

SEQUENCE LISTING

<110> NATIONAL UNIVERSITY CORPORATION KOBE UNIVERSITY

<120> A method for constructing chimeric plasmid library

<140> PCT/JP2020/013133

<141> 2020-03-24

<150> JP 2019-069798

<151> 2019-04-01

<160> 62

<170> PatentIn version 3.5

<210> 1

<211> 15333

<212> DNA

<213> Artificial Sequence

<220>

<223> Plasmid vector

<400> 1

ggccttcttg gccaccccg gccgtcgacg ctctccctta tgcgactcct gcattaggaa	60
gcagcccagt agtaggttga ggccgttgag caccgccgcc gcaaggaatg gtgcatgcaa	120
ggagatggcg cccaacagtc ccccgccac ggggcctgcc accataccca cgccgaaaca	180
agcgctcatg agcccgaagt ggcgagcccg atcttcccca tcggtgatgt cggcgatata	240
ggcgccagca accgcacctg tggcgccggt gatgccggcc acgatgcgtc cggcgtagag	300
gatccacagg acgggtgtgg tcgcatgat cgcgtagtcg atagtggctc caagtagcga	360
agcgagcagg actgggcggc ggccaaagcg gtcggacagt gctccgagaa cgggtgcgca	420
tagaaaattgc atcaacgcat atagcgctag cagcacgcca tagtgactgg cgatgctgtc	480
ggaatggacg atatcccgca agaggcccg cagtaccggc ataaccaagc ctatgcctac	540
agcatccagg gtgacggtgc cgaggatgac gatgagcgca ttgttagatt tcatacacgg	600
tgcctgactg cgttagcaat ttaactgtga taaactaccg cattaaagct tatcgatgat	660
aagctgtcaa acatgagaat tcttgaagac gaaagggcct cgtgatacgc ctatTTTTAT	720
aggTTaatgt catgataata atggTTTTctt agacgtcagg tggcactttt cggggaaatg	780

tgcgcggaac ccctatTTgt ttatTTTTtct aaatacatTC aaatatgtat ccgctcatga	840
gacaataacc ctgataaaatg cttcaataat attgaaaaag gaagagtatg agtattcaac	900
atttccgtgt cgcccttatt ccctTTTTtg cggcattttg ccttcctgtt tttgctcacc	960
cagaaacgct ggtgaaagta aaagatgctg aagatcagtt gggTgcacga gtgggttaca	1020
tcgaactgga tctcaacagc ggtaagatcc ttgagagttt tcgccccgaa gaacgttttc	1080
caatgatgag cacttttaaa gttctgctat gtggcgcggt attatcccgt gttgacgccg	1140
ggcaagagca actcggTcgC cgcatacact attctcagaa tgacttggtt gagtactcac	1200
cagtcacaga aaagcatctt acggatggca tgacagtaag agaattatgc agtgctgcca	1260
taaccatgag tgataacact gcggccaact tacttctgac aacgatcgga ggaccgaagg	1320
agctaaccgc ttttttgcaC aacatggggg atcatgtaac tcgccttgat cgttgggaac	1380
cggagctgaa tgaagccata ccaaacgacg agcgtgacac cacgatgcct gcagcaatgg	1440
caacaacgtt gcgcaaaacta ttaactggcg aactacttac tctagcttcc cggcaacaat	1500
taatagactg gatggaggcg gataaaagttg caggaccact tctgcgctcg gcccttccgg	1560
ctggctgggtt tattgctgat aaatctggag ccggtgagcg tgggtctcgC ggtatcattg	1620
cagcactggg gccagatggt aagccctccc gtatcgtagt tatctacacg acggggagtc	1680
aggcaactat ggatgaacga aatagacaga tcgctgagat aggtgcctca ctgattaagc	1740
attggtaact gtcagaccaa gtttactcat atatacttta gattgattta aaacttcatt	1800
tttaatttaa aaggatctag gtgaagatcc tttttgataa tctcatgacc aaaatccctt	1860
aacgtgagtt ttcgttccac tgagcgTcag accccgtaga aaagatcaaa ggatcttctt	1920
gagatccttt ttttctgcgc gtaatctgct gcttgcaaac aaaaaaacca ccgctaccag	1980
cggTggtttg tttgccggat caagagctac caactctttt tccgaaggta actggcttca	2040
gcagagcgca gataccaaat actgtccttc tagtgtagcc gtagttaggc caccacttca	2100
agaactctgt agcaccgcct acatacctcg ctctgctaata cctgttacca gtggctgctg	2160
ccagtggcga taagtcgtgt cttaccgggt tggactcaag acgatatgta ccggataagg	2220
cgcagcggtc gggctgaacg gggggttcgt gcacacagcc cagcttggag cgaacgacct	2280

acaccgaact gagataccta cagcgtgagc tatgagaaaag cgccacgctt cccgaaggga	2340
gaaaggcgga caggatatccg gtaagcggca gggtcggaac aggagagcgc acgagggagc	2400
ttccaggggg aaacgcctgg tatctttata gtcctgtcgg gtttcgccac ctctgacttg	2460
agcgtcgatt tttgtgatgc tcgtcagggg ggcgagacct atggaaaaac gccagcaacg	2520
cggccttttt acggttcctg gccttttgct ggctttttgc tcacatgttc tttcctgcgt	2580
tatcccctga ttctgtggat aaccgtatta ccgcctttga gtgagctgat accgctcgcc	2640
gcagccgaac gaccgagcgc agcgagtcag tgagcgagga agcggaagag cgcctgatgc	2700
ggtattttct ccttacgcat ctgtgcggta tttcacaccg catatggtgc actctcagta	2760
caatctgctc tgatgccgca tagttaagcc agtatacact ccgctatcgc tacgtgactg	2820
ggtcatggct gcgccccgac acccgccaac acccgctgac gcgcccctgac gggcttgtct	2880
gctcccgga tccgcttaca gacaagctgt gaccgtctcc gggagctgca tgtgtcagag	2940
gttttcaccg tcatcaccga aacgcgcgag gcaggatccg tatttcacac cgcatatcga	3000
cggtcgagga gaacttctag tatatccaca tacctaatat tattgcctta ttaaaaatgg	3060
aatcccaaca attacatcaa aatccacatt ctcttcaaaa tcaattgtcc tgtacttcct	3120
tgttcatgtg tgttcaaaaa cggtatatatt ataggataat tatactctat ttctcaacaa	3180
gtaattgggt gtttggccga gcggtctaag gcgcctgatt caagaaatat cttgaccgca	3240
gttaactgtg ggaatactca ggtatcgtaa gatgcaagag ttcgaatctc ttagcaacca	3300
ttatTTTTTT cctcaacata acgagaacac acaggggcgc tatcgcacag aatcaaattc	3360
gatgactgga aatTTTTTgt taatttcaga ggtcgcctga cgcatatacc tttttcaact	3420
gaaaaattgg gagaaaaagg aaaggtgaga ggccggaacc ggcttttcat atagaataga	3480
gaagcgttca tgactaaatg cttgcatcac aatacttgaa gttgacaata ttatttaagg	3540
acctattgtt ttttccaata ggtgggtagc aatcgtctta ctttctaact tttcttacct	3600
tttacatttc agcaatatat atatatatat caaggatata ccattctaata gtctgccccct	3660
atgtctgccc ctaagaagat cgtcgttttg ccaggtgacc acgttggtca agaaatcaca	3720
gccgaagcca ttaaggttct taaagctatt tctgatgttc gttccaatgt caagttcgat	3780

ttcgaaaatc atttaattgg tgggtgctgct atcgatgcta caggtgtccc acttccagat	3840
gaggcgctgg aagcctccaa gaaggttgat gccgttttgt taggtgctgt gggtaggtcct	3900
aaatggggta ccggtagtgt tagacctgaa caaggtttac taaaaatccg taaagaactt	3960
caattgtacg ccaacttaag accatgtaac tttgcatccg actctctttt agacttatct	4020
ccaatcaagc cacaatttgc taaagggtact gacttcgttg ttgtcagaga attagtggga	4080
ggtattttact ttggtaagag aaaggaagac gatgggtgatg gtgtcgcttg ggatagttaa	4140
caatacaccg ttccagaagt gcaaagaatc acaagaatgg ccgctttcat ggccctacaa	4200
catgagccac cattgcctat ttggtccttg gataaagcta atgttttggc ctcttcaaga	4260
ttatggagaa aaactgtgga ggaaaccatc aagaacgaat tccctacatt gaaggttcaa	4320
catcaattga ttgattctgc cgccatgatc ctagttaaga acccaaccca cctaaatggt	4380
attataatca ccagcaacat gtttggtgat atcatctccg atgaagcctc cgttatccca	4440
ggttccttgg gtttgttgcc atctgcgtcc ttggcctctt tgccagacaa gaacaccgca	4500
tttggtttgt acgaaccatg ccacggttct gctccagatt tgccaaagaa taaggttgac	4560
cctatcgcca ctatcttgtc tgctgcaatg atgttgaaat tgtcattgaa cttgcctgaa	4620
gaaggtaagg ccattgaaga tgcagttaaa aaggttttgg atgcaggtat cagaactggt	4680
gatttaggtg gttccaacag taccaccgaa gtcggtgatg ctgtcgccga agaagttaag	4740
aaaatccttg cttaaaaaga ttctcttttt ttatgatatt tgtacataaa ctttataaat	4800
gaaattcata atagaaacga cacgaaatta caaaatggaa tatgttcata gggtagacga	4860
aactatatac gcaatctaca tacatttatc aagaaggaga aaaaggagga tagtaaagga	4920
atacaggtaa gcaaattgat actaatggct caacgtgata aggaaaaaga attgcacttt	4980
aacattaata ttgacaagga ggagggcacc acacaaaaag ttaggtgtaa cagaaaatca	5040
tgaaactacg attcctaatt tgatattgga ggattttctc taaaaaaaaa aaaatacaac	5100
aaataaaaaa cactcaatga cctgaccatt tgatggagtt taagtcaata ctttcttgaa	5160
ccatttccca taatggtgaa agttccctca agaattttac tctgtcagaa acggccttac	5220
gacgtagtcg atatggtgca ctctcagtac aatctgctct gatgccgcat agttaagcca	5280

gccccgacac ccgccaacac ccgctgacgc gccctgacgg gcttgctctgc tcccggcatc	5340
cgcttacaga caagctgtga ccgtctccgg gagctgcatg tgtcagaggt tttcacgctc	5400
atcacccgaaa cgcgcgagac gaaagggcct cgtgatacgc ctatTTTTtTat aggttaatgt	5460
catgataata atggtttctt aggacggatc gcttgccctgt aacttacacg cgcctcgtat	5520
cttttaatatga tggaataatt tgggaattta ctctgtgttt atttattttt atgttttgta	5580
tttggttttt agaaagtaaa taaagaaggt agaagagtta cggaatgaag aaaaaaaaaat	5640
aaacaaaggt ttaaaaaatt tcaacaaaaa gcgtacttta catatatatt tattagacaa	5700
gaaaagcaga ttaaatagat atacattcga ttaacgataa gtaaaatgta aaatcacagg	5760
attttcgtgt gtggtcttct acacagacaa gatgaaacaa ttcggcatta atacctgaga	5820
gcaggaagag caagataaaa ggtagtattt gttggcgatc cccctagagt cttttacatc	5880
ttcggaaaac aaaaactatt ttttctttaa tttctttttt tactttctat ttttaattta	5940
tatatTTtata ttaaaaaatt taaattataa ttattttttat agcacgtgat gaaaaggacc	6000
caggatccta actcacatta attgcgttgc gctcactgcc cgctttccag tcgggaaacc	6060
tgtcgtgcc a gctgcattaa tgaatcggcc aacgcgcggg gagaggcggt ttgcgtattg	6120
ggcgccaggg tggtttttct tttcaccagt gagacgggca acagctgatt gcccttcacc	6180
gcctggccct gagagagttg cagcaagcgg tccacgctgg tttgccccag caggcgaaaa	6240
tcctgtttga tggtgggttaa cggcgggata taacatgagc tgtcttcggt atcgtcgtat	6300
cccactaccg agatatccgc accaacgcgc agcccggact cggtaatggc gcgcattgcg	6360
cccagcgcca tctgatcgtt ggcaaccagc atcgcagtgg gaacgatgcc ctcatcagc	6420
atttgcatgg tttgttgaaa accggacatg gcaactccagt cgccttcccg ttccgctatc	6480
ggctgaattt gattgcgagt gagatattta tgccagccag ccagacgcag acgcgccgag	6540
acagaactta atgggcccgc taacagcgcg atttgctggt gacccaatgc gaccagatgc	6600
tccacgcca gtcgcgtacc gtcttcatgg gagaaaaataa tactgttgat ggggtgtctgg	6660
tcagagacat caagaaataa cgccggaaca ttagtgcagg cagcttcac agcaatggca	6720
tcctgggtcat ccagcggata gttaatgatc agcccactga cgcgttgccg gagaagattg	6780

tgcaccgccg ttttacaggc ttcgacgccg cttcgttcta ccatcgacac caccacgctg	6840
gcacccagtt gatcggcgcg agatttaatc gccgcgacaa tttgcgacgg cgcgtgcagg	6900
gccagactgg aggtggcaac gccaatcagc aacgactgtt tgcccgccag ttgtttgtgcc	6960
acgcggttgg gaatgtaatt cagctccgcc atcgccgctt ccactttttc ccgcgttttc	7020
gcagaaacgt ggctggcctg gttcaccacg cgggaaacgg tctgataaga gacaccggca	7080
tactctgcga catcgtataa cgttactggg ttcataaaaa tcgtctccct ccgtttgaat	7140
atttgattga tcgtaaccag atgaagcact ctttccacta tccctacagt gttatggctt	7200
gaacaatcac gaaacaataa ttggtacgta cgatctttca gccgactcaa acatcaaadc	7260
ttacaaatgt agtctttgaa agtattacat atgtaagatt taaatgcaac cgttttttcg	7320
gaaggaaatg atgacctcgt ttccaccgaa ttagcttgca tgcaaadcga taaagatccg	7380
cgttctgcgg taatctcatg tgcataattct tccatctcaa taaggatgaa acgacgattc	7440
cctccatctt gtttgtaag cgataatact gcatgagcag tagtgccact ccctgcaaat	7500
gagtcaagta caatcgcttc tttgttttca gtcgcaaatt gtattagtct ttttaccaaa	7560
tcaattgatt tagggttatc gaaaaccttc cttccaaata tcttctttta ttgactagaa	7620
ccgttgggtt ttaagtcaaa ccaggcatta cttacaact ttttgctagt cggtggaaca	7680
aagtgcacaa tcgtgccatt atcattttgt cgtaacaagt caatatcttc cccattattt	7740
tctacatatt caagatacca tttatcaata tcctcttgag ttggattagt aatgcctttt	7800
tgtctaagtt catctaacat catttgatag ttttcaatag cctggagact acgttctttc	7860
ccccatctcc attgaccttc tgtcggagta accccaaata attcatatct catagtttta	7920
cggctctgtac ctctccaatg attattccaa ctaccaggct tttcttctac atcttcataa	7980
accttattaa atcgctcgaga tggctgttta gtgtaaacca aaatagactc ataaccattt	8040
gaaagagaat caattgtgtc aaattgcgct tgaacatttt ttactcctct acgaatgata	8100
atagcgtcac gaaaattctc ctcaccgaat atttcgttca taaggcacgt aagatgggtg	8160
atttcattgt agtcaatgct taaaaatc actccgtctt ctgacaacaa ctctttcaac	8220
agttttaacc tcggcatcat catacaaagc cacttatcat gtcgggataa gtcttctttg	8280

tctaccactt ttccaagcca ttccctaatac attggggagt tgacattatc attataaatc	8340
catttttcag ttccagtatt gtatgggtggg tcaatataga tgcaatctat cttaccagca	8400
tatgtaggta gtagagcttt caacgccttt aaattgtccc catgaatgat aagattgtca	8460
tgaagactaa ctttatcggg cagacttttt tctggttctg ggatcaattc atgatatttt	8520
acagtcaagt gatgattttg tacaaaagac tttcccttaa acgaaatagt aggcattgat	8580
tgaacctcct tatgtagata aaaaatccta atgtgtttta ttcttagtct ctgctaactc	8640
aaggagagat tatattagag ataaaagtgt taaaaatcac gtacacgaac aaggcgtgta	8700
cgacagcccc ctcttttctc ggagtgttct tcctcttccc ccatgttgga agggcttggtg	8760
atgttgacag caccgtccct acccatcagg acttttaacc atcaacgaca gtggctacga	8820
actagaggag catttgtagg tgtcatgacc tttccaacgt agtcctcgaa agacttgggg	8880
tagtcaacta gggcttttta caagccccac ttcaaaagcc gttaggcttt aagtgggtggg	8940
tagttgacct tcggtttgtt cttctctttc ctccaaccaa ttatagaacg gtactcttga	9000
tctttgttgc tcctgttggt gtttttcctg ttccttctgt tttttatatt ggtttagttt	9060
ataagtagca tgttcacttt gggaagaagc tctattcatt acaagacat ttacatata	9120
taaggctcgg tcacgtattg ggtttaatct acctttttta gatttttcat agtctgctat	9180
tttttttatc attttactga tttcgtgcgt gtaaaaagta gaaatccctg ctttccataa	9240
ataacatacc aaccgttctt caaagtgttt atcaaagcta aagttttcac gtaactgtat	9300
aactgaaaat ctattaataa attgataggc ctgtttaata tcttcttggtg aaaaaagtaa	9360
tgacctattt attgtacgac cagttgggtc attttcgatt tcctcatcat catcaattaa	9420
taaattattt gaaacattag tagaaatatt tgataagtta ttaaagatat ttgaataatt	9480
attgggtttt atttttgaaa cggtcaccgt ttcatttttg aaaccctcca ccgtttcatt	9540
tttgaaacct tccaccgttt catttttgaa accgttggtg ataactcttt ttaacttata	9600
tttacgtttc tttttagtta cttcttcggg tttcttttcg ggttcttctt cactatcttt	9660
tttcttggt ctaccacctg ttttacctaa ttcttttagaa acggaattat agtctttatc	9720
ccaatctctt aatttttcta gtgggtttata ctttctttct atttcgtgta aaggatactc	9780

ataaacaatt atatTTTTtag gtttagtaga attacggtta gattcttcgt attctatgat	9840
gtctattaat ccatattccc ataaagggtt tatcaatcta taaaacttac tttttgagat	9900
tcctagtgtc tttttatata tgttctcaaa acttctaggt atgcatcat aatctcggag	9960
ttcatcttct ctatctaccc aagtatggaa cctcaaccat aaagtaaacg tttcgtgtcc	10020
tagtttatca atccaatcat cagctactac ataagtcatt ataggtaggt ttaattccca	10080
tctgttcttc ttaccacgtt ttactgggtc attattcact ttgcattcct ccaatcaatt	10140
tgttattgga gaaatgtacg aaacgtgata caatgtaaat gtatctagtt attttttatt	10200
tatagcgttt cgtacatttc tcgaaagagt atccgttggt agcgggtact cttatTTTT	10260
tgatcatcacc aaaccaacgc ctaaaacgtt taatttccat attcatatct caattaaaaa	10320
ataacacgat accagcgagt gtggagtcca caaaaagtac aaaaaagtc tacaaaagtc	10380
cataatacct ataaaataac ctcaactctt ccagaaaaac ttttgttgca gaaaggctt	10440
ttatgacgtt aatttccttt taaatcattg atataacagg gtttttaagt tagaacgtcc	10500
gacgtaattt ccaattttct attcaatttt ttcacaacgt cataactttt tgcttgtcga	10560
ttcactgcaa cccttaatac atcaacaatc tattgaagca aataacgtcc gacgttcac	10620
taccaaaacg tccgacgttg aaatgacaat aacacctatc caattagcaa gcaggctaac	10680
gcccataata taagggcgac gaaccatgag acactaattt tttccagtta tagttgtttc	10740
agcagtctgt ataagtgcga tttatctaca ccaagtattt ttgctaattt aatttttgag	10800
attttgggat tctgttctaa taactcctgc aatttaaata atttatcatc tgttttatcc	10860
tgttgttgct taatatactc ctgtcgggtc atatctcccc gtcacgacg tttttgttct	10920
tgataaatcc tatccctttc ccgctttctt ctccgtttct cattagcgtc tataatcgtc	10980
tgtaaagtct tctgttcttc tgggtgtgata tctagccatt caatcaactt tttattgcta	11040
atattgtatc cagcactggg atatcctttt tcgattgcaa tccggtagc ctcttcgtta	11100
tttcgtgctt cccacgcctt ttctgcgctc cgtgtagccc tttcaacctc ttttaagggt	11160
aaaggctcag tgaactgtaa attaagtgtc tgtgtttgat ttaaagcctc tacagggtcg	11220
ttcgtgtaac agcacaacca ataacggtat aaaaagcaaa tgatttcctt gtatccagtt	11280

acctcataat ttcgtagttc caccaatttc actatatcca ataggcgagc gtaatggagt	11340
ttgtaggtat tgaataactg aactactttc tttttacgcc cccgtttttt cttttgtgga	11400
gcgggattaa taacctcatt gagttctgga aggtaatcaa attgaatctg ccttaactca	11460
tatctgtaat cgtgccgata ttccgctctt acttccgctc cattcttact attgacgctc	11520
ccagcaatcc gaaaaacacg tgctgcatcg gttgcttttg gatctccgcc tagttccttg	11580
agttgctcta ataaataatt ttgaacagcc tgccaaagcg gaagagcctt gtaaggcact	11640
ggctcaagca accatatgag aacaaggcct tgtccactaa aaataaggat attgggttca	11700
ggaatgcttt taccatagaa ttagcttaat tgttatccgc tcacaattcc acacattatg	11760
ccacaccttg tagataaagt caacaacttt ttgcaaaatt tttcaggaat tttagcagag	11820
gttgttctgg atgtagaaca aaacatcttt ccgctcttgt gctgttagga tatctttctt	11880
ggaagctagg taggcaaggg ctacctcaaa taaatcttct tcagggtgcg ctatTTTTaa	11940
ggtgcctagt gaggtcttga ccacttcacc cataatttca gtgccgaata gtctggactg	12000
ggctgtgtag aattgtagat atgacgacag gaagagtttg tagaaacgca aaaaggccat	12060
ccgtcaggat ggccttctgc ttaatttgat gcctggcagt ttatggcggg cgtcctgccc	12120
gccaccctcc gggccgttgc ttcgcaacgt tcaaatccgc tcccggcgga tttgtcctac	12180
tcaggagagc gttcaccgac aaacaacaga taaaacgaaa ggcccagtct ttcgactgag	12240
cctttcgttt tatttgatgc ccaattcctg ttataaaaaa aggatcaatt ttgaactctc	12300
tcccaaagtt gatcccttaa cgatttagaa atccctttga gaatgtttat atacattcaa	12360
ggtaaccagc caactaatga caatgattcc tgaaaaaagt aataacaaat tactatacag	12420
ataagttgac tgatcaactt ccataggtaa caacctttga tcaagtaagg gtatggataa	12480
taaaccacct acaattgcaa tacctgttcc ctctgataaa aagctggtaa agttaagcaa	12540
actcattcca gcaccagctt cctgctgttt caagctactt gaaacaattg ttgatataac	12600
tgttttggtg aacgaaaagcc cacctaaaac aaatacgatt ataattgtca tgaaccatga	12660
tgttgtttct aaaagaaagg aagcagttaa aaagctaaca gaaagaaatg taactccgat	12720
gtttaacacg tataaaggac ctcttctatc aacaagtatc ccaccaatgt agccgaaaat	12780

aatgacactc attgttccag ggaaaataat tacacttccg atttcggcag tacttagctg	12840
gtgaacatct ttcacatata aaggaacat agagacaaac cctgctactg ttccaaatat	12900
aattccccca caaagaactc caatcataaa aggtatatatt ttccctaatac cgggatcaac	12960
aaaaggatct gttactttcc tgatatgttt tacaatatc aggaatgaca gcacgctaac	13020
gataagaaaa gaaatgctat atgatgttgt aaacaacata aaaaatacaa tgcctacaga	13080
cattagtata attcctttga tatcaaaatg accttttatc cttacttctt tctttaataa	13140
tttcataaga aacggaacag tgataattgt tatcatagga atgagtagaa gataggacca	13200
atgaatataa tgggctatca ttccaccaat cgctggaccg actccttctc ccatggctac	13260
tatcgatcca ataagaccaa atgctttacc cctattttcc tttggaatat agcgcgcaac	13320
tacaaccatt acgagtgtg gaaatgcagc tgcaccagcc ccttgaataa aacgagccat	13380
aataagtaag gaaaagaaag aatggccaac aaaccaatt accgaccga aacaatttat	13440
tataattcca aataggagta accttttgat gcctaattga tcagatagct ttccatatac	13500
agctgttcca atggaaaagg ttaacataaa ggctgtgttc acccagtttg tactcgagg	13560
tggtttatta aaatcatttg caatatcagg taatgagacg ttcaaaacca tttcatttaa	13620
tacgctaaaa aaagataaaa tgcaaagcca aattaaaatt tggttgtgtc gtaaattcga	13680
ttgtgaatag gatgtattca catttcaccc tccaataatg agggcagacg tagtttatag	13740
ggttaatgat acgcttccct cttttaattg aaccctgtta cattcattat tcattacact	13800
tcataattaa ttctcctaa acttgattaa aacattttac cacatataaa ctaagtttta	13860
aattcagtat ttcatcactt atacaacaat atggggggat cttgttgaga aatgttaa	13920
gttttcatat attcttcttc ctccgatttc tgcaaaaatg aatcattgaa tatttaaata	13980
ttcttaattt tattttacaa aaatagagag aaagatcaag tagaaattca atttcacttc	14040
ataaccgata ttaggaattt catttataac taccaataac gtgaattatg taaataagct	14100
gttcatatcg accgggaagg gcgaattctg cggtaaagct catcagcgtg gtcgtgaagc	14160
gattcacaga tgtctgcctg ttcacccgcg tccagctcgt tgagtttctc cagaagcgtt	14220
aatgtctggc ttctgataaa gcgggccatg ttaagggcgg ttttttcctg tttggtcact	14280

gatgcctccg tgtaaggggg atttctgttc atgggggtaa tgataccgat gaaacgagag	14340
aggatgctca cgatacgggt tactgatgat gaacatgccc ggttactgga acgttgtgag	14400
ggtaaacaac tggcgggtatg gatgcggcgg gaccagagaa aaatcactca ggggtcaatgc	14460
cagcgcttcg ttaatacaga tgtaggtgtt ccacagggtg gccagcagca tcctgcgatg	14520
cagatccgga acataatggt gcagggcgct gacttccgcg tttccagact ttacgaaaca	14580
cggaaaccga agaccattca tgttgttgct caggtcgcag acgttttgca gcagcagtcg	14640
cttcacgttc gctcgcgtat cggtgattca ttctgctaac cagtaaggca accccgccag	14700
cctagccggg tcctcaacga caggagcacg atcatgcgca cccgtggcca ggacccaacg	14760
ctgcccgaga tgcgccgcgt gcggctgctg gagatggcgg acgcgatgga tatgttctgc	14820
caagggttgg tttgcgcatt cacagtctc cgcaagaatt gattggctcc aattcttgga	14880
gtggtgaatc cgtagcgag gtgccgccgg cttccattca ggtcgagggtg gcccggctcc	14940
atgcaccgcg acgcaacgcg gggaggcaga caaggatatag ggcggcgcct acaatccatg	15000
ccaacccgtt ccatgtgctc gccgaggcgg cataaatcgc cgtgacgatc agcgggtccaa	15060
tgatcgaagt taggctggta agagccgcga gcgatccttg aagctgtccc tgatggctgt	15120
catctacctg cctggacagc atggcctgca acgcgggcat cccgatgccg ccggaagcga	15180
gaagaatcat aatgggggaag gccatccagc ctgcgctgc gaacgccagc aagacgtagc	15240
ccagcgcgtc ggccgcaagc ttgaagagct cttctttcag aacgctcgggt tgccgccggg	15300
cgttttttat gagacgtctc ggcctgtttg gcc	15333

<210> 2
 <211> 2502
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Expression cassette

<400> 2	
ggcctgtttg gccgggtgta caatatggac ttctctttt ctggcaacca aaccataca	60
tcgggattcc tataataacct tcgttggctt ccctaacatg taggtggcgg aggggagata	120

tacaatagaa cagataccag acaagacata atgggctaaa caagactaca ccaattacac	180
tgccctcattg atgggtggtac ataacgaact aatactgtag ccctagactt gatagccatc	240
atcatatcga agtttcacta cccctttttcc atttgccatc tattgaagta ataataggcg	300
catgcaactt cttttctttt tttttctttt ctctctcccc cgttgttgtc tcaccatatac	360
cgcaatgaca aaaaaatgat ggaagacact aaaggaaaaa attaacgaca aagacagcac	420
caacagatgt cgttgttcca gagctgatga ggggtatctc gaagcacacg aaactttttc	480
cttccttcat tcacgcacac tactctctaa tgagcaacgg tatacggcct tccttccagt	540
tacttgaatt tgaaataaaa aaaagtttgc tgtcttgcta tcaagtataa atagacctgc	600
aattattaat cttttgtttc ctcgctcattg ttctcgttcc ctttcttcct tgtttctttt	660
tctgcacaat atttcaagct ataccaagca tacaatcaac tatctcatat acaatggcta	720
actacttcaa caccttgaat ttgagacaac aattggctca attgggtaaa tgcagattca	780
tgggtagaga tgaatttgct gatggtgctt cttacttgca aggtaaaaag gttgttatcg	840
ttggttggtg tgcccaaggt ttaaatacaag gtttgaacat gagagactcc ggtttgata	900
tttcttacgc cttgagaaaa gaagccattg ctgaaaaaag agcctcttgg agaaaagcta	960
ctgaaaacgg ttttaaggtc ggtacttacg aagaattgat tccacaagct gatttgggtca	1020
ttaacttgac cccagataag caacactctg atgttggttag aactgtccaa ccattgatga	1080
aggatggtgc tgctttgggt tatttctcatg gttttaacat cgttgaagtc ggtgaacaaa	1140
tcagaaagga tatcaccgtt gttatggttg ctccaaaatg tccagggtact gaagttagag	1200
aagaatacaa gagaggtttc ggtgttccaa ctttgattgc tgttcatcca gaaaatgatc	1260
caaagggtga aggtatggct attgctaaaag cttgggctgc tgctactgggt ggtcatagag	1320
ctggtgtttt ggaatcttca tttgttgccg aagttaagtc cgatttgatg ggtgaacaaa	1380
ccattttgtg tggatatgtg caagctgggt ctttgttggtg tttcgataag ttggttgaag	1440
aagggtactga tccagcttac gctgaaaagt tgattcaatt tgggtgggaa accattaccg	1500
aagctttgaa acaagggtggt attaccttga tgatggacag attgtctaata ccagctaagt	1560
tgagagctta cgcattgtcc gaacaattga aagaaattat ggcccccttg ttccaaaagc	1620

acatggatga tattatctcc ggtgaattct cttctgggat gatggctgat tgggctaata	1680
atgataagaa gttgttgact tggagagaag aaactggtaa gactgctttt gaaactgctc	1740
cacaatacga aggtaagatt ggtgaacaag aatacttcga taagggtggt ttgatgatcg	1800
ctatgggttaa ggctgggtgt gaattggcat ttgaaactat ggttgactcc ggtatcattg	1860
aagaatctgc ttactacgaa tccttgcacg aattgccatt gattgctaac actatcgcca	1920
gaaaaagatt atacgaaatg aacgtcgtaa tctccgatac tgctgaatac ggtaattact	1980
tgttctctta cgcttgcgtt cttttgttga aaccttttat ggctgaattg caaccagggtg	2040
atttgggtaa agctattcct gaagggtgctg ttgataatgg tcaattgaga gatgttaacg	2100
aagccattag atcccatgcc attgaacaag ttggtaagaa attgagaggt tacatgaccg	2160
acatgaagag aatagctgtt gctgggttaa cgaatttctt atgatttatg atttttatta	2220
ttaaataagt tataaaaaaa ataagtgtat acaaatttta aagtgactct taggttttaa	2280
aacgaaaatt cttattcttg agtaactctt tcctgtaggt cagggttgctt tctcaggat	2340
agcatgaggt cgctcttatt gaccacacct ctaccggcat gccgagcaaa tgcctgcaaa	2400
tcgctcccca tttcacccaa ttgtagatat gctaactcca gcaatgagtt gatgaatctc	2460
ggtgtgtatt ttatgtcctc agaggacaag gccttgatgg cc	2502

<210> 3
 <211> 3039
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Expression cassette

<400> 3	
ggccttgatg gccactggta gagagcgact ttgtatgccc caattgcgaa acccgcgata	60
tccttctcga ttcttttagta cccgaccagg acaaggaaaa ggaggtcgaa acgtttttga	120
agaaacaaga ggaactacac ggaagctcta aagatggcaa ccagccagaa actaagaaaa	180
tgaagttgat ggatccaact ggcaccgctg gcttgaacaa caataccagc cttccaactt	240
ctgtaaataa cggcgggtacg ccagtgccac cagtaccgtt acctttcgggt atacctcctt	300

tccccatggt	tccaatgccc	ttcatgcctc	caacggctac	tatcacaaat	cctcatcaag	360
ctgacgcaag	ccctaagaaa	tgaataacaa	tactgacagt	actaaataat	tgccacttg	420
gcttcacata	cgttgcatat	gtcgatatag	ataataatga	taatgacagc	aggattatcg	480
taatacgtaa	tagttgaaaa	tctcaaaaat	gtgtgggtca	ttacgtaa	aatgatagga	540
atgggattct	tctatTTTTc	ctttttccat	tctagcagcc	gtcgggaaaa	cgtggcatcc	600
tctcttttcg	gctcaattgg	agtcacgctg	ccgtgagcat	cctctctttc	catatctaac	660
aactgagcac	gtaaccaatg	gaaaagcatg	agcttagcgt	tgctccaaaa	aagtattgga	720
tggttaatac	catttgctg	ttctcttctg	actttgactc	ctcaaaaaaa	aaaaatctac	780
aatcaacaga	tcgcttcaat	tacgccctca	caaaaacttt	tttcttctt	cttcgcccac	840
gttaaatttt	atccctcatg	ttgtctaacg	gatttctgca	cttgatttat	tataaaaaga	900
caaagacata	atacttctct	atcaatttca	gttattgttc	ttccttgctg	tattcttctg	960
ttcttctttt	tcttttgtca	tatataacca	taaccaagta	atacatattc	aaaatggaat	1020
tcaagtacaa	cggtaaggct	gaatccgttg	aattgaacaa	gtactctaag	accttgactc	1080
aagatccaac	tcaaccagct	acacaagcta	tgtattacgg	tattggtttc	aaggacgaag	1140
atttcaagaa	agcccaagtt	ggtatcgttt	ctatggattg	ggatggtaat	ccatgcaata	1200
tgcatTTggg	tactttgggt	tccaagatca	agtcctctgt	taatcaaaact	gatggtttga	1260
tcggttttaca	attccatacc	atcgggtgtt	ctgatgggtat	tgctaattgg	aaattgggta	1320
tgagatactc	cttggtcagt	agagaagtta	ttgccgattc	cattgaaact	aatgctgggtg	1380
ccgaatatta	cgatgctata	gttgctattc	caggttgcga	taagaatatg	ccaggttcca	1440
ttattgggtat	ggccagattg	aatagaccat	ccattatggg	ttacgggtgg	actattgaac	1500
acggtgaata	caaagggtgaa	aagttgaaca	tcgtttccgc	ctttgaatct	ttgggtcaaa	1560
agattactgg	taacatctcc	gatgaagatt	accatgggtg	tatatgcaat	gccattccag	1620
gtcaagggtc	ttgtgggtgg	atgtatactg	ctaatacttt	ggctgctgct	attgaaacct	1680
tgggtatgtc	tttgccatac	tcttcatcta	atccagccgt	ttctcaagaa	aagcaagaag	1740
aatgcgacga	aattggtttg	gccattaaga	acttgttgga	aaaggatatc	aagccatccg	1800

acatcatgac caaagaagct tttgaaaacg ccatcaccat cgttatgggtt ttgggtgggtt	1860
ctacaaatgc cgtcttgcatt attattgcaa tggctaaccg tatcgggtgtt gaaattactc	1920
aagatgactt ccaaagaatc tccgatatta ctccagtcctt ggggtgatttt aaaccatccg	1980
gtaagtacat gatggaagac ttgcataaga ttgggtgggtt gccagctgtt ttgaaatact	2040
tgttgaaaga aggtaaattg cacgggtgatt gcttgactgt tacaggtaaa acattggccg	2100
aaaacgttga aactgctttg gattttggatt tcgactccca agatattatg agaccattga	2160
agaatccaat caaggctact ggtcacttgc aaatcttgta tggtaatttg gctcaagggtg	2220
gttccgttgc taaaatctct ggtaaagaag gtgaattctt caagggtact gctagagttt	2280
ttgatgggtga acaacatttc atcgacggta tcgaatctgg tagattgcat gctgggtgatg	2340
ttgctgttat tagaaacatt ggtccagttg gtgggtccagg tatgccagaa atgttgaaac	2400
ctacttctgc tttgattggg gctggtttgg gtaaactctt tgccttgatt actgatggta	2460
gattctctgg tggactcat ggttttgtt ttggtcatat tgtccctgaa gctgttgaag	2520
gtggtttaat aggtttgggt gaagatgacg acatcatcga aattgatgcc gttaacaact	2580
ccatctcctt gaaggtttca gatgaagaaa ttgctaagag gagagccaac taccaaaaac	2640
ctactccaaa agctacaaga ggtgttttgg ctaagtttgc taaattgact agaccagctt	2700
ctgaagggtt tgttactgat ttgtaagtta attcaaatta attgatatag ttttttaattg	2760
agtattgaat ctgttttagaa ataatggaat attattttta tttattttatt tatattattg	2820
gtcggctctt ttcttctgaa ggtcaatgac aaaatgatat gaaggaaata atgatttcta	2880
aaattttaca acgtaagata tttttacaaa agcctagctc atcttttgtc atgcactatt	2940
ttactcacgc ttgaaattaa cggccagtcc actgcggagt catttcaaag tcatcctaatt	3000
cgatctatcg tttttgatag ctcatgggcc tcgatggcc	3039

<210> 4

<211> 2399

<212> DNA

<213> Artificial Sequence

<220>

<223> Expression cassette

<400> 4

ggcctcgatg gcctcgtagg aacaatttcg ggcccctgcg tgttcttctg aggttcatct	60
tttacatttg cttctgctgg ataattttca gaggcaacaa ggaaaaatta gatggcaaaa	120
agtcgtcttt caaggaaaaa tccccaccat ctttcgagat cccctgtaac ttattggcaa	180
ctgaaagaat gaaaaggagg aaaatacaaa atatactaga actgaaaaaa aaaaagtata	240
aatagagacg atatatgcc aatacttcaca atgttcgaat ctattcttca ttgacagcta	300
ttgtaaaata ataaaacatc aagaacaaac aagctcaact tgtcttttct aagaacaaag	360
aataaacaca aaaacaaaaa gtttttttaa ttttaatcaa aaaatgccag acaaaaagta	420
ttatgggtgcc gatgctatcg ttgactcctt ggtaaatcat gatgtcaagt acgttttcgg	480
tattccaggt gctaagatcg atagagtttt cgaaagattg gaacaccag ttaatccaaa	540
gtctccaaga ttgatcgta ccagacatga acaaaacgct gcttttattg ctgctggtat	600
tggtagaatt actggtaaac caggtgttgt tatgactact tctgggtccag gtgcatctaa	660
tttggctact ggtttggtta ctgctactgc tgaaggatgat ccagttttgg ctatttctgg	720
tcaagttcaa agagccgatt tgttgagatt gacccatcaa tctatgaaca atgctgcttt	780
gttcaagcca atcactaagt actctgctga agttcaagaa ccagaaaaca tctctgaagt	840
tttggccaat gcttaccaag aagctacagc tgctaaacaa ggtgcttctt ttgtttctgt	900
tccacaagat gttaccgact ctatagttag aactccagtt attaccccaa ttcaagctcc	960
aaaattgggt ccagcttctc cagttgaagc tactttgtta gctcaaaaga ttaaggctgc	1020
taagttgcca gttttgttg ttggtatgag agcttcttca ccagaagtta ctaaggctat	1080
cagaaatttg gttgctgcag ctaatttgcc tgttggtgaa acttttcaag ctgccggtgt	1140
tatttccaga gatttggaag ctaatcactt cttcggtaga gttggtttgt tcagaaatca	1200
accaggtgac atgttattga agaagtccga tttggttatt gccgttggtt acgatccaat	1260
tgaatacgaa cctagaaaatt ggaacgccga aggtaaatct agaatcgttg ttattgatgc	1320
catgagagcc gaaatcgatc ataattttca accagaaacc gaattgatcg gtgatattgc	1380
tcaaaccttg gatttcttgt tgccttacat gaagggttac gatatttccg attctgctag	1440

agcttatttg ggtgaattgc aagaaagatt gcaaaccaga gacttcgttc caaacatcga	1500
taagcaatcc aagttgaacc atccattgtc tgttattgca gccttgcaac aaagagtttc	1560
tgatgatatg actgttaccg ttgatgttgg ttcccattac atttggatgg ctagacattt	1620
cagatcctat gaacctagac acttgttgtt ctctaacggg atgcaaactt tgggtgttgc	1680
tttaccatgg gctattgcag ctgctttggg tagaccagat actcaaatag tttccgtttc	1740
tggtgatggg gggtttttgt tttctgcccaga aaattggaa accgccgtta gattgaaaca	1800
aaacatcgtt catttgatct ggaacgacgg tacttacgat atgggttaagt tccaagaaga	1860
aatgaagtac ggtgaagatg ctgctgttca ttttgggtcca gttgattttg ttaagtacgc	1920
cgaatctttt ggtgctacag gtttgagagt taatcaacct gctgatttgg aaaaggtttt	1980
ggatcaagct tttgctactg atgggtccagt cgttggtgat attccaatcg attactctga	2040
caacaaggct ttgggtaaaa ctatgttgcc agaccaattc tactaatttg cgaacacttt	2100
tattaattca tgatcacgct ctaatttgtg catttgaaat gtactctaata tctaatttta	2160
tatttttaata gatatcttga aaagtaaata cgtttttaata atatacaaaa taatacagtt	2220
taattttcaa gtttttgatc atttgttctc agaaagtga gtgggacgga gacaaagaaa	2280
ctttaaagag aaatgcaaag tgggaagaag tcagttgttt accgaccgca ctgttattca	2340
caaataattcc aattttgcct gcagaccac gtctacaaat tttggtggcc ttgttggcc	2399

<210> 5
 <211> 2623
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Expression cassette

<400> 5	
ggccttggtg gccttgagat aagcacactg caccataacc ttccttaaaa acgtagcttc	60
cagtttttgg tgggtccggc ttccttcccg attccgcccc ctaaacgcat atttttgttg	120
cctggtggca tttgcaaaat gcataacctg tgcatttaaa agattatgta tcctcttctg	180
acttttcgtg tgatgaggct cgtggaaaaa atgaataatt tatgaatttg agaacaattt	240

tgtgttggtta cggatatttta ctatggaata atcaatcaat tgaggatttt atgcaaatat	300
cgtttgaata tttttccgac cttttgagta cttttcttca taattgcata atattgtccg	360
ctgccccctt ttctgttaga cgggtgtcttg atctacttgc tatcgttcaa caccacctta	420
ttttctaact attttttttt tagctcattt gaatcagctt atgggtgatgg cacatttttg	480
cataaaccta gctgtcctcg ttgaacatag gaaaaaaaaa tatataaaca aggctctttc	540
actctccttg caatcagatt tgggttttggt ccctttattt tcatatttct tgtcatattc	600
ctttctcaat tattattttt tactcataac ctcacgcaa ataacacagt caaatcaatc	660
aaaatgtaca ccgttggtga ttacttggtg gatagattgc atgaattggg tatcgaagaa	720
atctttggtg ttccagggtga ttacaacttg caattcttgg accaaatcat ctcccacaaa	780
gatatgaagt ggggttggtaa tgctaacgaa ttgaacgctt cttatatggc tgatgggttac	840
gctagaacaa aaaaggctgc tgcttttttg actactttcg gtgttggtga attgtctgct	900
gttaatgggt tggctggttc ttacgctgaa aatttgccag ttgttgaaat cgttggttct	960
ccaacttcta aggttcaaaa cgaaggtaaa ttcgttcac atactttggc cgatgggtgat	1020
tttaagcact ttatgaagat gcacgaacca gttactgctg ctagaacttt gttgactgct	1080
gaaaatgcta ccgtcgaaat cgatagagtt ttgtccgctt tgttgaaaga aagaaagcca	1140
gtctacatca acttgcctgt tgatgttgct gctgctaaag ctgaaaaacc atctttgcca	1200
ttgaagaaag aaaactccac ttccaacacc tccgaccaag aaattttgaa caagatccaa	1260
gaatccttga agaacgctaa gaagccaatc gttattactg gtcacgaaat catcagtttc	1320
ggtttggaag agaccgtcac tcaattcatt tctaagacca agttgccaat caccactttg	1380
aacttcggta agtcatctgt tgatgaagct ttgccatctt tcttggttat ctacaatggt	1440
actttgtccg aacctaactt gaaagaattc gttgaatccg ccgatttcat cttgatgttg	1500
gggtgtaagt tgaccgattc ttctactggt gctttcactc atcatttgaa cgaaaacaag	1560
atgatctcct tgaacatcga tgaaggtaag atcttcaacg aaagaatcca aaacttcgac	1620
ttcgaatctt tgatctcctc tttgttggac ttgtccgaaa ttgaatacaa gggtaaatac	1680
atcgacaaga agcaagaaga tttcgttcca tccaatgcct tgttgtctca agatagattg	1740

tggcaagctg ttgaaaactt gacccaatct aacgaaacta tcgttgctga acaaggtact	1800
tcttttttcg gtgcctcttc cattttcttg aagtccaagt ctcatttcat tgggtcaacca	1860
ttgtgggggtt ctattgggtta tactttttcca gctgcttttg gttctcaa at tgctgacaaa	1920
gaatctagac acttggttgtt cattgggtgac gggttcattgc aattgaccgt tcaagaattg	1980
ggtttggcca ttagagaaaa gattaaccca atctgcttca tcatcaacaa cgatgggttac	2040
actgtcgaaa gagaaattca cgggtccaaat caatcctaca acgatattcc aatgtggaac	2100
tactctaagt tgccagaatc ttttgggtgct accgaagata gagttgtttc caagatagtt	2160
agaaccgaaa acgaatttgt ctccgttatg aaggaagctc aagctgatcc aaatagaatg	2220
tactggatcg aattgatctt ggctaaagaa ggtgctccaa aggttttgaa gaagatgggt	2280
aaattgttcg cagaacaaaa caagtcttaa gcgattta at ctctaattat tagttaaagt	2340
tttataagca tttttatgta acgaaaaata aattgggttca tattattact gcactgtcac	2400
ttaccatgga aagaccagac aagaagttgc cgacagtctg ttgaattggc ctggtaggc	2460
ttaagtctgg gtccgcttct ttacaaat tt ggagaatttc tcttaaacga tatgtatatt	2520
cttttcgttg gaaaagatgt cttccaaaaa aaaaaccgat gaattagtgg aaccaaggaa	2580
aaaaaaagag gtatccttga ttaaggaaca ggctgattg gcc	2623

<210> 6
 <211> 2729
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Expression cassette

<400> 6	
ggcctgattg gccaaagatg ccgatttggg cgcgaaatcct ttattttggc ttcaccctca	60
tactattatc agggccagaa aaaggaagtg tttccctcct tcttgaattg atgttacct	120
cataaagcac gtggcctctt atcgagaaaag aaattaccgt cgctcgtgat ttgtttgcaa	180
aaagaacaaa actgaaaaaa cccagacacg ctcgacttcc tgtcttccta ttgattgcag	240
cttccaat tt cgtcacacaa caaggtccta gcgacggctc acaggttttg taacaagcaa	300

tcgaagggttc tggaatggcg ggaaagggtt tagtaccaca tgctatgatg cccactgtga	360
tctccagagc aaagttcggt cgatcgctact gttactctct ctctttcaaa cagaattgtc	420
cgaatcgtgt gacaacaaca gcctgttctc acacactctt ttctttctaac caaggggggtg	480
gtttagttta gtagaacctc gtgaaactta catttacata tatataaact tgcataaatt	540
ggccaatgca agaaatacat atttgggtctt ttctaattcg tagtttttca agttcttaga	600
tgctttcttt ttctcttttt tacagatcat caaggaagta attatctact ttttacaaca	660
aatataaaac atggggtttgt tgactaaggt tgctacctct agacaattct ctactactag	720
atgtgttgcc aagaagttga acaagtactc ctacattatt accgaaccta aaggtcaagg	780
tgcttctcaa gctatgttgt atgctactgg tttcaagaaa gaagatttca aaaagccaca	840
agtcgggtgtt gggttcttgtt ggtgggtctgg taatccatgt aatatgcact tgttggactt	900
gaacaacaga tgctcccaat ctattgaaaa ggctgggttg aaagccatgc aattcaacac	960
tattgggtgtt tccgatggta tctctatggg taaaaaggt atgagatact ccttgcaatc	1020
cagagaaaatt atcgccgatt ctttcgaaac cattatgatg gctcaacatt acgatgccaa	1080
cattgctatt ccatcttgcg ataagaatat gccagggtgta atgatggcta tgggtagaca	1140
taatagacca tccattatgg ttacgggtgg tactattttg ccaggatcat caacttgtgg	1200
ttcctctaag atttccaaga acatcgatat cgtttccgcc tttcaatctt acggtgaata	1260
tatctctaag caattcaccg aagaagaaag agaagacgtt gttgaacatg cttgtccagg	1320
tccagggttca tgtgggtgga tgtatactgc taataccatg gcttctgctg ctgaagtttt	1380
gggtttgact attccaaact cttcatcttt cccagccgtc agtaaagaaa aattggctga	1440
atgtgataac attgggtgaat atatcaaaaa gaccatggaa ttgggtatct tgccaagaga	1500
tatcttgacc aaagaagctt tcgaaaacgc tatcacttac gttgttgcta cagggtggtc	1560
taccaatgct gttttacatt tgggtgctgt tgctcattct gctgggtgta agttgtctcc	1620
agatgatgtt caaagaatct ctgataccac tccattgatc ggtgatgtta aaccatctgg	1680
taagtacgtt atggccgatt tgattaacgt tgggtgtact caatccgtca ttaagtactt	1740
gtacgaaaac aatatgttgc acggtaacac tatgactgtt actggtgata ctttggctga	1800

aagagctaaa aaagctccat ctttgccaga aggtcaagaa atcattaagc cattgtctca	1860
tccaatcaag gctaattggc acttgcaaat cttgtatggc tctttggctc caggtgggtgc	1920
tgttggtaaa attactggta aagaaggta ttacttcaag ggtagagcta gagtctttga	1980
agaagaagg gctttcattg aagctttgga aagaggtgaa atcaagaagg gtgaaaagac	2040
cgttggtgtc attagatatg aaggccaag aggtgctcca ggtatgccag aaatgttgaa	2100
accatcttct gctttgatgg gttacggttt gggtaaagat gttgctttgt taaccgatgg	2160
tagattctct ggtggttctc atggtttctt gattgggtcat attgtccctg aagctgcaga	2220
aggtgggtcca attggtttgg ttagagatgg tgacgaaatt atcattgatg ccgacaacaa	2280
caagattgat ttgttgggtca gtgacaaaga aatggcccaa agaaaacaat cttgggttgc	2340
tccaccacca agatatacaa gaggtacttt gtctaagtac gccaaagtgg tttctaattgc	2400
ttctaacggg tgtgttttgg atgcctaaga aataaattga attgaattga aatcgataga	2460
tcaatTTTTT tcttttctct ttcccatcc tttagctaa aataatagtt tattttattt	2520
tttgaatatt ttttatttat atacgtatat atagactatt atttatcttt taatgattat	2580
taagattttt attaaaaaaa aattcgctcc tcttttaatg cctttatgca gttttttttt	2640
cccattcgat atttctatgt tcgggttcag cgtattttta gtttaataac tcgaaaattc	2700
tgcggttcgtt aaagctggcc tttgtggcc	2729

<210> 7
 <211> 2514
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Expression cassette

<400> 7	
ggcctttgtg gccaggattt taatctgttg gagttaaggt gaatacgttt ttccatattg	60
gggtatgcag ctcgaacctt aagtggatat tacacatccc ctcaagcaca ccattatccc	120
ttataggatt aatgtaagca acagcttaca cggaattgga aatactattc aacgatccat	180
gcatctgccg gattcggaca tgcattattcc ccaattggat atagaaaatt aacgtaaggc	240

agtatctttt cacaatgtac ttgcaacgcg gcgacttaaa gttgaagtac aacctgcagc	300
agcggctttt tgtacggtac gccaaactgt caatggataa tattgcgtag accgaaaaag	360
gtaatcctca acactacccg tgggtggatga cctaaagcag taatattggg tggaattatc	420
tcccagacgg caccgtctcc ccgagaaagc ttagccccga ggtctacctt ccatacacca	480
ctgattgctc cacgtcatgc ggccttcttt cgaggacaaa aaggcatata tcgctaaaat	540
tagccatcag aaccgttatt gttattatat tttcattacg aaagaggaga gggcccagcg	600
cgccagagca cacacggtca ttgattactt tatttggcta aagatccatc ctttctcgat	660
gtcatctctt tccattcttg tgtatTTTTg attgaaaatg atTTTTgtc cactaatTtc	720
taaaaataag acaaaaaagcc tttaagcagt ttttcatcca ttttactacg gtaaaatgaa	780
ttagtacggg atggctccca gtcgcattat ttttagattg gccgtagggg ctggggtaga	840
actagagtaa ggaacattgc tctgccctct tttgaactgt catataaata cctgacctat	900
tttattctcc attatcgtat tatctcacct ctctttttct attctcttgt aattattgat	960
ttatagtcgt aactacaaag acaagcaaaa taaaatacgt tcgctctatt aagatgttga	1020
gaactcaagc tgctagattg atctgcaatt ccagagttat tactgccaag agaactttcg	1080
ctttggctac tagagctgct gcttattcta gaccagctgc aagatttggt aagccaatga	1140
ttactaccag aggtttgaag caaatcaact tcggtggtag tgttgaaacc gtttacgaaa	1200
gagctgattg gcctagagaa aagttgttgg attacttcaa gaacgatacc ttcgccttga	1260
ttggttatgg ttctcaaggt tatggtcaag gtttgaattt gagagacaac ggtttgaacg	1320
ttatcatcgg tgtagaaaa gatggtgctt cttggaaagc tgctattgaa gatggttggg	1380
ttccaggtaa gaatttggtc actgttgaag atgccatcaa gagaggttct tacgttatga	1440
acttgttgtc tgatgctgct caatctgaaa cttggccagc tattaagcca ttattgacta	1500
agggtaagac cttgtacttc tcccatgggt tttcaccagt tttcaaggat ttgacctatg	1560
ttgaaccacc aaaggatttg gatgttatTT tggttgctcc aaagggttct ggtagaactg	1620
ttagatcttt gttcaaagaa ggtagaggta tcaactctc ttacgctggt tggaatgatg	1680
ttactggtaa agctcacgaa aaagctcaag ctttggctgt tgctattggg tctggttatg	1740

tttaccaaac caccttcgaa agagaagtca attctgactt gtatggtgaa agaggttggt	1800
tgatgggtgg tattcatggt atgtttttgg cccaatacga tgtcttgaga gaaaatggtc	1860
attctccatc tgaagctttc aacgaaacag ttgaagaagc cacccaatca ttatacccat	1920
tgattggtaa atacggtatg gactacatgt acgatgcttg ttctactact gctagaagag	1980
gtgctttgga ttggtatcca attttcaaga atgccttgaa gccagttttc caagacttgt	2040
acgaatctac taagaacggt actgaaacta agagatcctt ggaattcaac tcccaaccag	2100
attacagaga aaaattggaa aaagaattgg acaccatcag aaacatggaa atctggaagg	2160
ttggtaaaga agtcagaaag ttaagaccag aaaatcaata aacggtgggtg tttgacacat	2220
ccgccttctt aatgctttct ttcagtatta tgttattttt ttgttattcg tttttcactt	2280
ctaggctttt tgacagacta gccccgttat accaccatct ttgtgggaaa gcccctaaat	2340
tgccctgagc agtatcggtt catgtctagt ctctttaaag atgtttctta cgcgttgcgt	2400
gtaaaacatc ctctcattca agacagggtt ttctaaaagc aataggggta gtttaataat	2460
tcttatataa tcatcatata cactatTTTT agttcttaat tggcctgtct ggcc	2514

<210> 8
 <211> 2409
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Expression cassette

<400> 8	
ggcctgtctg gcccttcctt ttacagtgc ttcggaaaag cacagcgttg tccaaggga	60
caatTTTTtct tcaagttaat gcataagaaa tatctTTTTt tatgttttagc taagtaaaag	120
cagcttggag taaaaaaaaa aatgagtaaa tttctcgatg gattagtttc tcacaggtaa	180
cataacaaaa accaagaaaa gcccgcttct gaaaactaca gttgacttgt atgctaaagg	240
gccagactaa tgggaggaga aaaagaaacg aatgtatatg ctcatTTtaca ctctatatca	300
ccatatggag gataagttgg gctgagcttc tgatccaatt tattctatcc attagttgct	360
gatatgtccc accagccaac acttgatagt atctactcgc cattcacttc cagcagcgcc	420

agtagggttg ttgagcttag taaaaatgtg cgcaccacaa gcctacatga ctccacgtca	480
catgaaacca caccgtgggg ccttgttgcg ctaggaatag gatatgcgac gaagacgctt	540
ctgcttagta accacaccac attttcaggg ggtcgatctg cttgcttcct ttactgtcac	600
gagcggccca taatcgcgct ttttttttaa aaggcgcgag acagcaaaca ggaagctcgg	660
gtttcaacct tcggagtggg cgcagatctg gagactggat ctttacaata cagtaaggca	720
agccaccatc tgcttcttag gtgcatgcga cggatatccac gtgcagaaca acatagtctg	780
aagaagggggg ggaggagcat gttcattctc tgtagcagta agagcttggt gataatgacc	840
aaaactggag tctcgaaatc atataaatag acaatatatt ttcacacaat gagatttgta	900
gtacagttct atttctctc ttgcataaat aagaaattca tcaagaactt ggtttgatat	960
ttaccaaca cacacaaaa acagtacttc actaaattta cacacaaaac aaaatgtcct	1020
accagaaaa gttcgaagggt attgccattc aatcacacga agattggaag aacccaaaaa	1080
agactaagta cgatccaaag ccattctacg atcatgatat cgacattaag attgaagctt	1140
gtggtgtttg cggttccgat attcattgtg ctgctgggtca ttggggtaat atgaagatgc	1200
cattggttgt tggtcacgaa atcgttggtg aagttgttaa gttgggtcca aagtctaact	1260
ccggtttgaa agttggtcaa agagttgggtg ttggtgctca agttttttct tgtttggaat	1320
gcgatagatg caagaacgat aacgaaccat actgtactaa gttcgttacc acttactctc	1380
aaccatacga agatggttat gtttctcaag gtggttacgc taactacgtt agagttcacg	1440
aacatttcgt tgttccaatc ccagaaaaca tcccatctca tttggctgct ccattattgt	1500
gtggtggttt gactgtttat tccccattgg ttagaaatgg ttgtggtcca ggtaaaaagg	1560
ttggtatagt tggtttgggt ggtattgggt ctatgggtac tttgatttct aaagctatgg	1620
gtgctgaaac ctacgtcatt tctagatcct ctagaaaaag agaagatgca atgaagatgg	1680
gtgccgatca ttatattgct actttggaag aagggtgactg gggtgaaaag tacttcgata	1740
cttttgattt gatcgttgct tgcgcttctt ccttgactga tattgatttc aacattatgc	1800
caaaggccat gaaggttggg ggtagaatag tttccatttc cattccagaa caacacgaaa	1860
tgttgtcctt gaaaccatac ggtttgaagg ccgtttctat ttcttattct gctttggggtt	1920

ccatcaaaga attgaatcaa ttattgaagt tggtttccga aaaggacatc aagatttggg	1980
ttgaaacttt gccagttggt gaagctggtg ttcattgaagc ttttgaaaga atggaaaagg	2040
gtgacgtcag atacagattc actttggttg gttacgacaa agaattctcc gactaaataa	2100
agcaatcttg atgaggataa tgatTTTTTT ttgaatatac ataaatacta ccgTTTTTct	2160
gctagatttt gtgaagacgt aaataagtac atattacttt ttaagccaag acaagattaa	2220
gcattaactt tacccttttc tcttctaagt ttcaatacta gttatcactg tttaaaagtt	2280
atggcgagaa cgtcggcggt taaaatatat taccctgaac gtggtgaatt gaagttctag	2340
gatggtttta agatttttcc tttttgggaa ataagtaaac aatatattgc tgccttggcc	2400
tatgtggcc	2409

<210> 9
 <211> 4469
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Expression cassette

<400> 9	
ggcctatgtg gcctccctgc gcggctaaag ttaaggatgc aaaaaacata agacaactga	60
agttaattta cgtcaattaa gttttccagg gtaatgatgt tttgggcttc cactaattca	120
ataagtatgt catgaaatac gttgtgaaga ggatccagaa ataatgaaaa gaaacaacga	180
aactgggtcg gcctgttggt tcttttcttt accacgtgat ctgcggcatt tacaggaagt	240
cgcgcgtttt gcgcagttgt tgcaacgcag ctacggctaa caaagcctag tggaactcga	300
ctgatgtggt agggcctaaa actggtggtg acagctgaag tgaactattc aatccaatca	360
tgtcatggct gtcacaaaga ctttgcggac cgcacgtacg aacacatacg tatgctaata	420
tgtgttttga tagtaccag tgatcgcaga cctgcaattt tttttaggt ttggaagaat	480
atataaagggt tgcactcatt caagatagtt tttttcttgt gtgtctattc attttattat	540
tgtttgttta aatgttaaaa aaaccaagaa cttagtttca aattaaattc atcacacaaa	600
caaacaaaac aaaatgtcct cctccaaaaa attggctggt ttgagagata acttctcctt	660

gttgggtgaa aagaacaaga ttttggttgc caacagaggt gaaatcccaa tcagaatttt	720
tagatccgcc cacgaattgt ccatgagaac tattgctatc tactcccacg aagatagatt	780
gtctatgcac agattgaaag ctgatgaagc ctacgttatt ggtgaagaag gtcaatatac	840
tccagttggt gcttatttgg ctatggacga aattattgaa atcgccaaga agcacaaggt	900
tgatttcatt catccagggt acggtttctt gtccgaaaac tctgaatttg ctgataaggt	960
tgtaaggct ggtattactt ggattgggtcc accagctgaa gttattgatt ctgttggtga	1020
caaagtttcc gctagacatt tggctgctag agctaattgtt ccaactgttc cagggtactcc	1080
aggccaatt gaaactgttc aagaagcttt ggatttcgtc aacgaatatg gttaccaggt	1140
tattatcaag gctgctttcg gtgggtgggtg tagagggtatg agagttgtta gagaagggtga	1200
tgatgttgct gatgcttttc aaagagctac ttctgaagct agaactgctt ttggtaatgg	1260
tacttgcttc gtcgaaagat tcttgataa gccaaagcac atcgaagttc aattattggc	1320
tgataaccac ggtaacgttg ttcacttggt tgaaagagat tgctccgttc aaagaagaca	1380
ccaaaagggt gttgaagttg ctccagctaa aactttgcc aagagaagtta gagatgccat	1440
tttgactgat gctgttaagt tggctaaagt ctgtgggttat agaaatgctg gtactgccga	1500
attcttggtc gataatcaaa acagacacta cttcatcgaa atcaatccta gaatccaagt	1560
cgaacatacc atcaccgaag aaattaccgg tatcgatata gtttccgccc aaattcaa	1620
tgctgctggt gctactttga ctcaattggg tttgttgcaa gataagatta ccaccagagg	1680
tttctccatt caatgtagaa ttactaccga agatccatcc aagaacttcc aaccagatac	1740
tggtagattg gaagtttaca gatctgccgg tggtaacggt gttagattgg acggtggtaa	1800
tgcatatgct ggtgcaacta tttctccaca ctatgattct atgttgggtca agtggtcttg	1860
ttccggttct acttacgaaa tcgttagaag aaagatgatc agagccttga tcgaattcag	1920
aatcagaggt gttaagacca acatcccatt tttgttgacc ttgttgacta acccagtttt	1980
catcgaaggt acttactgga ctaccttcat tgatgatacc ccacaattat tccaaatggt	2040
ttcctcacia aacagagcac aaaagtgtt gcattacttg gcagatttgg ctgttaacgg	2100
ttcttctatt aagggtcaaa ttgggttgcc aaagtgaag tctaattccat ctgttcaca	2160

cttgcacgat gctcaaggta atgttattaa cgttaccaa tcagctccac catcaggttg	2220
gagacaagtt ttgttggaag aaggtccttc cgaattcgct aagcaagtta gacaattcaa	2280
cggctactttg ttgatggata ccacttggag agatgctcat caatctttgt tggctactag	2340
agttagaacc catgatttgg ctacaattgc tccaactact gctcatgctt tagctgggtgc	2400
ttttgctttg gaatgttggg gtgggtgctac attcgatgtt gctatgagat tcttgcacga	2460
agatccttgg gaaagattga gaaagttgag atctttgggtt ccaaaccatcc ctttccaaat	2520
gttgttgaga ggtgctaata gtgttgctta ttcttcattg ccagataacg ccattgatca	2580
ctttgttaag caagctaagg ataacgggtg cgatatcttc agagtattcg atgctttgaa	2640
cgacttggaa caattgaagg ttgggtgtta cgctgttaag aaagctgggtg gtgttgtaga	2700
agctactgtt tgttattctg gtgacatgtt gcaaccagggt aagaagtaca atttggacta	2760
ctacttggaa gtcgtcgaaa agatagttca aatgggtact catatcttgg gtatcaaaga	2820
tatggctgggt actatgaagc cagctgctgc taagttgttg attgggtcct tgagaactag	2880
atacccgat ttgccaatcc atgttcattc tcatgattct gctgggtacag ctgttgcttc	2940
tatgactgct tgtgccttgg ctgggtgctga tgttgtagat gttgcaatca attctatgtc	3000
cggtttgact tctcaaccat ccattaacgc tttgttagct tctttggaag gtaacattga	3060
caccgggtatt aacgtcgaac acgttagaga attggatgct tactgggctg aaatgagatt	3120
gttgtactct tgttttgaag ccgatttgaa aggtccagat cctgaagttt atcaacacga	3180
aattccagggt ggtcaattga ctaacttgtt gttccaagct caacaattag gtttgggtga	3240
acaatgggca gaaactaaga gagcttatag agaagccaac tacttgtag gtgatatcgt	3300
taaggttacc ccaacttcta aagttgtagg tgatttggcc caattcatgg tcagtaacaa	3360
attgacctcc gatgacatta gaagattggc taattccttg gatttcccag attccgttat	3420
ggattttttc gaaggtttga tcgggtcaacc atacgggtgg tttccagaac cattgagatc	3480
tgatgttttg agaaacaaga gaagaaaatt gacttgcaga ccaggtttgg aattggaacc	3540
atttgatttg gaaaagatca gagaagactt gcaaaacaga ttcggtgaca tcgatgaatg	3600
tgatgttgcc tcttacaata tgtacccaag agtctacgaa gatttccaaa agattagaga	3660

aacctacggt gacttgtcag ttttgccaac taagaatttc ttggctccag ctgaaccaga	3720
tgaagaaatt gaagttacca tcgaacaagg taagaccttg atcattaagt tgcaagcagt	3780
tggtgacttg aacaaaaaga ctggtcaaag agaagtctac ttcgaattga acggtgaatt	3840
gagaaaaatc agagttgccg acaagtccca aaacattcaa tcagttgcta agccaaaagc	3900
cgatgttcat gatactcatc aaataggtgc tccaatggcc ggtgttatta tagaagttaa	3960
ggttcacaaa ggttccttgg tcaaaaaggg tgaatctatt gctgttttgt ccgccatgaa	4020
gatggaaatg gttgtttctt ctctgctga ttggtcaagtt aaggatgttt tcattaagga	4080
cggtgaatcc gttgatgctt ctgatttggt gggtgtcttg gaagaagaaa ccttgccacc	4140
atctcaaaaag aagtaaattt aactccttaa gttactttaa tgatttagtt tttattatta	4200
ataattcatg ctcatgacat ctcatataca cgtttataaa acttaaataag attgaaaatg	4260
tattaaagat tcctcaggga ttcgattttt ttggaagttt ttgttttttt ttccttgaga	4320
tgctgtagta tttgggaaca attatacaat cgaaagatat atgcttacat tcgaccgttt	4380
tagccgtgat cattatccta tagtaacata acctgaagca taactgacac tactatcatc	4440
aatacttgtc acatgaggcc ttggtggcc	4469

<210> 10
 <211> 3090
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Expression cassette

<400> 10	
ggccttggtg gccgaataaa aaacacgctt tttcagttcg agtttatcat tatcaatact	60
gccatttcaa agaatacgta aataattaat agtagtgatt ttcctaactt tatttagtca	120
aaaaattagc cttttaattc tgctgtaacc cgtacatgcc caaaataggg ggcggttac	180
acagaatata taacatcgta ggtgtctggg tgaacagttt attcctggca tccactaaat	240
ataatggagc ccgcttttta agctggcatc cagaaaaaaa aagaatccca gcacccaaat	300
attgttttct tcaccaacca tcagttcata ggtccattct cttagcgcaa ctacagagaa	360

caggggcaca aacaggcaaa aaacgggcac aacctcaatg gagtgatgca acctgcctgg	420
agtaaagtat gacacaaggc aattgaccca cgcatgtatc tatctcattt tcttacacct	480
tctattacct tctgctctct ctgatttgga aaaagctgaa aaaaaagggtt gaaaccagtt	540
ccctgaaatt attcccctac ttgactaata agtatataaa gacggtaggt attgattgta	600
attctgtaaa tctatttctt aaacttctta aattctactt ttatagttag tctttttttt	660
agtttttaaaa caccaagaac ttagtttcga ataaacacac ataaacaaac aaaatgatca	720
gacaatccac cttgaagaac ttcgctatta agagatgctt ccaacatatc gcttacagaa	780
atactccagc catgagatct gttgctttgg ctcaaagatt ttactcctca tcctccagat	840
attactctgc ttctccattg ccagcttcta aaagaccaga accagctcca tcttttaacg	900
ttgatccatt ggaacaacca gctgaaccat ctaaattggc taaaaagttg agagccgaac	960
cagatatgga tacttctttt gttggtttga ctgggtgtca aatcttcaac gaaatgatgt	1020
ccagacaaaa cgttgatacc gtttttggtt atccagggtg tgctattttg ccagtttatg	1080
atgctattca caactccgac aagttcaact tcgttttgcc aaaacatgaa caagggtgtg	1140
gtcatatggc tgaaggttat gctagagctt ctggtaaacc aggtgttggt ttggttactt	1200
ctgggtccagg tgctactaat gttgttactc caatggctga tgctttcgct gatggtattc	1260
caatgggtgt ttttactggc caagttccaa catccgctat tgggtacagat gcttttcaag	1320
aagctgacgt tgttgggtatt tctagatctt gtactaagtg gaacgtcatg gttaagtccg	1380
ttgaagaatt gccattgaga atcaacgaag ctttcgaaat tgctacatca ggtagaccag	1440
gtccagtttt ggttgatttg cctaaagatg ttactgccgc cattttgaga aatccaattc	1500
caactaagac taccttgcca tccaatgcct tgaatcaatt gacttctaga gccaagatg	1560
aattcgtcat gcaatctatt aacaaggctg ccgatttgat caacttggca aaaaaaccag	1620
tcttgatatg tgggtgccgt attttgaatc atgctgatgg tccaagatta ttgaaagaat	1680
tgtccgacag agcccaaatt ccagttacta ctactttaca aggtttgggt tccttcgatc	1740
aagaagatcc aaaatccttg gacatgttgg gtatgcatgg ttgtgctact gctaatttgg	1800
ctgttcaaaa cgccgacttg attattgctg ttgggtgctag atttgatgat agagtcactg	1860

gtaacatttc caagtttgct ccagaagcta ggagagctgc tgctgaaggt agaggtggta	1920
ttattcattt tgaagtctcc ccaaagaata tcaacaaggt tggtcaaacc caaatcgccg	1980
ttgaaggtga tgcaactact aatttgggta agatgatgtc taagatcttc ccagtcaaag	2040
aaagatctga atggttcgct caaatcaaca agtgggaagaa agaataccca tacgcctaca	2100
tggaagaaac tccaggttct aaaatcaagc cacaaccgt tatcaagaag ttgtctaagg	2160
ttgctaacga taccggtaga catgttatcg ttactactgg tggttggtcaa catcaaattgt	2220
gggctgctca acattggact tggagaaatc ctcatacttt cattacatct ggtggtttgg	2280
gtactatggg ttatggtttg ccagctgcta ttggtgctca agttgctaaa ccagaatcct	2340
tggttattga tattgatggg gatgcctctt tcaacatgac cttgactgaa ttatcttccg	2400
ctgttcaagc tgggtactcca gttaagattt tgatcttgaa caacgaagaa caaggtatgg	2460
tcacacaatg gcaaagtttg ttctacgaac atagatactc ccatacccat caattgaacc	2520
cagatttcat taagttggct gaagccatgg gtttaaaagg tttgagagtc aaaaagcaag	2580
aagaattgga cgctaagttg aaagaattcg tttctactaa gggtcctgtc ttgttggaag	2640
ttgaagttga taagaagggt ccagtccttg ctatggttgc tgggtggttca ggtttggatg	2700
aattcattaa ctttgacca gaagtcgaaa gacaacaaac tgaattgaga cataagagaa	2760
ctgggtggtaa gcactaagtg aattttacttt aaatcttgca tttaaataaa ttttcttttt	2820
atagctttat gacttagttt caattttatat actattttta tgacattttc gattcattga	2880
ttgaaagctt tgtgtttttt cttgatgcgc tattgcattg ttcttgtctt tttcgccaca	2940
tgtaatatct gtagtagata cctgatacat tgtggatgct gagtgaaatt ttagttaata	3000
atggaggcgc tcttaataat tttggggata ttggcttttt tttttaaaagt ttacaaatga	3060
attttttccg ccaggatggc cttagtggcc	3090

<210> 11

<211> 1810

<212> DNA

<213> Artificial Sequence

<220>

<223> Expression cassette

<400> 11

ggccttagtg gccgccgtac cacttcaaaa cacccaagca cagcatacta aatttcccct	60
ctttcttcct ctaggggtgtc gttaattacc cgtactaaag gtttggaataa gaaaaaagag	120
accgcctcgt ttctttttct tcgtcgaaaa aggcaataaa aatttttatc acgtttcttt	180
ttcttgaaaa tttttttttt tgattttttt ctctttcgat gacctcccat tgatatttaa	240
gttaataaac ggtcttcaat ttctcaagtt tcagtttcat ttttcttggt ctattacaac	300
tttttttact tcttgctcat tagaaagaaa gcatagcaat ctaatctaag ttttaattac	360
aaaatgccac attctgttac cccatccatt gaacaagatt ccttgaagat tgctattttg	420
ggtgctgctg gtggtattgg tcaatctttg tctttgttgt tgaaggccca attgcaatac	480
caattgaaag aatccaatag atccgtcacc catattcatt tggccttgta cgatgttaat	540
caagaagcca ttaacggtgt taccgctgat ttgtctcata ttgatacccc aatctccgtt	600
tcttcacatt ctccagccgg tggtagagaa aattgcttgc ataatgcttc catcgttggt	660
attccagctg gtgttccaag aaaaccaggt atgactagag atgatttggt caacgttaac	720
gccggtatca tttctcaatt ggggtgattct attgctgaat gctgcatgtt gtctaagggt	780
ttcgttttgg ttatctccaa cccagttaac tctttgggtc cagttatggt cagtaacatc	840
ttgaagaacc atccacaatc tagaaactcc ggtatcgaaa gaagaattat ggggtgttacc	900
aagttggata tcgttagagc ttctaccttc ttgagagaaa tcaacatcga atctggtttg	960
actccaagag tcaattctat gccagatgtt cctgttattg gtggtcattc tgggtgaaacc	1020
attatcccctt tgttctccca atctaacttc ttgtccagat tgaacgaaga tcaattgaag	1080
tacttgatcc acagagttca atacggtggt gatgaagttg ttaaggctaa aaatggtaag	1140
ggttctgcta ctttgtctat ggctcatgct gggtacaaat gcgttggtca attcgtttcc	1200
ttgttggttg gtaacatcga acaaatccat ggtacttact acgttccatt gaaggatgct	1260
aacaatttcc caattgctcc aggtgctgat caattattgc cattgggtga tgggtgctgat	1320
tacttcgcta ttccattgac tattactacc aagggtgttt cctacgttga ttacgatatt	1380
gtcaacagaa tgaacgatat ggaaagaaat caaatgttgc caatctgtgt ctccaattg	1440

aagaagaaca ttgacaaggg tttggaattc gttgcttcta gatctgcttc ttcctaagga	1500
gattgataag acttttctag ttgcatatct tttatattta aatcttatct attagttaat	1560
tttttgtaat ttatccttat atatagtctg gttattctaa aatatcattt cagtatctaa	1620
aaattcccct cttttttcag ttatatctta acaggcgaca gtccaaatgt tgatttatcc	1680
cagtccgatt catcagggtt gtgaagcatt ttgtcaatgg tcgaaatcac atcagtaata	1740
gtgcctctta cttgcctcat agaatttctt tctcttaacg tcaccgtttg gtcttttggc	1800
ctacttggcc	1810

<210> 12
 <211> 3106
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Expression cassette

<400> 12	
ggcctacttg gccgggcgcc ataaccaagg tatctataga ccgccaatca gcaaactacc	60
tccgtacatt catgttgcac ccacacattt atacaccag accgcgacaa attaccata	120
aggttgtttg tgacggcgtc gtacaagaga acgtgggaac tttttaggct caccaaaaaa	180
gaaagaaaaa atacgagttg ctgacagaag cctcaagaaa aaaaaattc ttcttcgact	240
atgctggagg cagagatgat cgagccggta gttaactata tatagctaaa ttggttccat	300
caccttcttt tctggtgtcg ctcttctag tgctatttct ggcttttcct atttttttt	360
ttccattttt ctttctctct ttctaataa taaattctct tgcattttct atttttctct	420
ctatctattc tacttgttta ttcccttcaa ggttttttt taaggagtac ttgttttag	480
aatatacggg caacgaacta taattaacta aacatggatg atcaattgaa gcaatctgcc	540
ttggatttcc atgaatttcc agttccagggt aagatccaag tttctccaac aaaaccattg	600
gctacccaaa gagatttggc tttggcttat tctccagggt ttgctgctcc atgtttggaa	660
attgaaaaag atccattgaa ggcttacaag tacactgcta gaggtaattt ggttgccgtt	720
atttctaata gtactgccgt tttgggtttg ggtaatatgt gtgctttggc tggtaaacca	780

gttatggaag gtaaagggtgt tttgttcaaa aagttcgccg gtatcgatgt tttcgacatc	840
gaagttgatg aattggatcc agacaagttc attgaagttg ttgctgcttt ggaacctact	900
ttcggtggtta ttaacttgga agatattaag gctccagaat gcttctacat cgaacaaaag	960
ttgagagaaa gaatgaacat cccagttttc cacgatgatc aacatggtac tgctattatt	1020
tctaccgctg ctattttgaa cggtttgaga gttgttgaaa agaacatctc cgatgtcaga	1080
atggttgttt ctggtgctgg tgctgctgct attgcttgta tgaatttggt gggtgccttg	1140
ggttttacaaa agcacaacat cgttgtttgc gattccaaag gtgttatcta ccaaggtaga	1200
gaacctaaaca tggctgaaac aaaagctgct tatgctgttg ttgatgatgg taagagaacc	1260
ttggatgatg ttattgaagg tgccgatatt ttcttgggtt gttctgggtcc aaaagtcttg	1320
actcaagaaa tgggttaagaa aatggctaga gcccgaatga ttttggcttt agctaacca	1380
gaaccagaaa tcttgccacc attggctaaa gaagttagac cagacgctat tatctgtacc	1440
ggtagatctg attacccaaa tcaagttaac aacgtcttgt gcttcccatt catTTTTtaga	1500
ggtgcttttg atgttggtgc taccgctatt aacgaagaaa tgaagttggc tgctgttaga	1560
gctattgctg aattggctca tgctgaacaa tcagaagttg ttgcatctgc ttatggtgat	1620
caagatttgt cttttgggtcc agaatatatc atcccaaagc cattcgatcc aagattgatc	1680
gttaagattg ctccagctgt tgctaaaagct gctatggaat ctggtgttgc tactagacca	1740
attgctgatt tcgatgttta catcgacaag ttgaccgaat tcgtttacaa gaccaacttg	1800
ttcatgaagc caattttctc acaagctaga aaggctccaa agagagttgt tttgccagaa	1860
ggtgaagaag ctagagtttt acacgctact caagaattag ttaccttggg tttggctaag	1920
ccaattttga ttggtagacc aaacgtcatc gaaatgagaa tccaaaagt aggtttacaa	1980
atcaaggccg gtgttgactt cgaaatcggt aacaatgaat ctgacccaag attcaaagaa	2040
tactggaccg aatacttcca aatcatgaag agaagagggtg tcactcaaga acaagctcaa	2100
agagctttga tttctaacct aactgttatt ggtgccatca tggttcaaag aggtgaagct	2160
gacgctatga tttgtggtac tgttggtgat taccatgaac acttctctgt tgtcaagaac	2220
gttttcggtt atagagatgg tgttcatact gctggtgcta tgaatgcttt gttgttgcca	2280

tctggaaca ccttcattgc tgatacttac gttaacgatg aaccagatgc tgaagaattg	2340
gctgaaatta ctttgatggc tgctgaaacc gttagaagat ttggtattga acctagagtt	2400
gccttgttgt cccattctaa ttttggttct tcagactgcc catcctcttc aaaaatgaga	2460
caagctttgg aattggtcag agaaagagca ccagaattga tgattgatgg tgaaatgcat	2520
ggtgatgctg ctttggttga agctattaga aatgatagaa tgccagactc ctcattgaaa	2580
ggttctgcta acattttggt catgccaaat atggaagctg ccagaatttc ttacaacttg	2640
ttgagagtct cttccagtga aggtgtaact gttggtccag ttttgatggg tgttgctaaa	2700
ccagttcatg ttttgactcc aattgcctcc gttagaagaa tcgttaatat ggttgctttg	2760
gccgttgttg aagctcaaac tcaaccattg taagagtaat aattattgct tccatataat	2820
atTTTTatat acctcttatt tttatgtatt agttaattaa gtatttttat ctatctgctt	2880
atcattttct tttcatatag ggggggttgg tgttttcttg cccatcagat tgatgtcctc	2940
caactcggca ctattttaca aagggttttt ttgtaagaga aggagaagac agatactaaa	3000
ccatacgtta ctcgaaacaa aaaaaaaaaa aatggaaaaa gctgctatca acaaaagacg	3060
gcctcatcaa acctaaagaa accatgtcag cgtggcctgt atggcc	3106

<210> 13
 <211> 2699
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Expression cassette

<400> 13	
ggcctgtatg gccctactta ttcccttcga gattatatct aggaacccat caggttggtg	60
gaagattacc cgttctaaga cttttcagct tcctctattg atgttacacc tggacacccc	120
ttttctggca tccagttttt aatcttcagt ggcatgtgag attctccgaa attaattaaa	180
gcaatcacac aattctctcg gataccacct cggttgaaac tgacaggtgg tttgttacgc	240
atgctaatagc aaaggagcct atataccttt ggctcggctg ctgtaacagg gaatataaag	300
ggcagcataa tttaggagtt tagtgaactt gcaacattta ctattttccc ttcttacgta	360

aatatTTTTc tttttaattc taaatcaatc tttttcaatt ttttgtttgt attcttttct	420
tgcttaaadc tataactaca aaaaacacat acataaacta aaaatgtggc caatccaaca	480
atccagatta tactcttcta acaccagatc tcataaggct actactacta gagaaaacac	540
cttccaaaag ccatactccg atgaagaagt tactaagact ccagttgggt ctagagccag	600
aaagattttt gaagctccac atccacatgc tactagattg actgttgaag gtgctattga	660
atgcccattg gaatccttcc aattattgaa ctcacctttg ttcaacaagg gttctgcttt	720
cactcaagaa gaaagagaag ctttcaactt ggaagctttg ttgccaccac aagttaacac	780
tttggatgaa caattggaaa gatcctacaa gcaattgtgc tacttgaaaa ctccattggc	840
caagaacgat ttcattgactt ctttgagagt tcaaaacaag gtcttgtact tcgccttgat	900
cagaagacac atcaaagaat tgggtccaat catctacact ccaactgaag gtgatgctat	960
tgctgcttat tctcacagat tcagaaaacc agaagggtgc tttttggata tcaccgaacc	1020
agattccatt gaatgtagat tggctactta tgggtggtgat aaggatgttg attacatcgt	1080
tgtttccgac tccgaaggta ttttgggtat tgggtgatcaa ggtatagggtg gtgtcagaat	1140
tgctattttct aagttggctt tgatgacctt gtgtgggtgg attcatccag gtagagtttt	1200
gccagtttgt ttggatgttg gtacaaacaa caaaaagttg gccagagatg aattgtacat	1260
gggtaacaag ttctccagaa tcagaggtaa gcaatacgac gatttcttgg aaaagttcat	1320
caaggccgtt aagaaggttt atccatccgc tgttttacac ttcgaagatt tcggtgttaa	1380
gaacgccaga agattattag aaaagtacag atacgaattg ccatccttca acgatgacat	1440
tcaagggtact ggtgctgttg ttatggcttc tttgattgct gcattgaagc acactaacag	1500
agatttgaaa gataccagag tcttgatcta tgggtgctggt tctgctgggt taggtattgc	1560
agatcaaadc gttaaccaca tgggttactca tgggtgtcgac aaagaagaag ccagaaaaaa	1620
gatcttcttg atggacagaa gaggtttgat attgcaatcc tacgaagcta attctacccc	1680
agctcaacat gtttacgcta aatctgatgc tgaatgggct ggtattaaca ctagatcatt	1740
gcacgatgtt gtcgaaaacg ttaagcctac ttgtttgggt ggttggttcta ctcaagctgg	1800
tgcttttaca caagatgtcg ttgaagaaat gcataagcac aatccaagac ctatcatctt	1860

cccattgtct aacccaacta gattgcatga agctgttcca gctgatttga tgaagtggac	1920
taacaacaat gctttgggtg ctactgggtc tccatttcca ccagttgatg gttacagaat	1980
ctctgaaaac aacaactgct actcctttcc aggtattggg ttgggtgctg ttttgtctag	2040
agctactaca attaccgaca agatgatttc tgctgccgtt gatcaattgg ctgaattgtc	2100
tccattgaga gaagggtgatt ctagaccagg tttattgcca ggtttggata ccattactaa	2160
tacctctgct agattggcaa ctgccgttat tttacaagct ttggaagaag gtactgccag	2220
aatcgaacaa gaacaagttc cagggtggtc tccaggtgaa actgttaagg ttccaagaga	2280
ttttgacgaa tgcttgcaat gggttaaggc tcaaattgtg gaaccagttt acagaccaat	2340
gattaagggt caacacgac catccgttca caccaatcaa ttgtaagatt aatataatta	2400
tataaaaata ttatcttctt ttctttatat ctagtgttat gtaaaataaa ttgatgacta	2460
cggaaagctt ttttatattg tttctttttc attctgagcc acttaaattt cgtgaatgtt	2520
cttgtaaggg acggtagatt tacaagtgat acaacaaaaa gcaaggcgct ttttctaata	2580
aaaagaagaa aagcatttaa caattgaaca cctctatatc aacgaagaat attactttgt	2640
ctctaaatcc ttgtaaaatg tgtacgatct ctatatgggt tactcaggcc tctttggcc	2699

<210> 14
 <211> 1475
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Expression cassette

<400> 14	
ggcctctttg gccagatctg tttagcttgc ctcgtccccg ccgggtcacc cggccagcga	60
catggaggcc cagaataccc tccttgacag tcttgacgtg cgcagctcag gggcatgatg	120
tgactgtcgc ccgtacattt agcccataca tccccatgta taatcatttg catccataca	180
ttttgatggc cgcacggcgc gaagcaaaaa ttacggctcc tcgctgcaga cctgcgagca	240
gggaaacgct cccctcacag acgcgttgaa ttgtccccac gccgcgcccc tgtagagaaa	300
tataaaagggt taggatttgc cactgagggt cttctttcat atacttcctt ttaaaatctt	360

gctaggatac agttctcaca tcacatccga acataaaca ccatgggtaa ggaaaagact	420
cacgtttcga ggccgcgatt aaattccaac atggatgctg atttatatgg gtataaatgg	480
gctcgcgata atgtcgggca atcagggtgcg acaatctatc gattgtatgg gaagcccgat	540
gcgccagagt tgtttctgaa acatggcaaa ggtagcggtg ccaatgatgt tacagatgag	600
atggtcagac taaactggct gacggaattt atgcctcttc cgaccatcaa gcattttatc	660
cgtactcctg atgatgcatg gttactcacc actgcgatcc ccggcaaaac agcattccag	720
gtattagaag aatatcctga ttcagggtgaa aatattgttg atgcgctggc agtgttcctg	780
cgccggttgc attcgattcc tgtttgtaat tgtcctttta acagcgatcg cgtatttcgt	840
ctcgcctcagg cgcaatcacg aatgaataac ggtttggttg atgcgagtga ttttgatgac	900
gagcgtaatg gctggcctgt tgaacaagtc tggaaagaaa tgcataagct tttgccattc	960
tcaccggatt cagtcgtcac tcatgggtgat ttctcacttg ataaccttat ttttgacgag	1020
gggaaattaa taggttgtat tgatgttgga cgagtcggaa tcgcagaccg ataccaggat	1080
cttgccatcc tatggaactg cctcgggtgag ttttctcctt cattacagaa acggcttttt	1140
caaaaatatg gtattgataa tcctgatatg aataaattgc agtttcattt gatgctcgat	1200
gagtttttct aatcagtact gacaataaaa agattcttgt tttcaagaac ttgtcatttg	1260
tatagttttt ttatattgta gttgttctat tttaatcaaa tgtagcgtg atttatat	1320
tttttcgcct cgacatcatc tgcccagatg cgaagttaag tgcgcagaaa gtaatatcat	1380
gcgtcaatcg tatgtgaatg ctggctgcta tactgctgtc gattcgatac taacgccgcc	1440
atccagtgtc gaaaacgagc tcggccttct tggcc	1475

<210> 15
 <211> 2508
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Expression cassette

<400> 15	
ggcctgtttg gccgggtgta caatatggac ttctctttt ctggcaacca aaccataca	60

tcgggattcc tataataacct tcgttggctc ccctaacatg taggtggcgg aggggagata	120
tacaatagaa cagataccag acaagacata atgggctaaa caagactaca ccaattacac	180
tgcctcattg atgggtggtac ataacgaact aatactgtag ccctagactt gatagccatc	240
atcatatcga agtttcacta cccctttttcc atttgccatc tattgaagta ataataggcg	300
catgcaactt cttttctttt tttttctttt ctctctcccc cgttgttgtc tcaccatatc	360
cgcaatgaca aaaaaatgat ggaagacact aaaggaaaaa attaacgaca aagacagcac	420
caacagatgt cgttgttcca gagctgatga ggggtatctc gaagcacacg aaactttttc	480
cttccttcat tcacgcacac tactctctaa tgagcaacgg tatacggcct tccttcaggt	540
tacttgaatt tgaaataaaaa aaaagtttgc tgtcttgcta tcaagtataa atagacctgc	600
aattattaat cttttgtttc ctcgctcattg ttctcgttcc ctttcttcct tgtttctttt	660
tctgcacaat atttcaagct ataccaagca tacaatcaac tatctcatat acaatgttaa	720
ccagcaacag ctattctctt catgtcggtc atgtaacctc tcaatttctt accaacttgt	780
tcaatggcat gggatctaata ggcttcgtta acatctctca attgaccatt atcaacagca	840
ccttcaggaa tagctttacc caaatcacct ggttgcaatt cagccataaa aggtttcaac	900
aaaggaacgc aagcgtaaga gaacaagtaa ttaccgtatt cagcagtatc ggagataacg	960
acgttcattt cgtataatct ttttctggcg atagtgttag caatcaatgg caattcgtgc	1020
aaggattcgt agtaagcaga ttcttcaatg ataccggagt caaccatagt ttcaaatgcc	1080
aattcaacac cagccttaac catagcgatc atcaaaacac ctttatcgaa gtattcttgt	1140
tcaccaatct taccttcgta ttgtggagca gtttcaaaag cagtcttacc agtttcttct	1200
ctccaagtca acaacttctt atcatcatta gcccaatcag ccatcatacc agaagagaat	1260
tcaccggaga taatatcatc catgtgcttt tggaacaaaag gggccataat ttctttcaat	1320
tgttcggaca atgcgtaagc tctcaactta gctggattag acaatctgtc catcatcaag	1380
gtaataccac cttgtttcaa agcttcggta atggttttcc aaccaaattg aatcaacttt	1440
tcagcgtaag ctggatcagt accttcttca accaacttat cgaaacacaa caaagaacca	1500
gcttgcaaca taccacacaa aatggtttgt tcacccatca aatcggactt aacttcggca	1560

acaaatgaag attccaaaac accagctcta tgaccaccag tagcagcagc ccaagcttta	1620
gcaatagcca taccttcacc ctttggatca ttttctggat gaacagcaat caaagttgga	1680
acaccgaaac ctctcttgta ttcttctcta acttcagtac ctggacattt tggagcaacc	1740
ataacaacgg tgatatcctt tctgatttgt tcaccgactt caacgatggt aaaaccatga	1800
gaataaccca aagcagcacc atccttcac aatggttgga cagttctaac aacatcagag	1860
tgttgcttat ctgggggtcaa gttaatgacc aaatcagctt gtggaatcaa ttcttcgtaa	1920
gtaccgacct taaaaccgtt ttcagtagct tttctccaag aggctctttt ttcagcaatg	1980
gcttcttttc tcaaggcgta agaaatatcc aaaccggagt ctctcatggt caaaccttga	2040
tttaaaccctt gggcaccaca accaacgata acaacctttt taccttgcaa gtaagaagca	2100
ccatcagcaa attcatctct acccatgaat ctgcatttac ccaattgagc caattgttgt	2160
ctcaaattca aggtgttgaa gtagttagcc attaagcgaa tttcttatga tttatgattt	2220
ttattattaa ataagttata aaaaaataa gtgtatacaa attttaaagt gactcttagg	2280
ttttaaaacg aaaattctta ttcttgagta actctttcct gtaggtcagg ttgctttctc	2340
aggtatagca tgaggctgct cttattgacc acacctctac cggcatgccg agcaaagcc	2400
tgcaaatcgc tccccatttc acccaattgt agatatgcta actccagcaa tgagttgatg	2460
aatctcgggtg tgtattttat gtcctcagag gacaaggcct tgatggcc	2508

<210> 16
 <211> 3045
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Expression cassette

<400> 16	
ggccttgatg gccactggta gagagcgact ttgtatgccc caattgcgaa acccgcgata	60
tccttctcga ttcttttagta cccgaccagg acaaggaaaa ggaggtcgaa acgtttttga	120
agaaacaaga ggaactacac ggaagctcta aagatggcaa ccagccagaa actaagaaaa	180
tgaagttgat ggatccaact ggcaccgctg gcttgaacaa caataccagc cttccaactt	240

ctgtaaataa cggcggtagc ccagtgccac cagtaccgtt acctttcggt atacctcctt	300
tcccatgtt tccaatgccc ttcattgcctc caacggctac tatcacaaat cctcatcaag	360
ctgacgcaag ccctaagaaa tgaataacaa tactgacagt actaaataat tgcctacttg	420
gcttcacata cgttgcatac gtcgatatag ataataatga taatgacagc aggattatcg	480
taatacgtaa tagttgaaaa tctcaaaaat gtgtgggtca ttacgtaa atgatagga	540
atgggattct tctatttttc ctttttccat tctagcagcc gtcgggaaaa cgtggcatcc	600
tctctttcgg gctcaattgg agtcacgctg ccgtgagcat cctctctttc catactaac	660
aactgagcac gtaaccaatg gaaaagcatg agcttagcgt tgctccaaaa aagtattgga	720
tggttaatac catttgtctg ttctcttctg actttgactc ctcaaaaaaa aaaaatctac	780
aatcaacaga tcgcttcaat tacgccctca caaaaacttt tttccttctt cttcgccac	840
gttaaatttt atccctcatg ttgtctaacg gatttctgca cttgatttat tataaaaaga	900
caaagacata atacttctct atcaatttca gttattgttc ttccttgctg tattcttctg	960
ttcttctttt tcttttgtca tatataacca taaccaagta atacatattc aaaatgttac	1020
aaatcagtaa cacaaccttc agaagctggc ctagtcaatt tagcaaaact agccaaaaca	1080
cctcttgtag cttttggagt aggtttttgg tagttggctc tcctcttagc aatttcttca	1140
tctgaaacct tcaaggagat ggagttgtta acggcatcaa tttcgatgat gtcgtcatct	1200
tcaaccaaac ctattaaacc accttcaaca gcttcaggga caatatgacc aacaacaaaa	1260
ccatgagtac caccagagaa tctaccatca gtaatcaagg cacaagattt acccaaacca	1320
gcaccaatca aagcagaagt aggtttcaac atttctggca tacctggacc accaactgga	1380
ccaatgtttc taataacagc aacatcacca gcatgcaatc taccagattc gataccgtcg	1440
atgaaatgtt gttcaccatc aaaaactcta gcagtaccct tgaagaattc accttcttta	1500
ccagagattt tagcaacgga accaccttga gccaaattac catacaagat ttgcaagtga	1560
ccagtagcct tgattggatt cttcaatggc ctcataatat cttgggagtc gaaatccaaa	1620
tccaaagcag tttcaacggt ttccggccaat gttttacctg taacagtcaa gcaatcaccg	1680
tgcaatttac cttctttcaa caagtatttc aaaacagctg gcaaaccacc aatcttatgc	1740

aagtcttcca tcatgtactt accggatggt ttaaaatcac ccaagactgg agtaatatcg	1800
gagattcttt ggaagtcatac ttgagtaatt tcaacaccga tagcgtagc cattgcaata	1860
atatgcaaga cggcatttgt agaaccaccc aaaaccataa cgatggatgat ggcgttttca	1920
aaagcttctt tggatcatgat gtcggatggc ttgatatacct tttccaacaa gttcttaatg	1980
gccaaaccaa tttcgtcgca ttcttcttgc ttttcttgag aaacggctgg attagatgaa	2040
gagtatggca aagacatacc caaggtttca atagcagcag ccaaagtatt agcagtatac	2100
ataccaccac aagcaccttg acctggaatg gcattgcata taacaccatg gtaatcttca	2160
tcggagatgt taccagtaat cttttgaccc aaagattcaa aggcggaaac gatgttcaac	2220
ttttcacctt tgtattcacc gtgttcaata gtaccaccgt aaaccataat ggatggctta	2280
ttcaatctgg ccataccaat aatggaacct ggcatattct tatcgcaacc tggaatagca	2340
actatagcat cgtaatatc ggcaccagca ttagtttcaa tggaatcggc aataacttct	2400
ctactgacca aggagtatct catacccaat ttaccattag caataccatc agaaacaccg	2460
atggtatgga attgtaaacc gatcaaacca tcagtttgat taacagagga cttgatcttg	2520
gaacccaaag tacccaaatg catattgcat ggattaccat cccaatccat agaaacgata	2580
ccaacttggg ctttcttgaa atcttcgtcc ttgaaaccaa taccgtaata catagcttgt	2640
gtagctgggt gagttggatc ttgagtcaag gtcttagagt acttggtcaa ttcaacggat	2700
tcgaccttac cgttgtactt gaattccatt aagttaattc aaattaattg atatagtttt	2760
ttaatgagta ttgaatctgt ttagaaataa tggaatatta tttttattta tttatttata	2820
ttattggtcg gctcttttct tctgaaggtc aatgacaaaa tgatatgaag gaaataatga	2880
tttctaaaat ttacaacgt aagatatattt tacaaaaagcc tagctcatct tttgtcatgc	2940
actattttac tcacgcttga aattaacggc cagtccactg cggagtcatt tcaaagtcac	3000
cctaatacga ctatcgtttt tgatagctca ttggcctcga tggcc	3045

<210> 17
 <211> 2405
 <212> DNA
 <213> Artificial Sequence

<220>

<223> Expression cassette

<400> 17

ggcctcgatg gcctcgtagg aacaatttcg ggcccctgcg tgttcttctg aggttcatct	60
tttacatttg cttctgctgg ataattttca gaggcaacaa ggaaaaatta gatggcaaaa	120
agtcgtcttt caaggaaaaa tccccaccat ctttcgagat cccctgtaac ttattggcaa	180
ctgaaagaat gaaaaggagg aaaatacaaa atatactaga actgaaaaaa aaaaagtata	240
aatagagacg atatatgcc aatacttcaca atgttcgaat ctattcttca tttgcagcta	300
ttgtaaaata ataaaacatc aagaacaaac aagctcaact tgtcttttct aagaacaaag	360
aataaacaca aaaacaaaaa gtttttttaa ttttaataca aaaatgttag tagaattggg	420
ctggcaacat agttttaccc aaagccttgt tgtcagagta atcgattgga atatcaacaa	480
cgactggacc atcagtagca aaagcttgat ccaaaacctt ttccaaatca gcaggttgat	540
taactctcaa acctgtagca ccaaaagatt cggcgtactt aacaaaatca actggaccaa	600
aatgaacagc agcatcttca ccgtacttca tttcttcttg gaacttaacc atatcgtaag	660
taccgtcgtt ccagatcaaa tgaacgatgt tttgtttcaa tctaacggcg gtttccaatt	720
cttgggcaga aaacaaaaaa ccaccatcac cagaaacgga aactatttga gtatctggtc	780
taaccaaagc agctgcaata gcccatggta aagcaacacc caaagtttgc ataccgtag	840
agaacaacaa gtgtctaggt tcataggatc tgaaatgtct agccatccaa atgtaatggg	900
aaccaacatc aacggtaaca gtcatatcat cagaaactct ttgttgcaag gctgcaataa	960
cagacaatgg atggttcaac ttggattgct tatcgatgtt tggaacgaag tctctggttt	1020
gcaatctttc ttgcaattca cccaaataag ctctagcaga atcggaataa tcgtaaccct	1080
tcatgtaagg caacaagaaa tccaaggttt gagcaatatc accgatcaat tcggtttctg	1140
gttgaaaatt atgatcgatt tcggctctca tggcatcaat aacaacgatt ctagatttac	1200
cttcggcgtt ccaatttcta gggttcgtatt caattggatc gtaaccaacg gcaataacca	1260
aatcggactt cttcaataac atgtcacctg gttgatttct gaacaaacca actctaccga	1320
agaagtgatt agcttccaaa tctctggaaa taacaccggc agcttgaaaa gtttcaacaa	1380

caggcaaatt agctgcagca accaaatttc tgatagcctt agtaacttct ggtgaagaag	1440
ctctcatacc aaccaacaaa actggcaact tagcagcctt aatcttttga gctaacaaaag	1500
tagcttcaac tggagaagct ggacccaatt ttggagcttg aattggggta ataactggag	1560
ttctaactat agagtcggta acatcttgtg gaacagaaac aaaagaagca ccttgtttag	1620
cagctgtagc ttcttggtaa gcattggcca aaacttcaga gatgttttct ggttcttgaa	1680
cttcagcaga gtacttagtg attggcttga acaaagcagc attgttcata gattgatggg	1740
tcaatctcaa caaatcggct ctttgaactt gaccagaaat agccaaaact ggatcacctt	1800
cagcagtagc agtaacaaaa ccagtagcca aattagatgc acctggacca gaagtagtca	1860
taacaacacc tgggtttacca gtaattctac caataccagc agcaataaaa gcagcgtttt	1920
gttcatgtct ggtaacgatc aatcttggag actttggatt aactgggtgt tccaatcttt	1980
cgaaaactct atcgatctta gcacctggaa taccgaaaac gtacttgaca tcatgattaa	2040
ccaaggagtc aacgatagca tcggcaccat aatacttttt gtctggcatt aatttgcgaa	2100
cacttttatt aattcatgat cacgctctaa tttgtgcatt tgaaatgtac tctaattcta	2160
attttatatt tttaatgata tcttgaaaag taaatacggt tttaatatat aaaaaataat	2220
acagtttaat tttcaagttt ttgatcattt gttctcagaa agttgagtgg gacggagaca	2280
aagaaacttt aaagagaaat gcaaagtggg aagaagtcag ttgtttaccg accgcactgt	2340
tattcacaaa tattccaatt ttgcctgcag acccacgtct acaaattttg gtggccttgt	2400
tggcc	2405

<210> 18
 <211> 2629
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Expression cassette

<400> 18	
ggccttggttgccttgagat aagcacactg cacccatacc ttccttaaaa acgtagcttc	60
cagtttttgg tggttccggc ttccttcccg attccgcccg ctaaacgcat atttttgttg	120

cctgggtggca tttgcaaaat gcataaccta tgcattttaa agattatgta tcctcttctg	180
acttttcgtg tgatgaggct cgtggaaaaa atgaataatt tatgaatttg agaacaattt	240
tgtgttggtta cgggtatttta ctatggaata atcaatcaat tgaggatttt atgcaaatat	300
cgtttgaata tttttccgac cttttgagta cttttcttca taattgcata atattgtccg	360
ctgccccctt ttctgttaga cgggtgtcttg atctacttgc tatcgttcaa caccacctta	420
ttttctaact attttttttt tagctcattt gaatcagctt atgggtgatgg cacatttttg	480
cataaaccta gctgtcctcg ttgaacatag gaaaaaaaaa tatataaaca aggctctttc	540
actctccttg caatcagatt tgggtttgtt ccttttattt tcatatttct tgtcatattc	600
ctttctcaat tattattttt tactcataac ctacgcaaa ataacacagt caaatcaatc	660
aaaatgttaa gacttgtttt gttctgcaa caatttacc atcttcttca aaacctttgg	720
agcaccttct ttagccaaga tcaattcgat ccagtacatt ctatttggat cagcttgagc	780
ttccttcata acggagacaa attcgttttt ggttctaact atcttgga aaactctatc	840
ttcggtagca ccaaaagatt ctggcaactt agagtagttc cacattggaa tatcgttgta	900
ggattgattt ggaccgtgaa tttctctttc gacagtgtaa ccatcgttgt tgatgatgaa	960
gcagattggg ttaatctttt ctctaattggc caaacccaat tcttgaacgg tcaattgcaa	1020
tgaaccgtca ccaatgaaca acaagtgtct agattctttg tcagcaattt gagaacccaa	1080
agcagctgga aaagtataac caatagaacc ccacaatggg tgaccaatga aatgagactt	1140
ggacttcaag aaaatggaag aggcaccgaa aaaagaagta ctttgttcag caacgatagt	1200
ttcgtagat tgggtcaagt tttcaacagc ttgccacaat ctatcttgag acaacaaggc	1260
attggatgga acgaaatctt cttgcttctt gtcgatgtat ttacccttgt attcaatttc	1320
ggacaagtcc aacaaagagg agatcaaaga ttcgaagtcg aagttttgga ttctttcggt	1380
gaagatctta ctttcacga tgttcaagga gatcatcttg ttttcgttca aatgatgagt	1440
gaaagcacca gtagaagaat cgggtcaactt aacacccaac atcaagatga aatcggcgga	1500
ttcaacgaat tctttcaagt taggttcgga caaagtacca ttgtagatac ccaagaaaga	1560
tggcaaagct tcatcaacag atgacttacc gaagttcaaa gtggtgattg gcaacttggt	1620

cttagaaatg aattgagtga cggctcttttc caaaccgaaa ctgatgattt cgtgaccagt	1680
aataacgatt ggcttcttag cgcttcttcaa ggattcttgg atcttggtca aaatttcttg	1740
gtcggagggtg ttggaagtgg agttttcttt cttcaatggc aaagatgggtt tttcagcttt	1800
agcagcagca acatcaacag gcaagttgat gtagactggc tttctttctt tcaacaaagc	1860
ggacaaaact ctatcgattt cgacggtagc attttcagca gtcaacaaag ttctagcagc	1920
agtaactgggt tcgtgcatct tcataaagtg cttaaaatca ccatcggcca aagtatgatg	1980
aacgaattta ccttcgtttt gaaccttaga agttggagaa ccaacgattt caacaactgg	2040
caaattttca gcgtaagaac cagccaaacc attaacagca gacaattcac caacaccgaa	2100
agtagtcaaa aaagcagcag ccttttttgt tctagcgtaa ccatcagcca tataagaagc	2160
gttcaattcg ttagcattac caaccactt catatctttg tgggagatga tttgggtcaa	2220
gaattgcaag ttgtaatcac ctggaacacc aaagatttct tcgataccca attcatgcaa	2280
tctatccaac aagtaatcac caacgggtga cattaagcga tttaatctct aattattagt	2340
taaagtttta taagcatttt tatgtaacga aaaataaatt ggttcatatt attactgcac	2400
tgtcacttac catggaaaga ccagacaaga agttgccgac agtctgttga attggcctgg	2460
ttaggcttaa gtctgggtcc gcttctttac aaatttggag aatttctctt aaacgatatg	2520
tatattcttt tcgttggaaa agatgtcttc caaaaaaaaa accgatgaat tagtggaacc	2580
aaggaaaaaa aaagagggtat ccttgattaa ggaacaggcc tgattggcc	2629

<210> 19
 <211> 2735
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Expression cassette

<400> 19	
ggcctgattg gccaaagatg ccgatttggg cgcgaaatcct ttattttggc ttcaccctca	60
tactattatc agggccagaa aaaggaagtg tttccctcct tcttgaattg atgttacct	120
cataaagcac gtggcctctt atcgagaaag aaattaccgt cgctcgtgat ttgtttgcaa	180

aaagaacaaa actgaaaaaa cccagacacg ctcgacttcc tgtcttccta ttgattgcag	240
cttccaatth cgtcacacaa caaggtccta gcgacggctc acaggttttg taacaagcaa	300
tcgaaggttc tggaatggcg ggaaagggtt tagtaccaca tgctatgatg cccactgtga	360
tctccagagc aaagttcgtt cgatcgtact gttactctct ctctttcaaa cagaattgtc	420
cgaatcgtgt gacaacaaca gcctgttctc acacactctt ttctttctaac caaggggggtg	480
gttttagttta gtagaacctc gtgaaactta catttacata tatataaact tgcataaatt	540
ggatcaatgca agaaatacat atttggctct ttctaatctg tagtttttca agttcttaga	600
tgctttcttt ttctcttttt tacagatcat caaggaagta attatctact ttttacaaca	660
aatataaaac atgttaggca tccaaaacac aaccgttaga agcattagaa accaacttgg	720
cgtacttaga caaagtacct cttgtatatc ttgggtgggtg agcaacccaa gattgttttc	780
tttgggccat ttctttgtca ctgaccaaca aatcaatctt gttgttgtcg gcatcaatga	840
taatttcgtc accatctcta accaaaccaa ttggaccacc ttctgcagct tcagggacaa	900
tatgaccaat caagaaacca tgagaaccac cagagaatct accatcgggt aacaaagcaa	960
catctttacc caaacgtaa cccatcaaag cagaagatgg tttcaacatt tctggcatac	1020
ctggagcacc tcttggacct tcatatctaa tgacaacaac ggtcttttca cccttcttga	1080
tttcacctct ttccaaagct tcaatgaaag caccttcttc ttcaaagact ctagctctac	1140
ccttgaagta agtaccttct ttaccagtaa ttttaccac agcaccacct ggagccaaag	1200
aaccatacaa gatttgcaag tgaccattag ccttgattgg atgagacaat ggcttaatga	1260
tttcttgacc ttctggcaaa gatggagctt ttttagctct ttcagccaaa gtatcaccag	1320
taacagtcac agtggtaccg tgcaacatat tgttttcgta caagtactta atgacggatt	1380
gagtaccacc aacgttaatc aaatcggcca taacgtactt accagatggg ttaaaatcac	1440
cgatcaatgg agtggtatca gagattcttt ggaaatcatc tggagacaac ttaacaccag	1500
cagaatgagc aacagcaacc aaatgtaaaa cagcattggg agaaccacct gtagcaacaa	1560
cgtaagtgat agcgttttct aaagcttctt tgggtcaagat atctcttggc aagataccca	1620
attccatggg ctttttgata tattcaccaa tgttatcaca ttcagccaat ttttctttac	1680

tgacggctgg gaaagatgaa gagtttggaa tagtcaaacc caaaacttca gcagcagaag	1740
ccatgggtatt agcagtatac ataccaccac atgaacctgg acctggacaa gcatgttcaa	1800
caacgtcttc tctttcttct tcggtgaatt gcttagagat atattcaccg taagattgaa	1860
aggcggaaac gatatcgatg ttcttggaaa tcttagagga accacaagtt ggatgacctg	1920
gcaaaatagt accaccgtaa accataatgg atgggtctatt atgtctaccc atagccatca	1980
ttacacctgg catattctta tcgcaagatg gaatagcaat gttggcatcg taatgttgag	2040
ccatcataat ggtttcgaaa gaatcggcga taatttctct ggattgcaag gagtatctca	2100
taccttttgt acccatagag ataccatcgg aaacaccaat agtgttgaat tgcattgctt	2160
tcaaaccagc cttttcaata gattgggagc atctgttggt caagtccaac aagtgcatat	2220
tacatggatt accagaccac caacaagaac caacaccgac ttgtggcttt ttgaaatctt	2280
ctttcttgaa accagtagca tacaacatag cttgagaagc accttgacct ttaggttcgg	2340
taataatgta ggagtacttg ttcaacttct tggcaacaca tctagtagta gagaattgtc	2400
tagaggtagc aaccttagtc aacaaaccca ttaagaaata aattgaattg aattgaaatc	2460
gatagatcaa tttttttctt ttctctttcc ccatccttta cgctaaaata atagtttatt	2520
ttattttttg aatatTTTTT atttatatac gtatatatag actattatTT atcttttaat	2580
gattattaag atttttatta aaaaaaaatt cgctcctctt ttaatgcctt tatgcagttt	2640
ttttttccca ttcgatattt ctatgttcgg gttcagcgta ttttaagttt aataactcga	2700
aaattctgcg ttcgttaaag ctggcctttg tggcc	2735

<210> 20
 <211> 2520
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Expression cassette

<400> 20	
ggcctttgtg gccaggattt taatctgttg gagttaaggt gaatacgttt ttccatattg	60
gggtatgcag ctcgaacctt aagtggatatg tacacatccc ctcaagcaca cccattaccc	120

ttataggatt aatgtaagca acagcttaca cggaattgga aatactattc aacgatccat	180
gcatctgcca gattcggaca tgcataattcc ccaattggat atagaaaatt aacgtaaggc	240
agtatctttt cacaatgtac ttgcaacgcg gcgacttaaa gttgaagtac aacctgcagc	300
agcggctttt tgtacggtac gccaaactgt caatggataa tattgcgtag accgaaaaag	360
gtaatcctca acactacccg tgggtggatga cctaaagcag taatattggg tggaattatc	420
tcccagacgg caccgtctcc ccgagaaagc ttagccccga ggtctacctt ccatacacca	480
ctgattgctc cacgtcatgc ggccttcttt cgaggacaaa aaggcatata tcgctaaaat	540
tagccatcag aaccgttatt gttattatat tttcattacg aaagaggaga gggcccagcg	600
cgccagagca cacacgggtca ttgattactt tatttggcta aagatccatc ctttctcgat	660
gtcatctctt tccattcttg tgtatttttg attgaaaatg attttttgtc cactaatttc	720
taaaaataag acaaaaagcc tttaagcagt ttttcatcca ttttactacg gtaaaatgaa	780
ttagtacggg atggctccca gtcgcattat ttttagattg gccgtagggg ctggggtaga	840
actagagtaa ggaacattgc tctgccctct tttgaactgt catataaata cctgacctat	900
tttattctcc attatcgtat tatctcacct ctctttttct attctcttgt aattattgat	960
ttatagtcgt aactacaaag acaagcaaaa taaaatacgt tcgctctatt aagatgttat	1020
tgattttctg gtcttaactt tctgacttct ttaccaacct tccagatttc catgtttctg	1080
atgggtgtcca attctttttc caatttttct ctgtaatctg gttgggagtt gaattccaag	1140
gatctcttag tttcagtacc gttcttagta gattcgtaca agtcttgga aactggcttc	1200
aaggcattct tgaaaattgg ataccaatcc aaagcacctc ttctagcagt agtagaacia	1260
gcatcgtaca tgtagtccat accgtattta ccaatcaatg ggtataatga ttgggtggct	1320
tcttcaactg tttcgttgaa agcttcagat ggagaatgac cattttctct caagacatcg	1380
tattgggcca aaaacatacc atgaatacca cccatcaaac aacctctttc accatacaag	1440
tcagaattga cttctctttc gaagggtgggt ttggtaaacat aaccagaacc aatagcaaca	1500
gccaaagctt gagctttttc gtgagcttta ccagtaacat cattccaaac agcgtaagag	1560
gagttgatac ctctaccttc tttgaacaaa gatctaacag ttctaccaga accctttgga	1620

gcaacaaaaa taacatccaa atccttttggg ggttcaacat gggtaaatac cttgaaaact	1680
ggtgaaaaaac catgggagaa gtacaagggtc ttacccttag tcaataatgg cttaatagct	1740
ggccaagttt cagattgagc agcatcagac aacaagttca taacgtaaga acctctcttg	1800
atggcatcct caacagtga caaattctta cctggaaccc aaccatcttc aatagcagct	1860
ttccaagaag caccatcttt tctaacaccg atgataacgt tcaaaccgtt gtctctcaaa	1920
ttcaaaccct gaccataacc ttgagaacca taaccaatca aggcgaagggt atcgttcttg	1980
aagtaatcca acaacttttc tctaggccaa tcagctcttt cgtaaaccgtt ttcaacagta	2040
ccaccgaagt tgatttgctt caaacctctg gtagtaatca ttggcttaac aaatcttgca	2100
gctggtctag aataagcagc agctctagta gccaaaagcga aagttctctt ggagtaata	2160
actctggaat tgcagatcaa tctagcagct tgagttctca acattaaacg gtggtgtttg	2220
acacatccgc cttcttaatg ctttctttca gtattatggt atttttttgt tattcgtttt	2280
tcacttctag gctttttgac agactagccc cggtatacca ccatctttgt gggaaagccc	2340
ctaaattgcc ctgagcagta tcgtttcatg tctagtctct ttaaagatgt ttcttacgcg	2400
ttgcgtgtaa aacatcctct cattcaagac agggttttct aaaagcaata ggggtagttt	2460
aataattctt atataatcat catatacact attttttagt ctttaattggc ctgtctggcc	2520

<210> 21
 <211> 2415
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Expression cassette

<400> 21	
ggcctgtctg gcccttccct ttacagtgct ttcggaaaag cacagcgttg tccaagggaa	60
caatttttct tcaagttaat gcataagaaa tatctttttt tatgttttagc taagtaaaag	120
cagcttggag taaaaaaaaa aatgagtaaa tttctcgatg gattagtttc tcacaggtaa	180
cataacaaaa accaagaaaa gcccgcttct gaaaactaca gttgacttgt atgctaaagg	240
gccagactaa tgggaggaga aaaagaaacg aatgtatatg ctcatattaca ctctatatca	300

ccatatggag gataagttgg gctgagcttc tgatccaatt tattctatcc attagttgct	360
gatatgtccc accagccaac acttgatagt atctactcgc cattcacttc cagcagcgcc	420
agtagggttg ttgagcttag taaaaatgtg cgcaccacaa gcctacatga ctccacgtca	480
catgaaacca caccgtgggg ccttgttgcg ctaggaatag gatatgcgac gaagacgctt	540
ctgcttagta accacaccac attttcaggg ggtcgatctg cttgcttcct ttactgtcac	600
gagcggccca taatcgcgct ttttttttaa aaggcgcgag acagcaaaca ggaagctcgg	660
gtttcaacct tcggagtggg cgcagatctg gagactggat ctttacaata cagtaaggca	720
agccaccatc tgcttcttag gtgcatgcga cggatatccac gtgcagaaca acatagtctg	780
aagaaggggg ggaggagcat gttcattctc tgtagcagta agagcttggg gataatgacc	840
aaaactggag tctcgaaatc atataaatag acaatatatt ttcacacaat gagatttgta	900
gtacagttct attctctctc ttgcataaat aagaaattca tcaagaactt ggtttgatat	960
ttcaccaaca cacacaaaaa acagtacttc actaaattta cacacaaaac aaaatgttag	1020
tcggagaatt ctttgtcgta accaaccaaa gtgaatctgt atctgacgtc acccttttcc	1080
attctttcaa aagcttcatg aacaccagct tcaccaactg gcaaagtttc aacccaaatc	1140
ttgatgtcct tttcggaac caacttcaat aattgattca attctttgat ggaacccaaa	1200
gcagaataag aaatagaaac ggccttcaaa ccgtatgggt tcaaggacaa catttcgtgt	1260
tgttctggaa tggaaatgga aactattcta ccaccaacct tcatggcctt tggcataatg	1320
ttgaaatcaa tatcagtcaa ggaagaagcg cagacaacga tcaaatacaa agtatcgaag	1380
tacttttcac ccagtcacc ttcttccaaa gtagcaatat aatgatcggc acccatcttc	1440
attgcatctt ctctttttct agaggatcta gaaatgacgt aggtttcagc acccatagct	1500
ttagaaatca aagtacccat agaaccaata ccacccaaac caactatacc aaccttttta	1560
cctggaccac aaccatttct aaccaatggg gaataaacag tcaaaccacc acacaataat	1620
ggagcagcca aatgagatgg gatgttttct gggattggaa caacgaaatg ttcgtgaact	1680
ctaacgtagt tagcgtaacc accttgagaa acataaccat cttcgtatgg ttgagagtaa	1740
gtggtaacga acttagtaca gtatggttcg ttatcgttct tgcattctatc gcattccaaa	1800

caagaaaaaa cttgagcacc aacaccaact ctttgacca ctttcaaacc ggagtttagac	1860
tttggaccca acttaacaac tttaccaacg atttcgtgac caacaaccaa tggcatcttc	1920
atattacccc aatgaccagc agcacaatga atatcggaac cgcaaacc acaagcttca	1980
atcttaatgt cgatatcatg atcgtagaat ggctttggat cgtacttagt cttttttggg	2040
ttcttccaat cttcgtgtga ttgaatggca ataccttcga acttttctgg gtaggacatt	2100
aaataaagca atcttgatga ggataatgat ttttttttga atatacataa atactaccgt	2160
ttttctgcta gattttgtga agacgtaaat aagtacatat tacttttttaa gccaagacaa	2220
gattaagcat taactttacc ctttttctctt ctaagtttca atactagtta tcactgttta	2280
aaagttatgg cgagaacgtc ggcggttaaa atatattacc ctgaacgtgg tgaattgaag	2340
ttctaggatg gtttaaagat ttttcctttt tgggaaataa gtaaacaata tattgctgcc	2400
ttggcctatg tggcc	2415

<210> 22
 <211> 4475
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Expression cassette

<400> 22	
ggcctatgtg gcctccctgc gcggctaaag ttaaggatgc aaaaaacata agacaactga	60
agttaattta cgtcaattaa gttttccagg gtaatgatgt tttgggcttc cactaattca	120
ataagtatgt catgaaatac gttgtgaaga ggatccagaa ataatgaaaa gaaacaacga	180
aactgggtcg gcctgttggt tcttttcttt accacgtgat ctgcggcatt tacaggaagt	240
cgcgcgtttt gcgcagttgt tgcaacgcag ctacggctaa caaagcctag tggaactcga	300
ctgatgtggt agggcctaaa actggtggtg acagctgaag tgaactattc aatccaatca	360
tgtcatggct gtcacaaaga ccttgcggaac cgcacgtacg aacacatacg tatgctaata	420
tgtgttttga tagtaccag tgatcgaga cctgcaattt tttttaggt ttggaagaat	480
atataaaggt tgcactcatt caagatagtt tttttcttgt gtgtctattc attttattat	540

tgtttgttta aatgttaaaa aaaccaagaa cttagtttca aattaaattc atcacacaaa	600
caaacaaaac aaaatgttac ttcttttgag atggtggcaa ggtttcttct tccaagacaa	660
ccaacaaatc agaagcatca acggattcac cgtccttaat gaaaacatcc ttaacttgac	720
catcagcagg agaagaaaca accattttcca tcttcatggc ggacaaaaca gcaatagatt	780
cacccttttt gaccaaggaa cttttgtgaa ccttaacttc tataataaca ccggccattg	840
gagcacctat ttgatgagta tcatgaacat cggcttttgg cttagcaact gattgaatgt	900
tttgggactt gtcggcaact ctgatttttc tcaattcacc gttcaattcg aagtagactt	960
ctctttgacc agtctttttg ttcaagtcac caactgcttg caacttaatg atcaaggctt	1020
taccttggtc gatggtaact tcaatttctt catctgggtc agctggagcc aagaaattct	1080
tagttggcaa aactgacaag tcaccgtagg tttctctaata cttttggaaa tcttcgtaga	1140
ctcttgggta catattgtaa gaggcaacat cacattcatc gatgtcaccg aatctgtttt	1200
gcaagtcttc tctgatcttt tccaaatcaa atggttccaa ttccaaacct ggtctgcaag	1260
tcaattttct tctcttgttt ctcaaaacat cagatctcaa tggttctgga aaaccaccgt	1320
atggttgacc gatcaaacct tcgaaaaaat ccataacgga atctgggaaa tccaaggaat	1380
tagccaatct tctaattgtca tcggagggtca atttgttact gaccatgaat tgggccaaat	1440
cacctacaac tttagaagtt ggggtaacct taacgatatc acctaacaag tagttggctt	1500
ctctataagc tctcttagtt tctgcccatt gttcacccaa acctaattgt tgagcttgga	1560
acaacaagtt agtcaattga ccacctggaa tttcgtgttg ataaacttca ggatctggac	1620
ctttcaaatc ggcttcaaaa caagagtaca acaatctcat ttcagcccag taagcatcca	1680
attctctaac gtgttcgacg ttaataccgg tgtcaatgtt accttccaaa gaagctaaca	1740
aagcgттаат ggatggttga gaagtcaaac cggacataga attgattgca acatctacaa	1800
catcagcacc agccaaggca caagcagtca tagaagcaac agctgtacca gcagaatcat	1860
gagaatgaac atggattggc aaatctgggt atctagttct caaagaacca atcaacaact	1920
tagcagcagc tggcttcata gtaccagcca tatctttgat acccaagata tgagtaccca	1980
tttgaactat cttttcgacg acttccaagt agtagtccaa attgtacttc ttacctggtt	2040

gcaacatgtc accagaataa caaacagtag cttctacaac accaccagct ttcttaacag	2100
cgtaacacc aaccttcaat tgttccaagt cgttcaaagc atcgaatact ctgaagatat	2160
cgacaccgtt atccttagct tgcttaacaa agtgatcaat ggcgttatct ggcaatgaag	2220
aataagcaac accattagca cctctcaaca acatttggaa agggatgttt ggaaccaaag	2280
atctcaactt tctcaatctt tccaaggat cttcatgcaa gaatctcata gcaacatcga	2340
atgtagcacc accccaacat tccaaagcaa aagcaccagc taaagcatga gcagtagttg	2400
gagcaattgt agccaaatca tgggttctaa ctctagtagc caacaaagat tgatgagcat	2460
ctctccaagt ggtatccatc aacaaagtac cgttgaattg tctaacttgc ttagcgaatt	2520
cggaaggacc tttttccaac aaaacttgtc tccaacctga tggtaggagct gatttggtaa	2580
cgtaataac attaccttga gcatcatgca agtgtggaac agatggatta gacttcaact	2640
ttggcaaacc aatttgaccc ttaatagaag aaccgttaac agccaaatct gccaaagtaat	2700
gcaacaactt ttgtgctctg ttttgtgagg aaaccatttg gaataattgt ggggtatcat	2760
caatgaaggt agtccagtaa gtaccttcga tgaaaactgg gttagtcaac aaggtcaaca	2820
aaaatgggat gttggtctta acacctctga ttctgaattc gatcaaggct ctgatcatct	2880
ttcttctaac gatttcgtaa gtagaaccgg aacaagaaca cttgaccaac atagaatcat	2940
agtgtggaga aatagttgca ccagcatatg cattaccacc gtccaatcta acaccgttac	3000
caccggcaga tctgtaaact tccaatctac cagtatctgg ttggaagttc ttggatggat	3060
cttcggtagt aattctacat tgaatggaga aacctctggt ggtaatctta tcttgcaaca	3120
aaccaattg agtcaaagta gcaccagcag caatttgaat ttgggcggaa actatatcga	3180
taccggtaat ttcttcggtg atggtatggt cgacttggat tctaggattg atttcgatga	3240
agtagtgtct gttttgatta tcgaccaaga attcggcagt accagcattt ctataaccac	3300
agactttagc caacttaaca gcatcagtca aaatggcatc tctaacttct cttggcaaag	3360
ttttagctgg agcaacttca acaacctttt ggtgtcttct ttgaacggag caatctcttt	3420
caaacaagtg aacaacgtta ccgtgggttat cagccaataa ttgaacttcg atgtgctttg	3480
gcttatccaa gaatctttcg acgaagcaag taccattacc aaaagcagtt ctagcttcag	3540

aagtagctct ttgaaaagca tcagcaacat catcaccttc tctaacaact ctcatacctc	3600
taccaccacc accgaaagca gccttgataa taactgggta accatattcg ttgacgaaat	3660
ccaaagcttc ttgaacagtt tcaattggac ctggagtacc tggaacagtt ggaacattag	3720
ctctagcagc caaatgtcta gcggaaactt tgtcaccaac agaatacaata acttcagctg	3780
gtggaccaat ccaagtaata ccagccttaa caaccttatc agcaaattca gagttttcgg	3840
acaagaaacc gtaacctgga tgaatgaaat caaccttggtg cttcttggcg atttcaataa	3900
tttcgtccat agccaaataa gcaccaactg gagtatattg accttcttca ccaataacgt	3960
aggcttcac acgttttcaat ctgtgcatag acaatctatc ttcgtgggag tagatagcaa	4020
tagttctcat ggacaattcg tgggcggatc taaaaattct gattgggatt tcacctctgt	4080
tggcaaccaa aatcttggtc ttttcaccca acaaggagaa gttatctctc aaaccagcca	4140
atTTTTTgga ggaggacatt aaatttaact ccttaagtta ctttaatgat ttagttttta	4200
ttattaataa ttcattgctca tgacatctca tatacacgtt tataaaactt aaatagattg	4260
aaaatgtatt aaagattcct cagggttcg atTTTTTgg aagTTTTgt tTTTTttcc	4320
ttgagatgct gtagtatttg ggaacaatta tacaatcgaa agatatatgc ttacattcga	4380
ccgttttagc cgtgatcatt atcctatagt aacataacct gaagcataac tgacactact	4440
atcatcaata cttgtcacat gaggccttgg tggcc	4475

<210> 23
 <211> 3096
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Expression cassette

<400> 23	
ggccttggtg gccgaataaa aaacacgctt tttcagttcg agtttatcat tatcaatact	60
gccatttcaa agaatacgta aataattaat agtagtgatt ttcctaactt tatttagtca	120
aaaaattagc cttttaattc tgctgtaacc cgtacatgcc caaaataggg ggcggttac	180
acagaatata taacatcgta ggtgtctggg tgaacagttt attcctggca tccactaaat	240

ataatggagc ccgcttttta agctggcatc cagaaaaaaaa aagaatccca gcaccaa	300
attgttttct tcaccaacca tcagttcata ggtccattct cttagcgcaa ctacagagaa	360
caggggcaca aacaggcaaa aaacgggcac aacctcaatg gagtgatgca acctgcctgg	420
agtaa	480
tctattacct tctgctctct ctgatttggg aaaagctgaa aaaaaagggt gaaaccagtt	540
ccctgaaatt attcccctac ttgactaata agtatataaa gacggtaggt attgattgta	600
attctgtaaa tctatttctt aaacttctta aattctactt ttatagttag tctttttttt	660
agttttaaaa caccaagaac ttagtttcga ataaacacac ataaacaaac aaaatgtag	720
tgcttaccac cagttctctt atgtctcaat tcagtttggt gtctttcgac ttctgggtca	780
aagttaatga attcatcaa acctgaacca ccagcaacca taggcaagac tggaaccttc	840
ttatcaactt caacttcaa caagacagga cccttagtag aaacgaattc tttcaactta	900
gcg	960
ttaatgaaat ctgggttcaa ttgatgggta tgggagtatc tatgttcgta gaacaaactt	1020
tgccattgtg tgaccatacc ttgttcttcg ttgttcaaga tcaaaatctt aactggagta	1080
ccagcttgaa cagcggaaga taattcagtc aagg	1140
atatcaataa ccaaggattc tggtttagca acttgagcac caatagcagc tggcaaacca	1200
taacccatag tacccaaacc accagatgta atgaaagtat gaggatttct ccaagtcaa	1260
tg	1320
gtatcgtag caaccttaga caacttcttg ataacggtt gtggcttgat tttagaacct	1380
ggagtttctt ccatgtaggc gtatgggtat tctttcttcc acttgttgat ttgagcgaac	1440
cattcagatc tttctttgac tgggaagatc ttagacatca tcttacc	1500
gc	1560
tcaaaatgaa taataccacc tctaccttca gcagcagctc tcctagcttc tggagcaaac	1620
ttggaaatgt taccagt	1680
gcgttttgaa cagccaaatt agcagtagca caac	1740

tttggatctt cttgatcgaa ggaacccaaa ctttgtaaag tagtagtaac tggaatttgg	1800
gctctgtcgg acaattcttt caataatctt ggaccatcag catgattcaa aataccggca	1860
ccaacataca agactggttt ttttgccaag ttgatcaaat cggcagcctt gttaatagat	1920
tgcatgacga attcatcttg ggctctagaa gtcaattgat tcaaggcatt ggatggcaag	1980
gtagtcttag ttggaattgg atttctcaaa atggcggcag taacatcttt aggcaaatca	2040
acaaaaactg gacctggctt acctgatgta gcaatttcga aagcttcgtt gattctcaat	2100
ggcaattctt caacggactt aaccatgacg ttccacttag tacaagatct agaaatacca	2160
acaacgtcag cttcttgaaa agcatctgta ccaatagcgg atgttggaac ttgaccagta	2220
aaaacaacca ttggaatacc atcagcgaaa gcatcagcca ttggagtaac aacattagta	2280
gcacctggac cagaagtaac caaaacaaca cctggtttac cagaagctct agcataacct	2340
tcagccatat gaccagcacc ttgttcatgt tttggcaaaa cgaagttgaa cttgtcggag	2400
ttgtgaatag catcataaac tggcaaaaata gcaccacctg gataacaaaa aacggtatca	2460
acgttttgtc tggacatcat ttcgttgaag atttgaccac cagtcaaacc aaaaaagaa	2520
gtatccatat ctggttcggc tctcaacttt ttagccaatt tagatggttc agctggttgt	2580
tccaatggat caacgttaaa agatggagct ggttctggtc ttttagaagc tggcaatgga	2640
gaagcagagt aatatctgga ggatgaggag taaaatcttt gagccaaagc aacagatctc	2700
atggctggag tattttctgta agcgatatgt tggaagcatc tcttaatagc gaagttcttc	2760
aagggtggatt gtctgatcat taagtgaatt tactttaaat cttgcattta aataaatatt	2820
ctttttatag ctttatgact tagtttcaat ttatatacta ttttaatgac attttcgatt	2880
cattgattga aagctttgtg ttttttcttg atgcgctatt gcattgttct tgtctttttc	2940
gccacatgta atatctgtag tagataacctg atacattgtg gatgctgagt gaaattttag	3000
ttaataatgg aggcgctctt aataattttg gggatattgg cttttttttt taaagtttac	3060
aatgaattt tttccgccag gatggcctta gtggcc	3096

<210> 24

<211> 1816

<212> DNA

<213> Artificial Sequence

<220>

<223> Expression cassette

<400> 24

ggccttagtg gccgccgtac cacttcaaaa cacccaagca cagcatacta aatttcccct	60
ctttcttcct ctaggggtgtc gttaattacc cgtactaaag gtttggaataa gaaaaaagag	120
accgcctcgt ttcttttttct tcgtcgaaaa aggcaataaa aattttttatc acgttttcttt	180
ttcttgaaaa tttttttttt tgattttttt ctctttcgat gacctcccat tgatatttaa	240
gttaataaac ggtcttcaat ttctcaagtt tcagtttcat ttttcttggt ctattacaac	300
tttttttact tcttgctcat tagaaagaaa gcatagcaat ctaatctaag ttttaattac	360
aaaatgtag gaagaagcag atctagaagc aacgaattcc aaacccttgt caatgttctt	420
cttcaattgg gagacacaga ttggcaacat ttgatttctt tccatatcgt tcattctggt	480
gacaatatcg taatcaacgt aggaaacacc cttggtagta atagtcaatg gaatagcgaa	540
gtaatcagca ccatcaacca atggcaataa ttgatcagca cctggagcaa ttgggaaatt	600
gtagcatcc ttcaatggaa cgtagtaagt accatggatt tggtcgtatg tacccaacaa	660
caaggaaacg aattgaacaa cgcatttgta accagcatga gccatagaca aagtagcaga	720
acccttacca ttttttagcct taacaacttc atcaccaccg tattgaactc tgtggatcaa	780
gtacttcaat tgatcttcgt tcaatctgga caagaagtta gattgggaga acaaagggat	840
aatggtttca ccagaatgac caccaataac aggaacatct ggcatagaat tgactcttgg	900
agtcaaacca gattcgtatg tgatttctct caagaaggta gaagctctaa cgatatccaa	960
cttggttaaca cccataattc ttctttcgat accggagttt ctagattgtg gatggttctt	1020
caagatgtta ctgaccataa ctggaaccaa agagttaact gggttggaga taacaaaaac	1080
gaaaacctta gacaaatcgc agcattcagc aatagaatca cccaattgag aaatgatacc	1140
ggcgttaacg ttgaacaaat catctctagt catacctggg tttcttggaa caccagctgg	1200
aataacaacg atggaagcat tatgcaagca attttctata ccaccggctg gagaatgtga	1260
agaaacggag attgggggtat caatatgaga caaatcagcg gtaacaccgt taatggcttc	1320

ttgattaaca tcgtacaagg ccaaatgaat atgggtgacg gatctattgg attctttcaa	1380
ttggtattgc aattgggcct tcaacaacaa agacaaagat tgaccaatac caccagcagc	1440
acccaaaata gcaatcttca aggaatcttg ttcaatggat ggggtaacag aatgtggcat	1500
taaggagatt gataagactt ttctagttgc atatctttta tatttaaatac ttatctatta	1560
gttaattttt tgtaatttat ccttatatat agtctgggta ttctaaaata tcatttcagt	1620
atctaaaaat tcccctcttt tttcagttat atcttaacag gcgacagtcc aaatgttgat	1680
ttatcccagt ccgattcatc agggttgtga agcattttgt caatggtcga aatcacatca	1740
gtaatagtg ctcctacttg cctcatagaa tttctttctc ttaacgtcac cgtttggctc	1800
tttggcctac ttggcc	1816

<210> 25
 <211> 3112
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Expression cassette

<400> 25	
ggcctacttg gccgggcgcc ataaccaagg tatctataga ccgccaatca gcaaactacc	60
tccgtacatt catgttgac ccacacattt atacaccag accgacgacaa attaccata	120
aggttgtttg tgacggcgtc gtacaagaga acgtgggaac tttttaggct caccaaaaaa	180
gaaagaaaaa atacgagttg ctgacagaag cctcaagaaa aaaaaaattc ttcttcgact	240
atgctggagg cagagatgat cgagccggtg gttaactata tatagctaaa ttggttccat	300
caccttcttt tctgggtgtcg ctccttctag tgctatttct ggcttttcct atttttttt	360
ttccattttt ctttctctct ttctaataa taaattctct tgcattttct atttttctct	420
ctatctattc tacttgttta ttcccttcaa gggttttttt taaggagtac ttgtttttag	480
aatatacggc caacgaacta taattaacta aacatgttac aatggttgag ttgagcttc	540
aacaacggcc aaagcaacca tattaacgat tcttctaacg gaggcaattg gagtcaaac	600
atgaactggc ttagcaacac ccatcaaac tggaccaaca gttacacctt cactggaaga	660

gactctcaac aagttgtaag aaattctggc agcttccata tttggcatga ccaaaatgtt	720
agcagaacct ttcaatgagg agtctggcat tctatcattt ctaatagctt caaccaaagc	780
agcatcacca tgcatttcac catcaatcat caattctggt gctctttctc tgaccaattc	840
caaagcttgt ctcatTTTTg aagaggatgg gcagtctgaa gaacaaaaat tagaatggga	900
caacaaggca actctagggt caataccaaa tcttctaacg gtttcagcag ccatcaaagt	960
aatttcagcc aattcttcag catctgggtt atcgttaacg taagtatcag caatgaaggt	1020
gttaccagat ggcaacaaca aagcattcat agcaccagca gtatgaacac catctctata	1080
accgaaaacg ttcttgacaa cagagaagtg ttcattggtaa tcaccaacag taccacaaat	1140
catagcgtca gcttcacctc tttgaaccat gatggcacca ataacagttg ggtagaaat	1200
caaagctctt tgagcttggt cttgagtgac acctcttctc ttcattgattt ggaagtattc	1260
gggccagtat tctttgaatc ttgggtcaga ttcattgtta acgatttcga agtcaacacc	1320
ggccttgatt tgtaaaccta acttttggat tctcatttcg atgacgtttg gtctaccaat	1380
caaaattggc ttagccaaac ccaaggtaac taattcttga gtagcgtgta aaactctagc	1440
ttcttcacct tctggcaaaa caactctctt tggagccttt ctagcttgtg agaaaattgg	1500
cttcatgaac aagttgggtc tgtaaacgaa ttcgggtcaac ttgtcgtatg aaacatcgaa	1560
atcagcaatt ggtctagtag caacaccaga ttccatagca gcttttagcaa cagctggagc	1620
aatcttaacg atcaatcttg gatcgaatgg ctttgggatg atatattctg gaccaaaga	1680
caaatcttga tcaccataag cagatgcaac aacttctgat tgttcagcat gagccaattc	1740
agcaatagct ctaacagcag ccaacttcat ttcttcgtta atagcggtag caccaacatc	1800
caaagcacct ctaaaaaatga atgggaagca caagacgttg ttaacttgat ttgggtaatc	1860
agatctaccg gtacagataa tagcgtctgg tctaacttct ttagccaatg gtggcaagat	1920
ttctggttct ggattagcta aagccaaaat cattggggct ctagccattt tcttaaccat	1980
ttcttgagtc aagacttttg gaccagaaca acccaagaaa atatcggcac cttcaataac	2040
atcatccaag gttctcttac catcatcaac aacagcataa gcagcttttg tttcagccat	2100
gttaggttct ctaccttgggt agataacacc tttggaatcg caaacaacga tgttgtgctt	2160

ttgtaaacc	aaggcaacca	acaaattcat	acaagcaata	gcagcagcac	cagcaccaga	2220
aacaaccatt	ctgacatcgg	agatgttctt	ttcaacaact	ctcaaaccgt	tcaaaatagc	2280
agcggtagaa	ataatagcag	taccatgttg	atcatcgtgg	aaaactggga	tgttcattct	2340
ttctctcaac	ttttgttcga	tgtagaagca	ttctggagcc	ttaatatctt	ccaagttaat	2400
accaccgaaa	gtaggttcca	aagcagcaac	aacttcaatg	aacttgtctg	gatccaattc	2460
atcaacttcg	atgtcgaaaa	catcgatacc	ggcgaacttt	ttgaacaaaa	cacctttacc	2520
ttccataact	ggtttaccag	ccaaagcacc	aatattaccc	aaacccaaaa	cggcagtacc	2580
attagaaata	acggcaacca	aattacctct	agcagtgtac	ttgtaagcct	tcaatggatc	2640
tttttcaatt	tccaaacatg	gagcagcaac	acctggagaa	taagccaaag	ccaaatctct	2700
ttgggtagcc	aatggttttg	ttggagaaac	ttggatctta	cctggaactg	gaaattcatg	2760
gaaatccaag	gcagattgct	tcaattgatc	atccattaag	agtaataatt	attgcttcca	2820
tataatattt	ttatatacct	cttattttta	tgtattagtt	aattaagtat	ttttatctat	2880
ctgcttatca	ttttcttttc	atataggggg	ggttggtgtt	ttcttgccca	tcagattgat	2940
gtcctccaac	tcggcactat	tttacaaagg	gtttttttgt	aagagaagga	gaagacagat	3000
actaaaccat	acgttactcg	aaacaaaaaa	aaaaaaaaatg	gaaaaagctg	ctatcaacaa	3060
aagacggcct	catcaaacct	aaagaaacca	tgtcagcgtg	gcctgtatgg	cc	3112

<210> 26
 <211> 2705
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Expression cassette

<400> 26						
ggcctgtatg	gccctactta	ttcccttcga	gattatatct	aggaacccat	caggttggtg	60
gaagattacc	cgttctaaga	cttttcagct	tcctctattg	atgttacacc	tggacacccc	120
ttttctggca	tccagttttt	aatcttcagt	ggcatgtgag	attctccgaa	attaattaaa	180
gcaatcacac	aattctctcg	gataccacct	cggttgaaac	tgacaggtgg	tttgttacgc	240

atgctaatagc aaaggagcct atataccttt ggctcggctg ctgtaacagg gaatataaag	300
ggcagcataa tttaggagtt tagtgaactt gcaacattta ctattttccc ttcttacgta	360
aatatttttc tttttaattc taaatcaatc tttttcaatt ttttgtttgt attcttttct	420
tgcttaaatac tataactaca aaaaacacat acataaacta aaaatgttac aattgattgg	480
tgtgaacgga tggatcgtgt tgaaccttaa tcattgggtct gtaaactggg tcccacattt	540
gagccttaac ccattgcaag cattcgtcaa aatctcttgg aaccttaaca gtttcacctg	600
gagcaccacc tggaacttgt tcttgttcga ttctggcagt accttcttcc aaagcttgta	660
aaataacggc agttgccaat ctagcagagg tattagtaat ggtatccaaa cctggcaata	720
aacctgggtct agaatacact tctctcaatg gagacaattc agccaattga tcaacggcag	780
cagaaatcat cttgtcggta attgtagtag ctctagacaa aacagcacc aaaccaatac	840
ctggaaagga gtagcagttg ttgttttcag agattctgta accatcaact ggtggaaatg	900
gagaaccagt agcaaccaa gcatgttgt tagtccactt catcaaatca gctggaacag	960
cttcatgcaa tctagttggg ttagacaatg ggaagatgat aggtcttgga ttgtgcttat	1020
gcatttcttc aacgacatct tgtgtaaaag caccagcttg agtagaaca ccaaccaaac	1080
aagtaggctt aacgttttcg acaacatcgt gcaatgatct agtgtaata ccagcccatt	1140
cagcatcaga tttagcgtaa acatgttgag ctggggtaga attagcttcg taggattgca	1200
atatcaaacc tcttctgtcc atcaagaaga tcttttttct ggcttcttct ttgtcgacac	1260
catgagtaac catgtgggta acgatttgat ctgcaatacc taaaccagca gaaccagcac	1320
catagatcaa gactctggta tctttcaaat ctctgttagt gtgcttcaat gcagcaatca	1380
aagaagccat aacaacagca ccagtacctt gaatgtcatc gttgaaggat ggcaattcgt	1440
atctgtactt ttctaataat cttctggcgt tcttaacacc gaaatcttcg aagtgtaaaa	1500
cagcggatgg ataaaccttc ttaacggcct tgatgaactt ttccaagaaa tcgtcgtatt	1560
gcttacctct gattctggag aacttggtac ccatgtacaa ttcattctctg gccaaactttt	1620
tggtgtttgt accaacaatcc aaacaaactg gcaaaactct acctggatga ataccaccac	1680
acaaggatcat caaagccaac ttagaaatag caattctgac accacctata ccttgatcac	1740

caatacccaa aataccttcg gagtcggaaa caacgatgta atcaacatcc ttatcaccac	1800
cataagtagc caatctacat tcaatggaat ctggttcggg gatatccaaa aagacacctt	1860
ctggtttttct gaatctgtga gaataagcag caatagcatc accttcagtt ggagtgtaga	1920
tgattggaac caattctttg atgtgtcttc tgatcaaggc gaagtacaag accttgtttt	1980
gaactctcaa agaagtcatg aaatcgttct tggccaatgg agttttcaag tagcacaatt	2040
gctttagtagga tctttccaat tgttcatcca aagtgttaac ttgtgggtggc aacaaagctt	2100
ccaagttgaa agcttctctt tcttcttgag tgaaagcaga acccttgttg aacaaagggtg	2160
agttcaataa ttggaaggat tccaatgggc attcaatagc accttcaaca gtcaatctag	2220
tagcatgtgg atgtggagct tcaaaaatct ttctggctct agaaccaact ggagtcttag	2280
taacttcttc atcggagtat ggcttttgga aggtgttttc tctagtagta gtagccttat	2340
gagatctggg gttagaagag tataatctgg attgttggat tggccacatt aagattaata	2400
taattatata aaaatattat cttcttttct ttatatctag tgttatgtaa aataaattga	2460
tgactacgga aagctttttt atattgtttc tttttcattc tgagccactt aaatttcgtg	2520
aatgttcttg taagggacgg tagatttaca agtgatacaa caaaaagcaa ggcgcttttt	2580
ctaataaaaa gaagaaaagc atttaacaat tgaacacctc tatatcaacg aagaatatta	2640
ctttgtctct aaatccttgt aaaatgtgta cgatctctat atgggttact caggcctctt	2700
tggcc	2705

<210> 27
 <211> 31
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> primer

<400> 27	
gtttgctgtc ttgctatcaa gtataaatag a	31

<210> 28
 <211> 22

<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 28
gatttaaacc ttgggcacca ca 22

<210> 29
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 29
gatgatcgct atgggtaagg ct 22

<210> 30
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 30
ctaacggatt tctgcacttg at 22

<210> 31
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 31
cgataccaac ttgggctttc t 21

<210> 32
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 32
gcatgctggg gatgttgct 19

<210> 33
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 33
gcccaatactt cacaatgttc gaatct 26

<210> 34
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 34
cgatcaatct tggagacttt gga 23

<210> 35
<211> 17
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 35
gggctattgc agctgct 17

<210> 36
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> primer	
<400> 36	
caaggctctt tcactctcct	20
<210> 37	
<211> 24	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> primer	
<400> 37	
gcgttcaatt cgtagcatt acca	24
<210> 38	
<211> 25	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> primer	
<400> 38	
gctgacaaag aatctagaca cttgt	25
<210> 39	
<211> 31	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> primer	
<400> 39	
cttgcataaa ttggtcaatg caagaaatac a	31
<210> 40	
<211> 27	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> primer	

<400> 40
cttcttttctt gaaaccagta gcataca 27

<210> 41
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 41
gttggtgtca ttagatatga aggtcca 27

<210> 42
<211> 28
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 42
gccctctttt gaactgtcat ataaatac 28

<210> 43
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 43
gatttgcttc aaacctctgg tagt 24

<210> 44
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 44
gatgggtggg attcatggta tgt 23

<210>	45	
<211>	33	
<212>	DNA	
<213>	Artificial Sequence	
<220>		
<223>	primer	
<400>	45	
	gacaatatat tttcacacaa tgagatttgt agt	33
<210>	46	
<211>	24	
<212>	DNA	
<213>	Artificial Sequence	
<220>		
<223>	primer	
<400>	46	
	caatgaatat cggaaccgca aaca	24
<210>	47	
<211>	22	
<212>	DNA	
<213>	Artificial Sequence	
<220>		
<223>	primer	
<400>	47	
	gctacttttg aagaaggatga ct	22
<210>	48	
<211>	30	
<212>	DNA	
<213>	Artificial Sequence	
<220>		
<223>	primer	
<400>	48	
	gtaggttttg aagaatatat aaagggttgca	30

<210> 49
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 49
gggagtagat agcaatagtt ctca

24

<210> 50
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 50
gatcattaag ttgcaagcag ttggt

25

<210> 51
<211> 35
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 51
ctaataagta tataaagacg gtaggtattg attgt

35

<210> 52
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 52
gctggcaatg gagaagca

18

<210> 53
<211> 19

<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 53
cgctgttcaa gctggtact 19

<210> 54
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 54
cgatgacctc ccattgatat ttaagt 26

<210> 55
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 55
cggatctatt ggattctttc aattggt 27

<210> 56
<211> 29
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 56
gtgatgaagt tgttaaggct aaaaatggt 29

<210> 57
<211> 40
<212> DNA
<213> Artificial Sequence

<220>		
<223>	primer	
<400>	57	
catttttctt tctctctttc taatatataa attctcttgc		40
<210>	58	
<211>	17	
<212>	DNA	
<213>	Artificial Sequence	
<220>		
<223>	primer	
<400>	58	
gcagcaacac ctggaga		17
<210>	59	
<211>	28	
<212>	DNA	
<213>	Artificial	
<220>		
<223>	primer	
<400>	59	
gttgtcccat tctaattttg gttcttca		28
<210>	60	
<211>	28	
<212>	DNA	
<213>	Artificial Sequence	
<220>		
<223>	primer	
<400>	60	
ggagtttagt gaacttgcaa catttact		28
<210>	61	
<211>	24	
<212>	DNA	
<213>	Artificial Sequence	
<220>		

<223> primer

<400> 61

ggagcttcaa aaatctttct ggct

24

<210> 62

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer

<400> 62

ctttccaggt attggtttgg gt

22