SEQUENCE LISTING

<110> Crestovo Holdings LLC
Millennium Pharmaceuticals, Inc.

<120> METHODS AND PRODUCTS FOR TREATMENT OF GASTROINTESTINAL DISORDERS

<130> FIN-019PC/112933-5019

<150> US 63/001,888
<151> 2020-03-30

<150> US 62/876,350
<151> 2019-07-19

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cggtgaaatg catagatata acttagaact ccgatagcga aggcagctta ccagactgta 600

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acgtatccaa cctgccgatg actcggggat agcctttcga aagaaagatt aatacccgat 180

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gagacacggt ccaaactcct acgggaggca gcagtgagga atattggtca atgggcgcag 180

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ggcatagttt tcccgcatgg gataattatt aaagaatttc ggttgtcgat ggggatgcgt 240

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cttacgtccg gggctacaca cgtgttacaa tgggggggtac agaaggcagc tacacggcga 1260

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<213> Artificial Sequence

<220>
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atccaaccta ccggttattc cgggatagcc tttcgaaaga aagattaata ccggatagta 180

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gcggctggaa cacctcctt 1519

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<212> DNA
<213> Artificial Sequence

<220>
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atgtaaccta cctataacag gggcataaca ctgagaaatt ggtactaatt ccccataata 180

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<213> Artificial Sequence

<220>
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acgtatccaa cctgccgatg actcggggat agcctttcga aagaaagatt aatacccgat 180

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<211> 1527
<212> DNA
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<220>
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<212> DNA
<213> Artificial Sequence

<220>
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cgacctaggg caaaaccggt gactggggct aagtcgtaac aaggtagccg taccggaagg 1500

tgcggctgga acacctcctt t 1521

<210> 19
<211> 1530

<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Polynucleotide

<400> 19
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ggtgagtaac gcgtgggtaa cctgcctcat acaggggat aacagttgga aacgactgct 180

aataccgcat aagcgcacag gatcacatga tccggtgtga aaaactccgg tggtatgaga 240

tggacccgcg tctgattagc cagttggcag ggtaacggcc taccaaagcg acgatcagta 300

gccgacctga gagggtgacc ggccacattg ggactgagac acggcccaaa ctcctacggg 360

aggcagcagt ggggaatatt gcacaatggg ggaaaccctg atgcagcgac gccgcgtgag 420

cgaagaagta tttcggtatg taaagctcta tcagcaggga agaagaatga cggtacctga 480

ctaagaagca ccggctaaat acgtgccagc agccgcggta atacgtatgg tgcaagcgtt 540

atccggattt actgggtgta aagggagcgc aggcggtgcg gcaagtctga tgtgaaagcc 600

cggggctcaa ccccggtact gcattggaaa ctgtcgtact agagtgtcgg aggggtaagt 660

ggaattccta gtgtagcggt gaaatgcgta gatattagga ggaacaccag tggcgaaggc 720

ggcttactgg acgataactg acgctgaggc tcgaaagcgt ggggagcaaa caggattaga 780

taccctggta gtccacgccg taaacgatga atactaggtg tcggggagca ttgctcttcg 840

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gaagaacctt accaagtctt gacatcccga tgacagggta tgtaatgtac tttctcttcg 1020

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agctggaatc gctagtaatc gcagatcaga atgctgcggt gaatacgttc ccgggtcttg 1380

tacacaccgc ccgtcacacc atgggagttg gaaatgcccg aagtcagtga cccaaccgca 1440

aggagggagc tgccgaaggc aggttcgata actggggtga agtcgtaaca aggtagccgt 1500

atcggaaggt gcggctggat cacctccttt 1530

<210> 20
<211> 1509
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Polynucleotide

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gagtaacctg cccccgagag cgggatagcc ctgggaaact gggattaata ccgcatagta 180

tcgaaagatt aaagcagcaa tgcgcttggg gatgggctcg cggcctatta gttagttggt 240

gaggtaacgg ctcaccaagg cgatgacggg tagccggtct gagaggatgt ccggccacac 300

tggaactgag acacggtcca gacacctacg ggtggcagca gtcgagaatc attcacaatg 360

ggggaaaccc tgatggtgcg acgccgcgtg ggggaatgaa ggtcttcgga ttgtaaaccc 420

ctgtcatgtg ggagcaaatt aaaaagatag taccacaaga ggaagagacg gctaactctg 480

tgccagcagc cgcggtaata cagaggtctc aagcgttgtt cggaatcact gggcgtaaag 540

cgtgcgtagg ctgtttcgta agtcgtgtgt gaaaggcgcg ggctcaaccc gcggacggca 600

catgatactg cgagactaga gtaatggagg gggaaccgga attctcggtg tagcagtgaa 660

atgcgtagat atcgagagga acactcgtgg cgaaggcggg ttcctggaca ttaactgacg 720

ctgaggcacg aaggccaggg gagcgaaagg gattagatac ccctgtagtc ctggcagtaa 780

acggtgcacg cttggtgtgc ggggaatcga ccccctgcgt gccggagcta acgcgttaag 840

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agactggtaa ctgggatgaa gtcgtaacaa ggtagccgta ggggaacctg cggctggatc 1500

acctccttt 1509

<210> 21
<211> 1557
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Polynucleotide

<400> 21
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cgaacggaga attttatttc ggtagaattc ttagtggcga acgggtgagt aacgcgtagg 120

caacctgccc tttagacggg gacaacattc cgaaaggagt gctaataccg gatgtgatca 180

tcgtgccgca tggcaggatg aagaaagatg gcctctacaa gtaagctatc gctaaaggat 240

gggcctgcgt ctgattagct agttggtagt gtaacggact accaaggcga tgatcagtag 300

ccggtctgag aggatgaacg gccacattgg gactgagaca cggcccaaac tcctacggga 360

ggcagcagtg gggaatcttc cgcaatggac gaaagtctga cggagcaacg ccgcgtgagt 420

gatgaaggat ttcggtctgt aaagctctgt tgtttatgac gaacgtgcag tgtgtgaaca 480

atgcattgca atgacggtag taaacgagga agccacggct aactacgtgc cagcagccgc 540

ggtaatacgt aggtggcgag cgttgtccgg aattattggg cgtaaagagc atgtaggcgg 600

cttaataagt cgagcgtgaa aatgcggggc tcaaccccgt atggcgctgg aaactgttag 660

gcttgagtgc aggagaggaa aggggaattc ccagtgtagc ggtgaaatgc gtagatattg 720

ggaggaacac cagtggcgaa ggcgcctttc tggactgtgt ctgacgctga gatgcgaaag 780

ccagggtagc gaacgggatt agataccccg gtagtcctgg ccgtaaacga tgggtactag 840

gtgtaggagg tatcgacccc ttctgtgccg gagttaacgc aataagtacc ccgcctgggg 900

agtacggccg caaggttgaa actcaaagga attgacgggg gcccgcacaa gcggtggagt 960

atgtggttta attcgacgca acgcgaagaa ccttaccaag gcttgacatt gattgaacgc 1020

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ctcgtgtcgt gagatgttgg gttaagtccc gcaacgagcg caacccctat cctatgttac 1140

cagcaagtaa agttggggac tcatgggaga ctgccaggga caacctggag gaaggcgggg 1200

atgacgtcaa gtcatcatgc cccttatgtc ttgggctaca cacgtactac aatggtcgga 1260

aacagaggga agcgaagccg cgaggcagag caaaccccag aaacccgatc tcagttcgga 1320

tcgcaggctg caacccgcct gcgtgaagtc ggaatcgcta gtaatcgcag gtcagcatac 1380

tgcggtgaat acgttcccgg gccttgtaca caccgcccgt cacaccacga aagttggtaa 1440

cacccgaagc cggtgaggta acctataagg agccagccgt ctaaggtggg gccgatgatt 1500

ggggtgaagt cgtaacaagg tagccgtatc ggaaggtgcg gctggatcac ctccttt 1557

<210> 22
<211> 809
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Polynucleotide

<220>
<221> misc_feature
<222> (631)..(631)

<223> n is a, c, g, or t

<400> 22
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atctaatcct gtttgctacc catgctttcg agcctcagcg tcagttggtg cccagtagac 120

cgccttcgcc actggtgttc ctcccgatat ctacgcattc caccgctaca ccgggaattc 180

catctacctc tgcactactc aagaaaaaca gttttgaaag caattcatgg gttgagccca 240

tggttttcac ttccaacttg tcttcccgcc tgcgctccct ttacacccag taattccgga 300

caacgcttgc accctacgtt ttaccgcggc tgctggcacg tagttagccg gtgctttctt 360

gttaggtacc gtcattatcg tccctaacga caggagttta caatccgaaa accttcttcc 420

tccacgcggc gtcgctgcat cagggtttcc cccattgtgc aatatccccc actgctgcct 480

cccgtaggag tctgggccgt gtctcagtcc caatgtggcc gttcaacctc tcagtccggc 540

taccaatcgt cgccttggtg ggccgttacc tcaccaacta gctaattgga cgcgagtcca 600

tcctaaagcg aataaatcct tttccctcag naccatgcgg taccgtgggc ttatgcggta 660

ttagcagtcg tttccaactg ttgtccccca ctctagggca ggttactcac gcgttactca 720

cccgttcgcc actaagctta aaaagcaagc tctctaagct ccgttcgact tgcatgtgtt 780

aggcgcgccg ccagcgttcg tcctgagcc 809

<210> 23
<211> 902
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Polynucleotide

<220>
<221> misc_feature
<222> (796)..(796)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (825)..(825)

<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (838)..(838)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (841)..(841)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (881)..(881)
<223> n is a, c, g, or t

<400> 23
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gggacaacag ttggaaacga ctgctaatac cgcataagcc cacgacccgg catcgggtag 120

agggaaaagg agcaatccgc tttgagatgg cctcgcgtcc gattagctag ttggtgaggt 180

aacggcccac caaggcgacg atcggtagcc ggactgagag gttgaacggc cacattggga 240

ctgagacacg gcccagactc ctacgggagg cagcagtggg gaatattgca caatggggga 300

aaccctgatg cagcgacgcc gcgtggagga agaaggtctt cggattgtaa actcctgttg 360

ttgaggaaga taatgacggt actcaacaag gaagtgacgg ctaactacgt gccagcagcc 420

gcggtaaaac gtaggtcaca agcgttgtcc ggaattactg ggtgtaaagg gagcgcaggc 480

gggaaggcaa gttggaagtg aaatccatgg gctcaaccca tgaactgctt tcaaaactgt 540

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tcgggaggaa caccagtggc gaaggcggcc tactgggcac caactgacgc tgaggctcga 660

aagtgtgggt agcaaacagg attagatacc ctggtagtcc acactgtaaa cgatgattac 720

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ggagtacgac cgcaanggtt gaaactcaaa ggaattgacg ggggnccgca caagcagngg 840

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gg 902

<210> 24
<211> 1000
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Polynucleotide

<400> 24
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ggtatagccc atggaaacgt ggattaacac cccatagtac ttttatcctg catgggatgt 120

gagttaaatg ttcaaggtat cggatgggca tgcgtcctat tagttagttg gcggggtaac 180

agcccaccaa gacgatgata ggtaggggtt ctgagaggaa ggtcccccac attggaactg 240

agacacggtc caaacttcta cgggaggcag cagtgaggaa tattggtcaa tggacgtaag 300

tctgaaccag ccaagtcgcg tgagggaaga ctgccctatg ggttgtaaac ctcttttata 360

agggaagaat aagttctacg tgtagaatga tgcctgtacc ttatgaataa gcatcggcta 420

actccgtgcc agcagccgcg gtaatacgga ggatgcgagc gttatccgga tttattgggt 480

ttaaagggtg cgtaggcggt ttattaagtt agtggttaaa tatttgagct aaactcaatt 540

gtgccattaa tactggtaaa ctggagtaca gacgaggtag gcggaataag ttaagtagcg 600

gtgaaatgca tagatataac ttagaactcc gatagcgaag gcagcttacc agactgtaac 660

tgacgctgat gcacgagagc gtgggtagcg aacaggatta gataccctgg tagtccacgc 720

cgtaaacgat gctcactggt tctgtgcgat atattgtacg ggattaagcg aaagtattaa 780

gtgagccacc tggggagtac gtcggcaacg atgaaactca aaggaattga cggggcccgc 840

acaagcggag gaacatgtgg tttaattcga tgatacgcga ggaaccttac ctgggtttaa 900

atgggaatgt cgtatttggg aacagatatt ctcttcgagc gtttttcaag gtgctgcatg 960

gttgtcgtca gctcgtgcgg tgaggggtcg gtagtccata 1000

<210> 25
<211> 982
<212> DNA

<213> Artificial Sequence

<220>
<223> Synthetic Polynucleotide

<400> 25
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acctgccctg tacaggggga taacagtcag aaatgactgc taataccgca taagaccaca 120

gcaccgcatg gtgcaggggt aaaaactccg gtggtacagg atggacccgc gtctgattag 180

ctggttggtg aggtaacggc tcaccaaggc gacgatcagt agccggcttg agagagtgaa 240

cggccacatt gggactgaga cacggcccaa actcctacgg gaggcagcag tggggaatat 300

tgcacaatgg gggaaaccct gatgcagcga cgccgcgtga gtgaagaagt atctcggtat 360

gtaaagctct atcagcaggg aagaaaatga cggtacctga ctaagaagcc ccggctaact 420

acgtgccagc agccgcggta atacgtaggg ggcaagcgtt atccggaatt actgggtgta 480

aagggtgcgt aggtggtatg gcaagtcaga agtgaaaacc cagggcttaa ctctgggact 540

gcttttgaaa ctgtcagact ggagtgcagg agaggtaagc ggaattccta gtgtagcggt 600

gaaatgcgta gatattagga ggaacatcag tggcgaaggc ggcttactgg actgaaactg 660

acactgaggc acgaaagcgt ggggagcaaa caggattaga taccctggta gtccacgccg 720

taacgatgaa tactaggtgt cggggccgta gaggcttcgg tgccgcagcc aacgcagtaa 780

gtattccacc tggggagtac gttcgcaaga atgaaactca aaggaattga cggggacccg 840

cacaagcggt ggagcatgtg gtttattcga agcaacgcga agaaccttac ctggtcttga 900

catccttctg accggtcctt aaccggactt tccttcggga cagagtgaca aggtggtgca 960

tgtgtcgtca gctcgtgtct ga 982

<210> 26
<211> 387
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Polynucleotide

<400> 26
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acaggggcat aacactgaga aattggtact aattccccat aatattcgga gaggcatctc 120

tccgggttga aaactccggt ggttatagat ggacatgcgt tgtattagct agttggtgag 180

gtaacggctc accaaggcaa cgatacatag ggggactgag aggttaaccc cccacactgg 240

tactgagaca cggaccagac tcctacggga ggcagcagtg aggaatattg gtcaatggac 300

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ttgtacgagg gtaaactcac ctacgtg 387

<210> 27
<211> 843
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Polynucleotide

<400> 27
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ctgtttgatc cccacgcttt cgtgcttcag tgtcagttat ggtttagtaa gctgccttcg 120

caatcggagt tctgcgtgat atctatgcat ttcaccgcta caccacgcat tccgcctacc 180

tcaaacacac tcaagtaacc cagtttcaac ggcaatttta tggttgagcc acaaactttc 240

accgctgact taaatcacca cctacgcacc ctttaaaccc aataaatccg gataacgctc 300

gcatcctccg tattaccgcg gctgctggca cggagttagc cgatgcttat tcatagggta 360

catacaaaaa aggacacgtc ctccacttta ttcccctata aaagaagttt acaaaccata 420

gatccttctt ccttcacgcg acttggctgg ttcagcctct cggccattga ccaatattcc 480

tcactgctgc ctcccgtagg agtttggtcc gtgtctcagt accaatgtgg gggaccttcc 540

tctcagaacc cctatccatc gtcggtttgg tgggccgtta ccccgccaac tgcctaatgg 600

aacgcatgcc tatctatcag cgatgaatct ttaacaaata ttcccatgcg ggacccctgt 660

tttatggggt attaatccga ctttcgccgg gctatccccc tctgataggt aagttgcata 720

cgcgttactc acccgtgcgc cggtcgccat caatctgtat tgctacaaat catgctgccc 780

ctcgacttgc atgtgttaag cctgtcgcta gcgttcatcc tgagccagat tcaaactcta 840

taa 843

<210> 28
<211> 939
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Polynucleotide

<400> 28
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ctgccttata caggggggata acaaccagaa atggttgcta ataccgcata agcgcacagg 120

accgcatggt ccagtgtgaa aaactccggt ggtataagat ggacccgcgt tggattagct 180

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cacaatgggg gaaaccctga tgcagcgacg ccgcgtgaag gaagaagtat ctcggtatgt 360

aaacttctat cagcagggaa gatagtgacg gtacctgact aagaagcccc ggctaactac 420

gtgccagcag ccgcggtaat acgtaggggg caagcgttat ccggatttac tgggtgtaaa 480

gggagcgtag acggactggc aagtctgatg tgaaaggcgg gggctcaacc cctggactgc 540

attggaaact gttagtcttg agtgccggag aggtaagcgg aattcctagt gtagcggtga 600

aatgcgtaga tattaggagg aacaccagtg gcgaaggcgg cttactggac ggtaactgac 660

gttgaggctc gaaagcgtgg ggagcaaaca ggattagata ccctgggtag tccacgccgt 720

aaacgatgaa tactaggtgt tgggggagca aagctcttcg gtgccgccgc aaacgcatta 780

agtattccac ctggggagta cgttcgcaag aatgaaactc aaaggatttg acggggaccc 840

gcacaagcgt ggagcatgtg tttattcgaa gcaaccggaa gaacttacca ggcttgacat 900

cctctgacgt tcgtaacgga actttcttcg gacaggaaa 939

<210> 29
<211> 956
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Polynucleotide

<400> 29
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gcaactgaca ttgaggctcg aaagtgtggg tatcaaacag gattagatac cctggtagtc 720

cacacggtaa acgatgaata ctcgctgttt gcgatatacg gcaagcggcc aagcgaaagc 780

gttaagtatt ccacctgggg agtacgccgg caacggtgaa ctcaaaggaa ttgacggggc 840

ccgcacaagc ggagaacatg tggtttaatt cgatgatacg cgaggacctt acccggctta 900

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<210> 30
<211> 980
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Polynucleotide

<400> 30
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gacacggtcc aaactcctac gggaggcagc agtgaggaat attggtcaat ggacgagagt 300

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ctccgtgcca gcagccgcgg taatacggag gatccgagcg ttatccggat ttattgggtt 480

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gtgaaatgct tagatatcac gaagaactcc gattgcgaag gcagcttact ggactgtaac 660

tgacgctgat gctcgaaagt gtgggtatca aacaggatta gataccctgg tagtccacac 720

agtaaacgat gaatactcgc tgtttgcgat atacagcaag cggccaagcg aaagcattaa 780

gtattccacc tggggagtac gccggcaacg gtgaaactca aaggaattga cgggggcccg 840

cacaagcgag aacatgtggt ttaattcgat gatacgcgag aaccttaccg ggcttaaatt 900

gcatctgaat aatttggaaa cagattagcc gcaagcagat gtgaaggtgc tgcatggtgt 960

cgtcagctcg tgcgtgaggt 980

<210> 31
<211> 867
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Polynucleotide

<400> 31
tgcttcaatt gccggcgacc ggcgcacggg tgcgtaacgc gtatgtaacc tacctataac 60

aggggcataa cactgagaaa ttggtactaa ttccccataa tattcggaga ggcatctctc 120

cgggttgaaa actccggtgg ttatagatgg acatgcgttg tattagctag ttggtgaggt 180

aacggctcac caaggcaacg atacataggg ggactgagag gttaaccccc cacactggta 240

ctgagacacg gaccagactc ctacgggagg cagcagtgag gaatattggt caatggacgc 300

aagtctgaac cagccatgcc gcgtgcagga agacggctct atgagttgta aactgctttt 360

gtacgagggt aaactcacct acgtgtaggt gactgaaagt atcgtacgaa taaggatcgg 420

ctaactccgt gccagcagcc gcggtaatac ggaggattca agcgttatcc ggatttattg 480

ggtttaaagg gtgcgtaggc ggtttgataa gttagaggtg aaatcccggg gcttaactcc 540

ggaactgcct ctaatactgt tagactagag agtagttgcg gtaggcggaa tgtatggtgt 600

agcggtgaaa tgcttagaga tcatacagaa caccgattgc gaaggcagct taccaaacta 660

tatctgacgt tgaggcacga aagcgtgggg agcaaaacag gattagatac cctggtagtc 720

cacgcagtaa acgatgataa ctcgttgtcg gcgatacaca gtcggtgact aagcgaaagc 780

gataagttat ccacctgggg agtacgttcg caagaatgaa cttaaaggaa ttgacggggc 840

ccgcacaagc ggagaactgt ggttatt 867

<210> 32
<211> 261
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Polynucleotide

<400> 32
ttgctaagtt tgatggcgac cggcgcacgg gtgagtaaca cgtatccaac ctgccgatga 60

ctcggggata gcctttcgaa agaaagatta atacccgatg gcatatttct tccgcatggt 120

agaattatta aagaatttcg gtcatcgatg gggatgcgtt ccattaggtt gttggcgggg 180

taacggccca ccaagccttc gatggatagg ggttctgaga ggaaggtccc ccacattgga 240

actgagccag gatcccacca t 261

<210> 33

<211> 832
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Polynucleotide

<400> 33
gtgtatcgcc gacaacgagt tatcatcgtt tactgcgtgg actaccaggg tatctaatcc 60

tgtttgctcc ccacgctttc gtgcctcaac gtcagatata gtttggtaag ctgccttcgc 120

aatcggtgtt ctgtatgatc tctaagcatt tcaccgctac accatacatt ccgcctaccg 180

caactactct ctagtctaac agtattagag gcagttccgg agttaagccc cgggatttca 240

cctctaactt atcaaaccgc ctacgcaccc tttaaaccca ataaatccgg ataacgcttg 300

aatcctccgt attaccgcgg ctgctggcac ggagttagcc gatccttatt cgtacgatac 360

tttcagtcac ctacacgtag gtgagtttac cctcgtacaa aagcagttta caactcatag 420

agccgtcttc ctgcacgcgg catggctggt tcagacttgc gtccattgac caatattcct 480

cactgctgcc tcccgtagga gtctggtccg tgtctcagta ccagtgtggg gggttaacct 540

ctcagtcccc ctatgtatcg ttgccttggt gagccgttac ctcaccaact agctaataca 600

acgcatgtcc atctataacc accggagttt tcaacccgga gagatgcctc tccgaatatt 660

atggggaatt agtaccaatt tctcagtgtt atgcccctgt tataggtagg ttacatacgc 720

gttacgcacc cgtgcgccgg tcgccaccaa agtattgcta cctcgtgatg cccctcgact 780

tgcatgtgtt aggcctgccg ctagcgttca tcctgagcca gattcaaact ct 832

<210> 34
<211> 1527
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Polynucleotide

<400> 34
tcagagagtt tgatcctggc tcaggatgaa cgctggcggc gtgcttaaca catgcaagtc 60

gaacgggaaa ccttttattg aagcttcggc agatttagat tgtttctagt ggcggacggg 120

tgagtaacgc gtgggtaacc tgccttatac agggggataa cagtcagaaa tgactgctaa 180

taccgcataa gcgcacagag ctgcatggct cggtgtgaaa aactccggtg gtataagatg 240

gacccgcgtt ggattagcta gttggtgagg taacggccca ccaaggcgac gatccatagc 300

cggcctgaga gggtgaacgg ccacattggg actgagacac ggcccagact cctacgggag 360

gcagcagtgg ggaatattgc acaatggggg aaaccctgat gcagcgacgc cgcgtgaagg 420

aagaagtatc tcggtatgta aacttctatc agcagggaag aaaatgacgg tacctgacta 480

agaagccccg gctaactacg tgccagcagc cgcggtaata cgtaggggcc aagcgttatc 540

cggatttact gggtgtaaag ggagcgtaga cggatggaca agtctgatgt gaaaggctgg 600

ggctcaaccc cgggactgca ttggaaactg cccgtcttga gtgccggaga ggtaagcgga 660

attcctagtg tagcggtgaa atgcgtagat attaggagga acaccagtgg cgaaggcggc 720

ttactggacg gtaactgacg ttgaggctcg aaagcgtggg gagcaaacag gattagatac 780

cctggtagtc cacgcggtaa acgatgaatg ctaggtgtcg gggagcaaag ctcttcggtg 840

ccgccgcaaa cgcattaagc attccacctg gggagtacgt tcgcaagaat gaaactcaaa 900

ggaattgacg gggacccgca caagcggtgg agcatgtggt ttaattcgaa gcaacgcgaa 960

gaaccttacc aagtcttgac atccttctga ccggaactta accgttcctt cccttcgggg 1020

cagaagtgac aggtggtgca tggttgtcgt cagctcgtgt cgtgagatgt tgggttaagt 1080

cccgcaacga gcgcaacccc tatcctcagt agccagcata taaggtgggc actctgggga 1140

gactgccagg gataacctgg aggaaggcgg ggatgacgtc aaatcatcat gccccttatg 1200

atttgggcta cacacgtgct acaatggcgt aaacaaaggg aagcgaacct gcgagggtgg 1260

gcaaatccca aaaataacgt cccagttcgg actgtagtct gcaacccgac tacacgaagc 1320

tggaatcgct agtaatcgcg gatcagaatg ccgcggtgaa tacgttcccg ggtcttgtac 1380

acaccgcccg tcacaccatg ggagtcagta acgcccgaag tcagtgacct aaccgcaagg 1440

aaggagctgc cgaaggcggg accgatgact ggggtgaagt cgtaacaagg tagccgtatc 1500

ggaaggtgcg gctggatcac ctccttt 1527

<210> 35
<211> 1055
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Polynucleotide

<220>
<221> misc_feature
<222> (868)..(868)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (917)..(917)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (925)..(925)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (984)..(986)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (1002)..(1002)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (1015)..(1015)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (1020)..(1020)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (1049)..(1049)
<223> n is a, c, g, or t

<400> 35
gaggggcatg ccatgatgga gtagtaatat ctatggtggc agaccggcgc acgggtgcgt 60

aacgcgtatg caacctacct ttaacagggg gataacactg agaaattggt actaataccc 120

cataatatca tagaaggcat cttttatggt tgaaaattcc gatggttaga gatgggcatg 180

cgttgtatta gctagttggt ggggtaacgg ctcaccaagg cgacgataca taggggact 240

gagaggttaa ccccccacac tggtactgag acacggacca gactcctacg ggaggcagca 300

gtgaggaata ttggtcaatg gacgcaagtc tgaaccagcc atgccgcgtg caggatgacg 360

gctctatgag ttgtaaactg cttttgtacg agggtaaacg cagatacgtg tatctgtctg 420

aaagtatcgt acgaataagg atcggctaac tccgtgccag cagccgcggt aatacggagg 480

attcaagcgt tatccggatt tattgggttt aaagggtgcg taggcggttt gataagttag 540

aggtgaaatt tcggggctca accctgaacg tgcctctaat actgttgagc tagagagtag 600

ttgcggtagg cggaatgtat ggtgtagcgg tgaaatgctt agagatcata cagaacaccg 660

attgcgaagg cagcttacca aactatatct gacgttgagg cacgaaagcg tggggagcaa 720

acaggattag ataccctggt agtccacgca gtaaacgatg ataactcgtt gtcggcgata 780

cacagtcggt gactaagcga aagcgataag ttatccacct ggggagtacg ttcgcaagaa 840

tgaaactcaa aggaattgac gggggccncg cacaagcgga ggaacatgtg ggtttaattc 900

gatgatacgc gaggaancct taccncgggc ttgaaagtta gcgacgattc ttgaaagagg 960

atttcccttc ggggcgcgaa actnnngctg catggttgtc gncagctcgt gccgngaggn 1020

gtcgggttaa gtcccataac gagcgcacnc cctac 1055

<210> 36
<211> 988
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Polynucleotide

<220>

<221> misc_feature
<222> (5)..(5)
<223> n is a, c, g, or t

<400> 36
acacntgcag tcgaggggca gcataatgga tagcaatatc tatggtggcg accggcgcac 60

gggtgcgtaa cgcgtatgca acctaccttt aacaggggga taacactgag aaattggtac 120

taatacccca taatatcata gaaggcatct tttatggttg aaaattccga tggttagaga 180

tgggcatgcg ttgtattagc tagttggtgg ggtaacggct caccaaggcg acgatacata 240

gggggactga gaggttaacc ccccacactg gtactgagac acggaccaga ctcctacggg 300

aggcagcagt gaggaatatt ggtcaatgga cgcaagtctg aaccagccat gccgcgtgca 360

ggatgacggc tctatgagtt gtaaactgct tttgtacgag ggtaaacgca gatacgtgta 420

tctgtctgaa agtatcgtac gaataaggat cggctaactc cgtgccagca gccgcggtaa 480

tacggaggat tcaagcgtta tccggattta ttgggtttaa agggtgcgta ggcggtttga 540

taagttagag gtgaaatttc ggggctcaac cctgaacgtg cctctaatac tgttgagcta 600

gagagtagtt gcggtaggcg gaatgtatgg tgtagcggtg aaatgcttag agatcataca 660

gaacaccgat tgcgaaggca gcttaccaaa ctatatctga cgttgaggca cgaaagcgtg 720

gggagcaaac aggattagat accctggtag tccacgcagt aaacgatgat aactcgttgt 780

cggcgataca cagtcggtga ctaagcgaaa gcgataagtt atccacctgg ggagtacgtt 840

cgcaagaatg aaactcaaag gaattgacgg gggcccgcac aagcggagga acatgtggtt 900

taattcgatg atacgcgagg aaccttaccc gggcttgaaa gttagcgacg attcttgaaa 960

gaggatttcc ctttcggggc gcgaaact 988

<210> 37
<211> 1029
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Polynucleotide

<220>
<221> misc_feature
<222> (5)..(5)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (989)..(991)
<223> n is a, c, g, or t

<400> 37
acacntggaa gtcgaggggc agcataatgg atagcaatat ctatggtggc gaccggcgca 60

cgggtgcgta acgcgtatgc aacctacctt taacaggggg ataacactga gaaattggta 120

ctaatacccc ataatatcat agaaggcatc ttttatggtt gaaaattccg atggttagag 180

atgggcatgc gttgtattag ctagttggtg gggtaacggc tcaccaaggc gacgatacat 240

agggggactg agaggttaac cccccacact ggtactgaga cacggaccag actcctacgg 300

gaggcagcag tgaggaatat tggtcaatgg acgcaagtct gaaccagcca tgccgcgtgc 360

aggatgacgg ctctatgagt tgtaaactgc ttttgtacga gggtaaacgc agatacgtgt 420

atctgtctga aagtatcgta cgaataagga tcggctaact ccgtgccagc agccgcggta 480

atacggagga ttcaagcgtt atccggattt attgggttta aagggtgcgt aggcggtttg 540

ataagttaga ggtgaaattt cggggctcaa ccctgaacgt gcctctaata ctgttgagct 600

agagagtagt tgcggtaggc ggaatgtatg gtgtagcggt gaaatgctta gagatcatac 660

agaacaccga ttgcgaaggc agcttaccaa actatatctg acgttgaggc acgaaagcgt 720

ggggagcaaa caggattaga taccctggta gtccacgcag taaacgatga taactcgttg 780

tcggcgatac acagtcggtg actaagcgaa agcgataagt tatccacctg gggagtacgt 840

tcgcaagaat gaaactcaaa ggaattgacg ggggcccgca caagcggagg aacatgtggt 900

ttaattcgat gatacgcgag gaaccttacc cgggcttgaa agttagcgac gattcttgaa 960

agaggatttc ccttcggggc gcgaaactnn ngctgcatgg tgtcgtcagc tcgtgccgtg 1020

aggtgtcgg 1029