<110> 22ND CENTURY LIMITED, LLC

<120> TRICHOME SPECIFIC PROMOTERS FOR THE MANIPULATION OF CANNABINOIDS AND OTHER COMPOUNDS IN GLANDULAR TRICHOMES

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<151> 2016-09-20

<160> 33

<170> PatentIn version 3.5

<210> 1
<211> 554
<212> DNA
<213> Artificial Sequence

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

<400> 1
aaaaataaaa ttaataaatt tttaattatt aatatcattt tatttttaa taaataaata 60

tcatttttat attattataa tatgtataaa gttttaattg tatacaagaa gtcttatagt 120

aagagtatac accttacatc ataataacta ctcgatctga aatcaatggt caagaaaagt 180

tccctaccgg taggaaactt ttgctagatc ctaccatagt cttcccttat atttattatg 240

tagaatctat tattatatct aataattaac aaatattaac aaatcatttt gaaaaattat 300

attaaaaaaa aaacttgaaa agtcaaagat taaccatcaa tttgccaaat caaattagtg 360

agaaagtagg tattatatac ctaacactca ttttacatat gtctagacgt ttatatgtat 420

agcgttgttg tgtgtaataa gttcacttgt agtatcttgt acatacataa tatatatata 480

taggtgtgtt tgtgaacaat tatattatca cacatacaca actcattatt atcataataa 540

taataatacc atgg 554

<210> 2
<211> 550
<212> DNA
<213> Artificial Sequence

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

<400> 2
aaaaataaaa ttaataaatt tttaattatt aatatcattt tatttttaa taaataaata 60

tcatttttat attattataa tatgtataaa gttttaattg tatacaagaa gtcttatagt 120

aagagtatac accttacatc ataataacta ctcgatctga aatcaatggt caagaaaagt 180

tccctaccgg taggaaactt ttgctagatc ctaccatagt cttcccttat atttattatg 240

tagaatctat tattatatct aataattaac aaatattaac aaatcatttt gaaaaattat 300

attaaaaaaa aaacttgaaa agtcaaagat taaccatcaa tttgccaaat caaattagtg 360

agaaagtagg tattatatac ctaacactca ttttacatat gtctagacgt ttatatgtat 420

agcgttgttg tgtgtaataa gttcacttgt agtatcttgt acatacataa tatatatata 480

taggtgtgtt tgtgaacaat tatattatca cacatacaca actcattatt atcataataa 540

taataataat 550

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

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

<400> 3
aaaaataaaa ttaataaatt tttaattatt aatatcattt tatttttaa taaataaata 60

tcatttttat attattataa tatgtataaa gttttaattg tatacaagaa gtcttatagt 120

aagagtatac accttacatc ataataacta ctcgatctga aatcaatggt caagaaaagt 180

tccctaccgg taggaaactt ttgctagatc ctaccatagt cttcccttat atttattatg 240

tagaatctat tattatatct aataattaac aaatattaac aaatcatttt gaaaaattat 300

attaaaaaaa aaacttgaaa agtcaaagat taaccatcaa tttgccaaat caaattagtg 360

agaaagtagg tattatatac ctaacactca ttttacatat gtctagacgt ttatatgtat 420

agcgttgttg tgtgtaataa gttcacttgt agtatcttgt acatacataa tatatatata 480

tataggtgtg tttgtgaaca attatattat cacacataca caactcatta ttattagcat 540

aataataata ataataat 558

<210> 4
<211> 1158
<212> DNA
<213> Artificial Sequence

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

<400> 4
atgaatcatc ttcgtgctga gggtccggcc tccgttctcg ccattggcac cgccaatccg 60

gagaacattt tattacaaga tgagtttcct gactactatt ttcgcgtcac caaaagtgaa 120

cacatgactc aactcaaaga aaagtttcga aaaatatgtg acaaaagtat gataaggaaa 180

cgtaactgtt tcttaaatga agaacaccta aagcaaaacc caagattggt ggagcacgag 240

atgcaaactc tggatgcacg tcaagacatg ttggtagttg aggttccaaa acttgggaag 300

gatgcttgtg caaaggccat caaagaatgg ggtcaaccca agtctaaaat cactcattta 360

atcttcacta gcgcatcaac cactgacatg cccggtgcag actaccattg cgctaagctt 420

ctcggactga gtccctcagt gaagcgtgtg atgatgtatc aactaggctg ttatggtggt 480

ggaaccgttc tacgcattgc caaggacata gcagagaata acaaaggcgc acgagttctc 540

gccgtgtgtt gtgacataat ggcttgcttg tttcgtgggc cttcagagtc tgacctcgaa 600

ttactagtgg gacaagctat ctttggtgat ggggctgctg cggtgattgt tggagctgaa 660

cccgatgagt cagttgggga aaggccgata tttgagttgg tgtcaactgg gcaaacaatc 720

ttaccaaact cggaaggaac tattggggga catataaggg aagcaggact gatatttgat 780

ttacataagg atgtgcctat gttgatctct aataatattg agaaatgttt gattgaggca 840

tttactccta ttgggattag tgattggaac tccatatttt ggattacaca cccaggtggg 900

aaagctattt tggacaaagt ggaggagaag ttgcatctaa agagtgataa gtttgtggat 960

tcacgtcatg tgctgagtga gcatgggaat atgtctagct caactgtctt gtttgttatg 1020

gatgagttga ggaagaggtc gttggaggaa gggaagtcta ccactggaga tggatttgag 1080

tggggtgttc tttttgggtt tggaccaggt ttgactgtcg aaagagtggt cgtgcgtagt 1140

gttcccatca aatattaa 1158

<210> 5
<211> 996
<212> DNA
<213> Artificial Sequence

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

<400> 5
aatttttgac aatttttttt aatataacta acttgaagat aattcctaat acgaataaat 60

acagaaaata taaacagttt tgttataaca cttttagatc agattataat taaatttttat 120

atttttgata aaaaaatcaa ttgagggtcc tatttgtacc attttagaaa atatagtgtc 180

catttttatt atttagtaaa acagagagtc taatgcgtaa cttttacaaa aatacatggt 240

ccaaaatagt atttaccctt taattttatt agcaactgtc ccaaaaaaaa tatgttttga 300

tgactgacgt acgggaatgt aaagttttgt aatagtgtat tgattcaaag acaacataaa 360

gacatcaatc tgaaatcgat ttcaatgtcc caaaaacaca ttaatgagcc ttaattgcat 420

ccgataatca ttttccattg gttttattac ttctcatata tatagacatc acatatatga 480

taggatttct tgagaataat gttaacattg agatttttat tacaactgat atattgatta 540

tgcttagatg gcttgaattt gagcgacata tatagaaaga gtatagaatg atatatatgc 600

acatccaaaa tatgtaccaa aatattaggt gacaatttag ataaatggaa gagaaaatta 660

tagaaaaatg agggtttata tttttgtggt tatttaattt tagacatagt gtgatccaat 720

aattttagga tgtataattg ttaggcacat ggattacttg ttttttttatt aagtataacc 780

ttacaaagta gatggtagta attaatgtag aaggttccaa taatgtattt atataaattg 840

ttaggcatgc aaagcctaat taattaataa atgagggtgg ccaatggcca ctatatatat 900

caaggcatcg actgtatgta gcataatgtg atttatataa ttatcaaaaa aaaaaaataa 960

aaataagaag aagaagaaag ttgagaaaga ccatgg 996

<210> 6
<211> 992
<212> DNA
<213> Artificial Sequence

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

<400> 6
aatttttgac aatttttttt aatataacta acttgaagat aattcctaat acgaataaat 60

acagaaaata taaacagttt tgttataaca cttttagatc agattataat taaattttat 120

atttttgata aaaaaatcaa ttgagggtcc tatttgtacc attttagaaa atatagtgtc 180

catttttatt atttagtaaa acagagagtc taatgcgtaa cttttacaaa aatacatggt 240

ccaaaatagt atttaccctt taattttatt agcaactgtc ccaaaaaaaa tatgttttga 300

tgactgacgt acgggaatgt aaagttttgt aatagtgtat tgattcaaag acaacataaa 360

gacatcaatc tgaaatcgat ttcaatgtcc caaaaacaca ttaatgagcc ttaattgcat 420

ccgataatca ttttccattg gttttattac ttctcatata tatagacatc acatatatga 480

taggatttct tgagaataat gttaacattg agatttttat tacaactgat atattgatta 540

tgcttagatg gcttgaattt gagcgacata tatagaaaga gtatagaatg atatatatgc 600

acatccaaaa tatgtaccaa aatattaggt gacaatttag ataaatggaa gagaaaatta 660

tagaaaaatg agggtttata tttttgtggt tatttaattt tagacatagt gtgatccaat 720

aattttagga tgtataattg ttaggcacat ggattacttg ttttttttatt aagtataacc 780

ttacaaagta gatggtagta attaatgtag aaggttccaa taatgtattt atataaattg 840

ttaggcatgc aaagcctaat taattaataa atgagggtgg ccaatggcca ctatatatat 900

caaggcatcg actgtatgta gcataatgtg atttatataa ttatcaaaaa aaaaaaataa 960

aaataagaag aagaagaaag ttgagaaaga ga 992

<210> 7
<211> 485
<212> DNA
<213> Artificial Sequence

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

<400> 7
aaaaaagaag aagaagaaga aagttgagaa agagaatggc agtgaagcat ttgattgtat 60

tgaagttcaa agatgaaatc acagaagccc aaaaggaaga atttttcaag acgtatgtga 120

atcttgtgaa tatcatccca gccatgaaag atgtatactg gggtaaagat gtgactcaaa 180

agaataagga agaagggtac actcacatag ttgaggtaac atttgagagt gtggagacta 240

ttcaggacta cattattcat cctgcccatg ttggatttgg agatgtctat cgttctttct 300

gggaaaaact tctcattttt gactacacac cacgaaagta gactatatat agtagccgac 360

caagctgcct tcatcttcat cttctcaaat aatatatcta atatctaatt atataataat 420

aactacttaa taaaagactg tgtttataac attaaataat aataataata aagtcttttg 480

tagct 485

<210> 8
<211> 1361
<212> DNA
<213> Artificial Sequence

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

<400> 8
tcaaaccaga ttttttataa taatttacac accaattaac taagaaattc taactagagt 60

tagtgttgaa ttagaaggag tatcaaggta acctatctcc tttgtctctt taaattttta 120

aaagaaaagc tattgttgta attagtttgg attttatggg ttaggttttg tagagtttgt 180

ttgagcttaa aattgttgtt ggtttgattt aaggttgaat tctgtgttgg tttgtaagat 240

tttagctgat gtagttcgtg ttggaggagt tcgagttttt gaactcaaag tccactcaac 300

aatatggtga aattagtttt aggtggtttt agatgctttt gaagtgtatg ttttgtttag 360

attaccctct ttttggtaag tttgatagcc tttggtcaag gaatgactta attttgaagg 420

tctgaaagtt gagtagtttt gaactctttt ctgcccaaaa tggtttcgaa tgagttgtac 480

ttgtcatatg tgatttgagt ggtaaggttc ggaagggtag tcctagacag tgttttcaat 540

gattaggttt ggggttggtg aatctagagt taagagccta gagttttggt tgcttggatt 600

ggtgtgacct ggttgttagt atccttatca agggatcccg aataggtgat gagtgaggtt 660

tggatggtat attctggatc aaaatttttа gatggggtcc aaactgatag tttcaaaaat 720

gtgtgtgtgt gtctggttaa ggatttattt tgggaaggct ctagttggga ggtcctggat 780

tggaagttct agatgtgagg ctccgggtag gagggtcctg taggaagatt ctagatggta 840

tttggtggtc gagatgaggg atttccgaac atgttttaat agttacaata attcataaat 900

tttcaacact aaatcaaaat attaattttg atatgattgt ataaatttaa tctcatcgta 960

gtgtagagct ctacatgcat gcatggtttg tatagccata attaattaat taggcaagaa 1020

agatagatgt gcctaccatg catgacttct aaaacatgga tgactttaaa ttttgaaacc 1080

aagcaaaaat tgttttacta taaatcttgt taatttttca ttattgatat cactatgtta 1140

ttctaaccct ttcgtagcca taattagtta attaggcaag aaagatagat gtgcctacca 1200

tgcatgactt ctaaaacatg gatgacttta aattttgaaa ccaagcaaaa attattttac 1260

tataaatctt gttatttttt cattattgat atcactatgt tattctaacc ctttctttcc 1320

ctcatttttt cttaatattc aatcaataat aatctccatg g 1361

<210> 9
<211> 1357
<212> DNA
<213> Artificial Sequence

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

<400> 9
tcaaaccaga ttttttataa taatttacac accaattaac taagaaattc taactagagt 60

tagtgttgaa ttagaaggag tatcaaggta acctatctcc tttgtctctt taaatttttа 120

aaagaaaagc tattgttgta attagtttgg attttatggg ttaggttttg tagagtttgt 180

ttgagcttaa aattgttgtt ggtttgattt aaggttgaat tctgtgttgg tttgtaagat 240

tttagctgat gtagttcgtg ttggaggagt tcgagttttt gaactcaaag tccactcaac 300

aatatggtga aattagtttt aggtggtttt agatgctttt gaagtgtatg ttttgtttag 360

attaccctct ttttggtaag tttgatagcc tttggtcaag gaatgactta attttgaagg 420

tctgaaagtt gagtagtttt gaactctttt ctgcccaaaa tggtttcgaa tgagttgtac 480

ttgtcatatg tgatttgagt ggtaaggttc ggaagggtag tcctagacag tgttttcaat 540

gattaggttt ggggttggtg aatctagagt taagagccta gagttttggt tgcttggatt 600

ggtgtgacct ggttgttagt atccttatca agggatcccg aataggtgat gagtgaggtt 660

tggatggtat attctggatc aaaatttttа gatggggtcc aaactgatag tttcaaaaat 720

gtgtgtgtgt gtctggttaa ggatttattt tgggaaggct ctagttggga ggtcctggat 780

tggaagttct agatgtgagg ctccgggtag gagggtcctg taggaagatt ctagatggta 840

tttggtggtc gagatgaggg atttccgaac atgttttaat agttacaata attcataaat 900

tttcaacact aaatcaaaat attaattttg atatgattgt ataaatttaa tctcatcgta 960

gtgtagagct ctacatgcat gcatggtttg tatagccata attaattaat taggcaagaa 1020

agatagatgt gcctaccatg catgacttct aaaacatgga tgactttaaa ttttgaaacc 1080

aagcaaaaat tgttttacta taaatcttgt taatttttca ttattgatat cactatgtta 1140

ttctaaccct ttcgtagcca taattagtta attaggcaag aaagatagat gtgcctacca 1200

tgcatgactt ctaaaacatg gatgacttta aattttgaaa ccaagcaaaa attattttac 1260

tataaatctt gttatttttt cattattgat atcactatgt tattctaacc ctttctttcc 1320

ctcatttttt cttaatattc aatcaataat aatctcc 1357

<210> 10
<211> 1188
<212> DNA
<213> Artificial Sequence

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

<400> 10
atgggactct catcagtttg tacctttttca tttcaaacta attaccatac tttattaaat 60

cctcacaata ataatcccaa aacctcatta ttatgttatc gacaccccaa aacaccaatt 120

aaatactctt acaataattt tccctctaaa cattgctcca ccaagagttt tcatctacaa 180

aacaaatgct cagaatcatt atcaatcgca aaaaattcca ttagggcagc tactacaaat 240

caaactgagc ctccagaatc tgataatcat tcagtagcaa ctaaaatttt aaactttggg 300

aaggcatgtt ggaaacttca aagaccatat acaatcatag catttacttc atgcgcttgt 360

ggattgtttg ggaaagagtt gttgcataac acaaatttaa taagttggtc tctgatgttc 420

aaggcattct ttttttggt ggctatatta tgcattgctt cttttacaac taccatcaat 480

cagatttacg atcttcacat tgacagaata aacaagcctg atctaccact agcttcaggg 540

gaaatatcag taaacacagc ttggattatg agcataattg tggcactgtt tggattgata 600

ataactataa aaatgaaggg tggaccactc tatatatttg gctactgttt tggtattttt 660

ggtgggattg tctattctgt tccaccattt agatggaagc aaaatccttc cactgcattt 720

cttctcaatt tcctggccca tattattaca aatttcacat tttattatgc cagcagagca 780

gctcttggcc taccatttga gttgaggcct tcttttactt tcctgctagc atttatgaaa 840

tcaatgggtt cagctttggc tttaatcaaa gatgcttcag acgttgaagg cgacactaaa 900

tttggcatat caaccttggc aagtaaatat ggttccagaa acttgacatt attttgttct 960

ggaattgttc tcctatccta tgtggctgct atacttgctg ggattatctg gccccaggct 1020

ttcaacagta acgtaatgtt actttctcat gcaatcttag cattttggtt aatcctccag 1080

actcgagatt ttgcgttaac aaattacgac ccggaagcag gcagaagatt ttacgagttc 1140

atgtggaagc tttattatgc tgaatattta gtatatgttt tcatataa 1188

<210> 11
<211> 805
<212> DNA
<213> Artificial Sequence

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

<400> 11
ataatgttat ttattattta atacaatatg acatttatac agcgtaccaa acgagcccat 60

aatgtattgc aattgtattg ttgtacgaat taaaataata aaatactaat taagttaata 120

ttgtaagata gataatatgg caaacaaata aataattttc agttgagaat atgtacaaaa 180

ttaaagttga ttttacaaga aacaagtagt actaattaaa atggtagatt tacatatagt 240

gttcgttaaa tttgaaaaaa gaaaacgact aattcattgg aaaattgatt gtggaagaaa 300

tcaaaatttg gtggctgaac cgccctagtt acttaacaca attcataaaa caaccctaca 360

ctacttaccc tacactatat acgtatattt tttttttata ttccatttgt taataaaata 420

aatatgcatt gttattatgt gtaccaagat gctaatacgg tgacgtttta tataagttta 480

taatttttta ttaaagtaaa acaattgtcc ctcaatatta aattaaagaa aataagtagg 540

ttttagcatt tctcatgata aataagtagg agtagtaagt atattaattt atatgcatat 600

gttaaaaggc aacacagtga taggttgtgt agtacgtacc caaaccaaat tccagcctaa 660

tccattatta atgagcaagt ccttgataaa ataaggtgca tgttgttaga tcaaataacc 720

cgtcccgaaa tccaatatat atatatatat aatattcaaa ctctctcttt ctatcttcgt 780

acaatttaat agaagtaacc atggg 805

<210> 12
<211> 800
<212> DNA
<213> Artificial Sequence

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

<400> 12
ataatgttat ttattattta atacaatatg acatttatac agcgtaccaa acgagcccat 60

aatgtattgc aattgtattg ttgtacgaat taaaataata aaatactaat taagttaata 120

ttgtaagata gataatatgg caaacaaata aataattttc agttgagaat atgtacaaaa 180

ttaaagttga ttttacaaga aacaagtagt actaattaaa atggtagatt tacatatagt 240

gttcgttaaa tttgaaaaaa gaaaacgact aattcattgg aaaattgatt gtggaagaaa 300

tcaaaatttg gtggctgaac cgccctagtt acttaacaca attcataaaa caaccctaca 360

ctacttaccc tacactatat acgtatattt ttttttttata ttccatttgt taataaaata 420

aatatgcatt gttattatgt gtaccaagat gctaatacgg tgacgtttta tataagttta 480

taatttttta ttaaagtaaa acaattgtcc ctcaatatta aattaaagaa aataagtagg 540

ttttagcatt tctcatgata aataagtagg agtagtaagt atattaattt atatgcatat 600

gttaaaaggc aacacagtga taggttgtgt agtacgtacc caaaccaaat tccagcctaa 660

tccattatta atgagcaagt ccttgataaa ataaggtgca tgttgttaga tcaaataacc 720

cgtcccgaaa tccaatatat atatatatat aatattcaaa ctctctcttt ctatcttcgt 780

acaatttaat agaagtaata 800

<210> 13
<211> 1000
<212> DNA
<213> Artificial Sequence

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

<400> 13
taaaaattag attatatttt tatcagaatt ttttatttat atttttcatc gagttacgtt 60

gatttaacgt atgttgacgg tgcttataat tgtctattat ttttaagtta tatacacgca 120

ctacttacgt aaatttagtt ggcagatttt ctgtctctat gggctatatt gttggacatc 180

agctatctca ttaattaata ataccatact ttttcttaaa agttaaataa aacaaaatta 240

tacacgcact gattcgaatg gtgtagccca cgcacttgct aagtctgtta ctagttctgt 300

aggagttaat gtgtggactg atgcttgtcc tagattttat cagctatctc attaattaat 360

aataccatac ttttttcttaa aagttaaata aaacaaaatt atacacgcac tacgataagg 420

attatataaa tgattaacta aaaaatatct atttaacatg ccataccgcg aaaggttttg 480

cgccattcga tggtgtccgg gatctcgacg ctctccctta tgcgactcct gcattaggaa 540

gcagcccagt agtaggttga ggccgttgag caccgccgcc gcaaggaatg gtgcatgcaa 600

ggagatggcg cccaacagtc ccccggccac ggggcctgcc accataccca cgccgaaaca 660

agcgctcatg agcccgaagt ggcgagcccg atcttcccca tcggtgatgt cggcgatata 720

ggcgccagca accgcacctg tggcgccggt gatgccggcc acgatgcgtc cggcgtagag 780

gatcgagatc tcgatcccgc gaaattaata cgactcacta taggggaatt gtgagcggat 840

aacaattccc ctctagaaat aattttgttt aactttaaga aggagatata ccatgaaaca 900

ccaccaccac caccaccacc acggtggtct ggttccgcgt ggttcccatg atcaaacaag 960

tttgtacaaa aaagcaggct ccgaattcgc ccttatggag 1000

<210> 14
<211> 869
<212> DNA
<213> Artificial Sequence

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

<400> 14
gtgacaaact gaagaattct gtttatttta ttttatacat tagtgatgtt ttttactttt 60

ttagagttat ttttatgcct atgtaatttg catattgtag tggagtttat gcagttattt 120

ttttgttgtt atttagttgt ttaactaaga gaaataaata tatatatttt ttatttgtgc 180

gttgttttta ttttattttt taagttgacg taagtgttga tgctcaatta atttttatat 240

taacataaaa ttgttattgt gttgcttatt cgttgctatt gagttatttc aatattgtac 300

tttttgaagt ttttgtctta taaatttatt tttatttgca taacatatga taaactttaa 360

tggatttata tgttacggtt aagttgtttt ctagttgctt ttgtgttgtt gtttagttgt 420

tttgcgctga gaaaagaagc cctatacgtt aaaattcact ttgtccgaat tcgccacgtg 480

gcaactactg ctacgttctg acgctacaga ttgtgagcgt caggcaagtc tgaatgcttt 540

gtcccgcact cacgtgtgag tctcactcgc ccacatagcc atatgtgtgc cacacatctc 600

cttgcgcatc taggggagtt tttctactgt atttttgtaa ataagaaact ttgaaaatag 660

tatatttgaa attaataaat aatataaatg tttatttttа cttatagtag tataaatatt 720

tatttaagat aattttaact taaaatagaa aaaatctcaa aaaaaaataa aataaaataa 780

actatacctt taatttttat atttatgaaa atttcccgta taaaagggaa gatttttttt 840

tttaaaatta gtaggtaagt aataggatg 869

<210> 15
<211> 2351
<212> DNA
<213> Artificial Sequence

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

<400> 15
tcttggagtg tatatataga tatatatata catttctcca tttttggcca cccaaattac 60

ctaaattgaa ttcgtcgtgt tcgtctttct ccgccataaa taacaattga tttccttcgt 120

tctttcaagt ttttgtcaac tgagtactga gatccagtct gagtcgacac ttgtagaggt 180

tcgaaaatgg cgcagaagaa gtttatttttt gaggttgaaa aggctaagga agctaaggat 240

ggaaggcctt ccatgggacc tgtttatcga agtatgtacg ccaaggatgg ctttcctcct 300

ccgattgatg gattggattg ttgttgggat gtgtttaggc tttctgtgga gagaaatcct 360
ggaaacaaaa tgctcggtcg ccgggaggtt gtggatggga aggctggaaa gtatgtttgg 420
caaacttata aggaggttta tgattgtgtg ataaaacttg gaaatgccat gcgcagttgt 480
ggtttcggag aaggagacaa atgtggtatc tatggtgcca attgctctga atggattatg 540
agcatgcagg cttgcaatgc tcatggactc tattgtgttc cgttgtatga caccttaggt 600
gctaatgcaa ttgagtttgt cataaaacat gccgaggtta caattgcttt tgcagaagag 660
aaaaagcttc ctgagctgtt gaaaacactt cctaacacca cagactattt aaaaacactt 720
gtgagctttg ggaaggtcac accggaacaa agggaatctg ttgaaaagtt tggattgaag 780
atctattcct gggaagagtt cttgcaattg ggtgattgta aagatttcga tcttccagtg 840
aaaaagaaaa ctgatatatg cactataatg tatactagtg gaactactgg tgacccaaag 900
ggagtactga tatccaatga gagcatcatt tctcttttgg ctggggtgag gcgattgctt 960
gagagtgtaa atgaaaagtt gaccgagaaa gatgtatttc tttcatatct tccccttgca 1020
catatcttcg atcgggtgat tgaggagtta tttattttgc atggtgcctc aatcgggttc 1080
tggcgtggcg atgtcaaatt attacttgaa gacattgggg agctaaaacc aactattttc 1140
tgtgccgttc cccgtgtgct ggatagagtc tatgctggtt tgacgcagaa gatttctgct 1200
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cctcatgttg aagcttactt acgagttgtg acatgtgctc atgtttgcca aggatatggg 1440
ctaactgaaa cttgtgcggg gacatttgtc tcgataccaa atgaactacc aatgctcggt 1500
acagttggtc ctccagtacc caatgttgat gtatgtctgg aatcagttcc ggaaatggga 1560
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tctgggtact acaaacgtga agacttaacc aaggaggtca tgattgatgg gtggttccat 1680
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aatattttca aactttctca aggagaatat gtggcagttg agaacttaga gaacatttat 1800
ggtcttgttt ctgacattga ctcaatatgg gtttacggga acagcttcga gtccttcctc 1860
gttgctgtga ttaacccgaa ccagcaagca cttgaacgtt gggccggaga gaataatata 1920
tctggtgact tcaagtccat ttgtgaaaat ccaagagcaa aggaatacat tttgggagag 1980
ctcaataaga ttggcaaaga gaaaaagttg aaaggttttg agttcataag agctgttcac 2040
cttgacccag aggcatttga catagaacgt gaccttatta ctccaacata taagaaaaag 2100
agaccccagt tgctcaaata ctaccagagt gttattgata acatgtacaa ggaaggaaac 2160

aagcccagga cctgaaagat ataatagaca tttagagctt cactttctaa tatttcttca 2220

cacacttccc attttcatct ctctcttact tattacacta taaataatta acaaggttta 2280

ctgtgttgta aatgacattt taatattttc atagtctcaa tgtttcaatt cttagaggac 2340

gttttgattg g 2351

<210> 16
<211> 420
<212> DNA
<213> Artificial Sequence

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

<400> 16
gttaataaac atacttgtga gtagatctaa gatcctggta aaataattcc caacatattt 60

caatcgtaaa ttcatgagtg attcttatca cttcttaaaa aaaagatata aagatccata 120

gataaatatt tgctagtcct ttctttccat agtcaacttc aatatggcat cttaacttct 180

ttccatcaac aaatgatgct caactactta atgtacaatt tatatttatt tttagtaagg 240

gatacaccta acaatgatgc ctaattttgg tgaatttttt tttaccacat gtgacttaat 300

gatatcaaat ttggaaatat ttagttaatt tatttgcccc tgctccatta tataaagcta 360

taaataggat agttcttaat tcatagtaat tcaaaaatta ttagaactaa agaaccatgg 420

<210> 17
<211> 416
<212> DNA
<213> Artificial Sequence

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

<400> 17
gttaataaac atacttgtga gtagatctaa gatcctggta aaataattcc caacatattt 60

caatcgtaaa ttcatgagtg attcttatca cttcttaaaa aaaagatata aagatccata 120

gataaatatt tgctagtcct ttctttccat agtcaacttc aatatggcat cttaacttct 180

ttccatcaac aaatgatgct caactactta atgtacaatt tatatttatt tttagtaagg 240

gatacaccta acaatgatgc ctaattttgg tgaatttttt tttaccacat gtgacttaat 300

gatatcaaat ttggaaatat ttagttaatt tatttgcccc tgctccatta tataaagcta 360

taaataggat agttcttaat tcatagtaat tcaaaaatta ttagaactaa agaaaa 416

<210> 18
<211> 535
<212> DNA
<213> Artificial Sequence

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

<400> 18
agacgttata gctttattgt ctaaatttct tggggtagtt ttgtcccatg ttgctcgctt 60

actttagaag ttcaaagttt gacaaaacat gctattcggt tatacaatga gctatcctag 120

ttcaaggaga ttcctgtgct atttgtggat gtctacattg taaattcatg agtgattctt 180

ataactttat taaaaaaaag acaaatagat ccatagataa atatttgcaa gtgctttctt 240

gtcatagcaa ttttttttta cataggtaat ttaaaaaatt catcttaact ttttttcatc 300

aataaatgat gctcaattat tcaatgcacc atgtacattt atttttaata agggctgcac 360

ctaacaaagg tgcctaattt tggtaaaaaa gaaattacgg catgtgaata tttaatgagc 420

atcaaattac aaaatattta gctaatttct ttacccccac tccaatctat aaagctataa 480

ataggataat tttccattca tagtaatttc caacattacg actaaagaac catgg 535

<210> 19
<211> 531
<212> DNA
<213> Artificial Sequence

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

<400> 19
agacgttata gctttattgt ctaaatttct tggggtagtt ttgtcccatg ttgctcgctt 60

actttagaag ttcaaagttt gacaaaacat gctattcggt tatacaatga gctatcctag 120

ttcaaggaga ttcctgtgct atttgtggat gtctacattg taaattcatg agtgattctt 180

ataactttat taaaaaaaag acaaatagat ccatagataa atatttgcaa gtgctttctt 240

gtcatagcaa ttttttttta cataggtaat ttaaaaaatt catcttaact ttttttcatc 300

aataaatgat gctcaattat tcaatgcacc atgtacattt atttttaata agggctgcac 360

ctaacaaagg tgcctaattt tggtaaaaaa gaaattacgg catgtgaata tttaatgagc 420

atcaaattac aaaatattta gctaatttct ttacccccac tccaatctat aaagctataa 480

ataggataat tttccattca tagtaatttc caacattacg actaaagaaa a 531

<210> 20
<211> 1635
<212> DNA
<213> Artificial Sequence

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

<400> 20
atgaagtgct caacattctc cttttggttt gtttgcaaga taatattttt ctttttctca 60
ttcaatatcc aaacttccat tgctaatcct cgagaaaact tccttaaatg cttctcgcaa 120
tatattccca ataatgcaac aaatctaaaa ctcgtataca ctcaaaacaa cccattgtat 180
atgtctgtcc taaattcgac aatacacaat cttagattca cctctgacac aaccccaaaa 240
ccacttgtta tcgtcactcc ttcacatgtc tctcatatcc aaggcactat tctatgctcc 300
aagaaagttg gcttgcagat tcgaactcga agtggtggtc atgattctga gggcatgtcc 360
tacatatctc aagtcccatt tgttatagta gacttgagaa acatgcgttc aatcaaaata 420
gatgttcata gccaaactgc atgggttgaa gccggagcta cccttggaga agtttattat 480
tgggttaatg agaaaaatga gaatcttagt ttggcggctg ggtattgccc tactgtttgc 540
gcaggtggac actttggtgg aggaggctat ggaccattga tgagaaacta tggcctcgcg 600
gctgataata tcattgatgc acacttagtc aacgttcatg gaaaagtgct agatcgaaaa 660
tctatggggg aagatctctt ttgggcttta cgtggtggtg gagcagaaag cttcggaatc 720
attgtagcat ggaaaattag actggttgct gtcccaaagt ctactatgtt tagtgttaaa 780
aagatcatgg agatacatga gcttgtcaag ttagttaaca aatggcaaaa tattgcttac 840
aagtatgaca aagatttatt actcatgact cacttcataa ctaggaacat tacagataat 900
caagggaaga ataagacagc aatacacact tacttctctt cagttttcct tggtggagtg 960
gatagtctag tcgacttgat gaacaagagt tttcctgagt tgggtattaa aaaaacggat 1020
tgcagacaat tgagctggat tgatactatc atcttctata gtggtgttgt aaattacgac 1080
actgataatt ttaacaagga aattttgctt gatagatccg ctgggcagaa cggtgctttc 1140
aagattaagt tagactacgt taagaaacca attccagaat ctgtatttgt ccaaattttg 1200
gaaaaattat atgaagaaga tataggagct gggatgtatg cgttgtaccc ttacggtggt 1260
ataatggatg agatttcaga atcagcaatt ccattccctc atcgagctgg aatcttgtat 1320
gagttatggt acatatgtag ttgggagaag caagaagata acgaaaagca tctaaactgg 1380
attagaaata tttataactt catgactcct tatgtgtcca aaaatccaag attggcatat 1440
ctcaattata gagaccttga tataggaata aatgatccca agaatccaaa taattacaca 1500
caagcacgta tttggggtga gaagtatttt ggtaaaaatt ttgacaggct agtaaaagtg 1560
aaaaccctgg ttgatcccaa taactttttt agaaacgaac aaagcatccc acctcttcca 1620
cggcatcgtc attaa 1635

<210> 21
<211> 800
<212> DNA
<213> Artificial Sequence

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

<400> 21
cttatcactc attcgggagc aacttaaaaa aattacaatt attatgaaag acggcacaaa 60

aagcgaatta attacctaat cgtaaataaa agaaatttta cataaatata ttatataatt 120

ttatattatt cataaaaaat ataaaatagt attagactga attgagattt gattcgtaac 180

taaaaattaa tttctttaat gtaaaatttt aaaaacaaat tattaaaacc gcgtgaagcg 240

cggatctatt ccctagttga ataataaagt agatagtaga ggaggttaga atttataatt 300

tttcatttaa atatttgaat ttactttact gttctttgtt attcttcatt taattttgct 360

atttgttatt ttacttttca aaaattataa ttttaattac caaataaaaa gtaaaataga 420

tattggtact tgatattcac tctttatggg aaccataata aactataaaa gtcattatgt 480

gtacttgcta ccataggcac ctatatccca caaactagct accatagcca atttcttgtt 540

ttttgtttcc aatatccaat ttttattgat gccaaactat tcaatgtaca atgtacattt 600

attttcaata agggcttcac ctaacaaagg tgcctaattt tagttgattt atttttatc 660

acatgtgact atttaatgac tatcaaatta taaaatattt aagtcaattt atttgcccca 720

actccaatat ataatattat aaataggata gttctcaatt cctaataatt caaaaaatca 780

ttaggactga agaaccatgg 800

<210> 22
<211> 796
<212> DNA
<213> Artificial Sequence

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

<400> 22
cttatcactc attcgggagc aacttaaaaa aattacaatt attatgaaag acggcacaaa 60

aagcgaatta attacctaat cgtaaataaa agaaatttta cataaatata ttatataatt 120

ttatattatt cataaaaaat ataaaatagt attagactga attgagattt gattcgtaac 180

taaaaattaa tttctttaat gtaaaatttt aaaaacaaat tattaaaacc gcgtgaagcg 240

cggatctatt ccctagttga ataataaagt agatagtaga ggaggttaga atttataatt 300

tttcatttaa atatttgaat ttactttact gttctttgtt attcttcatt taattttgct 360

atttgttatt ttacttttca aaaattataa ttttaattac caaataaaaa gtaaaataga 420

tattggtact tgatattcac tctttatggg aaccataata aactataaaa gtcattatgt 480

gtacttgcta ccataggcac ctatatccca caaactagct accatagcca atttcttgtt 540

ttttgtttcc aatatccaat ttttattgat gccaaactat tcaatgtaca atgtacattt 600

attttcaata agggcttcac ctaacaaagg tgcctaattt tagttgattt atttttatc 660

acatgtgact atttaatgac tatcaaatta taaaatattt aagtcaattt atttgcccca 720

actccaatat ataatattat aaataggata gttctcaatt cctaataatt caaaaaatca 780

ttaggactga agaaaa 796

<210> 23
<211> 796
<212> DNA
<213> Artificial Sequence

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

<400> 23
ttatttaaat ttctcagaga gatatagaga atttacaata ggtcaagttg tatatttttt 60

aatccgaata attaatgctt ttgaatatcc atcatcaata ttgaataata aagtagatag 120

cagaggagat tagaactcat aatttttcat ttatattttt gaatttagtt tactgttctt 180

tattattctt catttaattt tgctatatgt tattttactt ttcaaaaatt ctaattttga 240

ttaccaaata aaaaataaaa tatatattgg tacttcatat ttagttttta tgggaatgat 300

aatgaatgat attgtaataa actataaaag taattttgta tacttgcata gttcttaatt 360

tttacccaaa aaaatatata ttaatgaaaa aaaaaggtgg aaagtgccat aggcacctat 420

atcccacaaa ctagctataa gatattgaaa gacaaataga tccatagata aatatttgcg 480

tgtccttttct tttcatatct aatttttttgt ttttttattt ttttccaata gtcaattttg 540

gcagcttaac ttctttccat aaataatgat gccaaactat tcaatgtaaa atttagattt 600

attttcatta agggcttcac ctaacaaatg tgcctaattt ttgtggattt ttttaccata 660

tgtcgctatt taatgactac caaattatag aattatttaa gtcaatttct cagtccccgc 720

tccaatatat aaagttatag aaaggacaat tcttaattca tagtaattca aaaatcatta 780

agactaaaaa ccatgg 796

<210> 24
<211> 792
<212> DNA
<213> Artificial Sequence

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

<400> 24
ttatttaaat ttctcagaga gatatagaga atttacaata ggtcaagttg tatatttttt 60

aatccgaata attaatgctt ttgaatatcc atcatcaata ttgaataata aagtagatag 120

cagaggagat tagaactcat aatttttcat ttatattttt gaatttagtt tactgttctt 180

tattattctt catttaattt tgctatatgt tattttactt ttcaaaaatt ctaattttga 240

ttaccaaata aaaaataaaa tatatattgg tacttcatat ttagttttta tgggaatgat 300

aatgaatgat attgtaataa actataaaag taattttgta tacttgcata gttcttaatt 360

tttacccaaa aaaatatata ttaatgaaaa aaaaaggtgg aaagtgccat aggcacctat 420

atcccacaaa ctagctataa gatattgaaa gacaaataga tccatagata aatatttgcg 480

tgtcctttct tttcatatct aatttttttgt ttttttattt ttttccaata gtcaattttg 540

gcagcttaac ttctttccat aaataatgat gccaaactat tcaatgtaaa atttagattt 600

attttcatta agggcttcac ctaacaaatg tgcctaattt ttgtggattt ttttaccata 660

tgtcgctatt taatgactac caaattatag aattatttaa gtcaatttct cagtccccgc 720

tccaatatat aaagttatag aaaggacaat tcttaattca tagtaattca aaaatcatta 780

agactaaaaa aa 792

<210> 25
<211> 720
<212> DNA
<213> Artificial Sequence

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

<400> 25
ttttcaattg atttaatttc ttatattgat ataaagaatt tgcaatacat tgagtttctt 60

aacccgaata ttaaacggtt ttgaatatct tcatcattga ttgaataata aagtggatag 120

tagagggaat tagaatccat aatttttttat ttatatattt gaagttagtt tattattctt 180

tgctatcctt catttaattt tgctatttgt tattttagtt tcaaaaattt atttttcatt 240

acaaaataaa aaataagata ggatattggt acttgataag tcttctttgt ggaaacgata 300

atcggtatta ttaggtatat ttgcatattt caatattatt gcaaaaaata aatatattaa 360

taaataaagt ggaaggtgcc ataggtacct atatccacaa actagcatat tgaaagaaaa 420

tggatccaag gataaatatt tgcaagtctt ttttttttttg catagccaat ttctttttttt 480

attattattt taatagaata tttcaaaagg gcatctaaca tttatttttta ataaggactg 540

cacctaacaa aggtgcctaa tttttgtgaa ctttttttta ccacatgtga ctatttaatg 600

agtactaaat tatgaaatat ttagttaatt tctttgcccc cgctccaata tataatgcta 660

taaatagcat aatttttctat tcatagtaat tcaaaaatca ttaggactaa agaaccatgg 720

<210> 26
<211> 716
<212> DNA

<213> Artificial Sequence

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

<400> 26
ttttcaattg atttaatttc ttatattgat ataaagaatt tgcaatacat tgagtttctt 60

aacccgaata ttaaacggtt ttgaatatct tcatcattga ttgaataata aagtggatag 120

tagagggaat tagaatccat aatttttttat ttatatattt gaagttagtt tattattctt 180

tgctatcctt catttaattt tgctatttgt tattttagtt tcaaaaattt atttttcatt 240

acaaaataaa aaataagata ggatattggt acttgataag tcttctttgt ggaaacgata 300

atcggtatta ttaggtatat ttgcatattt caatattatt gcaaaaaata aatatattaa 360

taaataaagt ggaaggtgcc ataggtacct atatccacaa actagcatat tgaaagaaaa 420

tggatccaag gataaatatt tgcaagtctt tttttttttg catagccaat ttctttttt 480

attattattt taatagaata tttcaaaagg gcatctaaca tttatttta ataaggactg 540

cacctaacaa aggtgcctaa tttttgtgaa ctttttttta ccacatgtga ctatttaatg 600

agtactaaat tatgaaatat ttagttaatt tctttgcccc cgctccaata tataatgcta 660

taaatagcat aattttctat tcatagtaat tcaaaaatca ttaggactaa agaaag 716

<210> 27
<211> 1635
<212> DNA
<213> Artificial Sequence

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

<400> 27
atgaattgct cagcattttc cttttggttt gtttgcaaaa taatattttt ctttctctca 60

ttcaatatcc aaatttcaat agctaatcct caagaaaact tccttaaatg cttctcggaa 120

tatattccta acaatccagc aaatccaaaa ttcatataca ctcaacacga ccaattgtat 180

atgtctgtcc tgaattcgac aatacaaaat cttagattca cctctgatac aaccccaaaa 240

ccactcgtta ttgtcactcc ttcaaatgtc tcccatatcc aggccagtat tctctgctcc 300

aagaaagttg gtttgcagat tcgaactcga agcggtggcc atgatgctga gggtatgtcc 360

tacatatctc aagtcccatt tgttgtagta gacttgagaa acatgcattc gatcaaaata 420

gatgttcata gccaaactgc gtgggttgaa gccggagcta cccttggaga agtttattat 480

tggatcaatg agaagaatga gaattttagt tttcctggtg ggtattgccc tactgttggc 540

gtaggtggac actttagtgg aggaggctat ggagcattga tgcgaaatta tggccttgcg 600

gctgataata tcattgatgc acacttagtc aatgttgatg gaaaagttct agatcgaaaa 660

tccatgggag aagatctatt ttgggctata cgtggtggag gaggagaaaa ctttggaatc 720

attgcagcat ggaaaatcaa actggttgtt gtcccatcaa agtctactat attcagtgtt 780

aaaaagaaca tggagataca tgggcttgtc aagttattta acaaatggca aaatattgct 840

tacaagtatg acaaagattt agtactcatg actcacttca taacaaagaa tattacagat 900

aatcatggga agaataagac tacagtacat ggttacttct cttcaatttt tcatggtgga 960

gtggatagtc tagtcgactt gatgaacaag agctttcctg agttgggtat taaaaaaact 1020

gattgcaaag aatttagctg gattgataca accatcttct acagtggtgt tgtaaatttt 1080

aacactgcta attttaaaaa ggaaattttg cttgatagat cagctgggaa gaagacggct 1140

ttctcaatta agttagacta tgttaagaaa ccaattccag aaactgcaat ggtcaaaatt 1200

ttggaaaaat tatatgaaga agatgtagga gctgggatgt atgtgttgta cccttacggt 1260

ggtataatgg aggagatttc agaatcagca attccattcc ctcatcgagc tggaataatg 1320

tatgaacttt ggtacactgc ttcctgggag aagcaagaag ataatgaaaa gcatataaac 1380

tgggttcgaa gtgtttataa ttttacgact ccttatgtgt cccaaaatcc aagattggcg 1440

tatctcaatt atagggacct tgatttagga aaaactaatc ctgagagtcc taataattac 1500

acacaagcac gtatttgggg tgaaaagtat tttggtaaaa attttaacag gttagttaag 1560

gtgaaaacca aagctgatcc caataatttt tttagaaacg aacaaagtat cccacctctt 1620

ccaccgcatc atcat 1635

<210> 28
<211> 804
<212> DNA
<213> Artificial Sequence

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

<400> 28
gataattttt cttccaaatt taatagtatc ttttatataa gttcagtcat gtttttctta 60

tgtaagttag gctattaatt attttgatgt atttattata ttgtatgtcg tttactgcat 120

tctgccaaca ttggtttttg tcgatttatg atatataata tgatatgctg ttaagttaga 180

ggtaagattc aatttattta agattattta atttgcgctt ttattatata catcttctag 240

ttgtaattaa tggggtagaa ttaagactgt gttttgaatt aatatcggta ttagaatagg 300

atttgcatga ctatatttct accttaccaa gttttttatc tgataacacc ctttcactta 360

ttattttctt atttttaatt tatttatatt tttaccatat tctatttata ctaatcttaa 420

gtggtacatt acctccctgt ggatacgaca tataatctgt ttactatcgt gaccgaagta 480

taactaattg ggcgacatca cacctatatc ccacaaacta gctactatag tcaatttctt 540

gttttttttc caatagccaa ttttaaatga tgccaaacta ttcaatgtat aatgtacatt 600

tattttaaat aagggcttca cctaacaaat gtgcctaatt ttagttaatt tatttttta 660

tcgcatctta ctatttaaag gaactatcaa attataaaat atttatgtca attcatttgc 720

cccaactcca atatataata ttataaatag gatagttctc tattcataat aattcaaaat 780

atcattagga ctgaagaacc atgg 804

<210> 29
<211> 800
<212> DNA
<213> Artificial Sequence

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

<400> 29
gataattttt cttccaaatt taatagtatc ttttatataa gttcagtcat gtttttctta 60

tgtaagttag gctattaatt attttgatgt atttattata ttgtatgtcg tttactgcat 120

tctgccaaca ttggtttttg tcgatttatg atatataata tgatatgctg ttaagttaga 180

ggtaagattc aatttattta agattattta atttgcgctt ttattatata catcttctag 240

ttgtaattaa tggggtagaa ttaagactgt gttttgaatt aatatcggta ttagaatagg 300

atttgcatga ctatatttct accttaccaa gttttttatc tgataacacc ctttcactta 360

ttattttctt atttttaatt tatttatatt tttaccatat tctatttata ctaatcttaa 420

gtggtacatt acctccctgt ggatacgaca tataatctgt ttactatcgt gaccgaagta 480

taactaattg ggcgacatca cacctatatc ccacaaacta gctactatag tcaatttctt 540

gttttttttc caatagccaa ttttaaatga tgccaaacta ttcaatgtat aatgtacatt 600

tattttaaat aagggcttca cctaacaaat gtgcctaatt ttagttaatt tatttttta 660

tcgcatctta ctatttaaag gaactatcaa attataaaat atttatgtca attcatttgc 720

cccaactcca atatataata ttataaatag gatagttctc tattcataat aattcaaaat 780

atcattagga ctgaagaaaa 800

<210> 30
<211> 1635
<212> DNA
<213> Artificial Sequence

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

<400> 30
atgaattgct caacattctc cttttggttt gtttgcaaaa taatattttt ctttctctca 60

ttcaatatcc aaatttcaat agctaatcct caagaaaact tccttaaatg cttctcggaa 120

tatattccta acaatccagc aaatccaaaa ttcatataca ctcaacacga ccaattgtat 180

atgtctgtcc tgaattcgac aatacaaaat cttagattca cctctgatac aaccccaaaa 240

ccactcgtta ttgtcactcc ttcaaatgtc tcccatatcc aggccagtat tctctgctcc 300

aagaaagttg gtttgcagat tcgaactcga agcggtggcc atgatgctga gggtttgtcc 360

tacatatctc aagtcccatt tgctatagta gacttgagaa acatgcatac ggtcaaagta 420

gatattcata gccaaactgc gtgggttgaa gccggagcta cccttggaga agtttattat 480

tggatcaatg agatgaatga gaattttagt tttcctggtg ggtattgccc tactgttggc 540

gtaggtggac actttagtgg aggaggctat ggagcattga tgcgaaatta tggccttgcg 600

gctgataata tcattgatgc acacttagtc aatgttgatg gaaaagttct agatcgaaaa 660

tccatgggag aagatctatt ttgggctata cgtggtggag gaggagaaaa ctttggaatc 720

attgcagcat gtaaaatcaa acttgttgtt gtcccatcaa aggctactat attcagtgtt 780

aaaaagaaca tggagataca tgggcttgtc aagttattta acaaatggca aaatattgct 840

tacaagtatg acaaagattt aatgctcacg actcacttca gaactaggaa tattacagat 900

aatcatggga agaataagac tacagtacat ggttacttct cttccatttt tcttggtgga 960

gtggatagtc tagttgactt gatgaacaag agctttcctg agttgggtat taaaaaaact 1020

gattgcaaag aattgagctg gattgataca accatcttct acagtggtgt tgtaaattac 1080

aacactgcta attttaaaaa ggaaattttg cttgatagat cagctgggaa gaagacggct 1140

ttctcaatta agttagacta tgttaagaaa ctaatacctg aaactgcaat ggtcaaaatt 1200

ttggaaaaat tatatgaaga agaggtagga gttgggatgt atgtgttgta cccttacggt 1260

ggtataatgg atgagatttc agaatcagca attccattcc ctcatcgagc tggaataatg 1320

tatgaacttt ggtacactgc tacctgggag aagcaagaag ataacgaaaa gcatataaac 1380

tgggttcgaa gtgtttataa tttcacaact ccttatgtgt cccaaaatcc aagattggcg 1440

tatctcaatt atagggacct tgatttagga aaaactaatc ctgagagtcc taataattac 1500

acacaagcac gtatttgggg tgaaaagtat tttggtaaaa attttaacag gttagttaag 1560

gtgaaaacca aagctgatcc caataatttt tttagaaacg aacaaagtat cccacctctt 1620

ccaccgcgtc atcat 1635

<210> 31
<211> 171
<212> DNA
<213> Artificial Sequence

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

<400> 31
atgatgccaa actattcaat gtacaatgta catttatttt taataagggc ttcacctaac 60

aaaggtgcct aatttttgtg aacttttttt taccacatgt gactatttaa tgactatcaa 120

attataaaat atttaagtca atttctttgc ccccactcca atatataatg t 171

<210> 32
<211> 232
<212> DNA
<213> Artificial Sequence

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

<400> 32
atgatgccaa actattcaat gtacaatgta catttatttt taataagggc ttcacctaac 60

aaaggtgcct aatttttgtg aacttttttt taccacatgt gactatttaa tgactatcaa 120

attataaaat atttaagtca atttctttgc ccccactcca atatataatg ttataaatag 180

gataattctc aattcatagt aattcaaaaa tcattaggac taaagaaaaa tg 232

<210> 33
<211> 709
<212> DNA
<213> Artificial Sequence

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

<400> 33
atgatgccaa actattcaat gtacaatgta catttatttt taataagggc ttcacctaac 60

aaaggtgcct aatttttgtg aacttttttt taccacatgt gactatttaa tgactatcaa 120

attataaaat atttaagtca atttctttgc ccccactcca tgatgccaaa ctattcaatg 180

tacaatgtac atttatttttt aataagggct tcacctaaca aaggtgccta atttttgtga 240

actttttttt accacatgtg actatttaat gactatcaaa ttataaaata tttaagtcaa 300

tttctttgcc cccactccat gatgccaaac tattcaatgt acaatgtaca tttatttttа 360

ataagggctt cacctaacaa aggtgcctaa tttttgtgaa ctttttttta ccacatgtga 420

ctatttaatg actatcaaat tataaaatat ttaagtcaat ttctttgccc ccactccatg 480

atgccaaact attcaatgta caatgtacat ttatttttaa taagggcttc acctaacaaa 540

ggtgcctaat ttttgtgaac tttttttac cacatgtgac tatttaatga ctatcaaatt 600

ataaaatatt taagtcaatt tctttgcccc cactccaata tataatgtta taaataggat 660

aattctcaat tcatagtaat tcaaaaatca ttaggactaa agaaaaatg 709