ctaccagctg gccagaggca tggagtactt ggcttcccaa 1860

aaatgtattc atcgagattt agcagccaga aatgttttgg taacagaaaa caatgtgatg 1920

aaaatagcag actttggact cgccagagat atcaacaata tagactatta caaaaagacc 1980

accaatgggc ggcttccagt caagtggatg gctccagaag ccctgtttga tagagtatac 2040

actcatcaga gtgatgtctg gtccttcggg gtgttaatgt gggagatctt cactttaggg 2100

ggctcgccct acccagggat tcccgtggag gaacttttta agctgctgaa ggaaggacac 2160

agaatggata agccagccaa ctgcaccaac gaactgtaca tgatgatgag ggactgttgg 2220

catgcagtgc cctcccagag accaacgttc aagcagttgg tagaagactt ggatcgaatt 2280

ctcactctca caaccaatga gacacaactt cgaaaccagc taattcatga gttgatgcac 2340

cctgtattga gtggagaact gcagcctcgg tccatttcag tagaagggag ctccctctta 2400

ataggcgcct ctaactcttt agtggcagat cacttacaaa gatgtggcta tgaatattca 2460

ctttctgttt tctttccaga aagtggtttg gcaaaagaaa aggtatttac tatgcaggat 2520

ctattacaac tcattaaaat caaccctact tccagtctct acaaatcact ggtttcagga 2580

tctgataaag aaaatcaaaa aggttttctt atgcattttt taaaagaatt ggcagaatat 2640

catcaagcta aagagagttg taatatggaa actcagacaa gttcgacatt taacagagat 2700

tctctggctg agaagcttca gcttattgat gatcagtttg cagatgctta ccctcagcgt 2760

atcaagttcg aatctttaga aataaagcta aatgagtata agagagaaat agaagagcaa 2820

cttcgggcag aaatgtgtca aaagttgaag ttttttaaag ataccgagat agcaaaaatt 2880

aaaatggaag caaaaaaaaa gtatgaaaag gagttaacca tgttccagaa tgattttgaa 2940

aaagcttgtc aagcaaaatc tgaagctctc gttcttcggg aaaagagtac ccttgaaaga 3000

attcacaagc accaagagat tgaaacaaaa gaaatttatg ctcaaaggca acttttacta 3060

aaagatatgg atttgctaag aggaagagaa gcagagctga agcaaagagt tgaagctttt 3120

gaattgaacc agaagctcca ggaagaaaaa cataaaagca taactgaggc acttaggaga 3180

caggagcaga atataaagag ttttgaggag acctatgacc gaaagctcaa gaatgaactt 3240

ctaaagtatc aacttgaact gaaggatgac tacatcatta gaactaatcg actgattgaa 3300
gatgaaagga agaataaaga aaaagctgtt catttgcaag aggagctcat agctattaat 3360
tcaaaaaagg aggaactcaa tcaatctgta aatcgtgtga aagaacttga gcttgaatta 3420
gagtctgtca aagcccagtc tttggcaata acaaaacaaa accatatgct gaatgaaaag 3480
gttaaagaga tgagtgatta ttcactacta aaagaagaga aactggagct tctggcacaa 3540
aataaattac ttaaacaaca actggaagag agtagaaatg aaaacctgcg tctcctaaac 3600
cgcctagctc agccggctcc tgaacttgca gtctttcaga aagaactacg gaaagccgaa 3660
aaggctatag tggttgagca tgaggagttc gaaagctgca ggcaagctct gcacaaacaa 3720
ctgcaagacg aaattgagca ttctgcacag ctgaaggccc agattctagg ttacaaagct 3780
tctgtaaaga gtttaactac tcaggttgcc gatttaaaat tgcaactgaa gcaaactcag 3840
acagccctag agaatgaagt gtactgcaat ccaaagcagt ctgtgatcga tcgttctgtc 3900
aatggattaa taaatggcaa tgtggtgcct tgcaatggtg agataagtgg ggatttcttg 3960
aacaatcctt ttaaacagga aaacgttcta gcacgtatgg ttgcatcaag gatcacaaat 4020
tatccaactg catgggtgga gggtagttcc cctgattctg accttgagtt tgtagccaat 4080
actaaggcaa gggtcaaaga gcttcagcaa gaggccgaac gcttggaaaa ggctttcaga 4140
agttaccatc ggagagtcat taaaaactct gccaaaagcc cactagcagc aaagagccca 4200
ccatctctgc acttgctgga agccttcaaa aacattactt ccagttcccc ggaaagacat 4260
atttttggag aggacagagt tgtctctgag cagcctcaag tgggcacact tgaagaaagg 4320
aatgacgtcg tggaagcact gacaggcagt gcagcctcga ggctccgcgg gggcacttcc 4380
tccagacgcc tctcttccac acccccttcca aaagcaaaaa gaagcctcga aagtgaaatg 4440
tatctggaag gtctgggcag atcacacatt gcttccccca gtccttgtcc tgacagaatg 4500
cccctaccat cacccactga gtctaggcac agcctctcca tccctcctgt ctccagccct 4560
ccggagcaga aagtgggtct ttatcgaaga caaactgaac ttcaagacaa aagtgaattt 4620
tcagatgtgg acaagctagc ttttaaggat aatgaggagt ttgaatcatc ttttgaatct 4680
gcagggaaca tgccaaggca gttggaaatg ggcgggcttt ctcctgccgg ggatatgtct 4740
catgtggacg ctgctgcagc tgctgtgccc ctctcatatc agcacccaag tgtagatcag 4800
aaacaaattg aagaacaaaa ggaagaagaa aaaatacggg aacagcaagt gaaagaacga 4860
aggcagagag aagaaagaag gcagagtaac ctacaagaag ttttagaaag ggaacgaaga 4920
gaactagaaa aactgtatca ggaaaggaag atgattgaag aatcactgaa gattaaaata 4980
aaaaaggaat tagaaatgga aaatgaatta gaaatgagta atcaagaaat aaaagacaaa 5040
tctgctcaca gtgaaaatcc tttagagaaa tacatgaaaa tcatccagca ggagcaagac 5100
caggagtcgg cagataagag ctcaaaaaag atggtccaag aaggctccct agtggacacg 5160
ctgcaatcta gtgacaaagt cgaaagttta acaggctttt ctcatgaaga actagacgac 5220
tcttggtaa 5229