<110> Cellid Co.,Ltd.

<120> Novel adenovirus vector not comprising replication-competent adenovirus and use thereof

<130> 2022P-01-001

<150> KR 10/20210008666
<151> 2021-01-21

<160> 46

<170> KoPatentIn 3.0

<210> 1
<211> 36262
<212> DNA
<213> Artificial Sequence

<220>
<223> pRCA

<400> 1
ttaattaaga attaattcga tcctgaatgg cgaatggacg cgccctgtag cggcgcatta 60

agcgcggcgg gtgtggtggt tacgcgcagc gtgaccgcta cacttgccag cgccctagcg 120

cccgctcctt tcgctttctt cccttccttt ctcgccacgt tcgccggctt tccccgtcaa 180

gctctaaatc gggggctccc tttagggttc cgatttagtg ctttacggca cctcgacccc 240

aaaaaacttg attagggtga tggttcacgt agtgggccat cgccctgata gacggttttt 300

cgcccttttga cgttggagtc cacgttcttt aatagtggac tcttgttcca aactggaaca 360

acactcaacc ctatctcggt ctattctttt gatttataag ggattttgcc gatttcggcc 420

tattggttaa aaaatgagct gatttaacaa aaattttaac aaaattcaga agaactcgtc 480

aagaaggcga tagaaggcga tgcgctgcga atcgggagcg gcgataccgt aaagcacgag 540

gaagcggtca gcccattcgc cgccaagctc ttcagcaata tcacgggtag ccaacgctat 600

gtcctgatag cggtccgcca cacccagccg gccacagtcg atgaatccag aaaagcggcc 660

attttccacc atgatattcg gcaagcaggc atcgccatgg gtcacgacga gatcctcgcc 720

gtcgggcatg ctcgccttga gcctggcgaa cagttcggct ggcgcgagcc cctgatgctc 780

ttcgtccaga tcatcctgat cgacaagacc ggcttccatc cgagtacgtg ctcgctcgat 840

gcgatgtttc gcttggtggt cgaatgggca ggtagccgga tcaagcgtat gcagccgccg 900

cattgcatca gccatgatgg atactttctc ggcaggagca aggtgagatg acaggagatc 960

ctgccccggc acttcgccca atagcagcca gtcccttccc gcttcagtga caacgtcgag 1020

cacagctgcg caaggaacgc ccgtcgtggc cagccacgat agccgcgctg cctcgtcttg 1080

cagttcattc agggcaccgg acaggtcggt cttgacaaaa agaaccgggc gcccctgcgc 1140

tgacagccgg aacacggcgg catcagagca gccgattgtc tgttgtgccc agtcatagcc 1200

gaatagcctc tccacccaag cggccggaga acctgcgtgc aatccatctt gttcaatcat 1260

gcgaaacgat cctcatcctg tctcttgatc agagcttgat cccctgcgcc atcagatcct 1320

tggcggcaag aaagccatcc agtttacttt gcagggcttc ccaaccttac cagagggcgc 1380

cccagctggc aattccggtt cgcttgctgt ccataaaacc gcccagtcta gctatcgcca 1440

tgtaagccca ctgcaagcta cctgctttct ctttgcgctt gcgttttccc ttgtccagat 1500

agcccagtag ctgacattca tccggggtca gcaccgtttc tgcggactgg ctttctacgt 1560

gaaaaggatc taggtgaaga tccttttttga taatctcatg gctgcagcaa tggcaacaac 1620

gttgcgcaaa ctattaactg gcgaactact tactctagct tcccggcaac aattaataga 1680

ctggatggag gcggataaag ttgcaggacc acttctgcgc tcggcccttc cggctggctg 1740

gtttattgct gataaatctg gagccggtga gcgtgggtct cgcggtatca ttgcagcact 1800

ggggccagat ggtaagccct cccgtatcgt agttatctac acgacgggga gtcaggcaac 1860

tatggatgaa cgaaatagac agatcgctga gataggtgcc tcactgatta agcattggta 1920

actgtcagac caagtttact catatatact ttagattgat ttaaaacttc atttttaatt 1980

taaaaggatc taggtgaaga tccttttttga taatctcatg accaaaatcc cttaacgtga 2040

gttttcgttc cactgagcgt cagaccccgt agaaaagatc aaaggatctt cttgagatcc 2100

ttttttttctg cgcgtaatct gctgcttgca aacaaaaaaa ccaccgctac cagcggtggt 2160

ttgtttgccg gatcaagagc taccaactct ttttccgaag gtaactggct tcagcagagc 2220

gcagatacca aatactgtcc ttctagtgta gccgtagtta ggccaccact tcaagaactc 2280

tgtagcaccg cctacatacc tcgctctgct aatcctgtta ccagtggctg ctgccagtgg 2340

cgataagtcg tgtcttaccg ggttggactc aagacgatag ttaccggata aggcgcagcg 2400

gtcgggctga acgggggggtt cgtgcacaca gcccagcttg gagcgaacga cctacaccga 2460

actgagatac ctacagcgtg agctatgaga aagcgccacg cttcccgaag ggagaaaggc 2520

ggacaggtat ccggtaagcg gcagggtcgg aacaggagag cgcacgaggg agcttccagg 2580

gggaaacgcc tggtatcttt atagtcctgt cgggtttcgc cacctctgac ttgagcgtcg 2640

atttttgtga tgctcgtcag gggggcggag cctatggaaa aacgccagca acgcggcctt 2700

tttacggttc ctggcctttt gctggccttt tgctcacatg ttctttcctg cgttatcccc 2760

tgattctgtg gataaccgta ttaccgcctt tgagtgagct gataccgctc gccgcagccg 2820

aacgaccgag cgcagcgagt cagtgagcga ggaagcggaa gagcgcctga tgcggtattt 2880

tctccttacg catctgtgcg gtatttcaca ccgcatatgg atccatgcat gttaattaac 2940

atcatcaata atatacctta ttttggattg aagccaatat gataatgagg gggtggagtt 3000

tgtgacgtgg cgcggggcgt gggaacgggg cgggtgacgt agtagtgtgg cggaagtgtg 3060

atgttgcaag tgtggcggaa cacatgtaag cgacggatgt ggcaaaagtg acgttttgg 3120

tgtgcgccgg tgtacacagg aagtgacaat tttcgcgcgg ttttaggcgg atgttgtagt 3180

aaatttgggc gtaaccgagt aagatttggc cattttcgcg ggaaaactga ataagaggaa 3240

gtgaaatctg aataattttg tgttactcat agcgcgtaat atttgtctag ggccgcgggg 3300

actttgaccg tttacgtgga gactcgccca ggtgtttttc tcaggtgttt tccgcgttcc 3360

gggtcaaagt tggcgtttta ttattatagt cagctgacgt gtagtgtatt tatacccggt 3420

gagttcctca agaggccact cttgagtgcc agcgagtaga gttttctcct ccgagccgct 3480

ccgacaccgg gactgaaaat gagacatatt atctgccacg gaggtgttat taccgaagaa 3540

atggccgcca gtcttttgga ccagctgatc gaagaggtac tggctgataa tcttccacct 3600

cctagccatt ttgaaccacc tacccttcac gaactgtatg atttagacgt gacggccccc 3660

gaagatccca acgaggaggc ggtttcgcag atttttcccg actctgtaat gttggcggtg 3720

caggaaggga ttgacttact cacttttccg ccggcgcccg gttctccgga gccgcctcac 3780

ctttcccggc agcccgagca gccggagcag agagccttgg gtccggtttc tatgccaaac 3840

cttgtaccgg aggtgatcga tcttacctgc cacgaggctg gctttccacc cagtgacgac 3900

gaggatgaag agggtgagga gtttgtgtta gattatgtgg agcaccccgg gcacggttgc 3960

aggtcttgtc attatcaccg gaggaatacg ggggacccag atattatgtg ttcgctttgc 4020

tatatgagga cctgtggcat gtttgtctac agtaagtgaa aattatgggc agtgggtgat 4080

agagtggtgg gtttggtgtg gtaatttttt ttttaatttt tacagttttg tggtttaaag 4140

aattttgtat tgtgattttt ttaaaaggtc ctgtgtctga acctgagcct gagcccgagc 4200

cagaaccgga gcctgcaaga cctacccgcc gtcctaaaat ggcgcctgct atcctgagac 4260

gcccgacatc acctgtgtct agagaatgca atagtagtac ggatagctgt gactccggtc 4320

cttctaacac acctcctgag atacacccgg tggtcccgct gtgccccatt aaaccagttg 4380

ccgtgagagt tggtgggcgt cgccaggctg tggaatgtat cgaggacttg cttaacgagc 4440

ctgggcaacc tttggacttg agctgtaaac gccccaggcc ataaggtgta aacctgtgat 4500

tgcgtgtgtg gttaacgcct ttgtttgctg aatgagttga tgtaagttta ataaagggtg 4560

agataatgtt taacttgcat ggcgtgttaa atggggcggg gcttaaaggg tatataatgc 4620

gccgtgggct aatcttggtt acatctgacc tcatggaggc ttgggagtgt ttggaagatt 4680

tttctgctgt gcgtaacttg ctggaacaga gctctaacag tacctcttgg ttttggaggt 4740

ttctgtgggg ctcatcccag gcaaagttag tctgcagaat taaggaggat tacaagtggg 4800

aatttgaaga gcttttgaaa tcctgtggtg agctgtttga ttctttgaat ctgggtcacc 4860

aggcgctttt ccaagagaag gtcatcaaga ctttggattt ttccacaccg gggcgcgctg 4920

cggctgctgt tgctttttg agttttataa aggataaatg gagcgaagaa acccatctga 4980

gcgggggta cctgctggat tttctggcca tgcatctgtg gagagcggtt gtgagacaca 5040

agaatcgcct gctactgttg tcttccgtcc gcccggcgat aataccgacg gaggagcagc 5100

agcagcagca ggaggaagcc aggcggcggc ggcaggagca gagcccatgg aacccgagag 5160

ccggcctgga ccctcgggaa tgaatgttgt acaggtggct gaactgtatc cagaactgag 5220

acgcattttg acaattacag aggatgggca ggggctaaag ggggtaaaga gggagcgggg 5280

ggcttgtgag gctacagagg aggctaggaa tctagctttt agcttaatga ccagacaccg 5340

tcctgagtgt attacttttc aacagatcaa ggataattgc gctaatgagc ttgatctgct 5400

ggcgcagaag tattccatag agcagctgac cacttactgg ctgcagccag gggatgattt 5460

tgaggaggct attagggtat atgcaaaggt ggcacttagg ccagattgca agtacaagat 5520

cagcaaactt gtaaatatca ggaattgttg ctacatttct gggaacgggg ccgaggtgga 5580

gatagatacg gaggataggg tggcctttag atgtagcatg ataaatatgt ggccgggggt 5640

gcttggcatg gacggggtgg ttattatgaa tgtaaggttt actggcccca attttagcgg 5700

tacggttttc ctggccaata ccaaccttat cctacacggt gtaagcttct atgggtttaa 5760

caatacctgt gtggaagcct ggaccgatgt aagggttcgg ggctgtgcct tttactgctg 5820

ctggaagggg gtggtgtgtc gccccaaaag cagggcttca attaagaaat gcctctttga 5880

aaggtgtacc ttgggtatcc tgtctgaggg taactccagg gtgcgccaca atgtggcctc 5940

cgactgtggt tgcttcatgc tagtgaaaag cgtggctgtg attaagcata acatggtatg 6000

tggcaactgc gaggacaggg cctctcagat gctgacctgc tcggacggca actgtcacct 6060

gctgaagacc attcacgtag ccagccactc tcgcaaggcc tggccagtgt ttgagcataa 6120

catactgacc cgctgttcct tgcatttggg taacaggagg ggggtgttcc taccttacca 6180

atgcaatttg agtcacacta agatattgct tgagcccgag agcatgtcca aggtgaacct 6240

gaacggggtg tttgacatga ccatgaagat ctggaaggtg ctgaggtacg atgagacccg 6300

caccaggtgc agaccctgcg agtgtggcgg taaacatatt aggaaccagc ctgtgatgct 6360

ggatgtgacc gaggagctga ggcccgatca cttggtgctg gcctgcaccc gcgctgagtt 6420

tggctctagc gatgaagata cagattgagg tactgaaatg tgtgggcgtg gcttaagggt 6480

gggaaagaat atataaggtg ggggtcttat gtagttttgt atctgttttg cagcagccgc 6540

cgccgccatg agcaccaact cgtttgatgg aagcattgtg agctcatatt tgacaacgcg 6600

catgccccca tgggccgggg tgcgtcagaa tgtgatgggc tccagcattg atggtcgccc 6660

cgtcctgccc gcaaactcta ctaccttgac ctacgagacc gtgtctggaa cgccgttgga 6720

gactgcagcc tccgccgccg cttcagccgc tgcagccacc gcccgcggga ttgtgactga 6780

ctttgctttc ctgagcccgc ttgcaagcag tgcagcttcc cgttcatccg cccgcgatga 6840

caagttgacg gctcttttgg cacaattgga ttctttgacc cgggaactta atgtcgtttc 6900

tcagcagctg ttggatctgc gccagcaggt ttctgccctg aaggcttcct cccctcccaa 6960

tgcggtttaa aacataaata aaaaaccaga ctctgtttgg atttggatca agcaagtgtc 7020

ttgctgtctt tatttagggg ttttgcgcgc gcggtaggcc cgggaccagc ggtctcggtc 7080

gttgagggtc ctgtgtattt tttccaggac gtggtaaagg tgactctgga tgttcagata 7140

catgggcata agcccgtctc tggggtggag gtagcaccac tgcagagctt catgctgcgg 7200

ggtggtgttg tagatgatcc agtcgtagca ggagcgctgg gcgtggtgcc taaaaatgtc 7260

tttcagtagc aagctgattg ccaggggcag gcccttggtg taagtgttta caaagcggtt 7320

aagctgggat gggtgcatac gtggggatat gagatgcatc ttggactgta tttttaggtt 7380

ggctatgttc ccagccatat ccctccgggg attcatgttg tgcagaacca ccagcacagt 7440

gtatccggtg cacttgggaa atttgtcatg tagcttagaa ggaaatgcgt ggaagaactt 7500

ggagacgccc ttgtgacctc caagattttc catgcattcg tccataatga tggcaatggg 7560

cccacgggcg gcggcctggg cgaagatatt tctgggatca ctaacgtcat agttgtgttc 7620

caggatgaga tcgtcatagg ccatttttac aaagcgcggg cggagggtgc cagactgcgg 7680

tataatggtt ccatccggcc caggggcgta gttaccctca cagatttgca tttcccacgc 7740

tttgagttca gatgggggga tcatgtctac ctgcggggcg atgaagaaaa cggtttccgg 7800

ggtaggggag atcagctggg aagaaagcag gttcctgagc agctgcgact taccgcagcc 7860

ggtgggcccg taaatcacac ctattaccgg gtgcaactgg tagttaagag agctgcagct 7920

gccgtcatcc ctgagcaggg gggccacttc gttaagcatg tccctgactc gcatgttttc 7980

cctgaccaaa tccgccagaa ggcgctcgcc gcccagcgat agcagttctt gcaaggaagc 8040

aaagtttttc aacggtttga gaccgtccgc cgtaggcatg ctttgagcg tttgaccaag 8100

cagttccagg cggtcccaca gctcggtcac ctgctctacg gcatctcgat ccagcatatc 8160

tcctcgtttc gcgggttggg gcggctttcg ctgtacggca gtagtcggtg ctcgtccaga 8220

cgggccaggg tcatgtcttt ccacgggcgc agggtcctcg tcagcgtagt ctgggtcacg 8280

gtgaaggggt gcgctccggg ctgcgcgctg gccagggtgc gcttgaggct ggtcctgctg 8340

gtgctgaagc gctgccggtc ttcgccctgc gcgtcggcca ggtagcattt gaccatggtg 8400

tcatagtcca gcccctccgc ggcgtggccc ttggcgcgca gcttgccctt ggaggaggcg 8460

ccgcacgagg ggcagtgcag acttttgagg gcgtagagct tgggcgcgag aaataccgat 8520

tccggggagt aggcatccgc gccgcaggcc ccgcagacgg tctcgcattc cacgagccag 8580

gtgagctctg gccgttcggg gtcaaaaacc aggtttcccc catgcttttt gatgcgtttc 8640

ttacctctgg tttccatgag ccggtgtcca cgctcggtga cgaaaaggct gtccgtgtcc 8700

ccgtatacag acttgagagg cctgtcctcg agcggtgttc cgcggtcctc ctcgtataga 8760

aactcggacc actctgagac aaaggctcgc gtccaggcca gcacgaagga ggctaagtgg 8820

gaggggtagc ggtcgttgtc cactaggggg tccactcgct ccagggtgtg aagacacatg 8880

tcgccctctt cggcatcaag gaaggtgatt ggtttgtagg tgtaggccac gtgaccgggt 8940

gttcctgaag gggggctata aaaggggtg ggggcgcgtt cgtcctcact ctcttccgca 9000

tcgctgtctg cgagggccag ctgttggggt gagtactccc tctgaaaagc gggcatgact 9060

tctgcgctaa gattgtcagt ttccaaaaac gaggaggatt tgatattcac ctggcccgcg 9120

gtgatgcctt tgagggtggc cgcatccatc tggtcagaaa agacaatctt tttgttgtca 9180

agcttggtgg caaacgaccc gtagagggcg ttggacagca acttggcgat ggagcgcagg 9240

gtttggtttt tgtcgcgatc ggcgcgctcc ttggccgcga tgtttagctg cacgtattcg 9300

cgcgcaacgc accgccattc gggaaagacg gtggtgcgct cgtcgggcac caggtgcacg 9360

cgccaaccgc ggttgtgcag ggtgacaagg tcaacgctgg tggctacctc tccgcgtagg 9420

cgctcgttgg tccagcagag gcggccgccc ttgcgcgagc agaatggcgg tagggggtct 9480

agctgcgtct cgtccggggg gtctgcgtcc acggtaaaga ccccgggcag caggcgcgcg 9540

tcgaagtagt ctatcttgca tccttgcaag tctagcgcct gctgccatgc gcgggcggca 9600

agcgcgcgct cgtatgggtt gagtggggga ccccatggca tggggtgggt gagcgcggag 9660

gcgtacatgc cgcaaatgtc gtaaacgtag aggggctctc tgagtattcc aagatatgta 9720

gggtagcatc ttccaccgcg gatgctggcg cgcacgtaat cgtatagttc gtgcgaggga 9780

gcgaggaggt cgggaccgag gttgctacgg gcgggctgct ctgctcggaa gactatctgc 9840

ctgaagatgg catgtgagtt ggatgatatg gttggacgct ggaagacgtt gaagctggcg 9900

tctgtgagac ctaccgcgtc acgcacgaag gaggcgtagg agtcgcgcag cttgttgacc 9960

agctcggcgg tgacctgcac gtctagggcg cagtagtcca gggtttcctt gatgatgtca 10020

tacttatcct gtccctttt tttccacagc tcgcggttga ggacaaactc ttcgcggtct 10080

ttccagtact cttggatcgg aaacccgtcg gcctccgaac ggtaagagcc tagcatgtag 10140

aactggttga cggcctggta ggcgcagcat ccctttttcta cgggtagcgc gtatgcctgc 10200

gcggccttcc ggagcgaggt gtgggtgagc gcaaaggtgt ccctgaccat gactttgagg 10260

tactggtatt tgaagtcagt gtcgtcgcat ccgccctgct cccagagcaa aaagtccgtg 10320

cgctttttgg aacgcggatt tggcagggcg aaggtgacat cgttgaagag tatctttccc 10380

gcgcgaggca taaagttgcg tgtgatgcgg aagggtcccg gcacctcgga acggttgtta 10440

attacctggg cggcgagcac gatctcgtca aagccgttga tgttgtggcc cacaatgtaa 10500

agttccaaga agcgcgggat gcccttgatg gaaggcaatt ttttaagttc ctcgtaggtg 10560

agctcttcag gggagctgag cccgtgctct gaaagggccc agtctgcaag atgagggttg 10620

gaagcgacga atgagctcca caggtcacgg gccattagca tttgcaggtg gtcgcgaaag 10680

gtcctaaact ggcgacctat ggccattttt tctggggtga tgcagtagaa ggtaagcggg 10740

tcttgttccc agcggtccca tccaaggttc gcggctaggt ctcgcgcggc agtcactaga 10800

ggctcatctc cgccgaactt catgaccagc atgaagggca cgagctgctt cccaaaggcc 10860

cccatccaag tataggtctc tacatcgtag gtgacaaaga gacgctcggt gcgaggatgc 10920

gagccgatcg ggaagaactg gatctcccgc caccaattgg aggagtggct attgatgtgg 10980

tgaaagtaga agtccctgcg acgggccgaa cactcgtgct ggcttttgta aaaacgtgcg 11040

cagtactggc agcggtgcac gggctgtaca tcctgcacga ggttgacctg acgaccgcgc 11100

acaaggaagc agagtgggaa tttgagcccc tcgcctggcg ggtttggctg gtggtcttct 11160

acttcggctg cttgtccttg accgtctggc tgctcgaggg gagttacggt ggatcggacc 11220

accacgccgc gcgagcccaa agtccagatg tccgcgcgcg gcggtcggag cttgatgaca 11280

acatcgcgca gatgggagct gtccatggtc tggagctccc gcggcgtcag gtcaggcggg 11340

agctcctgca ggtttacctc gcatagacgg gtcagggcgc gggctagatc caggtgatac 11400

ctaatttcca ggggctggtt ggtggcggcg tcgatggctt gcaagaggcc gcatccccgc 11460

ggcgcgacta cggtaccgcg cggcgggcgg tgggccgcgg gggtgtcctt ggatgatgca 11520

tctaaaagcg gtgacgcggg cgagcccccg gaggtagggg gggctccgga cccgccggga 11580

gagggggcag gggcacgtcg gcgccgcgcg cgggcaggag ctggtgctgc gcgcgtaggt 11640

tgctggcgaa cgcgacgacg cggcggttga tctcctgaat ctggcgcctc tgcgtgaaga 11700

cgacgggccc ggtgagcttg aacctgaaag agagttcgac agaatcaatt tcggtgtcgt 11760

tgacggcggc ctggcgcaaa atctcctgca cgtctcctga gttgtcttga taggcgatct 11820

cggccatgaa ctgctcgatc tcttcctcct ggagatctcc gcgtccggct cgctccacgg 11880

tggcggcgag gtcgttggaa atgcgggcca tgagctgcga gaaggcgttg aggcctccct 11940

cgttccagac gcggctgtag accacgcccc cttcggcatc gcgggcgcgc atgaccacct 12000

gcgcgagatt gagctccacg tgccgggcga agacggcgta gtttcgcagg cgctgaaaga 12060

ggtagttgag ggtggtggcg gtgtgttctg ccacgaagaa gtacataacc cagcgtcgca 12120

acgtggattc gttgatatcc cccaaggcct caaggcgctc catggcctcg tagaagtcca 12180

cggcgaagtt gaaaaactgg gagttgcgcg ccgacacggt taactcctcc tccagaagac 12240

ggatgagctc ggcgacagtg tcgcgcacct cgcgctcaaa ggctacaggg gcctcttctt 12300

cttcttcaat ctcctcttcc ataagggcct ccccttcttc ttcttctggc ggcggtgggg 12360

gagggggggac acggcggcga cgacggcgca ccgggaggcg gtcgacaaag cgctcgatca 12420

tctccccgcg gcgacggcgc atggtctcgg tgacggcgcg gccgttctcg cgggggcgca 12480

gttggaagac gccgcccgtc atgtcccggt tatgggttgg cgggggggctg ccatgcggca 12540

gggatacggc gctaacgatg catctcaaca attgttgtgt aggtactccg ccgccgaggg 12600

acctgagcga gtccgcatcg accggatcgg aaaacctctc gagaaaggcg tctaaccagt 12660

cacagtcgca aggtaggctg agcaccgtgg cgggcggcag cgggcggcgg tcggggttgt 12720

ttctggcgga ggtgctgctg atgatgtaat taaagtaggc ggtcttgaga cggcggatgg 12780

tcgacagaag caccatgtcc ttgggtccgg cctgctgaat gcgcaggcgg tcggccatgc 12840

cccaggcttc gttttgacat cggcgcaggt ctttgtagta gtcttgcatg agcctttcta 12900

ccggcacttc ttcttctcct tcctcttgtc ctgcatctct tgcatctatc gctgcggcgg 12960

cggcggagtt tggccgtagg tggcgccctc ttcctcccat gcgtgtgacc ccgaagcccc 13020

tcatcggctg aagcagggct aggtcggcga caacgcgctc ggctaatatg gcctgctgca 13080

cctgcgtgag ggtagactgg aagtcatcca tgtccacaaa gcggtggtat gcgcccgtgt 13140

tgatggtgta agtgcagttg gccataacgg accagttaac ggtctggtga cccggctgcg 13200

agagctcggt gtacctgaga cgcgagtaag ccctcgagtc aaatacgtag tcgttgcaag 13260

tccgcaccag gtactggtat cccaccaaaa agtgcggcgg cggctggcgg tagaggggcc 13320

agcgtagggt ggccggggct ccgggggcga gatcttccaa cataaggcga tgatatccgt 13380

agatgtacct ggacatccag gtgatgccgg cggcggtggt ggaggcgcgc ggaaagtcgc 13440

ggacgcggtt ccagatgttg cgcagcggca aaaagtgctc catggtcggg acgctctggc 13500

cggtcaggcg cgcgcaatcg ttgacgctct agcgtgcaaa aggagagcct gtaagcgggc 13560

actcttccgt ggtctggtgg ataaattcgc aagggtatca tggcggacga ccggggttcg 13620

agccccgtat ccggccgtcc gccgtgatcc atgcggttac cgcccgcgtg tcgaacccag 13680

gtgtgcgacg tcagacaacg ggggagtgct ccttttggct tccttccagg cgcggcggct 13740

gctgcgctag ctttttttggc cactggccgc gcgcagcgta agcggttagg ctggaaagcg 13800

aaagcattaa gtggctcgct ccctgtagcc ggagggttat tttccaaggg ttgagtcgcg 13860

ggacccccgg ttcgagtctc ggaccggccg gactgcggcg aacgggggtt tgcctccccg 13920

tcatgcaaga ccccgcttgc aaattcctcc ggaaacaggg acgagcccct tttttgcttt 13980

tcccagatgc atccggtgct gcggcagatg cgcccccctc ctcagcagcg gcaagagcaa 14040

gagcagcggc agacatgcag ggcaccctcc cctcctccta ccgcgtcagg aggggcgaca 14100

tccgcggttg acgcggcagc agatggtgat tacgaacccc cgcggcgccg ggcccggcac 14160

tacctggact tggaggaggg cgagggcctg gcgcggctag gagcgccctc tcctgagcgg 14220

cacccaaggg tgcagctgaa gcgtgatacg cgtgaggcgt acgtgccgcg gcagaacctg 14280

tttcgcgacc gcgagggaga ggagcccgag gagatgcggg atcgaaagtt ccacgcaggg 14340

cgcgagctgc ggcatggcct gaatcgcgag cggttgctgc gcgaggagga ctttgagccc 14400

gacgcgcgaa ccgggattag tcccgcgcgc gcacacgtgg cggccgccga cctggtaacc 14460

gcatacgagc agacggtgaa ccaggagatt aactttcaaa aaagctttaa caaccacgtg 14520

cgtacgcttg tggcgcgcga ggaggtggct ataggactga tgcatctgtg ggactttgta 14580

agcgcgctgg agcaaaaccc aaatagcaag ccgctcatgg cgcagctgtt ccttatagtg 14640

cagcacagca gggacaacga ggcattcagg gatgcgctgc taaacatagt agagcccgag 14700

ggccgctggc tgctcgattt gataaacatc ctgcagagca tagtggtgca ggagcgcagc 14760

ttgagcctgg ctgacaaggt ggccgccatc aactattcca tgcttagcct gggcaagttt 14820

tacgcccgca agatatacca taccccttac gttcccatag acaaggaggt aaagatcgag 14880

gggttctaca tgcgcatggc gctgaaggtg cttaccttga gcgacgacct gggcgtttat 14940

cgcaacgagc gcatccacaa ggccgtgagc gtgagccggc ggcgcgagct cagcgaccgc 15000

gagctgatgc acagcctgca aagggccctg gctggcacgg gcagcggcga tagagaggcc 15060

gagtcctact ttgacgcggg cgctgacctg cgctgggccc caagccgacg cgccctggag 15120

gcagctgggg ccggacctgg gctggcggtg gcacccgcgc gcgctggcaa cgtcggcggc 15180

gtggaggaat atgacgagga cgatgagtac gagccagagg acggcgagta ctaagcggtg 15240

atgtttctga tcagatgatg caagacgcaa cggacccggc ggtgcgggcg gcgctgcaga 15300

gccagccgtc cggccttaac tccacggacg actggcgcca ggtcatggac cgcatcatgt 15360

cgctgactgc gcgcaatcct gacgcgttcc ggcagcagcc gcaggccaac cggctctccg 15420

caattctgga agcggtggtc ccggcgcgcg caaaccccac gcacgagaag gtgctggcga 15480

tcgtaaacgc gctggccgaa aacagggcca tccggcccga cgaggccggc ctggtctacg 15540

acgcgctgct tcagcgcgtg gctcgttaca acagcggcaa cgtgcagacc aacctggacc 15600

ggctggtggg ggatgtgcgc gaggccgtgg cgcagcgtga gcgcgcgcag cagcagggca 15660

acctgggctc catggttgca ctaaacgcct tcctgagtac acagcccgcc aacgtgccgc 15720

ggggacagga ggactacacc aactttgtga gcgcactgcg gctaatggtg actgagacac 15780

cgcaaagtga ggtgtaccag tctgggccag actatttttt ccagaccagt agacaaggcc 15840

tgcagaccgt aaacctgagc caggctttca aaaacttgca ggggctgtgg ggggtgcggg 15900

ctcccacagg cgaccgcgcg accgtgtcta gcttgctgac gcccaactcg cgcctgttgc 15960

tgctgctaat agcgcccttc acggacagtg gcagcgtgtc ccgggacaca tacctaggtc 16020

acttgctgac actgtaccgc gaggccatag gtcaggcgca tgtggacgag catactttcc 16080

aggagattac aagtgtcagc cgcgcgctgg ggcaggagga cacgggcagc ctggaggcaa 16140

ccctaaacta cctgctgacc aaccggcggc agaagatccc ctcgttgcac agtttaaaca 16200

gcgaggagga gcgcattttg cgctacgtgc agcagagcgt gagccttaac ctgatgcgcg 16260

acggggtaac gcccagcgtg gcgctggaca tgaccgcgcg caacatggaa ccgggcatgt 16320

atgcctcaaa ccggccgttt atcaaccgcc taatggacta cttgcatcgc gcggccgccg 16380

tgaaccccga gtatttcacc aatgccatct tgaacccgca ctggctaccg ccccctggtt 16440

tctacaccgg gggattcgag gtgcccgagg gtaacgatgg attcctctgg gacgacatag 16500

acgacagcgt gttttccccg caaccgcaga ccctgctaga gttgcaacag cgcgagcagg 16560

cagaggcggc gctgcgaaag gaaagcttcc gcaggccaag cagcttgtcc gatctaggcg 16620

ctgcggcccc gcggtcagat gctagtagcc catttccaag cttgataggg tctcttacca 16680

gcactcgcac cacccgcccg cgcctgctgg gcgaggagga gtacctaaac aactcgctgc 16740

tgcagccgca gcgcgaaaaa aacctgcctc cggcatttcc caacaacggg atagagagcc 16800

tagtggacaa gatgagtaga tggaagacgt acgcgcagga gcacagggac gtgccaggcc 16860

cgcgcccgcc cacccgtcgt caaaggcacg accgtcagcg gggtctggtg tgggaggacg 16920

atgactcggc agacgacagc agcgtcctgg atttgggagg gagtggcaac ccgtttgcgc 16980

accttcgccc caggctgggg agaatgtttt aaaaaaaaaa aagcatgatg caaaataaaa 17040

aactcaccaa ggccatggca ccgagcgttg gttttcttgt attcccctta gtatgcggcg 17100

cgcggcgatg tatgaggaag gtcctcctcc ctcctacgag agtgtggtga gcgcggcgcc 17160

agtggcggcg gcgctgggtt ctcccttcga tgctcccctg gacccgccgt ttgtgcctcc 17220

gcggtacctg cggcctaccg gggggagaaa cagcatccgt tactctgagt tggcacccct 17280

attcgacacc acccgtgtgt acctggtgga caacaagtca acggatgtgg catccctgaa 17340

ctaccagaac gaccacagca actttctgac cacggtcatt caaaacaatg actacagccc 17400

gggggaggca agcacacaga ccatcaatct tgacgaccgg tcgcactggg gcggcgacct 17460

gaaaaccatc ctgcatacca acatgccaaa tgtgaacgag ttcatgttta ccaataagtt 17520

taaggcgcgg gtgatggtgt cgcgcttgcc tactaaggac aatcaggtgg agctgaaata 17580

cgagtgggtg gagttcacgc tgcccgaggg caactactcc gagaccatga ccatagacct 17640

tatgaacaac gcgatcgtgg agcactactt gaaagtgggc agacagaacg gggttctgga 17700

aagcgacatc ggggtaaagt ttgacacccg caacttcaga ctggggtttg accccgtcac 17760

tggtcttgtc atgcctgggg tatatacaaa cgaagccttc catccagaca tcattttgct 17820

gccaggatgc ggggtggact tcacccacag ccgcctgagc aacttgttgg gcatccgcaa 17880

gcggcaaccc ttccaggagg gctttaggat cacctacgat gatctggagg gtggtaacat 17940

tcccgcactg ttggatgtgg acgcctacca ggcgagcttg aaagatgaca ccgaacaggg 18000

cgggggtggc gcaggcggca gcaacagcag tggcagcggc gcggaagaga actccaacgc 18060

ggcagccgcg gcaatgcagc cggtggagga catgaacgat catgccattc gcggcgacac 18120

ctttgccaca cgggctgagg agaagcgcgc tgaggccgaa gcagcggccg aagctgccgc 18180

ccccgctgcg caacccgagg tcgagaagcc tcagaagaaa ccggtgatca aacccctgac 18240

agaggacagc aagaaacgca gttacaacct aataagcaat gacagcacct tcacccagta 18300

ccgcagctgg taccttgcat acaactacgg cgaccctcag accggaatcc gctcatggac 18360

cctgctttgc actcctgacg taacctgcgg ctcggagcag gtctactggt cgttgccaga 18420

catgatgcaa gaccccgtga ccttccgctc cacgcgccag atcagcaact ttccggtggt 18480

gggcgccgag ctgttgcccg tgcactccaa gagcttctac aacgaccagg ccgtctactc 18540

ccaactcatc cgccagttta cctctctgac ccacgtgttc aatcgctttc ccgagaacca 18600

gattttggcg cgcccgccag cccccaccat caccaccgtc agtgaaaacg ttcctgctct 18660

cacagatcac gggacgctac cgctgcgcaa cagcatcgga ggagtccagc gagtgaccat 18720

tactgacgcc agacgccgca cctgccccta cgtttacaag gccctgggca tagtctcgcc 18780

gcgcgtccta tcgagccgca ctttttgagc aagcatgtcc atccttatat cgcccagcaa 18840

taacacaggc tggggcctgc gcttcccaag caagatgttt ggcggggcca agaagcgctc 18900

cgaccaacac ccagtgcgcg tgcgcgggca ctaccgcgcg ccctggggcg cgcacaaacg 18960

cggccgcact gggcgcacca ccgtcgatga cgccatcgac gcggtggtgg aggaggcgcg 19020

caactacacg cccacgccgc caccagtgtc cacagtggac gcggccattc agaccgtggt 19080

gcgcggagcc cggcgctatg ctaaaatgaa gagacggcgg aggcgcgtag cacgtcgcca 19140

ccgccgccga cccggcactg ccgcccaacg cgcggcggcg gccctgctta accgcgcacg 19200

tcgcaccggc cgacgggcgg ccatgcgggc cgctcgaagg ctggccgcgg gtattgtcac 19260

tgtgcccccc aggtccaggc gacgagcggc cgccgcagca gccgcggcca ttagtgctat 19320

gactcagggt cgcaggggca acgtgtattg ggtgcgcgac tcggttagcg gcctgcgcgt 19380

gcccgtgcgc acccgccccc cgcgcaacta gattgcaaga aaaaactact tagactcgta 19440

ctgttgtatg tatccagcgg cggcggcgcg caacgaagct atgtccaagc gcaaaatcaa 19500

agaagagatg ctccaggtca tcgcgccgga gatctatggc cccccgaaga aggaagagca 19560

ggattacaag ccccgaaagc taaagcgggt caaaaagaaa aagaaagatg atgatgatga 19620

acttgacgac gaggtggaac tgctgcacgc taccgcgccc aggcgacggg tacagtggaa 19680

aggtcgacgc gtaaaacgtg ttttgcgacc cggcaccacc gtagtcttta cgcccggtga 19740

gcgctccacc cgcacctaca agcgcgtgta tgatgaggtg tacggcgacg aggacctgct 19800

tgagcaggcc aacgagcgcc tcggggagtt tgcctacgga aagcggcata aggacatgct 19860

ggcgttgccg ctggacgagg gcaacccaac acctagccta aagcccgtaa cactgcagca 19920

ggtgctgccc gcgcttgcac cgtccgaaga aaagcgcggc ctaaagcgcg agtctggtga 19980

cttggcaccc accgtgcagc tgatggtacc caagcgccag cgactggaag atgtcttgga 20040

aaaaatgacc gtggaacctg ggctggagcc cgaggtccgc gtgcggccaa tcaagcaggt 20100

ggcgccggga ctgggcgtgc agaccgtgga cgttcagata cccactacca gtagcaccag 20160

tattgccacc gccacagagg gcatggagac acaaacgtcc ccggttgcct cagcggtggc 20220

ggatgccgcg gtgcaggcgg tcgctgcggc cgcgtccaag acctctacgg aggtgcaaac 20280

ggacccgtgg atgtttcgcg tttcagcccc ccggcgcccg cgccgttcga ggaagtacgg 20340

cgccgccagc gcgctactgc ccgaatatgc cctacatcct tccattgcgc ctacccccgg 20400

ctatcgtggc tacacctacc gccccagaag acgagcaact acccgacgcc gaaccaccac 20460

tggaacccgc cgccgccgtc gccgtcgcca gcccgtgctg gccccgattt ccgtgcgcag 20520

ggtggctcgc gaaggaggca ggaccctggt gctgccaaca gcgcgctacc accccagcat 20580

cgtttaaaag ccggtctttg tggttcttgc agatatggcc ctcacctgcc gcctccgttt 20640

cccggtgccg ggattccgag gaagaatgca ccgtaggagg ggcatggccg gccacggcct 20700

gacgggcggc atgcgtcgtg cgcaccaccg gcggcggcgc gcgtcgcacc gtcgcatgcg 20760

cggcggtatc ctgcccctcc ttattccact gatcgccgcg gcgattggcg ccgtgcccgg 20820

aattgcatcc gtggccttgc aggcgcagag acactgatta aaaacaagtt gcatgtggaa 20880

aaatcaaaat aaaaagtctg gactctcacg ctcgcttggt cctgtaacta ttttgtagaa 20940

tggaagacat caactttgcg tctctggccc cgcgacacgg ctcgcgcccg ttcatgggaa 21000

actggcaaga tatcggcacc agcaatatga gcggtggcgc cttcagctgg ggctcgctgt 21060

ggagcggcat taaaaatttc ggttccaccg ttaagaacta tggcagcaag gcctggaaca 21120

gcagcacagg ccagatgctg agggataagt tgaaagagca aaatttccaa caaaaggtgg 21180

tagatggcct ggcctctggc attagcgggg tggtggacct ggccaaccag gcagtgcaaa 21240

ataagattaa cagtaagctt gatccccgcc ctcccgtaga ggagcctcca ccggccgtgg 21300

agacagtgtc tccagagggg cgtggcgaaa agcgtccgcg ccccgacagg gaagaaactc 21360

tggtgacgca aatagacgag cctccctcgt acgaggaggc actaaagcaa ggcctgccca 21420

ccacccgtcc catcgcgccc atggctaccg gagtgctggg ccagcacaca cccgtaacgc 21480

tggacctgcc tccccccgcc gacacccagc agaaacctgt gctgccaggc ccgaccgccg 21540

ttgttgtaac ccgtcctagc cgcgcgtccc tgcgccgcgc cgccagcggt ccgcgatcgt 21600

tgcggcccgt agccagtggc aactggcaaa gcacactgaa cagcatcgtg ggtctggggg 21660

tgcaatccct gaagcgccga cgatgcttct gatagctaac gtgtcgtatg tgtgtcatgt 21720

atgcgtccat gtcgccgcca gaggagctgc tgagccgccg cgcgcccgct ttccaagatg 21780

gctacccctt cgatgatgcc gcagtggtct tacatgcaca tctcgggcca ggacgcctcg 21840

gagtacctga gccccgggct ggtgcagttt gcccgcgcca ccgagacgta cttcagcctg 21900

aataacaagt ttagaaaccc cacggtggcg cctacgcacg acgtgaccac agaccggtcc 21960

cagcgtttga cgctgcggtt catccctgtg gaccgtgagg atactgcgta ctcgtacaag 22020

gcgcggttca ccctagctgt gggtgataac cgtgtgctgg acatggcttc cacgtacttt 22080

gacatccgcg gcgtgctgga caggggccct acttttaagc cctactctgg cactgcctac 22140

aacgccctgg ctcccaaggg tgccccaaat ccttgcgaat gggatgaagc tgctactgct 22200

cttgaaataa acctagaaga agaggacgat gacaacgaag acgaagtaga cgagcaagct 22260

gagcagcaaa aaactcacgt atttgggcag gcgccttatt ctggtataaa tattacaaag 22320

gagggtattc aaataggtgt cgaaggtcaa acacctaaat atgccgataa aacatttcaa 22380

cctgaacctc aaataggaga atctcagtgg tacgaaacag aaattaatca tgcagctggg 22440

agagtcctaa aaaagactac cccaatgaaa ccatgttacg gttcatatgc aaaacccaca 22500

aatgaaaatg gagggcaagg cattcttgta aagcaacaaa atggaaagct agaaagtcaa 22560

gtggaaatgc aatttttctc aactactgag gcagccgcag gcaatggtga taacttgact 22620

cctaaagtgg tattgtacag tgaagatgta gatatagaaa ccccagacac tcatatttct 22680

tacatgccca ctattaagga aggtaactca cgagaactaa tgggccaaca atctatgccc 22740

aacaggccta attacattgc ttttagggac aattttattg gtctaatgta ttacaacagc 22800

acgggtaata tgggtgttct ggcgggccaa gcatcgcagt tgaatgctgt tgtagatttg 22860

caagacagaa acacagagct ttcataccag cttttgcttg attccattgg tgatagaacc 22920

aggtactttt ctatgtggaa tcaggctgtt gacagctatg atccagatgt tagaattatt 22980

gaaaatcatg gaactgaaga tgaacttcca aattactgct ttccactggg aggtgtgatt 23040

aatacagaga ctcttaccaa ggtaaaacct aaaacaggtc aggaaaatgg atgggaaaaa 23100

gatgctacag aattttcaga taaaaatgaa ataagagttg gaaataattt tgccatggaa 23160

atcaatctaa atgccaacct gtggagaaat ttcctgtact ccaacatagc gctgtatttg 23220

cccgacaagc taaagtacag tccttccaac gtaaaaattt ctgataaccc aaacacctac 23280

gactacatga acaagcgagt ggtggctccc gggctagtgg actgctacat taaccttgga 23340

gcacgctggt cccttgacta tatggacaac gtcaacccat ttaaccacca ccgcaatgct 23400

ggcctgcgct accgctcaat gttgctgggc aatggtcgct atgtgccctt ccacatccag 23460

gtgcctcaga agttctttgc cattaaaaac ctccttctcc tgccgggctc atacacctac 23520

gagtggaact tcaggaagga tgttaacatg gttctgcaga gctccctagg aaatgaccta 23580

agggttgacg gagccagcat taagtttgat agcatttgcc tttacgccac cttcttcccc 23640

atggcccaca acaccgcctc cacgcttgag gccatgctta gaaacgacac caacgaccag 23700

tcctttaacg actatctctc cgccgccaac atgctctacc ctatacccgc caacgctacc 23760

aacgtgccca tatccatccc ctcccgcaac tgggcggctt tccgcggctg ggccttcacg 23820

cgccttaaga ctaaggaaac cccatcactg ggctcgggct acgaccctta ttacacctac 23880

tctggctcta taccctacct agatggaacc ttttacctca accacacctt taagaaggtg 23940

gccattacct ttgactcttc tgtcagctgg cctggcaatg accgcctgct tacccccaac 24000

gagtttgaaa ttaagcgctc agttgacggg gagggttaca acgttgccca gtgtaacatg 24060

accaaagact ggttcctggt acaaatgcta gctaactata acattggcta ccagggcttc 24120

tatatcccag agagctacaa ggaccgcatg tactccttct ttagaaactt ccagcccatg 24180

agccgtcagg tggtggatga tactaaatac aaggactacc aacaggtggg catcctacac 24240

caacacaaca actctggatt tgttggctac cttgccccca ccatgcgcga aggacaggcc 24300

taccctgcta acttccccta tccgcttata ggcaagaccg cagttgacag cattacccag 24360

aaaaagtttc tttgcgatcg cacccttttgg cgcatcccat tctccagtaa ctttatgtcc 24420

atgggcgcac tcacagacct gggccaaaac cttctctacg ccaactccgc ccacgcgcta 24480

gacatgactt ttgaggtgga tcccatggac gagcccaccc ttctttatgt tttgtttgaa 24540

gtctttgacg tggtccgtgt gcaccagccg caccgcggcg tcatcgaaac cgtgtacctg 24600

cgcacgccct tctcggccgg caacgccaca acataaagaa gcaagcaaca tcaacaacag 24660

ctgccgccat gggctccagt gagcaggaac tgaaagccat tgtcaaagat cttggttgtg 24720

ggccatattt tttgggcacc tatgacaagc gctttccagg ctttgtttct ccacacaagc 24780

tcgcctgcgc catagtcaat acggccggtc gcgagactgg gggcgtacac tggatggcct 24840

ttgcctggaa cccgcactca aaaacatgct acctctttga gccctttggc ttttctgacc 24900

agcgactcaa gcaggtttac cagtttgagt acgagtcact cctgcgccgt agcgccattg 24960

cttcttcccc cgaccgctgt ataacgctgg aaaagtccac ccaaagcgta caggggccca 25020

actcggccgc ctgtggacta ttctgctgca tgtttctcca cgcctttgcc aactggcccc 25080

aaactcccat ggatcacaac cccaccatga accttattac cggggtaccc aactccatgc 25140

tcaacagtcc ccaggtacag cccaccctgc gtcgcaacca ggaacagctc tacagcttcc 25200

tggagcgcca ctcgccctac ttccgcagcc acagtgcgca gattaggagc gccacttctt 25260

tttgtcactt gaaaaacatg taaaaataat gtactagaga cactttcaat aaaggcaaat 25320

gcttttattt gtacactctc gggtgattat ttacccccac ccttgccgtc tgcgccgttt 25380

aaaaatcaaa ggggttctgc cgcgcatcgc tatgcgccac tggcagggac acgttgcgat 25440

actggtgttt agtgctccac ttaaactcag gcacaaccat ccgcggcagc tcggtgaagt 25500

tttcactcca caggctgcgc accatcacca acgcgtttag caggtcgggc gccgatatct 25560

tgaagtcgca gttggggcct ccgccctgcg cgcgcgagtt gcgatacaca gggttgcagc 25620

actggaacac tatcagcgcc gggtggtgca cgctggccag cacgctcttg tcggagatca 25680

gatccgcgtc caggtcctcc gcgttgctca gggcgaacgg agtcaacttt ggtagctgcc 25740

ttcccaaaaa gggcgcgtgc ccaggctttg agttgcactc gcaccgtagt ggcatcaaaa 25800

ggtgaccgtg cccggtctgg gcgttaggat acagcgcctg cataaaagcc ttgatctgct 25860

taaaagccac ctgagccttt gcgccttcag agaagaacat gccgcaagac ttgccggaaa 25920

actgattggc cggacaggcc gcgtcgtgca cgcagcacct tgcgtcggtg ttggagatct 25980

gcaccacatt tcggccccac cggttcttca cgatcttggc cttgctagac tgctccttca 26040

gcgcgcgctg cccgttttcg ctcgtcacat ccatttcaat cacgtgctcc ttatttatca 26100

taatgcttcc gtgtagacac ttaagctcgc cttcgatctc agcgcagcgg tgcagccaca 26160

acgcgcagcc cgtgggctcg tgatgcttgt aggtcacctc tgcaaacgac tgcaggtacg 26220

cctgcaggaa tcgccccatc atcgtcacaa aggtcttgtt gctggtgaag gtcagctgca 26280

acccgcggtg ctcctcgttc agccaggtct tgcatacggc cgccagagct tccacttggt 26340

caggcagtag tttgaagttc gcctttagat cgttatccac gtggtacttg tccatcagcg 26400

cgcgcgcagc ctccatgccc ttctcccacg cagacacgat cggcacactc agcgggttca 26460

tcaccgtaat ttcactttcc gcttcgctgg gctcttcctc ttcctcttgc gtccgcatac 26520

cacgcgccac tgggtcgtct tcattcagcc gccgcactgt gcgcttacct cctttgccat 26580

gcttgattag caccggtggg ttgctgaaac ccaccatttg tagcgccaca tcttctcttt 26640

cttcctcgct gtccacgatt acctctggtg atggcgggcg ctcgggcttg ggagaagggc 26700

gcttcttttt cttcttgggc gcaatggcca aatccgccgc cgaggtcgat ggccgcgggc 26760

tgggtgtgcg cggcaccagc gcgtcttgtg atgagtcttc ctcgtcctcg gactcgatac 26820

gccgcctcat ccgctttttt gggggcgccc ggggaggcgg cggcgacggg gacggggacg 26880

acacgtcctc catggttggg ggacgtcgcg ccgcaccgcg tccgcgctcg ggggtggttt 26940

cgcgctgctc ctcttcccga ctggccattt ccttctccta taggcagaaa aagatcatgg 27000

agtcagtcga gaagaaggac agcctaaccg ccccctctga gttcgccacc accgcctcca 27060

ccgatgccgc caacgcgcct accaccttcc ccgtcgaggc acccccgctt gaggaggagg 27120

aagtgattat cgagcaggac ccaggttttg taagcgaaga cgacgaggac cgctcagtac 27180

caacagagga taaaaagcaa gaccaggaca acgcagaggc aaacgaggaa caagtcgggc 27240

gggggggacga aaggcatggc gactacctag atgtgggaga cgacgtgctg ttgaagcatc 27300

tgcagcgcca gtgcgccatt atctgcgacg cgttgcaaga gcgcagcgat gtgcccctcg 27360

ccatagcgga tgtcagcctt gcctacgaac gccacctatt ctcaccgcgc gtacccccca 27420

aacgccaaga aaacggcaca tgcgagccca acccgcgcct caacttctac cccgtatttg 27480

ccgtgccaga ggtgcttgcc acctatcaca tctttttcca aaactgcaag atacccctat 27540

cctgccgtgc caaccgcagc cgagcggaca agcagctggc cttgcggcag ggcgctgtca 27600

tacctgatat cgcctcgctc aacgaagtgc caaaaatctt tgagggtctt ggacgcgacg 27660

agaagcgcgc ggcaaacgct ctgcaacagg aaaacagcga aaatgaaagt cactctggag 27720

tgttggtgga actcgagggt gacaacgcgc gcctagccgt actaaaacgc agcatcgagg 27780

tcacccactt tgcctacccg gcacttaacc tacccccaa ggtcatgagc acagtcatga 27840

gtgagctgat cgtgcgccgt gcgcagcccc tggagaggga tgcaaatttg caagaacaaa 27900

cagaggaggg cctacccgca gttggcgacg agcagctagc gcgctggctt caaacgcgcg 27960

agcctgccga cttggaggag cgacgcaaac taatgatggc cgcagtgctc gttaccgtgg 28020

agcttgagtg catgcagcgg ttctttgctg acccggagat gcagcgcaag ctagaggaaa 28080

cattgcacta caccttcga cagggctacg tacgccaggc ctgcaagatc tccaacgtgg 28140

agctctgcaa cctggtctcc taccttggaa ttttgcacga aaaccgcctt gggcaaaacg 28200

tgcttcattc cacgctcaag ggcgaggcgc gccgcgacta cgtccgcgac tgcgtttact 28260

tatttctatg ctacacctgg cagacggcca tgggcgtttg gcagcagtgc ttggaggagt 28320

gcaacctcaa ggagctgcag aaactgctaa agcaaaactt gaaggaccta tggacggcct 28380

tcaacgagcg ctccgtggcc gcgcacctgg cggacatcat tttccccgaa cgcctgctta 28440

aaaccctgca acagggtctg ccagacttca ccagtcaaag catgttgcag aactttagga 28500

actttatcct agagcgctca ggaatcttgc ccgccacctg ctgtgcactt cctagcgact 28560

ttgtgcccat taagtaccgc gaatgccctc cgccgctttg gggccactgc taccttctgc 28620

agctagccaa ctaccttgcc taccactctg acataatgga agacgtgagc ggtgacggtc 28680

tactggagtg tcactgtcgc tgcaacctat gcaccccgca ccgctccctg gtttgcaatt 28740

cgcagctgct taacgaaagt caaattatcg gtacctttga gctgcagggt ccctcgcctg 28800

acgaaaagtc cgcggctccg gggttgaaac tcactccggg gctgtggacg tcggcttacc 28860

ttcgcaaatt tgtacctgag gactaccacg cccacgagat taggttctac gaagaccaat 28920

cccgcccgcc taatgcggag cttaccgcct gcgtcattac ccagggccac attcttggcc 28980

aattgcaagc catcaacaaa gcccgccaag agtttctgct acgaaaggga cgggggttt 29040

acttggaccc ccagtccggc gaggagctca acccaatccc cccgccgccg cagccctatc 29100

agcagcagcc gcgggccctt gcttcccagg atggcaccca aaaagaagct gcagctgccg 29160

ccgccaccca cggacgagga ggaatactgg gacagtcagg cagaggaggt tttggacgag 29220

gaggaggagg acatgatgga agactgggag agcctagacg aggaagcttc cgaggtcgaa 29280

gaggtgtcag acgaaacacc gtcaccctcg gtcgcattcc cctcgccggc gccccagaaa 29340

tcggcaaccg gttccagcat ggctacaacc tccgctcctc aggcgccgcc ggcactgccc 29400

gttcgccgac ccaaccgtag atgggacacc actggaacca gggccggtaa gtccaagcag 29460

ccgccgccgt tagcccaaga gcaacaacag cgccaaggct accgctcatg gcgcgggcac 29520

aagaacgcca tagttgcttg cttgcaagac tgtgggggca acatctcctt cgcccgccgc 29580

tttcttctct accatcacgg cgtggccttc ccccgtaaca tcctgcatta ctaccgtcat 29640

ctctacagcc catactgcac cggcggcagc ggcagcaaca gcagcggcca cacagaagca 29700

aaggcgaccg gatagcaaga ctctgacaaa gcccaagaaa tccacagcgg cggcagcagc 29760

aggaggagga gcgctgcgtc tggcgcccaa cgaacccgta tcgacccgcg agcttagaaa 29820

caggattttt cccactctgt atgctatatt tcaacagagc aggggccaag aacaagagct 29880

gaaaataaaa aacaggtctc tgcgatccct cacccgcagc tgcctgtatc acaaaagcga 29940

agatcagctt cggcgcacgc tggaagacgc ggaggctctc ttcagtaaat actgcgcgct 30000

gactcttaag gactagtttc gcgccctttc tcaaatttaa gcgcgaaaac tacgtcatct 30060

ccagcggcca cacccggcgc cagcacctgt tgtcagcgcc attatgagca aggaaattcc 30120

cacgccctac atgtggagtt accagccaca aatgggactt gcggctggag ctgcccaaga 30180

ctactcaacc cgaataaact acatgagcgc gggaccccac atgatatccc gggtcaacgg 30240

aatacgcgcc caccgaaacc gaattctcct ggaacaggcg gctattacca ccacacctcg 30300

taataacctt aatccccgta gttggcccgc tgccctggtg taccaggaaa gtcccgctcc 30360

caccactgtg gtacttccca gagacgccca ggccgaagtt cagatgacta actcaggggc 30420

gcagcttgcg ggcggctttc gtcacagggt gcggtcgccc gggcagggta taactcacct 30480

gacaatcaga gggcgaggta ttcagctcaa cgacgagtcg gtgagctcct cgcttggtct 30540

ccgtccggac gggacatttc agatcggcgg cgccggccgc tcttcattca cgcctcgtca 30600

ggcaatccta actctgcaga cctcgtcctc tgagccgcgc tctggaggca ttggaactct 30660

gcaatttatt gaggagtttg tgccatcggt ctactttaac cccttctcgg gacctcccgg 30720

ccactatccg gatcaattta ttcctaactt tgacgcggta aaggactcgg cggacggcta 30780

cgactgaatg ttaagtggag aggcagagca actgcgcctg aaacacctgg tccactgtcg 30840

ccgccacaag tgctttgccc gcgactccgg tgagttttgc tactttgaat tgcccgagga 30900

tcatatcgag ggcccggcgc acggcgtccg gcttaccgcc cagggagagc ttgcccgtag 30960

cctgattcgg gagtttaccc agcgcccccc gctagttgag cgggacaggg gaccctgtgt 31020

tctcactgtg atttgcaact gtcctaaccc tggattacat caagatcctc tagttaatgt 31080

caggtcgcct aagtcgatta actagagtac ccggggatct tattcccttt aactaataaa 31140

aaaaaataat aaagcatcac ttacttaaaa tcagttagca aatttctgtc cagtttattc 31200

agcagcacct ccttgccctc ctcccagctc tggtattgca gcttcctcct ggctgcaaac 31260

tttctccaca atctaaatgg aatgtcagtt tcctcctgtt cctgtccatc cgcacccact 31320

atcttcatgt tgttgcagat gaagcgcgca agaccgtctg aagatacctt caaccccgtg 31380

tatccatatg acacggaaac cggtcctcca actgtgcctt ttcttactcc tccctttgta 31440

tcccccaatg ggtttcaaga gagtcccccc ggggtactct ctttgcgcct atccgaacct 31500

ctagttacct ccaatggcat gcttgcgctc aaaatgggca acggcctctc tctggacgag 31560

gccggcaacc ttacctccca aaatgtaacc actgtgagcc cacctctcaa aaaaaccaag 31620

tcaaacataa acctggaaat atctgcaccc ctcacagtta cctcagaagc cctaactgtg 31680

gctgccgccg cacctctaat ggtcgcgggc aacacactca ccatgcaatc acaggccccg 31740

ctaaccgtgc acgactccaa acttagcatt gccacccaag gacccctcac agtgtcagaa 31800

ggaaagctag ccctgcaaac atcaggcccc ctcaccacca ccgatagcag tacccttact 31860

atcactgcct caccccctct aactactgcc actggtagct tgggcattga cttgaaagag 31920

cccatttata cacaaaatgg aaaactagga ctaaagtacg gggctccttt gcatgtaaca 31980

gacgacctaa acactttgac cgtagcaact ggtccaggtg tgactattaa taatacttcc 32040

ttgcaaacta aagttactgg agccttgggt tttgattcac aaggcaatat gcaacttaat 32100

gtagcaggag gactaaggat tgattctcaa aacagacgcc ttatacttga tgttagttat 32160

ccgtttgatg ctcaaaacca actaaatcta agactaggac agggccctct ttttataaac 32220

tcagcccaca acttggatat taactacaac aaaggccttt acttgtttac agcttcaaac 32280

aattccaaaa agcttgaggt taacctaagc actgccaagg ggttgatgtt tgacgctaca 32340

gccatagcca ttaatgcagg agatgggctt gaatttggtt cacctaatgc accaaacaca 32400

aatcccctca aaacaaaaat tggccatggc ctagaatttg attcaaacaa ggctatggtt 32460

cctaaactag gaactggcct tagttttgac agcacaggtg ccattacagt aggaaacaaa 32520

aataatgata agctaacttt gtggaccgga ataaaccctc cacctaactg tcaaattgtg 32580

gaaaacacta atacaaatga tggcaaactt actttagtat tagtaaaaaa tggagggctt 32640

gttaatggct acgtgtctct agttggtgta tcagacactg tgaaccaaat gttcacacaa 32700

aagacagcaa acatccaatt aagattatat tttgactctt ctggaaatct attaactgag 32760

gaatcagact taaaaattcc acttaaaaat aaatcttcta cagcgaccag tgaaactgta 32820

gccagcagca aagcctttat gccaagtact acagcttatc ccttcaacac cactactagg 32880

gatagtgaaa actacattca tggaatatgt tactacatga ctagttatga tagaagtcta 32940

tttcccttga acatttctat aatgctaaac agccgtatga tttcttccaa tgttgcctat 33000

gccatacaat ttgaatggaa tctaaatgca agtgaatctc cagaaagcaa catagctacg 33060

ctgaccacat ccccctttt cttttcttac attacagaag acgacaacta aagaatcgtt 33120

tgtgttatgt ttcaacgtgt ttatttttca attgcagaaa atttcaagtc atttttcatt 33180

cagtagtata gccccaccac cacatagctt atacagatca ccgtacctta atcaaactca 33240

cagaacccta gtattcaacc tgccacctcc ctcccaacac acagagtaca cagtcctttc 33300

tccccggctg gccttaaaaa gcatcatatc atgggtaaca gacatattct taggtgttat 33360

attccacacg gtttcctgtc gagccaaacg ctcatcagtg atattaataa actccccggg 33420

cagctcactt aagttcatgt cgctgtccag ctgctgagcc acaggctgct gtccaacttg 33480

cggttgctta acgggcggcg aaggagaagt ccacgcctac atgggggtag agtcataatc 33540

gtgcatcagg atagggcggt ggtgctgcag cagcgcgcga ataaactgct gccgccgccg 33600

ctccgtcctg caggaataca acatggcagt ggtctcctca gcgatgattc gcaccgcccg 33660

cagcataagg cgccttgtcc tccgggcaca gcagcgcacc ctgatctcac ttaaatcagc 33720

acagtaactg cagcacagca ccacaatatt gttcaaaatc ccacagtgca aggcgctgta 33780

tccaaagctc atggcgggga ccacagaacc cacgtggcca tcataccaca agcgcaggta 33840

gattaagtgg cgacccctca taaacacgct ggacataaac attacctctt ttggcatgtt 33900

gtaattcacc acctcccggt accatataaa cctctgatta aacatggcgc catccaccac 33960

catcctaaac cagctggcca aaacctgccc gccggctata cactgcaggg aaccgggact 34020

ggaacaatga cagtggagag cccaggactc gtaaccatgg atcatcatgc tcgtcatgat 34080

atcaatgttg gcacaacaca ggcacacgtg catacacttc ctcaggatta caagctcctc 34140

ccgcgttaga accatatccc agggaacaac ccattcctga atcagcgtaa atcccacact 34200

gcagggaaga cctcgcacgt aactcacgtt gtgcattgtc aaagtgttac attcgggcag 34260

cagcggatga tcctccagta tggtagcgcg ggtttctgtc tcaaaaggag gtagacgatc 34320

cctactgtac ggagtgcgcc gagacaaccg agatcgtgtt ggtcgtagtg tcatgccaaa 34380

tggaacgccg gacgtagtca tatttcctga agcaaaacca ggtgcgggcg tgacaaacag 34440

atctgcgtct ccggtctcgc cgcttagatc gctctgtgta gtagttgtag tatatccact 34500

ctctcaaagc atccaggcgc cccctggctt cgggttctat gtaaactcct tcatgcgccg 34560

ctgccctgat aacatccacc accgcagaat aagccacacc cagccaacct acacattcgt 34620

tctgcgagtc acacacggga ggagcgggaa gagctggaag aaccatgttt ttttttttat 34680

tccaaaagat tatccaaaac ctcaaaatga agatctatta agtgaacgcg ctcccctccg 34740

gtggcgtggt caaactctac agccaaagaa cagataatgg catttgtaag atgttgcaca 34800

atggcttcca aaaggcaaac ggccctcacg tccaagtgga cgtaaaggct aaacccttca 34860

gggtgaatct cctctataaa cattccagca ccttcaacca tgcccaaata attctcatct 34920

cgccaccttc tcaatatatc tctaagcaaa tcccgaatat taagtccggc cattgtaaaa 34980

atctgctcca gagcgccctc caccttcagc ctcaagcagc gaatcatgat tgcaaaaatt 35040

caggttcctc acagacctgt ataagattca aaagcggaac attaacaaaa ataccgcgat 35100

cccgtaggtc ccttcgcagg gccagctgaa cataatcgtg caggtctgca cggaccagcg 35160

cggccacttc cccgccagga accatgacaa aagaacccac actgattatg acacgcatac 35220

tcggagctat gctaaccagc gtagccccga tgtaagcttg ttgcatgggc ggcgatataa 35280

aatgcaaggt gctgctcaaa aaatcaggca aagcctcgcg caaaaaagaa agcacatcgt 35340

agtcatgctc atgcagataa aggcaggtaa gctccggaac caccacagaa aaagacacca 35400

tttttctctc aaacatgtct gcgggtttct gcataaacac aaaataaaat aacaaaaaaa 35460

catttaaaca ttagaagcct gtcttacaac aggaaaaaca acccttataa gcataagacg 35520

gactacggcc atgccggcgt gaccgtaaaa aaactggtca ccgtgattaa aaagcaccac 35580

cgacagctcc tcggtcatgt ccggagtcat aatgtaagac tcggtaaaca catcaggttg 35640

attcacatcg gtcagtgcta aaaagcgacc gaaatagccc gggggaatac atacccgcag 35700

gcgtagagac aacattacag cccccatagg aggtataaca aaattaatag gagagaaaaa 35760

cacataaaca cctgaaaaac cctcctgcct aggcaaaata gcaccctccc gctccagaac 35820

aacatacagc gcttccacag cggcagccat aacagtcagc cttaccagta aaaaagaaaa 35880

cctattaaaa aaacaccact cgacacggca ccagctcaat cagtcacagt gtaaaaaagg 35940

gccaagtgca gagcgagtat atataggact aaaaaatgac gtaacggtta aagtccacaa 36000

aaaacaccca gaaaaccgca cgcgaaccta cgcccagaaa cgaaagccaa aaaacccaca 36060

acttcctcaa atcgtcactt ccgttttccc acgttacgtc acttcccatt ttaagaaaac 36120

tacaattccc aacacataca agttactccg ccctaaaacc tacgtcaccc gccccgttcc 36180

cacgccccgc gccacgtcac aaactccacc ccctcattat catattggct tcaatccaaa 36240

ataaggtata ttattgatga tg 36262

<210> 2
<211> 36248
<212> DNA
<213> Artificial Sequence

<220>
<223> pRCA-E4dl355

<400> 2
ttaattaaga attaattcga tcctgaatgg cgaatggacg cgccctgtag cggcgcatta 60

agcgcggcgg gtgtggtggt tacgcgcagc gtgaccgcta cacttgccag cgccctagcg 120

cccgctcctt tcgctttctt cccttccttt ctcgccacgt tcgccggctt tccccgtcaa 180

gctctaaatc gggggctccc tttagggttc cgatttagtg ctttacggca cctcgacccc 240

aaaaaacttg attagggtga tggttcacgt agtgggccat cgccctgata gacggttttt 300

cgcccttttga cgttggagtc cacgttcttt aatagtggac tcttgttcca aactggaaca 360

acactcaacc ctatctcggt ctattctttt gatttataag ggattttgcc gatttcggcc 420

tattggttaa aaaatgagct gatttaacaa aaattttaac aaaattcaga agaactcgtc 480

aagaaggcga tagaaggcga tgcgctgcga atcgggagcg gcgataccgt aaagcacgag 540

gaagcggtca gcccattcgc cgccaagctc ttcagcaata tcacgggtag ccaacgctat 600

gtcctgatag cggtccgcca cacccagccg gccacagtcg atgaatccag aaaagcggcc 660

attttccacc atgatattcg gcaagcaggc atcgccatgg gtcacgacga gatcctcgcc 720

gtcgggcatg ctcgccttga gcctggcgaa cagttcggct ggcgcgagcc cctgatgctc 780

ttcgtccaga tcatcctgat cgacaagacc ggcttccatc cgagtacgtg ctcgctcgat 840

gcgatgtttc gcttggtggt cgaatgggca ggtagccgga tcaagcgtat gcagccgccg 900

cattgcatca gccatgatgg atactttctc ggcaggagca aggtgagatg acaggagatc 960

ctgccccggc acttcgccca atagcagcca gtcccttccc gcttcagtga caacgtcgag 1020

cacagctgcg caaggaacgc ccgtcgtggc cagccacgat agccgcgctg cctcgtcttg 1080

cagttcattc agggcaccgg acaggtcggt cttgacaaaa agaaccgggc gcccctgcgc 1140

tgacagccgg aacacggcgg catcagagca gccgattgtc tgttgtgccc agtcatagcc 1200

gaatagcctc tccacccaag cggccggaga acctgcgtgc aatccatctt gttcaatcat 1260

gcgaaacgat cctcatcctg tctcttgatc agagcttgat cccctgcgcc atcagatcct 1320

tggcggcaag aaagccatcc agtttacttt gcagggcttc ccaaccttac cagagggcgc 1380

cccagctggc aattccggtt cgcttgctgt ccataaaacc gcccagtcta gctatcgcca 1440

tgtaagccca ctgcaagcta cctgctttct ctttgcgctt gcgttttccc ttgtccagat 1500

agcccagtag ctgacattca tccggggtca gcaccgtttc tgcggactgg ctttctacgt 1560

gaaaaggatc taggtgaaga tccttttga taatctcatg gctgcagcaa tggcaacaac 1620

gttgcgcaaa ctattaactg gcgaactact tactctagct tcccggcaac aattaataga 1680

ctggatggag gcggataaag ttgcaggacc acttctgcgc tcggcccttc cggctggctg 1740

gtttattgct gataaatctg gagccggtga gcgtgggtct cgcggtatca ttgcagcact 1800

ggggccagat ggtaagccct cccgtatcgt agttatctac acgacgggga gtcaggcaac 1860

tatggatgaa cgaaatagac agatcgctga gataggtgcc tcactgatta agcattggta 1920

actgtcagac caagtttact catatatact ttagattgat ttaaaacttc atttttaatt 1980

taaaaggatc taggtgaaga tccttttga taatctcatg accaaaatcc cttaacgtga 2040

gttttcgttc cactgagcgt cagaccccgt agaaaagatc aaaggatctt cttgagatcc 2100

ttttttctg cgcgtaatct gctgcttgca aacaaaaaaa ccaccgctac cagcggtggt 2160

ttgtttgccg gatcaagagc taccaactct ttttccgaag gtaactggct tcagcagagc 2220

gcagatacca aatactgtcc ttctagtgta gccgtagtta ggccaccact tcaagaactc 2280

tgtagcaccg cctacatacc tcgctctgct aatcctgtta ccagtggctg ctgccagtgg 2340

cgataagtcg tgtcttaccg ggttggactc aagacgatag ttaccggata aggcgcagcg 2400

gtcgggctga acgggggggtt cgtgcacaca gcccagcttg gagcgaacga cctacaccga 2460

actgagatac ctacagcgtg agctatgaga aagcgccacg cttcccgaag ggagaaaggc 2520

ggacaggtat ccggtaagcg gcagggtcgg aacaggagag cgcacgaggg agcttccagg 2580

gggaaacgcc tggtatcttt atagtcctgt cgggtttcgc cacctctgac ttgagcgtcg 2640

atttttgtga tgctcgtcag gggggcggag cctatggaaa aacgccagca acgcggcctt 2700

tttacggttc ctggcctttt gctggccttt tgctcacatg ttctttcctg cgttatcccc 2760

tgattctgtg gataaccgta ttaccgcctt tgagtgagct gataccgctc gccgcagccg 2820

aacgaccgag cgcagcgagt cagtgagcga ggaagcggaa gagcgcctga tgcggtattt 2880

tctccttacg catctgtgcg gtatttcaca ccgcatatgg atccatgcat gttaattaac 2940

atcatcaata atatacctta ttttggattg aagccaatat gataatgagg gggtggagtt 3000

tgtgacgtgg cgcggggcgt gggaacgggg cgggtgacgt agtagtgtgg cggaagtgtg 3060

atgttgcaag tgtggcggaa cacatgtaag cgacggatgt ggcaaaagtg acgttttgg 3120

tgtgcgccgg tgtacacagg aagtgacaat tttcgcgcgg ttttaggcgg atgttgtagt 3180

aaatttgggc gtaaccgagt aagatttggc cattttcgcg ggaaaactga ataagaggaa 3240

gtgaaatctg aataattttg tgttactcat agcgcgtaat atttgtctag ggccgcgggg 3300

actttgaccg tttacgtgga gactcgccca ggtgtttttc tcaggtgttt tccgcgttcc 3360

gggtcaaagt tggcgtttta ttattatagt cagctgacgt gtagtgtatt tatacccggt 3420

gagttcctca agaggccact cttgagtgcc agcgagtaga gttttctcct ccgagccgct 3480

ccgacaccgg gactgaaaat gagacatatt atctgccacg gaggtgttat taccgaagaa 3540

atggccgcca gtcttttgga ccagctgatc gaagaggtac tggctgataa tcttccacct 3600

cctagccatt ttgaaccacc taccttcac gaactgtatg atttagacgt gacggccccc 3660

gaagatccca acgaggaggc ggtttcgcag atttttcccg actctgtaat gttggcggtg 3720

caggaaggga ttgacttact cacttttccg ccggcgcccg gttctccgga gccgcctcac 3780

ctttcccggc agcccgagca gccggagcag agagccttgg gtccggtttc tatgccaaac 3840

cttgtaccgg aggtgatcga tcttacctgc cacgaggctg gctttccacc cagtgacgac 3900

gaggatgaag agggtgagga gtttgtgtta gattatgtgg agcaccccgg gcacggttgc 3960

aggtcttgtc attatcaccg gaggaatacg ggggacccag atattatgtg ttcgctttgc 4020

tatatgagga cctgtggcat gtttgtctac agtaagtgaa aattatgggc agtgggtgat 4080

agagtggtgg gtttggtgtg gtaatttttt ttttaatttt tacagttttg tggtttaaag 4140

aattttgtat tgtgattttt ttaaaaggtc ctgtgtctga acctgagcct gagcccgagc 4200

cagaaccgga gcctgcaaga cctacccgcc gtcctaaaat ggcgcctgct atcctgagac 4260

gcccgacatc acctgtgtct agagaatgca atagtagtac ggatagctgt gactccggtc 4320

cttctaacac acctcctgag atacacccgg tggtcccgct gtgccccatt aaaccagttg 4380

ccgtgagagt tggtgggcgt cgccaggctg tggaatgtat cgaggacttg cttaacgagc 4440

ctgggcaacc tttggacttg agctgtaaac gccccaggcc ataaggtgta aacctgtgat 4500

tgcgtgtgtg gttaacgcct ttgtttgctg aatgagttga tgtaagttta ataaagggtg 4560

agataatgtt taacttgcat ggcgtgttaa atggggcggg gcttaaaggg tatataatgc 4620

gccgtgggct aatcttggtt acatctgacc tcatggaggc ttgggagtgt ttggaagatt 4680

tttctgctgt gcgtaacttg ctggaacaga gctctaacag tacctcttgg ttttggaggt 4740

ttctgtgggg ctcatcccag gcaaagttag tctgcagaat taaggaggat tacaagtggg 4800

aatttgaaga gcttttgaaa tcctgtggtg agctgtttga ttctttgaat ctgggtcacc 4860

aggcgctttt ccaagagaag gtcatcaaga ctttggattt ttccacaccg gggcgcgctg 4920

cggctgctgt tgctttttg agttttataa aggataaatg gagcgaagaa acccatctga 4980

gcgggggta cctgctggat tttctggcca tgcatctgtg gagagcggtt gtgagacaca 5040

agaatcgcct gctactgttg tcttccgtcc gcccggcgat aataccgacg gaggagcagc 5100

agcagcagca ggaggaagcc aggcggcggc ggcaggagca gagcccatgg aacccgagag 5160

ccggcctgga ccctcgggaa tgaatgttgt acaggtggct gaactgtatc cagaactgag 5220

acgcattttg acaattacag aggatgggca ggggctaaag ggggtaaaga gggagcgggg 5280

ggcttgtgag gctacagagg aggctaggaa tctagctttt agcttaatga ccagacaccg 5340

tcctgagtgt attacttttc aacagatcaa ggataattgc gctaatgagc ttgatctgct 5400

ggcgcagaag tattccatag agcagctgac cacttactgg ctgcagccag gggatgattt 5460

tgaggaggct attagggtat atgcaaaggt ggcacttagg ccagattgca agtacaagat 5520

cagcaaactt gtaaatatca ggaattgttg ctacatttct gggaacgggg ccgaggtgga 5580

gatagatacg gaggataggg tggcctttag atgtagcatg ataaatatgt ggccgggggt 5640

gcttggcatg gacggggtgg ttattatgaa tgtaaggttt actggcccca attttagcgg 5700

tacggttttc ctggccaata ccaaccttat cctacacggt gtaagcttct atgggtttaa 5760

caatacctgt gtggaagcct ggaccgatgt aagggttcgg ggctgtgcct tttactgctg 5820

ctggaagggg gtggtgtgtc gccccaaaag cagggcttca attaagaaat gcctctttga 5880

aaggtgtacc ttgggtatcc tgtctgaggg taactccagg gtgcgccaca atgtggcctc 5940

cgactgtggt tgcttcatgc tagtgaaaag cgtggctgtg attaagcata acatggtatg 6000

tggcaactgc gaggacaggg cctctcagat gctgacctgc tcggacggca actgtcacct 6060

gctgaagacc attcacgtag ccagccactc tcgcaaggcc tggccagtgt ttgagcataa 6120

catactgacc cgctgttcct tgcatttggg taacaggagg ggggtgttcc taccttacca 6180

atgcaatttg agtcacacta agatattgct tgagcccgag agcatgtcca aggtgaacct 6240

gaacggggtg tttgacatga ccatgaagat ctggaaggtg ctgaggtacg atgagacccg 6300

caccaggtgc agaccctgcg agtgtggcgg taaacatatt aggaaccagc ctgtgatgct 6360

ggatgtgacc gaggagctga ggcccgatca cttggtgctg gcctgcaccc gcgctgagtt 6420

tggctctagc gatgaagata cagattgagg tactgaaatg tgtgggcgtg gcttaagggt 6480

gggaaagaat atataaggtg ggggtcttat gtagttttgt atctgttttg cagcagccgc 6540

cgccgccatg agcaccaact cgtttgatgg aagcattgtg agctcatatt tgacaacgcg 6600

catgccccca tgggccgggg tgcgtcagaa tgtgatgggc tccagcattg atggtcgccc 6660

cgtcctgccc gcaaactcta ctaccttgac ctacgagacc gtgtctggaa cgccgttgga 6720

gactgcagcc tccgccgccg cttcagccgc tgcagccacc gcccgcggga ttgtgactga 6780

ctttgctttc ctgagcccgc ttgcaagcag tgcagcttcc cgttcatccg cccgcgatga 6840

caagttgacg gctcttttgg cacaattgga ttctttgacc cgggaactta atgtcgtttc 6900

tcagcagctg ttggatctgc gccagcaggt ttctgccctg aaggcttcct cccctcccaa 6960

tgcggtttaa aacataaata aaaaaccaga ctctgtttgg atttggatca agcaagtgtc 7020

ttgctgtctt tatttagggg ttttgcgcgc gcggtaggcc cgggaccagc ggtctcggtc 7080

gttgagggtc ctgtgtattt tttccaggac gtggtaaagg tgactctgga tgttcagata 7140

catgggcata agcccgtctc tggggtggag gtagcaccac tgcagagctt catgctgcgg 7200

ggtggtgttg tagatgatcc agtcgtagca ggagcgctgg gcgtggtgcc taaaaatgtc 7260

tttcagtagc aagctgattg ccaggggcag gcccttggtg taagtgttta caaagcggtt 7320

aagctgggat gggtgcatac gtggggatat gagatgcatc ttggactgta tttttaggtt 7380

ggctatgttc ccagccatat ccctccgggg attcatgttg tgcagaacca ccagcacagt 7440

gtatccggtg cacttgggaa atttgtcatg tagcttagaa ggaaatgcgt ggaagaactt 7500

ggagacgccc ttgtgacctc caagattttc catgcattcg tccataatga tggcaatggg 7560

cccacgggcg gcggcctggg cgaagatatt tctgggatca ctaacgtcat agttgtgttc 7620

caggatgaga tcgtcatagg ccatttttac aaagcgcggg cggagggtgc cagactgcgg 7680

tataatggtt ccatccggcc caggggcgta gttaccctca cagatttgca tttcccacgc 7740

tttgagttca gatgggggga tcatgtctac ctgcggggcg atgaagaaaa cggtttccgg 7800

ggtaggggag atcagctggg aagaaagcag gttcctgagc agctgcgact taccgcagcc 7860

ggtgggcccg taaatcacac ctattaccgg gtgcaactgg tagttaagag agctgcagct 7920

gccgtcatcc ctgagcaggg gggccacttc gttaagcatg tccctgactc gcatgttttc 7980

cctgaccaaa tccgccagaa ggcgctcgcc gcccagcgat agcagttctt gcaaggaagc 8040

aaagtttttc aacggtttga gaccgtccgc cgtaggcatg cttttgagcg tttgaccaag 8100

cagttccagg cggtcccaca gctcggtcac ctgctctacg gcatctcgat ccagcatatc 8160

tcctcgtttc gcgggttggg gcggctttcg ctgtacggca gtagtcggtg ctcgtccaga 8220

cgggccaggg tcatgtcttt ccacgggcgc agggtcctcg tcagcgtagt ctgggtcacg 8280

gtgaaggggt gcgctccggg ctgcgcgctg gccagggtgc gcttgaggct ggtcctgctg 8340

gtgctgaagc gctgccggtc ttcgccctgc gcgtcggcca ggtagcattt gaccatggtg 8400

tcatagtcca gcccctccgc ggcgtggccc ttggcgcgca gcttgccctt ggaggaggcg 8460

ccgcacgagg ggcagtgcag acttttgagg gcgtagagct tgggcgcgag aaataccgat 8520

tccggggagt aggcatccgc gccgcaggcc ccgcagacgg tctcgcattc cacgagccag 8580

gtgagctctg gccgttcggg gtcaaaaacc aggtttcccc catgcttttt gatgcgtttc 8640

ttacctctgg tttccatgag ccggtgtcca cgctcggtga cgaaaaggct gtccgtgtcc 8700

ccgtatacag acttgagagg cctgtcctcg agcggtgttc cgcggtcctc ctcgtataga 8760

aactcggacc actctgagac aaaggctcgc gtccaggcca gcacgaagga ggctaagtgg 8820

gaggggtagc ggtcgttgtc cactaggggg tccactcgct ccagggtgtg aagacacatg 8880

tcgccctctt cggcatcaag gaaggtgatt ggtttgtagg tgtaggccac gtgaccgggt 8940

gttcctgaag gggggctata aaaggggtg ggggcgcgtt cgtcctcact ctcttccgca 9000

tcgctgtctg cgagggccag ctgttggggt gagtactccc tctgaaaagc gggcatgact 9060

tctgcgctaa gattgtcagt ttccaaaaac gaggaggatt tgatattcac ctggcccgcg 9120

gtgatgcctt tgagggtggc cgcatccatc tggtcagaaa agacaatctt tttgttgtca 9180

agcttggtgg caaacgaccc gtagagggcg ttggacagca acttggcgat ggagcgcagg 9240

gtttggtttt tgtcgcgatc ggcgcgctcc ttggccgcga tgtttagctg cacgtattcg 9300

cgcgcaacgc accgccattc gggaaagacg gtggtgcgct cgtcgggcac caggtgcacg 9360

cgccaaccgc ggttgtgcag ggtgacaagg tcaacgctgg tggctacctc tccgcgtagg 9420

cgctcgttgg tccagcagag gcggccgccc ttgcgcgagc agaatggcgg taggggtct 9480

agctgcgtct cgtccggggg gtctgcgtcc acggtaaaga ccccgggcag caggcgcgcg 9540

tcgaagtagt ctatcttgca tccttgcaag tctagcgcct gctgccatgc gcgggcggca 9600

agcgcgcgct cgtatgggtt gagtgggga ccccatggca tggggtgggt gagcgcggag 9660

gcgtacatgc cgcaaatgtc gtaaacgtag aggggctctc tgagtattcc aagatatgta 9720

gggtagcatc ttccaccgcg gatgctggcg cgcacgtaat cgtatagttc gtgcgaggga 9780

gcgaggaggt cgggaccgag gttgctacgg gcgggctgct ctgctcggaa gactatctgc 9840

ctgaagatgg catgtgagtt ggatgatatg gttggacgct ggaagacgtt gaagctggcg 9900

tctgtgagac ctaccgcgtc acgcacgaag gaggcgtagg agtcgcgcag cttgttgacc 9960

agctcggcgg tgacctgcac gtctagggcg cagtagtcca gggtttcctt gatgatgtca 10020

tacttatcct gtccctttt tttccacagc tcgcggttga ggacaaactc ttcgcggtct 10080

ttccagtact cttggatcgg aaacccgtcg gcctccgaac ggtaagagcc tagcatgtag 10140

aactggttga cggcctggta ggcgcagcat ccctttcta cgggtagcgc gtatgcctgc 10200

gcggccttcc ggagcgaggt gtgggtgagc gcaaaggtgt ccctgaccat gactttgagg 10260

tactggtatt tgaagtcagt gtcgtcgcat ccgccctgct cccagagcaa aaagtccgtg 10320

cgcttttgg aacgcggatt tggcagggcg aaggtgacat cgttgaagag tatctttccc 10380

gcgcgaggca taaagttgcg tgtgatgcgg aagggtcccg gcacctcgga acggttgtta 10440

attacctggg cggcgagcac gatctcgtca aagccgttga tgttgtggcc cacaatgtaa 10500

agttccaaga agcgcgggat gcccttgatg gaaggcaatt ttttaagttc ctcgtaggtg 10560

agctcttcag gggagctgag cccgtgctct gaaagggccc agtctgcaag atgagggttg 10620

gaagcgacga atgagctcca caggtcacgg gccattagca tttgcaggtg gtcgcgaaag 10680

gtcctaaact ggcgacctat ggccattttt tctggggtga tgcagtagaa ggtaagcggg 10740

tcttgttccc agcggtccca tccaaggttc gcggctaggt ctcgcgcggc agtcactaga 10800

ggctcatctc cgccgaactt catgaccagc atgaagggca cgagctgctt cccaaaggcc 10860

cccatccaag tataggtctc tacatcgtag gtgacaaaga gacgctcggt gcgaggatgc 10920

gagccgatcg ggaagaactg gatctcccgc caccaattgg aggagtggct attgatgtgg 10980

tgaaagtaga agtccctgcg acgggccgaa cactcgtgct ggcttttgta aaaacgtgcg 11040

cagtactggc agcggtgcac gggctgtaca tcctgcacga ggttgacctg acgaccgcgc 11100

acaaggaagc agagtgggaa tttgagcccc tcgcctggcg ggtttggctg gtggtcttct 11160

acttcggctg cttgtccttg accgtctggc tgctcgaggg gagttacggt ggatcggacc 11220

accacgccgc gcgagcccaa agtccagatg tccgcgcgcg gcggtcggag cttgatgaca 11280

acatcgcgca gatgggagct gtccatggtc tggagctccc gcggcgtcag gtcaggcggg 11340

agctcctgca ggtttacctc gcatagacgg gtcagggcgc gggctagatc caggtgatac 11400

ctaatttcca ggggctggtt ggtggcggcg tcgatggctt gcaagaggcc gcatccccgc 11460

ggcgcgacta cggtaccgcg cggcgggcgg tgggccgcgg gggtgtcctt ggatgatgca 11520

tctaaaagcg gtgacgcggg cgagcccccg gaggtagggg gggctccgga cccgccggga 11580

gagggggcag gggcacgtcg gcgccgcgcg cgggcaggag ctggtgctgc gcgcgtaggt 11640

tgctggcgaa cgcgacgacg cggcggttga tctcctgaat ctggcgcctc tgcgtgaaga 11700

cgacgggccc ggtgagcttg aacctgaaag agagttcgac agaatcaatt tcggtgtcgt 11760

tgacggcggc ctggcgcaaa atctcctgca cgtctcctga gttgtcttga taggcgatct 11820

cggccatgaa ctgctcgatc tcttcctcct ggagatctcc gcgtccggct cgctccacgg 11880

tggcggcgag gtcgttggaa atgcgggcca tgagctgcga gaaggcgttg aggcctccct 11940

cgttccagac gcggctgtag accacgcccc cttcggcatc gcgggcgcgc atgaccacct 12000

gcgcgagatt gagctccacg tgccgggcga agacggcgta gtttcgcagg cgctgaaaga 12060

ggtagttgag ggtggtggcg gtgtgttctg ccacgaagaa gtacataacc cagcgtcgca 12120

acgtggattc gttgatatcc cccaaggcct caaggcgctc catggcctcg tagaagtcca 12180

cggcgaagtt gaaaaactgg gagttgcgcg ccgacacggt taactcctcc tccagaagac 12240

ggatgagctc ggcgacagtg tcgcgcacct cgcgctcaaa ggctacaggg gcctcttctt 12300

cttcttcaat ctcctcttcc ataagggcct ccccttcttc ttcttctggc ggcggtgggg 12360

gaggggggac acggcggcga cgacggcgca ccgggaggcg gtcgacaaag cgctcgatca 12420

tctccccgcg gcgacggcgc atggtctcgg tgacggcgcg gccgttctcg cgggggcgca 12480

gttggaagac gccgcccgtc atgtcccggt tatgggttgg cgggggggctg ccatgcggca 12540

gggatacggc gctaacgatg catctcaaca attgttgtgt aggtactccg ccgccgaggg 12600

acctgagcga gtccgcatcg accggatcgg aaaacctctc gagaaaggcg tctaaccagt 12660

cacagtcgca aggtaggctg agcaccgtgg cgggcggcag cgggcggcgg tcggggttgt 12720

ttctggcgga ggtgctgctg atgatgtaat taaagtaggc ggtcttgaga cggcggatgg 12780

tcgacagaag caccatgtcc ttgggtccgg cctgctgaat gcgcaggcgg tcggccatgc 12840

cccaggcttc gttttgacat cggcgcaggt ctttgtagta gtcttgcatg agcctttcta 12900

ccggcacttc ttcttctcct tcctcttgtc ctgcatctct tgcatctatc gctgcggcgg 12960

cggcggagtt tggccgtagg tggcgccctc ttcctcccat gcgtgtgacc ccgaagcccc 13020

tcatcggctg aagcagggct aggtcggcga caacgcgctc ggctaatatg gcctgctgca 13080

cctgcgtgag ggtagactgg aagtcatcca tgtccacaaa gcggtggtat gcgcccgtgt 13140

tgatggtgta agtgcagttg gccataacgg accagttaac ggtctggtga cccggctgcg 13200

agagctcggt gtacctgaga cgcgagtaag ccctcgagtc aaatacgtag tcgttgcaag 13260

tccgcaccag gtactggtat cccaccaaaa agtgcggcgg cggctggcgg tagaggggcc 13320

agcgtagggt ggccggggct ccgggggcga gatcttccaa cataaggcga tgatatccgt 13380

agatgtacct ggacatccag gtgatgccgg cggcggtggt ggaggcgcgc ggaaagtcgc 13440

ggacgcggtt ccagatgttg cgcagcggca aaaagtgctc catggtcggg acgctctggc 13500

cggtcaggcg cgcgcaatcg ttgacgctct agcgtgcaaa aggagagcct gtaagcgggc 13560

actcttccgt ggtctggtgg ataaattcgc aagggtatca tggcggacga ccggggttcg 13620

agccccgtat ccggccgtcc gccgtgatcc atgcggttac cgcccgcgtg tcgaacccag 13680

gtgtgcgacg tcagacaacg ggggagtgct ccttttggct tccttccagg cgcggcggct 13740

gctgcgctag ctttttttggc cactggccgc gcgcagcgta agcggttagg ctggaaagcg 13800

aaagcattaa gtggctcgct ccctgtagcc ggagggttat tttccaaggg ttgagtcgcg 13860

ggacccccgg ttcgagtctc ggaccggccg gactgcggcg aacgggggtt tgcctccccg 13920

tcatgcaaga ccccgcttgc aaattcctcc ggaaacaggg acgagcccct tttttgcttt 13980

tcccagatgc atccggtgct gcggcagatg cgccccccctc ctcagcagcg gcaagagcaa 14040

gagcagcggc agacatgcag ggcaccctcc cctcctccta ccgcgtcagg aggggcgaca 14100

tccgcggttg acgcggcagc agatggtgat tacgaacccc cgcggcgccg ggcccggcac 14160

tacctggact tggaggaggg cgagggcctg gcgcggctag gagcgccctc tcctgagcgg 14220

cacccaaggg tgcagctgaa gcgtgatacg cgtgaggcgt acgtgccgcg gcagaacctg 14280

tttcgcgacc gcgagggaga ggagcccgag gagatgcggg atcgaaagtt ccacgcaggg 14340

cgcgagctgc ggcatggcct gaatcgcgag cggttgctgc gcgaggagga ctttgagccc 14400

gacgcgcgaa ccgggattag tcccgcgcgc gcacacgtgg cggccgccga cctggtaacc 14460

gcatacgagc agacggtgaa ccaggagatt aactttcaaa aaagctttaa caaccacgtg 14520

cgtacgcttg tggcgcgcga ggaggtggct ataggactga tgcatctgtg ggactttgta 14580

agcgcgctgg agcaaaaccc aaatagcaag ccgctcatgg cgcagctgtt ccttatagtg 14640

cagcacagca gggacaacga ggcattcagg gatgcgctgc taaacatagt agagcccgag 14700

ggccgctggc tgctcgattt gataaacatc ctgcagagca tagtggtgca ggagcgcagc 14760

ttgagcctgg ctgacaaggt ggccgccatc aactattcca tgcttagcct gggcaagttt 14820

tacgcccgca agatatacca taccccttac gttcccatag acaaggaggt aaagatcgag 14880

gggttctaca tgcgcatggc gctgaaggtg cttaccttga gcgacgacct gggcgtttat 14940

cgcaacgagc gcatccacaa ggccgtgagc gtgagccggc ggcgcgagct cagcgaccgc 15000

gagctgatgc acagcctgca aagggccctg gctggcacgg gcagcggcga tagagaggcc 15060

gagtcctact ttgacgcggg cgctgacctg cgctgggccc caagccgacg cgccctggag 15120

gcagctgggg ccggacctgg gctggcggtg gcacccgcgc gcgctggcaa cgtcggcggc 15180

gtggaggaat atgacgagga cgatgagtac gagccagagg acggcgagta ctaagcggtg 15240

atgtttctga tcagatgatg caagacgcaa cggacccggc ggtgcgggcg gcgctgcaga 15300

gccagccgtc cggccttaac tccacggacg actggcgcca ggtcatggac cgcatcatgt 15360

cgctgactgc gcgcaatcct gacgcgttcc ggcagcagcc gcaggccaac cggctctccg 15420

caattctgga agcggtggtc ccggcgcgcg caaaccccac gcacgagaag gtgctggcga 15480

tcgtaaacgc gctggccgaa aacagggcca tccggcccga cgaggccggc ctggtctacg 15540

acgcgctgct tcagcgcgtg gctcgttaca acagcggcaa cgtgcagacc aacctggacc 15600

ggctggtggg ggatgtgcgc gaggccgtgg cgcagcgtga gcgcgcgcag cagcagggca 15660

acctgggctc catggttgca ctaaacgcct tcctgagtac acagcccgcc aacgtgccgc 15720

ggggacagga ggactacacc aactttgtga gcgcactgcg gctaatggtg actgagacac 15780

cgcaaagtga ggtgtaccag tctgggccag actatttttt ccagaccagt agacaaggcc 15840

tgcagaccgt aaacctgagc caggctttca aaaacttgca ggggctgtgg ggggtgcggg 15900

ctcccacagg cgaccgcgcg accgtgtcta gcttgctgac gcccaactcg cgcctgttgc 15960

tgctgctaat agcgcccttc acggacagtg gcagcgtgtc ccgggacaca tacctaggtc 16020

acttgctgac actgtaccgc gaggccatag gtcaggcgca tgtggacgag catactttcc 16080

aggagattac aagtgtcagc cgcgcgctgg ggcaggagga cacgggcagc ctggaggcaa 16140

ccctaaacta cctgctgacc aaccggcggc agaagatccc ctcgttgcac agtttaaaca 16200

gcgaggagga gcgcattttg cgctacgtgc agcagagcgt gagccttaac ctgatgcgcg 16260

acggggtaac gcccagcgtg gcgctggaca tgaccgcgcg caacatggaa ccgggcatgt 16320

atgcctcaaa ccggccgttt atcaaccgcc taatggacta cttgcatcgc gcggccgccg 16380

tgaaccccga gtatttcacc aatgccatct tgaacccgca ctggctaccg ccccctggtt 16440

tctacaccgg gggattcgag gtgcccgagg gtaacgatgg attcctctgg gacgacatag 16500

acgacagcgt gttttccccg caaccgcaga ccctgctaga gttgcaacag cgcgagcagg 16560

cagaggcggc gctgcgaaag gaaagcttcc gcaggccaag cagcttgtcc gatctaggcg 16620

ctgcggcccc gcggtcagat gctagtagcc catttccaag cttgataggg tctcttacca 16680

gcactcgcac cacccgcccg cgcctgctgg gcgaggagga gtacctaaac aactcgctgc 16740

tgcagccgca gcgcgaaaaa aacctgcctc cggcatttcc caacaacggg atagagagcc 16800

tagtggacaa gatgagtaga tggaagacgt acgcgcagga gcacagggac gtgccaggcc 16860

cgcgcccgcc cacccgtcgt caaaggcacg accgtcagcg gggtctggtg tgggaggacg 16920

atgactcggc agacgacagc agcgtcctgg atttgggagg gagtggcaac ccgtttgcgc 16980

accttcgccc caggctgggg agaatgtttt aaaaaaaaaa aagcatgatg caaaataaaa 17040

aactcaccaa ggccatggca ccgagcgttg gttttcttgt attcccctta gtatgcggcg 17100

cgcggcgatg tatgaggaag gtcctcctcc ctcctacgag agtgtggtga gcgcggcgcc 17160

agtggcggcg gcgctgggtt ctcccttcga tgctcccctg gacccgccgt ttgtgcctcc 17220

gcggtacctg cggcctaccg gggggagaaa cagcatccgt tactctgagt tggcacccct 17280

attcgacacc acccgtgtgt acctggtgga caacaagtca acggatgtgg catccctgaa 17340

ctaccagaac gaccacagca actttctgac cacggtcatt caaaacaatg actacagccc 17400

gggggaggca agcacacaga ccatcaatct tgacgaccgg tcgcactggg gcggcgacct 17460

gaaaaccatc ctgcatacca acatgccaaa tgtgaacgag ttcatgttta ccaataagtt 17520

taaggcgcgg gtgatggtgt cgcgcttgcc tactaaggac aatcaggtgg agctgaaata 17580

cgagtgggtg gagttcacgc tgcccgaggg caactactcc gagaccatga ccatagacct 17640

tatgaacaac gcgatcgtgg agcactactt gaaagtgggc agacagaacg gggttctgga 17700

aagcgacatc ggggtaaagt ttgacacccg caacttcaga ctggggtttg accccgtcac 17760

tggtcttgtc atgcctgggg tatatacaaa cgaagccttc catccagaca tcattttgct 17820

gccaggatgc ggggtggact tcacccacag ccgcctgagc aacttgttgg gcatccgcaa 17880

gcggcaaccc ttccaggagg gctttaggat cacctacgat gatctggagg gtggtaacat 17940

tcccgcactg ttggatgtgg acgcctacca ggcgagcttg aaagatgaca ccgaacaggg 18000

cgggggtggc gcaggcggca gcaacagcag tggcagcggc gcggaagaga actccaacgc 18060

ggcagccgcg gcaatgcagc cggtggagga catgaacgat catgccattc gcggcgacac 18120

ctttgccaca cgggctgagg agaagcgcgc tgaggccgaa gcagcggccg aagctgccgc 18180

ccccgctgcg caacccgagg tcgagaagcc tcagaagaaa ccggtgatca aacccctgac 18240

agaggacagc aagaaacgca gttacaacct aataagcaat gacagcacct tcacccagta 18300

ccgcagctgg taccttgcat acaactacgg cgaccctcag accggaatcc gctcatggac 18360

cctgctttgc actcctgacg taacctgcgg ctcggagcag gtctactggt cgttgccaga 18420

catgatgcaa gaccccgtga ccttccgctc cacgcgccag atcagcaact ttccggtggt 18480

gggcgccgag ctgttgcccg tgcactccaa gagcttctac aacgaccagg ccgtctactc 18540

ccaactcatc cgccagttta cctctctgac ccacgtgttc aatcgctttc ccgagaacca 18600

gattttggcg cgcccgccag cccccaccat caccaccgtc agtgaaaacg ttcctgctct 18660

cacagatcac gggacgctac cgctgcgcaa cagcatcgga ggagtccagc gagtgaccat 18720

tactgacgcc agacgccgca cctgccccta cgtttacaag gccctgggca tagtctcgcc 18780

gcgcgtccta tcgagccgca ctttttgagc aagcatgtcc atccttatat cgcccagcaa 18840

taacacaggc tggggcctgc gcttcccaag caagatgttt ggcggggcca agaagcgctc 18900

cgaccaacac ccagtgcgcg tgcgcgggca ctaccgcgcg ccctggggcg cgcacaaacg 18960

cggccgcact gggcgcacca ccgtcgatga cgccatcgac gcggtggtgg aggaggcgcg 19020

caactacacg cccacgccgc caccagtgtc cacagtggac gcggccattc agaccgtggt 19080

gcgcggagcc cggcgctatg ctaaaatgaa gagacggcgg aggcgcgtag cacgtcgcca 19140

ccgccgccga cccggcactg ccgcccaacg cgcggcggcg gccctgctta accgcgcacg 19200

tcgcaccggc cgacgggcgg ccatgcgggc cgctcgaagg ctggccgcgg gtattgtcac 19260

tgtgcccccc aggtccaggc gacgagcggc cgccgcagca gccgcggcca ttagtgctat 19320

gactcagggt cgcaggggca acgtgtattg ggtgcgcgac tcggttagcg gcctgcgcgt 19380

gcccgtgcgc acccgccccc cgcgcaacta gattgcaaga aaaaactact tagactcgta 19440

ctgttgtatg tatccagcgg cggcggcgcg caacgaagct atgtccaagc gcaaaatcaa 19500

agaagagatg ctccaggtca tcgcgccgga gatctatggc cccccgaaga aggaagagca 19560

ggattacaag ccccgaaagc taaagcgggt caaaaagaaa aagaaagatg atgatgatga 19620

acttgacgac gaggtggaac tgctgcacgc taccgcgccc aggcgacggg tacagtggaa 19680

aggtcgacgc gtaaaacgtg ttttgcgacc cggcaccacc gtagtcttta cgcccggtga 19740

gcgctccacc cgcacctaca agcgcgtgta tgatgaggtg tacggcgacg aggacctgct 19800

tgagcaggcc aacgagcgcc tcggggagtt tgcctacgga aagcggcata aggacatgct 19860

ggcgttgccg ctggacgagg gcaacccaac acctagccta aagcccgtaa cactgcagca 19920

ggtgctgccc gcgcttgcac cgtccgaaga aaagcgcggc ctaaagcgcg agtctggtga 19980

cttggcaccc accgtgcagc tgatggtacc caagcgccag cgactggaag atgtcttgga 20040

aaaaatgacc gtggaacctg ggctggagcc cgaggtccgc gtgcggccaa tcaagcaggt 20100

ggcgccggga ctgggcgtgc agaccgtgga cgttcagata cccactacca gtagcaccag 20160

tattgccacc gccacagagg gcatggagac acaaacgtcc ccggttgcct cagcggtggc 20220

ggatgccgcg gtgcaggcgg tcgctgcggc cgcgtccaag acctctacgg aggtgcaaac 20280

ggacccgtgg atgtttcgcg tttcagcccc ccggcgcccg cgccgttcga ggaagtacgg 20340

cgccgccagc gcgctactgc ccgaatatgc cctacatcct tccattgcgc ctacccccgg 20400

ctatcgtggc tacacctacc gccccagaag acgagcaact acccgacgcc gaaccaccac 20460

tggaacccgc cgccgccgtc gccgtcgcca gcccgtgctg gccccgattt ccgtgcgcag 20520

ggtggctcgc gaaggaggca ggaccctggt gctgccaaca gcgcgctacc accccagcat 20580

cgtttaaaag ccggtctttg tggttcttgc agatatggcc ctcacctgcc gcctccgttt 20640

cccggtgccg ggattccgag gaagaatgca ccgtaggagg ggcatggccg gccacggcct 20700

gacgggcggc atgcgtcgtg cgcaccaccg gcggcggcgc gcgtcgcacc gtcgcatgcg 20760

cggcggtatc ctgcccctcc ttattccact gatcgccgcg gcgattggcg ccgtgcccgg 20820

aattgcatcc gtggccttgc aggcgcagag acactgatta aaaacaagtt gcatgtggaa 20880

aaatcaaaat aaaaagtctg gactctcacg ctcgcttggt cctgtaacta ttttgtagaa 20940

tggaagacat caactttgcg tctctggccc cgcgacacgg ctcgcgcccg ttcatgggaa 21000

actggcaaga tatcggcacc agcaatatga gcggtggcgc cttcagctgg ggctcgctgt 21060

ggagcggcat taaaaatttc ggttccaccg ttaagaacta tggcagcaag gcctggaaca 21120

gcagcacagg ccagatgctg agggataagt tgaaagagca aaatttccaa caaaaggtgg 21180

tagatggcct ggcctctggc attagcgggg tggtggacct ggccaaccag gcagtgcaaa 21240

ataagattaa cagtaagctt gatccccgcc ctcccgtaga ggagcctcca ccggccgtgg 21300

agacagtgtc tccagagggg cgtggcgaaa agcgtccgcg ccccgacagg gaagaaactc 21360

tggtgacgca aatagacgag cctccctcgt acgaggaggc actaaagcaa ggcctgccca 21420

ccacccgtcc catcgcgccc atggctaccg gagtgctggg ccagcacaca cccgtaacgc 21480

tggacctgcc tccccccgcc gacacccagc agaaacctgt gctgccaggc ccgaccgccg 21540

ttgttgtaac ccgtcctagc cgcgcgtccc tgcgccgcgc cgccagcggt ccgcgatcgt 21600

tgcggcccgt agccagtggc aactggcaaa gcacactgaa cagcatcgtg ggtctggggg 21660

tgcaatccct gaagcgccga cgatgcttct gatagctaac gtgtcgtatg tgtgtcatgt 21720

atgcgtccat gtcgccgcca gaggagctgc tgagccgccg cgcgcccgct ttccaagatg 21780

gctacccctt cgatgatgcc gcagtggtct tacatgcaca tctcgggcca ggacgcctcg 21840

gagtacctga gccccgggct ggtgcagttt gcccgcgcca ccgagacgta cttcagcctg 21900

aataacaagt ttagaaaccc cacggtggcg cctacgcacg acgtgaccac agaccggtcc 21960

cagcgtttga cgctgcggtt catccctgtg gaccgtgagg atactgcgta ctcgtacaag 22020

gcgcggttca ccctagctgt gggtgataac cgtgtgctgg acatggcttc cacgtacttt 22080

gacatccgcg gcgtgctgga caggggccct acttttaagc cctactctgg cactgcctac 22140

aacgccctgg ctcccaaggg tgccccaaat ccttgcgaat gggatgaagc tgctactgct 22200

cttgaaataa acctagaaga agaggacgat gacaacgaag acgaagtaga cgagcaagct 22260

gagcagcaaa aaactcacgt atttgggcag gcgccttatt ctggtataaa tattacaaag 22320

gagggtattc aaataggtgt cgaaggtcaa acacctaaat atgccgataa aacatttcaa 22380

cctgaacctc aaataggaga atctcagtgg tacgaaacag aaattaatca tgcagctggg 22440

agagtcctaa aaaagactac cccaatgaaa ccatgttacg gttcatatgc aaaacccaca 22500

aatgaaaatg gagggcaagg cattcttgta aagcaacaaa atggaaagct agaaagtcaa 22560

gtggaaatgc aatttttctc aactactgag gcagccgcag gcaatggtga taacttgact 22620

cctaaagtgg tattgtacag tgaagatgta gatatagaaa ccccagacac tcatatttct 22680

tacatgccca ctattaagga aggtaactca cgagaactaa tgggccaaca atctatgccc 22740

aacaggccta attacattgc ttttagggac aattttattg gtctaatgta ttacaacagc 22800

acgggtaata tgggtgttct ggcgggccaa gcatcgcagt tgaatgctgt tgtagatttg 22860

caagacagaa acacagagct ttcataccag cttttgcttg attccattgg tgatagaacc 22920

aggtactttt ctatgtggaa tcaggctgtt gacagctatg atccagatgt tagaattatt 22980

gaaaatcatg gaactgaaga tgaacttcca aattactgct ttccactggg aggtgtgatt 23040

aatacagaga ctcttaccaa ggtaaaacct aaaacaggtc aggaaaatgg atgggaaaaa 23100

gatgctacag aattttcaga taaaaatgaa ataagagttg gaaataattt tgccatggaa 23160

atcaatctaa atgccaacct gtggagaaat ttcctgtact ccaacatagc gctgtatttg 23220

cccgacaagc taaagtacag tccttccaac gtaaaaattt ctgataaccc aaacacctac 23280

gactacatga acaagcgagt ggtggctccc gggctagtgg actgctacat taaccttgga 23340

gcacgctggt cccttgacta tatggacaac gtcaacccat ttaaccacca ccgcaatgct 23400

ggcctgcgct accgctcaat gttgctgggc aatggtcgct atgtgccctt ccacatccag 23460

gtgcctcaga agttctttgc cattaaaaac ctccttctcc tgccgggctc atacacctac 23520

gagtggaact tcaggaagga tgttaacatg gttctgcaga gctccctagg aaatgaccta 23580

agggttgacg gagccagcat taagtttgat agcatttgcc tttacgccac cttcttcccc 23640

atggcccaca acaccgcctc cacgcttgag gccatgctta gaaacgacac caacgaccag 23700

tcctttaacg actatctctc cgccgccaac atgctctacc ctatacccgc caacgctacc 23760

aacgtgccca tatccatccc ctcccgcaac tgggcggctt tccgcggctg ggccttcacg 23820

cgccttaaga ctaaggaaac cccatcactg ggctcgggct acgaccctta ttacacctac 23880

tctggctcta taccctacct agatggaacc ttttacctca accacacctt taagaaggtg 23940

gccattacct ttgactcttc tgtcagctgg cctggcaatg accgcctgct tacccccaac 24000

gagtttgaaa ttaagcgctc agttgacggg gagggttaca acgttgccca gtgtaacatg 24060

accaaagact ggttcctggt acaaatgcta gctaactata acattggcta ccagggcttc 24120

tatatcccag agagctacaa ggaccgcatg tactccttct ttagaaactt ccagcccatg 24180

agccgtcagg tggtggatga tactaaatac aaggactacc aacaggtggg catcctacac 24240

caacacaaca actctggatt tgttggctac cttgccccca ccatgcgcga aggacaggcc 24300

taccctgcta acttccccta tccgcttata ggcaagaccg cagttgacag cattacccag 24360

aaaaagtttc tttgcgatcg cacccttttgg cgcatcccat tctccagtaa ctttatgtcc 24420

atgggcgcac tcacagacct gggccaaaac cttctctacg ccaactccgc ccacgcgcta 24480

gacatgactt ttgaggtgga tcccatggac gagcccaccc ttctttatgt tttgtttgaa 24540

gtctttgacg tggtccgtgt gcaccagccg caccgcggcg tcatcgaaac cgtgtacctg 24600

cgcacgccct tctcggccgg caacgccaca acataaagaa gcaagcaaca tcaacaacag 24660

ctgccgccat gggctccagt gagcaggaac tgaaagccat tgtcaaagat cttggttgtg 24720

ggccatattt tttgggcacc tatgacaagc gctttccagg ctttgtttct ccacacaagc 24780

tcgcctgcgc catagtcaat acggccggtc gcgagactgg gggcgtacac tggatggcct 24840

ttgcctggaa cccgcactca aaaacatgct acctctttga gccctttggc ttttctgacc 24900

agcgactcaa gcaggtttac cagtttgagt acgagtcact cctgcgccgt agcgccattg 24960

cttcttcccc cgaccgctgt ataacgctgg aaaagtccac ccaaagcgta caggggccca 25020

actcggccgc ctgtggacta ttctgctgca tgtttctcca cgcctttgcc aactggcccc 25080

aaactcccat ggatcacaac cccaccatga accttattac cggggtaccc aactccatgc 25140

tcaacagtcc ccaggtacag cccaccctgc gtcgcaacca ggaacagctc tacagcttcc 25200

tggagcgcca ctcgccctac ttccgcagcc acagtgcgca gattaggagc gccacttctt 25260

tttgtcactt gaaaaacatg taaaaataat gtactagaga cactttcaat aaaggcaaat 25320

gcttttattt gtacactctc gggtgattat ttacccccac ccttgccgtc tgcgccgttt 25380

aaaaatcaaa ggggttctgc cgcgcatcgc tatgcgccac tggcagggac acgttgcgat 25440

actggtgttt agtgctccac ttaaactcag gcacaaccat ccgcggcagc tcggtgaagt 25500

tttcactcca caggctgcgc accatcacca acgcgtttag caggtcgggc gccgatatct 25560

tgaagtcgca gttggggcct ccgccctgcg cgcgcgagtt gcgatacaca gggttgcagc 25620

actggaacac tatcagcgcc gggtggtgca cgctggccag cacgctcttg tcggagatca 25680

gatccgcgtc caggtcctcc gcgttgctca gggcgaacgg agtcaacttt ggtagctgcc 25740

ttcccaaaaa gggcgcgtgc ccaggctttg agttgcactc gcaccgtagt ggcatcaaaa 25800

ggtgaccgtg cccggtctgg gcgttaggat acagcgcctg cataaaagcc ttgatctgct 25860

taaaagccac ctgagccttt gcgccttcag agaagaacat gccgcaagac ttgccggaaa 25920

actgattggc cggacaggcc gcgtcgtgca cgcagcacct tgcgtcggtg ttggagatct 25980

gcaccacatt tcggccccac cggttcttca cgatcttggc cttgctagac tgctccttca 26040

gcgcgcgctg cccgttttcg ctcgtcacat ccatttcaat cacgtgctcc ttatttatca 26100

taatgcttcc gtgtagacac ttaagctcgc cttcgatctc agcgcagcgg tgcagccaca 26160

acgcgcagcc cgtgggctcg tgatgcttgt aggtcacctc tgcaaacgac tgcaggtacg 26220

cctgcaggaa tcgccccatc atcgtcacaa aggtcttgtt gctggtgaag gtcagctgca 26280

acccgcggtg ctcctcgttc agccaggtct tgcatacggc cgccagagct tccacttggt 26340

caggcagtag tttgaagttc gcctttagat cgttatccac gtggtacttg tccatcagcg 26400

cgcgcgcagc ctccatgccc ttctcccacg cagacacgat cggcacactc agcgggttca 26460

tcaccgtaat ttcactttcc gcttcgctgg gctcttcctc ttcctcttgc gtccgcatac 26520

cacgcgccac tgggtcgtct tcattcagcc gccgcactgt gcgcttacct cctttgccat 26580

gcttgattag caccggtggg ttgctgaaac ccaccatttg tagcgccaca tcttctcttt 26640

cttcctcgct gtccacgatt acctctggtg atggcgggcg ctcgggcttg ggagaagggc 26700

gcttcttttt cttcttgggc gcaatggcca aatccgccgc cgaggtcgat ggccgcgggc 26760

tgggtgtgcg cggcaccagc gcgtcttgtg atgagtcttc ctcgtcctcg gactcgatac 26820

gccgcctcat ccgcttttt gggggcgccc ggggaggcgg cggcgacggg gacggggacg 26880

acacgtcctc catggttggg ggacgtcgcg ccgcaccgcg tccgcgctcg ggggtggttt 26940

cgcgctgctc ctcttcccga ctggccattt ccttctccta taggcagaaa aagatcatgg 27000

agtcagtcga gaagaaggac agcctaaccg ccccctctga gttcgccacc accgcctcca 27060

ccgatgccgc caacgcgcct accaccttcc ccgtcgaggc acccccgctt gaggaggagg 27120

aagtgattat cgagcaggac ccaggttttg taagcgaaga cgacgaggac cgctcagtac 27180

caacagagga taaaaagcaa gaccaggaca acgcagaggc aaacgaggaa caagtcgggc 27240

gggggacga aaggcatggc gactacctag atgtgggaga cgacgtgctg ttgaagcatc 27300

tgcagcgcca gtgcgccatt atctgcgacg cgttgcaaga gcgcagcgat gtgcccctcg 27360

ccatagcgga tgtcagcctt gcctacgaac gccacctatt ctcaccgcgc gtacccccca 27420

aacgccaaga aaacggcaca tgcgagccca acccgcgcct caacttctac cccgtatttg 27480

ccgtgccaga ggtgcttgcc acctatcaca tctttttcca aaactgcaag atacccctat 27540

cctgccgtgc caaccgcagc cgagcggaca agcagctggc cttgcggcag ggcgctgtca 27600

tacctgatat cgcctcgctc aacgaagtgc caaaaatctt tgagggtctt ggacgcgacg 27660

agaagcgcgc ggcaaacgct ctgcaacagg aaaacagcga aaatgaaagt cactctggag 27720

tgttggtgga actcgagggt gacaacgcgc gcctagccgt actaaaacgc agcatcgagg 27780

tcacccactt tgcctacccg gcacttaacc tacccccaa ggtcatgagc acagtcatga 27840

gtgagctgat cgtgcgccgt gcgcagcccc tggagaggga tgcaaatttg caagaacaaa 27900

cagaggaggg cctacccgca gttggcgacg agcagctagc gcgctggctt caaacgcgcg 27960

agcctgccga cttggaggag cgacgcaaac taatgatggc cgcagtgctc gttaccgtgg 28020

agcttgagtg catgcagcgg ttctttgctg acccggagat gcagcgcaag ctagaggaaa 28080

cattgcacta cacctttcga cagggctacg tacgccaggc ctgcaagatc tccaacgtgg 28140

agctctgcaa cctggtctcc taccttggaa ttttgcacga aaaccgcctt gggcaaaacg 28200

tgcttcattc cacgctcaag ggcgaggcgc gccgcgacta cgtccgcgac tgcgtttact 28260

tatttctatg ctacacctgg cagacggcca tgggcgtttg gcagcagtgc ttggaggagt 28320

gcaacctcaa ggagctgcag aaactgctaa agcaaaactt gaaggaccta tggacggcct 28380

tcaacgagcg ctccgtggcc gcgcacctgg cggacatcat tttccccgaa cgcctgctta 28440

aaaccctgca acagggtctg ccagacttca ccagtcaaag catgttgcag aactttagga 28500

actttatcct agagcgctca ggaatcttgc ccgccacctg ctgtgcactt cctagcgact 28560

ttgtgcccat taagtaccgc gaatgccctc cgccgctttg gggccactgc taccttctgc 28620

agctagccaa ctaccttgcc taccactctg acataatgga agacgtgagc ggtgacggtc 28680

tactggagtg tcactgtcgc tgcaacctat gcaccccgca ccgctccctg gtttgcaatt 28740

cgcagctgct taacgaaagt caaattatcg gtacctttga gctgcagggt ccctcgcctg 28800

acgaaaagtc cgcggctccg gggttgaaac tcactccggg gctgtggacg tcggcttacc 28860

ttcgcaaatt tgtacctgag gactaccacg cccacgagat taggttctac gaagaccaat 28920

cccgcccgcc taatgcggag cttaccgcct gcgtcattac ccagggccac attcttggcc 28980

aattgcaagc catcaacaaa gcccgccaag agtttctgct acgaaaggga cgggggttt 29040

acttggaccc ccagtccggc gaggagctca acccaatccc cccgccgccg cagccctatc 29100

agcagcagcc gcgggccctt gcttcccagg atggcaccca aaaagaagct gcagctgccg 29160

ccgccaccca cggacgagga ggaatactgg gacagtcagg cagaggaggt tttggacgag 29220

gaggaggagg acatgatgga agactgggag agcctagacg aggaagcttc cgaggtcgaa 29280

gaggtgtcag acgaaacacc gtcaccctcg gtcgcattcc cctcgccggc gccccagaaa 29340

tcggcaaccg gttccagcat ggctacaacc tccgctcctc aggcgccgcc ggcactgccc 29400

gttcgccgac ccaaccgtag atgggacacc actggaacca gggccggtaa gtccaagcag 29460

ccgccgccgt tagcccaaga gcaacaacag cgccaaggct accgctcatg gcgcgggcac 29520

aagaacgcca tagttgcttg cttgcaagac tgtgggggca acatctcctt cgcccgccgc 29580

tttcttctct accatcacgg cgtggccttc ccccgtaaca tcctgcatta ctaccgtcat 29640

ctctacagcc catactgcac cggcggcagc ggcagcaaca gcagcggcca cacagaagca 29700

aaggcgaccg gatagcaaga ctctgacaaa gcccaagaaa tccacagcgg cggcagcagc 29760

aggaggagga gcgctgcgtc tggcgcccaa cgaacccgta tcgacccgcg agcttagaaa 29820

caggattttt cccactctgt atgctatatt tcaacagagc aggggccaag aacaagagct 29880

gaaaataaaa aacaggtctc tgcgatccct cacccgcagc tgcctgtatc acaaaagcga 29940

agatcagctt cggcgcacgc tggaagacgc ggaggctctc ttcagtaaat actgcgcgct 30000

gactcttaag gactagtttc gcgccctttc tcaaatttaa gcgcgaaaac tacgtcatct 30060

ccagcggcca cacccggcgc cagcacctgt tgtcagcgcc attatgagca aggaaattcc 30120

cacgccctac atgtggagtt accagccaca aatgggactt gcggctggag ctgcccaaga 30180

ctactcaacc cgaataaact acatgagcgc gggaccccac atgatatccc gggtcaacgg 30240

aatacgcgcc caccgaaacc gaattctcct ggaacaggcg gctattacca ccacacctcg 30300

taataacctt aatccccgta gttggcccgc tgccctggtg taccaggaaa gtcccgctcc 30360

caccactgtg gtacttccca gagacgccca ggccgaagtt cagatgacta actcaggggc 30420

gcagcttgcg ggcggctttc gtcacagggt gcggtcgccc gggcagggta taactcacct 30480

gacaatcaga gggcgaggta ttcagctcaa cgacgagtcg gtgagctcct cgcttggtct 30540

ccgtccggac gggacatttc agatcggcgg cgccggccgc tcttcattca cgcctcgtca 30600

ggcaatccta actctgcaga cctcgtcctc tgagccgcgc tctggaggca ttggaactct 30660

gcaatttatt gaggagtttg tgccatcggt ctactttaac cccttctcgg gacctcccgg 30720

ccactatccg gatcaattta ttcctaactt tgacgcggta aaggactcgg cggacggcta 30780

cgactgaatg ttaagtggag aggcagagca actgcgcctg aaacacctgg tccactgtcg 30840

ccgccacaag tgctttgccc gcgactccgg tgagttttgc tactttgaat tgcccgagga 30900

tcatatcgag ggcccggcgc acggcgtccg gcttaccgcc cagggagagc ttgcccgtag 30960

cctgattcgg gagtttaccc agcgcccccc gctagttgag cgggacaggg gaccctgtgt 31020

tctcactgtg atttgcaact gtcctaaccc tggattacat caagatcctc tagttaatgt 31080

caggtcgcct aagtcgatta actagagtac ccggggatct tattcccttt aactaataaa 31140

aaaaaataat aaagcatcac ttacttaaaa tcagttagca aatttctgtc cagtttattc 31200

agcagcacct ccttgccctc ctcccagctc tggtattgca gcttcctcct ggctgcaaac 31260

tttctccaca atctaaatgg aatgtcagtt tcctcctgtt cctgtccatc cgcacccact 31320

atcttcatgt tgttgcagat gaagcgcgca agaccgtctg aagatacctt caaccccgtg 31380

tatccatatg acacggaaac cggtcctcca actgtgcctt ttcttactcc tccctttgta 31440

tcccccaatg ggtttcaaga gagtcccccc ggggtactct ctttgcgcct atccgaacct 31500

ctagttacct ccaatggcat gcttgcgctc aaaatgggca acggcctctc tctggacgag 31560

gccggcaacc ttacctccca aaatgtaacc actgtgagcc cacctctcaa aaaaaccaag 31620

tcaaacataa acctggaaat atctgcaccc ctcacagtta cctcagaagc cctaactgtg 31680

gctgccgccg cacctctaat ggtcgcgggc aacacactca ccatgcaatc acaggccccg 31740

ctaaccgtgc acgactccaa acttagcatt gccacccaag gacccctcac agtgtcagaa 31800

ggaaagctag ccctgcaaac atcaggcccc ctcaccacca ccgatagcag tacccttact 31860

atcactgcct cacccccctct aactactgcc actggtagct tgggcattga cttgaaagag 31920

cccatttata cacaaaatgg aaaactagga ctaaagtacg gggctccttt gcatgtaaca 31980

gacgacctaa acactttgac cgtagcaact ggtccaggtg tgactattaa taatacttcc 32040

ttgcaaacta aagttactgg agccttgggt tttgattcac aaggcaatat gcaacttaat 32100

gtagcaggag gactaaggat tgattctcaa aacagacgcc ttatacttga tgttagttat 32160

ccgtttgatg ctcaaaacca actaaatcta agactaggac agggccctct ttttataaac 32220

tcagcccaca acttggatat taactacaac aaaggccttt acttgtttac agcttcaaac 32280

aattccaaaa agcttgaggt taacctaagc actgccaagg ggttgatgtt tgacgctaca 32340

gccatagcca ttaatgcagg agatgggctt gaatttggtt cacctaatgc accaaacaca 32400

aatcccctca aaacaaaaat tggccatggc ctagaatttg attcaaacaa ggctatggtt 32460

cctaaactag gaactggcct tagttttgac agcacaggtg ccattacagt aggaaacaaa 32520

aataatgata agctaacttt gtggaccgga ataaaccctc cacctaactg tcaaattgtg 32580

gaaaacacta atacaaatga tggcaaactt actttagtat tagtaaaaaa tggagggctt 32640

gttaatggct acgtgtctct agttggtgta tcagacactg tgaaccaaat gttcacacaa 32700

aagacagcaa acatccaatt aagattatat tttgactctt ctggaaatct attaactgag 32760

gaatcagact taaaaattcc acttaaaaat aaatcttcta cagcgaccag tgaaactgta 32820

gccagcagca aagcctttat gccaagtact acagcttatc ccttcaacac cactactagg 32880

gatagtgaaa actacattca tggaatatgt tactacatga ctagttatga tagaagtcta 32940

tttcccttga acatttctat aatgctaaac agccgtatga tttcttccaa tgttgcctat 33000

gccatacaat ttgaatggaa tctaaatgca agtgaatctc cagaaagcaa catagctacg 33060

ctgaccacat ccccctttt cttttcttac attacagaag acgacaacta aagaatcgtt 33120

tgtgttatgt ttcaacgtgt ttatttttca attgcagaaa atttcaagtc atttttcatt 33180

cagtagtata gccccaccac cacatagctt atacagatca ccgtacctta atcaaactca 33240

cagaacccta gtattcaacc tgccacctcc ctcccaacac acagagtaca cagtcctttc 33300

tccccggctg gccttaaaaa gcatcatatc atgggtaaca gacatattct taggtgttat 33360

attccacacg gtttcctgtc gagccaaacg ctcatcagtg atattaataa actccccggg 33420

cagctcactt aagttcatgt cgctgtccag ctgctgagcc acaggctgct gtccaacttg 33480

cggttgctta acgggcggcg aaggagaagt ccacgcctac atgggggtag agtcataatc 33540

gtgcatcagg atagggcggt ggtgctgcag cagcgcgcga ataaactgct gccgccgccg 33600

ctccgtcctg caggaataca acatggcagt ggtctcctca gcgatgattc gcaccgcccg 33660

cagcataagg cgccttgtcc tccgggcaca gcagcgcacc ctgatctcac ttaaatcagc 33720

acagtaactg cagcacagca ccacaatatt gttcaaaatc ccacagtgca aggcgctgta 33780

tccaaagctc atggcgggga ccacagaacc cacgtggcca tcataccaca agcgcaggta 33840

gattaagtgg cgacccctca taaacacgct ggacataaac attacctctt ttggcatgtt 33900

gtaattcacc acctcccctc tgattaaaca tggcgccatc caccaccatc ctaaaccagc 33960

tggccaaaac ctgcccgccg gctatacact gcagggaacc gggactggaa caatgacagt 34020

ggagagccca ggactcgtaa ccatggatca tcatgctcgt catgatatca atgttggcac 34080

aacacaggca cacgtgcata cacttcctca ggattacaag ctcctcccgc gttagaacca 34140

tatcccaggg aacaacccat tcctgaatca gcgtaaatcc cacactgcag ggaagacctc 34200

gcacgtaact cacgttgtgc attgtcaaag tgttacattc gggcagcagc ggatgatcct 34260

ccagtatggt agcgcgggtt tctgtctcaa aaggaggtag acgatcccta ctgtacggag 34320

tgcgccgaga caaccgagat cgtgttggtc gtagtgtcat gccaaatgga acgccggacg 34380

tagtcatatt tcctgaagca aaaccaggtg cgggcgtgac aaacagatct gcgtctccgg 34440

tctcgccgct tagatcgctc tgtgtagtag ttgtagtata tccactctct caaagcatcc 34500

aggcgccccc tggcttcggg ttctatgtaa actccttcat gcgccgctgc cctgataaca 34560

tccaccaccg cagaataagc cacacccagc caacctacac attcgttctg cgagtcacac 34620

acgggaggag cgggaagagc tggaagaacc atgttttttt ttttattcca aaagattatc 34680

caaaacctca aaatgaagat ctattaagtg aacgcgctcc cctccggtgg cgtggtcaaa 34740

ctctacagcc aaagaacaga taatggcatt tgtaagatgt tgcacaatgg cttccaaaag 34800

gcaaacggcc ctcacgtcca agtggacgta aaggctaaac ccttcagggt gaatctcctc 34860

tataaacatt ccagcacctt caaccatgcc caaataattc tcatctcgcc accttctcaa 34920

tatatctcta agcaaatccc gaatattaag tccggccatt gtaaaaatct gctccagagc 34980

gccctccacc ttcagcctca agcagcgaat catgattgca aaaattcagg ttcctcacag 35040

acctgtataa gattcaaaag cggaacatta acaaaaatac cgcgatcccg taggtccctt 35100

cgcagggcca gctgaacata atcgtgcagg tctgcacgga ccagcgcggc cacttccccg 35160

ccaggaacca tgacaaaaga acccacactg attatgacac gcatactcgg agctatgcta 35220

accagcgtag ccccgatgta agcttgttgc atgggcggcg atataaaatg caaggtgctg 35280

ctcaaaaaat caggcaaagc ctcgcgcaaa aaagaaagca catcgtagtc atgctcatgc 35340

agataaaggc aggtaagctc cggaaccacc acagaaaaag acaccatttt tctctcaaac 35400

atgtctgcgg gtttctgcat aaacacaaaa taaaataaca aaaaaacatt taaacattag 35460

aagcctgtct tacaacagga aaaacaaccc ttataagcat aagacggact acggccatgc 35520

cggcgtgacc gtaaaaaaac tggtcaccgt gattaaaaag caccaccgac agctcctcgg 35580

tcatgtccgg agtcataatg taagactcgg taaacacatc aggttgattc acatcggtca 35640

gtgctaaaaa gcgaccgaaa tagcccgggg gaatacatac ccgcaggcgt agagacaaca 35700

ttacagcccc cataggaggt ataacaaaat taataggaga gaaaaacaca taaacacctg 35760

aaaaaccctc ctgcctaggc aaaatagcac cctcccgctc cagaacaaca tacagcgctt 35820

ccacagcggc agccataaca gtcagcctta ccagtaaaaa agaaaaccta ttaaaaaaac 35880

accactcgac acggcaccag ctcaatcagt cacagtgtaa aaaagggcca agtgcagagc 35940

gagtatatat aggactaaaa aatgacgtaa cggttaaagt ccacaaaaaa cacccagaaa 36000

accgcacgcg aacctacgcc cagaaacgaa agccaaaaaa cccacaactt cctcaaatcg 36060

tcacttccgt tttcccacgt tacgtcactt cccattttaa gaaaactaca attcccaaca 36120

catacaagtt actccgccct aaaacctacg tcacccgccc cgttcccacg ccccgcgcca 36180

cgtcacaaac tccacccccct cattatcata ttggcttcaa tccaaaataa ggtatattat 36240

tgatgatg 36248

<210> 3
<211> 34833
<212> DNA
<213> Artificial Sequence

<220>
<223> pRCA-E4dl355

<400> 3
ttaattaaga attaattcga tcctgaatgg cgaatggacg cgccctgtag cggcgcatta 60

agcgcggcgg gtgtggtggt tacgcgcagc gtgaccgcta cacttgccag cgccctagcg 120

cccgctcctt tcgctttctt cccttccttt ctcgccacgt tcgccggctt tccccgtcaa 180

gctctaaatc gggggctccc tttagggttc cgatttagtg ctttacggca cctcgacccc 240

aaaaaacttg attagggtga tggttcacgt agtgggccat cgccctgata gacggttttt 300

cgcccctttga cgttggagtc cacgttcttt aatagtggac tcttgttcca aactggaaca 360

acactcaacc ctatctcggt ctattctttt gatttataag ggattttgcc gatttcggcc 420

tattggttaa aaaatgagct gatttaacaa aaattttaac aaaattcaga agaactcgtc 480

aagaaggcga tagaaggcga tgcgctgcga atcgggagcg gcgataccgt aaagcacgag 540

gaagcggtca gcccattcgc cgccaagctc ttcagcaata tcacgggtag ccaacgctat 600

gtcctgatag cggtccgcca cacccagccg gccacagtcg atgaatccag aaaagcggcc 660

attttccacc atgatattcg gcaagcaggc atcgccatgg gtcacgacga gatcctcgcc 720

gtcgggcatg ctcgccttga gcctggcgaa cagttcggct ggcgcgagcc cctgatgctc 780

ttcgtccaga tcatcctgat cgacaagacc ggcttccatc cgagtacgtg ctcgctcgat 840

gcgatgtttc gcttggtggt cgaatgggca ggtagccgga tcaagcgtat gcagccgccg 900

cattgcatca gccatgatgg atactttctc ggcaggagca aggtgagatg acaggagatc 960

ctgccccggc acttcgccca atagcagcca gtcccttccc gcttcagtga caacgtcgag 1020

cacagctgcg caaggaacgc ccgtcgtggc cagccacgat agccgcgctg cctcgtcttg 1080

cagttcattc agggcaccgg acaggtcggt cttgacaaaa agaaccgggc gcccctgcgc 1140

tgacagccgg aacacggcgg catcagagca gccgattgtc tgttgtgccc agtcatagcc 1200

gaatagcctc tccacccaag cggccggaga acctgcgtgc aatccatctt gttcaatcat 1260

gcgaaacgat cctcatcctg tctcttgatc agagcttgat cccctgcgcc atcagatcct 1320

tggcggcaag aaagccatcc agtttacttt gcagggcttc ccaaccttac cagagggcgc 1380

cccagctggc aattccggtt cgcttgctgt ccataaaacc gcccagtcta gctatcgcca 1440

tgtaagccca ctgcaagcta cctgctttct ctttgcgctt gcgttttccc ttgtccagat 1500

agcccagtag ctgacattca tccggggtca gcaccgtttc tgcggactgg ctttctacgt 1560

gaaaaggatc taggtgaaga tccttttttga taatctcatg gctgcagcaa tggcaacaac 1620

gttgcgcaaa ctattaactg gcgaactact tactctagct tcccggcaac aattaataga 1680

ctggatggag gcggataaag ttgcaggacc acttctgcgc tcggcccttc cggctggctg 1740

gtttattgct gataaatctg gagccggtga gcgtgggtct cgcggtatca ttgcagcact 1800

ggggccagat ggtaagccct cccgtatcgt agttatctac acgacgggga gtcaggcaac 1860

tatggatgaa cgaaatagac agatcgctga gataggtgcc tcactgatta agcattggta 1920

actgtcagac caagtttact catatatact ttagattgat ttaaaacttc atttttaatt 1980

taaaaggatc taggtgaaga tccttttttga taatctcatg accaaaatcc cttaacgtga 2040

gttttcgttc cactgagcgt cagaccccgt agaaaagatc aaaggatctt cttgagatcc 2100

ttttttttctg cgcgtaatct gctgcttgca aacaaaaaaa ccaccgctac cagcggtggt 2160

ttgtttgccg gatcaagagc taccaactct ttttccgaag gtaactggct tcagcagagc 2220

gcagatacca aatactgtcc ttctagtgta gccgtagtta ggccaccact tcaagaactc 2280

tgtagcaccg cctacatacc tcgctctgct aatcctgtta ccagtggctg ctgccagtgg 2340

cgataagtcg tgtcttaccg ggttggactc aagacgatag ttaccggata aggcgcagcg 2400

gtcgggctga acgggggggtt cgtgcacaca gcccagcttg gagcgaacga cctacaccga 2460

actgagatac ctacagcgtg agctatgaga aagcgccacg cttcccgaag ggagaaaggc 2520

ggacaggtat ccggtaagcg gcagggtcgg aacaggagag cgcacgaggg agcttccagg 2580

gggaaacgcc tggtatcttt atagtcctgt cgggtttcgc cacctctgac ttgagcgtcg 2640

atttttgtga tgctcgtcag gggggcggag cctatggaaa aacgccagca acgcggcctt 2700

tttacggttc ctggcctttt gctggccttt tgctcacatg ttctttcctg cgttatcccc 2760

tgattctgtg gataaccgta ttaccgcctt tgagtgagct gataccgctc gccgcagccg 2820

aacgaccgag cgcagcgagt cagtgagcga ggaagcggaa gagcgcctga tgcggtattt 2880

tctccttacg catctgtgcg gtatttcaca ccgcatatgg atccatgcat gttaattaac 2940

atcatcaata atatacctta ttttggattg aagccaatat gataatgagg gggtggagtt 3000

tgtgacgtgg cgcggggcgt gggaacgggg cgggtgacgt agtagtgtgg cggaagtgtg 3060

atgttgcaag tgtggcggaa cacatgtaag cgacggatgt ggcaaaagtg acgttttgg 3120

tgtgcgccgg tgtacacagg aagtgacaat tttcgcgcgg ttttaggcgg atgttgtagt 3180

aaatttgggc gtaaccgagt aagatttggc cattttcgcg ggaaaactga ataagaggaa 3240

gtgaaatctg aataattttg tgttactcat agcgcgtaat atttgtctag ggccgcgggg 3300

actttgaccg tttacgtgga gactcgccca ggtgtttttc tcaggtgttt tccgcgttcc 3360

gggtcaaagt tggcgtttta ttattatagt cagctgacgt gtagtgtatt tatacccggt 3420

gagttcctca agaggccact cttgagtgcc agcgagtaga gttttctcct ccgagccgct 3480

ccgacaccgg gactgaaaat gagacatatt atctgccacg gaggtgttat taccgaagaa 3540

atggccgcca gtcttttgga ccagctgatc gaagaggtac tggctgataa tcttccacct 3600

cctagccatt ttgaaccacc taccttcac gaactgtatg atttagacgt gacggccccc 3660

gaagatccca acgaggaggc ggtttcgcag atttttcccg actctgtaat gttggcggtg 3720

caggaaggga ttgacttact cacttttccg ccggcgcccg gttctccgga gccgcctcac 3780

ctttcccggc agcccgagca gccggagcag agagccttgg gtccggtttc tatgccaaac 3840

cttgtaccgg aggtgatcga tcttacctgc cacgaggctg gctttccacc cagtgacgac 3900

gaggatgaag agggtgagga gtttgtgtta gattatgtgg agcaccccgg gcacggttgc 3960

aggtcttgtc attatcaccg gaggaatacg ggggacccag atattatgtg ttcgctttgc 4020

tatatgagga cctgtggcat gtttgtctac agtaagtgaa aattatgggc agtgggtgat 4080

agagtggtgg gtttggtgtg gtaatttttt ttttaatttt tacagttttg tggtttaaag 4140

aattttgtat tgtgattttt ttaaaaggtc ctgtgtctga acctgagcct gagcccgagc 4200

cagaaccgga gcctgcaaga cctacccgcc gtcctaaaat ggcgcctgct atcctgagac 4260

gcccgacatc acctgtgtct agagaatgca atagtagtac ggatagctgt gactccggtc 4320

cttctaacac acctcctgag atacacccgg tggtcccgct gtgccccatt aaaccagttg 4380

ccgtgagagt tggtgggcgt cgccaggctg tggaatgtat cgaggacttg cttaacgagc 4440

ctgggcaacc tttggacttg agctgtaaac gccccaggcc ataaggtgta aacctgtgat 4500

tgcgtgtgtg gttaacgcct ttgtttgctg aatgagttga tgtaagttta ataaagggtg 4560

agataatgtt taacttgcat ggcgtgttaa atggggcggg gcttaaaggg tatataatgc 4620

gccgtgggct aatcttggtt acatctgacc tcatggaggc ttgggagtgt ttggaagatt 4680

tttctgctgt gcgtaacttg ctggaacaga gctctaacag tacctcttgg ttttggaggt 4740

ttctgtgggg ctcatcccag gcaaagttag tctgcagaat taaggaggat tacaagtggg 4800

aatttgaaga gcttttgaaa tcctgtggtg agctgtttga ttctttgaat ctgggtcacc 4860

aggcgctttt ccaagagaag gtcatcaaga ctttggattt ttccacaccg gggcgcgctg 4920

cggctgctgt tgctttttg agttttataa aggataaatg gagcgaagaa acccatctga 4980

gcgggggta cctgctggat tttctggcca tgcatctgtg gagagcggtt gtgagacaca 5040

agaatcgcct gctactgttg tcttccgtcc gcccggcgat aataccgacg gaggagcagc 5100

agcagcagca ggaggaagcc aggcggcggc ggcaggagca gagcccatgg aacccgagag 5160

ccggcctgga ccctcgggaa tgaatgttgt acaggtggct gaactgtatc cagaactgag 5220

acgcattttg acaattacag aggatgggca ggggctaaag ggggtaaaga gggagcgggg 5280

ggcttgtgag gctacagagg aggctaggaa tctagctttt agcttaatga ccagacaccg 5340

tcctgagtgt attacttttc aacagatcaa ggataattgc gctaatgagc ttgatctgct 5400

ggcgcagaag tattccatag agcagctgac cacttactgg ctgcagccag gggatgattt 5460

tgaggaggct attagggtat atgcaaaggt ggcacttagg ccagattgca agtacaagat 5520

cagcaaactt gtaaatatca ggaattgttg ctacatttct gggaacgggg ccgaggtgga 5580

gatagatacg gaggataggg tggcctttag atgtagcatg ataaatatgt ggccgggggt 5640

gcttggcatg gacggggtgg ttattatgaa tgtaaggttt actggcccca attttagcgg 5700

tacggttttc ctggccaata ccaaccttat cctacacggt gtaagcttct atgggtttaa 5760

caatacctgt gtggaagcct ggaccgatgt aagggttcgg ggctgtgcct tttactgctg 5820

ctggaagggg gtggtgtgtc gccccaaaag cagggcttca attaagaaat gcctctttga 5880

aaggtgtacc ttgggtatcc tgtctgaggg taactccagg gtgcgccaca atgtggcctc 5940

cgactgtggt tgcttcatgc tagtgaaaag cgtggctgtg attaagcata acatggtatg 6000

tggcaactgc gaggacaggg cctctcagat gctgacctgc tcggacggca actgtcacct 6060

gctgaagacc attcacgtag ccagccactc tcgcaaggcc tggccagtgt ttgagcataa 6120

catactgacc cgctgttcct tgcatttggg taacaggagg ggggtgttcc taccttacca 6180

atgcaatttg agtcacacta agatattgct tgagcccgag agcatgtcca aggtgaacct 6240

gaacggggtg tttgacatga ccatgaagat ctggaaggtg ctgaggtacg atgagacccg 6300

caccaggtgc agaccctgcg agtgtggcgg taaacatatt aggaaccagc ctgtgatgct 6360

ggatgtgacc gaggagctga ggcccgatca cttggtgctg gcctgcaccc gcgctgagtt 6420

tggctctagc gatgaagata cagattgagg tactgaaatg tgtgggcgtg gcttaagggt 6480

gggaaagaat atataaggtg ggggtcttat gtagttttgt atctgttttg cagcagccgc 6540

cgccgccatg agcaccaact cgtttgatgg aagcattgtg agctcatatt tgacaacgcg 6600

catgccccca tgggccgggg tgcgtcagaa tgtgatgggc tccagcattg atggtcgccc 6660

cgtcctgccc gcaaactcta ctaccttgac ctacgagacc gtgtctggaa cgccgttgga 6720

gactgcagcc tccgccgccg cttcagccgc tgcagccacc gcccgcggga ttgtgactga 6780

ctttgctttc ctgagcccgc ttgcaagcag tgcagcttcc cgttcatccg cccgcgatga 6840

caagttgacg gctcttttgg cacaattgga ttctttgacc cgggaactta atgtcgtttc 6900

tcagcagctg ttggatctgc gccagcaggt ttctgccctg aaggcttcct cccctcccaa 6960

tgcggtttaa aacataaata aaaaaccaga ctctgtttgg atttggatca agcaagtgtc 7020

ttgctgtctt tatttagggg ttttgcgcgc gcggtaggcc cgggaccagc ggtctcggtc 7080

gttgagggtc ctgtgtattt tttccaggac gtggtaaagg tgactctgga tgttcagata 7140

catgggcata agcccgtctc tggggtggag gtagcaccac tgcagagctt catgctgcgg 7200

ggtggtgttg tagatgatcc agtcgtagca ggagcgctgg gcgtggtgcc taaaaatgtc 7260

tttcagtagc aagctgattg ccaggggcag gcccttggtg taagtgttta caaagcggtt 7320

aagctgggat gggtgcatac gtggggatat gagatgcatc ttggactgta tttttaggtt 7380

ggctatgttc ccagccatat ccctccgggg attcatgttg tgcagaacca ccagcacagt 7440

gtatccggtg cacttgggaa atttgtcatg tagcttagaa ggaaatgcgt ggaagaactt 7500

ggagacgccc ttgtgacctc caagattttc catgcattcg tccataatga tggcaatggg 7560

cccacgggcg gcggcctggg cgaagatatt tctgggatca ctaacgtcat agttgtgttc 7620

caggatgaga tcgtcatagg ccatttttac aaagcgcggg cggagggtgc cagactgcgg 7680

tataatggtt ccatccggcc caggggcgta gttaccctca cagatttgca tttcccacgc 7740

tttgagttca gatgggggga tcatgtctac ctgcggggcg atgaagaaaa cggtttccgg 7800

ggtaggggag atcagctggg aagaaagcag gttcctgagc agctgcgact taccgcagcc 7860

ggtgggcccg taaatcacac ctattaccgg gtgcaactgg tagttaagag agctgcagct 7920

gccgtcatcc ctgagcaggg gggccacttc gttaagcatg tccctgactc gcatgttttc 7980

cctgaccaaa tccgccagaa ggcgctcgcc gcccagcgat agcagttctt gcaaggaagc 8040

aaagtttttc aacggtttga gaccgtccgc cgtaggcatg ctttgagcg tttgaccaag 8100

cagttccagg cggtcccaca gctcggtcac ctgctctacg gcatctcgat ccagcatatc 8160

tcctcgtttc gcgggttggg gcggctttcg ctgtacggca gtagtcggtg ctcgtccaga 8220

cgggccaggg tcatgtcttt ccacgggcgc agggtcctcg tcagcgtagt ctgggtcacg 8280

gtgaaggggt gcgctccggg ctgcgcgctg gccagggtgc gcttgaggct ggtcctgctg 8340

gtgctgaagc gctgccggtc ttcgccctgc gcgtcggcca ggtagcattt gaccatggtg 8400

tcatagtcca gcccctccgc ggcgtggccc ttggcgcgca gcttgccctt ggaggaggcg 8460

ccgcacgagg ggcagtgcag acttttgagg gcgtagagct tgggcgcgag aaataccgat 8520

tccggggagt aggcatccgc gccgcaggcc ccgcagacgg tctcgcattc cacgagccag 8580

gtgagctctg gccgttcggg gtcaaaaacc aggtttcccc catgcttttt gatgcgtttc 8640

ttacctctgg tttccatgag ccggtgtcca cgctcggtga cgaaaaggct gtccgtgtcc 8700

ccgtatacag acttgagagg cctgtcctcg agcggtgttc cgcggtcctc ctcgtataga 8760

aactcggacc actctgagac aaaggctcgc gtccaggcca gcacgaagga ggctaagtgg 8820

gaggggtagc ggtcgttgtc cactaggggg tccactcgct ccagggtgtg aagacacatg 8880

tcgccctctt cggcatcaag gaaggtgatt ggtttgtagg tgtaggccac gtgaccgggt 8940

gttcctgaag gggggctata aaaggggtg ggggcgcgtt cgtcctcact ctcttccgca 9000

tcgctgtctg cgagggccag ctgttggggt gagtactccc tctgaaaagc gggcatgact 9060

tctgcgctaa gattgtcagt ttccaaaaac gaggaggatt tgatattcac ctggcccgcg 9120

gtgatgcctt tgagggtggc cgcatccatc tggtcagaaa agacaatctt tttgttgtca 9180

agcttggtgg caaacgaccc gtagagggcg ttggacagca acttggcgat ggagcgcagg 9240

gtttggtttt tgtcgcgatc ggcgcgctcc ttggccgcga tgtttagctg cacgtattcg 9300

cgcgcaacgc accgccattc gggaaagacg gtggtgcgct cgtcgggcac caggtgcacg 9360

cgccaaccgc ggttgtgcag ggtgacaagg tcaacgctgg tggctacctc tccgcgtagg 9420

cgctcgttgg tccagcagag gcggccgccc ttgcgcgagc agaatggcgg taggggtct 9480

agctgcgtct cgtccggggg gtctgcgtcc acggtaaaga ccccgggcag caggcgcgcg 9540

tcgaagtagt ctatcttgca tccttgcaag tctagcgcct gctgccatgc gcgggcggca 9600

agcgcgcgct cgtatgggtt gagtggggga ccccatggca tggggtgggt gagcgcggag 9660

gcgtacatgc cgcaaatgtc gtaaacgtag aggggctctc tgagtattcc aagatatgta 9720

gggtagcatc ttccaccgcg gatgctggcg cgcacgtaat cgtatagttc gtgcgaggga 9780

gcgaggaggt cgggaccgag gttgctacgg gcgggctgct ctgctcggaa gactatctgc 9840

ctgaagatgg catgtgagtt ggatgatatg gttggacgct ggaagacgtt gaagctggcg 9900

tctgtgagac ctaccgcgtc acgcacgaag gaggcgtagg agtcgcgcag cttgttgacc 9960

agctcggcgg tgacctgcac gtctagggcg cagtagtcca gggtttcctt gatgatgtca 10020

tacttatcct gtccctttt tttccacagc tcgcggttga ggacaaactc ttcgcggtct 10080

ttccagtact cttggatcgg aaacccgtcg gcctccgaac ggtaagagcc tagcatgtag 10140

aactggttga cggcctggta ggcgcagcat ccctttcta cgggtagcgc gtatgcctgc 10200

gcggccttcc ggagcgaggt gtgggtgagc gcaaaggtgt ccctgaccat gactttgagg 10260

tactggtatt tgaagtcagt gtcgtcgcat ccgccctgct cccagagcaa aaagtccgtg 10320

cgcttttgg aacgcggatt tggcagggcg aaggtgacat cgttgaagag tatctttccc 10380

gcgcgaggca taaagttgcg tgtgatgcgg aagggtcccg gcacctcgga acggttgtta 10440

attacctggg cggcgagcac gatctcgtca aagccgttga tgttgtggcc cacaatgtaa 10500

agttccaaga agcgcgggat gcccttgatg gaaggcaatt ttttaagttc ctcgtaggtg 10560

agctcttcag gggagctgag cccgtgctct gaaagggccc agtctgcaag atgagggttg 10620

gaagcgacga atgagctcca caggtcacgg gccattagca tttgcaggtg gtcgcgaaag 10680

gtcctaaact ggcgacctat ggccattttt tctggggtga tgcagtagaa ggtaagcggg 10740

tcttgttccc agcggtccca tccaaggttc gcggctaggt ctcgcgcggc agtcactaga 10800

ggctcatctc cgccgaactt catgaccagc atgaagggca cgagctgctt cccaaaggcc 10860

cccatccaag tataggtctc tacatcgtag gtgacaaaga gacgctcggt gcgaggatgc 10920

gagccgatcg ggaagaactg gatctcccgc caccaattgg aggagtggct attgatgtgg 10980

tgaaagtaga agtccctgcg acgggccgaa cactcgtgct ggcttttgta aaaacgtgcg 11040

cagtactggc agcggtgcac gggctgtaca tcctgcacga ggttgacctg acgaccgcgc 11100

acaaggaagc agagtgggaa tttgagcccc tcgcctggcg ggtttggctg gtggtcttct 11160

acttcggctg cttgtccttg accgtctggc tgctcgaggg gagttacggt ggatcggacc 11220

accacgccgc gcgagcccaa agtccagatg tccgcgcgcg gcggtcggag cttgatgaca 11280

acatcgcgca gatgggagct gtccatggtc tggagctccc gcggcgtcag gtcaggcggg 11340

agctcctgca ggtttacctc gcatagacgg gtcagggcgc gggctagatc caggtgatac 11400

ctaatttcca ggggctggtt ggtggcggcg tcgatggctt gcaagaggcc gcatccccgc 11460

ggcgcgacta cggtaccgcg cggcgggcgg tgggccgcgg gggtgtcctt ggatgatgca 11520

tctaaaagcg gtgacgcggg cgagcccccg gaggtagggg gggctccgga cccgccggga 11580

gaggggggcag gggcacgtcg gcgccgcgcg cgggcaggag ctggtgctgc gcgcgtaggt 11640

tgctggcgaa cgcgacgacg cggcggttga tctcctgaat ctggcgcctc tgcgtgaaga 11700

cgacgggccc ggtgagcttg aacctgaaag agagttcgac agaatcaatt tcggtgtcgt 11760

tgacggcggc ctggcgcaaa atctcctgca cgtctcctga gttgtcttga taggcgatct 11820

cggccatgaa ctgctcgatc tcttcctcct ggagatctcc gcgtccggct cgctccacgg 11880

tggcggcgag gtcgttggaa atgcgggcca tgagctgcga gaaggcgttg aggcctccct 11940

cgttccagac gcggctgtag accacgcccc cttcggcatc gcgggcgcgc atgaccacct 12000

gcgcgagatt gagctccacg tgccgggcga agacggcgta gtttcgcagg cgctgaaaga 12060

ggtagttgag ggtggtggcg gtgtgttctg ccacgaagaa gtacataacc cagcgtcgca 12120

acgtggattc gttgatatcc cccaaggcct caaggcgctc catggcctcg tagaagtcca 12180

cggcgaagtt gaaaaactgg gagttgcgcg ccgacacggt taactcctcc tccagaagac 12240

ggatgagctc ggcgacagtg tcgcgcacct cgcgctcaaa ggctacaggg gcctcttctt 12300

cttcttcaat ctcctcttcc ataagggcct ccccttcttc ttcttctggc ggcggtgggg 12360

gaggggggac acggcggcga cgacggcgca ccgggaggcg gtcgacaaag cgctcgatca 12420

tctccccgcg gcgacggcgc atggtctcgg tgacggcgcg gccgttctcg cgggggcgca 12480

gttggaagac gccgcccgtc atgtcccggt tatgggttgg cgggggggctg ccatgcggca 12540

gggatacggc gctaacgatg catctcaaca attgttgtgt aggtactccg ccgccgaggg 12600

acctgagcga gtccgcatcg accggatcgg aaaacctctc gagaaaggcg tctaaccagt 12660

cacagtcgca aggtaggctg agcaccgtgg cgggcggcag cgggcggcgg tcggggttgt 12720

ttctggcgga ggtgctgctg atgatgtaat taaagtaggc ggtcttgaga cggcggatgg 12780

tcgacagaag caccatgtcc ttgggtccgg cctgctgaat gcgcaggcgg tcggccatgc 12840

cccaggcttc gttttgacat cggcgcaggt ctttgtagta gtcttgcatg agcctttcta 12900

ccggcacttc ttcttctcct tcctcttgtc ctgcatctct tgcatctatc gctgcggcgg 12960

cggcggagtt tggccgtagg tggcgccctc ttcctcccat gcgtgtgacc ccgaagcccc 13020

tcatcggctg aagcagggct aggtcggcga caacgcgctc ggctaatatg gcctgctgca 13080

cctgcgtgag ggtagactgg aagtcatcca tgtccacaaa gcggtggtat gcgcccgtgt 13140

tgatggtgta agtgcagttg gccataacgg accagttaac ggtctggtga cccggctgcg 13200

agagctcggt gtacctgaga cgcgagtaag ccctcgagtc aaatacgtag tcgttgcaag 13260

tccgcaccag gtactggtat cccaccaaaa agtgcggcgg cggctggcgg tagaggggcc 13320

agcgtagggt ggccggggct ccgggggcga gatcttccaa cataaggcga tgatatccgt 13380

agatgtacct ggacatccag gtgatgccgg cggcggtggt ggaggcgcgc ggaaagtcgc 13440

ggacgcggtt ccagatgttg cgcagcggca aaaagtgctc catggtcggg acgctctggc 13500

cggtcaggcg cgcgcaatcg ttgacgctct agcgtgcaaa aggagagcct gtaagcgggc 13560

actcttccgt ggtctggtgg ataaattcgc aagggtatca tggcggacga ccggggttcg 13620

agccccgtat ccggccgtcc gccgtgatcc atgcggttac cgcccgcgtg tcgaacccag 13680

gtgtgcgacg tcagacaacg ggggagtgct ccttttggct tccttccagg cgcggcggct 13740

gctgcgctag ctttttggc cactggccgc gcgcagcgta agcggttagg ctggaaagcg 13800

aaagcattaa gtggctcgct ccctgtagcc ggagggttat tttccaaggg ttgagtcgcg 13860

ggacccccgg ttcgagtctc ggaccggccg gactgcggcg aacgggggtt tgcctccccg 13920

tcatgcaaga ccccgcttgc aaattcctcc ggaaacaggg acgagcccct tttttgcttt 13980

tcccagatgc atccggtgct gcggcagatg cgccccctc ctcagcagcg gcaagagcaa 14040

gagcagcggc agacatgcag ggcaccctcc cctcctccta ccgcgtcagg aggggcgaca 14100

tccgcggttg acgcggcagc agatggtgat tacgaacccc cgcggcgccg ggcccggcac 14160

tacctggact tggaggaggg cgagggcctg gcgcggctag gagcgccctc tcctgagcgg 14220

cacccaaggg tgcagctgaa gcgtgatacg cgtgaggcgt acgtgccgcg gcagaacctg 14280

tttcgcgacc gcgagggaga ggagcccgag gagatgcggg atcgaaagtt ccacgcaggg 14340

cgcgagctgc ggcatggcct gaatcgcgag cggttgctgc gcgaggagga ctttgagccc 14400

gacgcgcgaa ccgggattag tcccgcgcgc gcacacgtgg cggccgccga cctggtaacc 14460

gcatacgagc agacggtgaa ccaggagatt aactttcaaa aaagctttaa caaccacgtg 14520

cgtacgcttg tggcgcgcga ggaggtggct ataggactga tgcatctgtg ggactttgta 14580

agcgcgctgg agcaaaaccc aaatagcaag ccgctcatgg cgcagctgtt ccttatagtg 14640

cagcacagca gggacaacga ggcattcagg gatgcgctgc taaacatagt agagcccgag 14700

ggccgctggc tgctcgattt gataaacatc ctgcagagca tagtggtgca ggagcgcagc 14760

ttgagcctgg ctgacaaggt ggccgccatc aactattcca tgcttagcct gggcaagttt 14820

tacgcccgca agatatacca taccccttac gttcccatag acaaggaggt aaagatcgag 14880

gggttctaca tgcgcatggc gctgaaggtg cttaccttga gcgacgacct gggcgtttat 14940

cgcaacgagc gcatccacaa ggccgtgagc gtgagccggc ggcgcgagct cagcgaccgc 15000

gagctgatgc acagcctgca aagggccctg gctggcacgg gcagcggcga tagagaggcc 15060

gagtcctact ttgacgcggg cgctgacctg cgctgggccc caagccgacg cgccctggag 15120

gcagctgggg ccggacctgg gctggcggtg gcacccgcgc gcgctggcaa cgtcggcggc 15180

gtggaggaat atgacgagga cgatgagtac gagccagagg acggcgagta ctaagcggtg 15240

atgtttctga tcagatgatg caagacgcaa cggacccggc ggtgcgggcg gcgctgcaga 15300

gccagccgtc cggccttaac tccacggacg actggcgcca ggtcatggac cgcatcatgt 15360

cgctgactgc gcgcaatcct gacgcgttcc ggcagcagcc gcaggccaac cggctctccg 15420

caattctgga agcggtggtc ccggcgcgcg caaaccccac gcacgagaag gtgctggcga 15480

tcgtaaacgc gctggccgaa aacagggcca tccggcccga cgaggccggc ctggtctacg 15540

acgcgctgct tcagcgcgtg gctcgttaca acagcggcaa cgtgcagacc aacctggacc 15600

ggctggtggg ggatgtgcgc gaggccgtgg cgcagcgtga gcgcgcgcag cagcagggca 15660

acctgggctc catggttgca ctaaacgcct tcctgagtac acagcccgcc aacgtgccgc 15720

ggggacagga ggactacacc aactttgtga gcgcactgcg gctaatggtg actgagacac 15780

cgcaaagtga ggtgtaccag tctgggccag actatttttt ccagaccagt agacaaggcc 15840

tgcagaccgt aaacctgagc caggctttca aaaacttgca ggggctgtgg ggggtgcggg 15900

ctcccacagg cgaccgcgcg accgtgtcta gcttgctgac gcccaactcg cgcctgttgc 15960

tgctgctaat agcgcccttc acggacagtg gcagcgtgtc ccgggacaca tacctaggtc 16020

acttgctgac actgtaccgc gaggccatag gtcaggcgca tgtggacgag catactttcc 16080

aggagattac aagtgtcagc cgcgcgctgg ggcaggagga cacgggcagc ctggaggcaa 16140

ccctaaacta cctgctgacc aaccggcggc agaagatccc ctcgttgcac agtttaaaca 16200

gcgaggagga gcgcattttg cgctacgtgc agcagagcgt gagccttaac ctgatgcgcg 16260

acggggtaac gcccagcgtg gcgctggaca tgaccgcgcg caacatggaa ccgggcatgt 16320

atgcctcaaa ccggccgttt atcaaccgcc taatggacta cttgcatcgc gcggccgccg 16380

tgaaccccga gtatttcacc aatgccatct tgaacccgca ctggctaccg ccccctggtt 16440

tctacaccgg gggattcgag gtgcccgagg gtaacgatgg attcctctgg gacgacatag 16500

acgacagcgt gttttccccg caaccgcaga ccctgctaga gttgcaacag cgcgagcagg 16560

cagaggcggc gctgcgaaag gaaagcttcc gcaggccaag cagcttgtcc gatctaggcg 16620

ctgcggcccc gcggtcagat gctagtagcc catttccaag cttgataggg tctcttacca 16680

gcactcgcac cacccgcccg cgcctgctgg gcgaggagga gtacctaaac aactcgctgc 16740

tgcagccgca gcgcgaaaaa aacctgcctc cggcatttcc caacaacggg atagagagcc 16800

tagtggacaa gatgagtaga tggaagacgt acgcgcagga gcacagggac gtgccaggcc 16860

cgcgcccgcc cacccgtcgt caaaggcacg accgtcagcg gggtctggtg tgggaggacg 16920

atgactcggc agacgacagc agcgtcctgg atttgggagg gagtggcaac ccgtttgcgc 16980

accttcgccc caggctgggg agaatgtttt aaaaaaaaaa aagcatgatg caaaataaaa 17040

aactcaccaa ggccatggca ccgagcgttg gttttcttgt attcccctta gtatgcggcg 17100

cgcggcgatg tatgaggaag gtcctcctcc ctcctacgag agtgtggtga gcgcggcgcc 17160

agtggcggcg gcgctgggtt ctcccttcga tgctcccctg gacccgccgt ttgtgcctcc 17220

gcggtacctg cggcctaccg gggggagaaa cagcatccgt tactctgagt tggcacccct 17280

attcgacacc acccgtgtgt acctggtgga caacaagtca acggatgtgg catccctgaa 17340

ctaccagaac gaccacagca actttctgac cacggtcatt caaaacaatg actacagccc 17400

gggggaggca agcacacaga ccatcaatct tgacgaccgg tcgcactggg gcggcgacct 17460

gaaaaccatc ctgcatacca acatgccaaa tgtgaacgag ttcatgttta ccaataagtt 17520

taaggcgcgg gtgatggtgt cgcgcttgcc tactaaggac aatcaggtgg agctgaaata 17580

cgagtgggtg gagttcacgc tgcccgaggg caactactcc gagaccatga ccatagacct 17640

tatgaacaac gcgatcgtgg agcactactt gaaagtgggc agacagaacg gggttctgga 17700

aagcgacatc ggggtaaagt ttgacacccg caacttcaga ctggggtttg accccgtcac 17760

tggtcttgtc atgcctgggg tatatacaaa cgaagccttc catccagaca tcattttgct 17820

gccaggatgc ggggtggact tcacccacag ccgcctgagc aacttgttgg gcatccgcaa 17880

gcggcaaccc ttccaggagg gctttaggat cacctacgat gatctggagg gtggtaacat 17940

tcccgcactg ttggatgtgg acgcctacca ggcgagcttg aaagatgaca ccgaacaggg 18000

cgggggtggc gcaggcggca gcaacagcag tggcagcggc gcggaagaga actccaacgc 18060

ggcagccgcg gcaatgcagc cggtggagga catgaacgat catgccattc gcggcgacac 18120

ctttgccaca cgggctgagg agaagcgcgc tgaggccgaa gcagcggccg aagctgccgc 18180

ccccgctgcg caacccgagg tcgagaagcc tcagaagaaa ccggtgatca aacccctgac 18240

agaggacagc aagaaacgca gttacaacct aataagcaat gacagcacct tcacccagta 18300

ccgcagctgg taccttgcat acaactacgg cgaccctcag accggaatcc gctcatggac 18360

cctgctttgc actcctgacg taacctgcgg ctcggagcag gtctactggt cgttgccaga 18420

catgatgcaa gaccccgtga ccttccgctc cacgcgccag atcagcaact ttccggtggt 18480

gggcgccgag ctgttgcccg tgcactccaa gagcttctac aacgaccagg ccgtctactc 18540

ccaactcatc cgccagttta cctctctgac ccacgtgttc aatcgctttc ccgagaacca 18600

gattttggcg cgcccgccag cccccaccat caccaccgtc agtgaaaacg ttcctgctct 18660

cacagatcac gggacgctac cgctgcgcaa cagcatcgga ggagtccagc gagtgaccat 18720

tactgacgcc agacgccgca cctgccccta cgtttacaag gccctgggca tagtctcgcc 18780

gcgcgtccta tcgagccgca ctttttgagc aagcatgtcc atccttatat cgcccagcaa 18840

taacacaggc tggggcctgc gcttcccaag caagatgttt ggcggggcca agaagcgctc 18900

cgaccaacac ccagtgcgcg tgcgcgggca ctaccgcgcg ccctggggcg cgcacaaacg 18960

cggccgcact gggcgcacca ccgtcgatga cgccatcgac gcggtggtgg aggaggcgcg 19020

caactacacg cccacgccgc caccagtgtc cacagtggac gcggccattc agaccgtggt 19080

gcgcggagcc cggcgctatg ctaaaatgaa gagacggcgg aggcgcgtag cacgtcgcca 19140

ccgccgccga cccggcactg ccgcccaacg cgcggcggcg gccctgctta accgcgcacg 19200

tcgcaccggc cgacgggcgg ccatgcgggc cgctcgaagg ctggccgcgg gtattgtcac 19260

tgtgcccccc aggtccaggc gacgagcggc cgccgcagca gccgcggcca ttagtgctat 19320

gactcagggt cgcaggggca acgtgtattg ggtgcgcgac tcggttagcg gcctgcgcgt 19380

gcccgtgcgc acccgccccc cgcgcaacta gattgcaaga aaaaactact tagactcgta 19440

ctgttgtatg tatccagcgg cggcggcgcg caacgaagct atgtccaagc gcaaaatcaa 19500

agaagagatg ctccaggtca tcgcgccgga gatctatggc cccccgaaga aggaagagca 19560

ggattacaag ccccgaaagc taaagcgggt caaaaagaaa aagaaagatg atgatgatga 19620

acttgacgac gaggtggaac tgctgcacgc taccgcgccc aggcgacggg tacagtggaa 19680

aggtcgacgc gtaaaacgtg ttttgcgacc cggcaccacc gtagtcttta cgcccggtga 19740

gcgctccacc cgcacctaca agcgcgtgta tgatgaggtg tacggcgacg aggacctgct 19800

tgagcaggcc aacgagcgcc tcggggagtt tgcctacgga aagcggcata aggacatgct 19860

ggcgttgccg ctggacgagg gcaacccaac acctagccta aagcccgtaa cactgcagca 19920

ggtgctgccc gcgcttgcac cgtccgaaga aaagcgcggc ctaaagcgcg agtctggtga 19980

cttggcaccc accgtgcagc tgatggtacc caagcgccag cgactggaag atgtcttgga 20040

aaaaatgacc gtggaacctg ggctggagcc cgaggtccgc gtgcggccaa tcaagcaggt 20100

ggcgccggga ctgggcgtgc agaccgtgga cgttcagata cccactacca gtagcaccag 20160

tattgccacc gccacagagg gcatggagac acaaacgtcc ccggttgcct cagcggtggc 20220

ggatgccgcg gtgcaggcgg tcgctgcggc cgcgtccaag acctctacgg aggtgcaaac 20280

ggacccgtgg atgtttcgcg tttcagcccc ccggcgcccg cgccgttcga ggaagtacgg 20340

cgccgccagc gcgctactgc ccgaatatgc cctacatcct tccattgcgc ctacccccgg 20400

ctatcgtggc tacacctacc gccccagaag acgagcaact acccgacgcc gaaccaccac 20460

tggaacccgc cgccgccgtc gccgtcgcca gcccgtgctg gccccgattt ccgtgcgcag 20520

ggtggctcgc gaaggaggca ggaccctggt gctgccaaca gcgcgctacc accccagcat 20580

cgtttaaaag ccggtctttg tggttcttgc agatatggcc ctcacctgcc gcctccgttt 20640

cccggtgccg ggattccgag gaagaatgca ccgtaggagg ggcatggccg gccacggcct 20700

gacgggcggc atgcgtcgtg cgcaccaccg gcggcggcgc gcgtcgcacc gtcgcatgcg 20760

cggcggtatc ctgcccctcc ttattccact gatcgccgcg gcgattggcg ccgtgcccgg 20820

aattgcatcc gtggccttgc aggcgcagag acactgatta aaaacaagtt gcatgtggaa 20880

aaatcaaaat aaaaagtctg gactctcacg ctcgcttggt cctgtaacta ttttgtagaa 20940

tggaagacat caactttgcg tctctggccc cgcgacacgg ctcgcgcccg ttcatgggaa 21000

actggcaaga tatcggcacc agcaatatga gcggtggcgc cttcagctgg ggctcgctgt 21060

ggagcggcat taaaaatttc ggttccaccg ttaagaacta tggcagcaag gcctggaaca 21120

gcagcacagg ccagatgctg agggataagt tgaaagagca aaatttccaa caaaaggtgg 21180

tagatggcct ggcctctggc attagcgggg tggtggacct ggccaaccag gcagtgcaaa 21240

ataagattaa cagtaagctt gatccccgcc ctcccgtaga ggagcctcca ccggccgtgg 21300

agacagtgtc tccagagggg cgtggcgaaa agcgtccgcg ccccgacagg gaagaaactc 21360

tggtgacgca aatagacgag cctccctcgt acgaggaggc actaaagcaa ggcctgccca 21420

ccacccgtcc catcgcgccc atggctaccg gagtgctggg ccagcacaca cccgtaacgc 21480

tggacctgcc tccccccgcc gacacccagc agaaacctgt gctgccaggc ccgaccgccg 21540

ttgttgtaac ccgtcctagc cgcgcgtccc tgcgccgcgc cgccagcggt ccgcgatcgt 21600

tgcggcccgt agccagtggc aactggcaaa gcacactgaa cagcatcgtg ggtctggggg 21660

tgcaatccct gaagcgccga cgatgcttct gatagctaac gtgtcgtatg tgtgtcatgt 21720

atgcgtccat gtcgccgcca gaggagctgc tgagccgccg cgcgcccgct ttccaagatg 21780

gctacccctt cgatgatgcc gcagtggtct tacatgcaca tctcgggcca ggacgcctcg 21840

gagtacctga gccccgggct ggtgcagttt gcccgcgcca ccgagacgta cttcagcctg 21900

aataacaagt ttagaaaccc cacggtggcg cctacgcacg acgtgaccac agaccggtcc 21960

cagcgtttga cgctgcggtt catccctgtg gaccgtgagg atactgcgta ctcgtacaag 22020

gcgcggttca ccctagctgt gggtgataac cgtgtgctgg acatggcttc cacgtacttt 22080

gacatccgcg gcgtgctgga caggggccct acttttaagc cctactctgg cactgcctac 22140

aacgccctgg ctcccaaggg tgccccaaat ccttgcgaat gggatgaagc tgctactgct 22200

cttgaaataa acctagaaga agaggacgat gacaacgaag acgaagtaga cgagcaagct 22260

gagcagcaaa aaactcacgt atttgggcag gcgccttatt ctggtataaa tattacaaag 22320

gagggtattc aaataggtgt cgaaggtcaa acacctaaat atgccgataa aacatttcaa 22380

cctgaacctc aaataggaga atctcagtgg tacgaaacag aaattaatca tgcagctggg 22440

agagtcctaa aaaagactac cccaatgaaa ccatgttacg gttcatatgc aaaacccaca 22500

aatgaaaatg gagggcaagg cattcttgta aagcaacaaa atggaaagct agaaagtcaa 22560

gtggaaatgc aatttttctc aactactgag gcagccgcag gcaatggtga taacttgact 22620

cctaaagtgg tattgtacag tgaagatgta gatatagaaa ccccagacac tcatatttct 22680

tacatgccca ctattaagga aggtaactca cgagaactaa tgggccaaca atctatgccc 22740

aacaggccta attacattgc ttttagggac aattttattg gtctaatgta ttacaacagc 22800

acgggtaata tgggtgttct ggcgggccaa gcatcgcagt tgaatgctgt tgtagatttg 22860

caagacagaa acacagagct ttcataccag cttttgcttg attccattgg tgatagaacc 22920

aggtactttt ctatgtggaa tcaggctgtt gacagctatg atccagatgt tagaattatt 22980

gaaaatcatg gaactgaaga tgaacttcca aattactgct ttccactggg aggtgtgatt 23040

aatacagaga ctcttaccaa ggtaaaacct aaaacaggtc aggaaaatgg atgggaaaaa 23100

gatgctacag aattttcaga taaaaatgaa ataagagttg gaaataattt tgccatggaa 23160

atcaatctaa atgccaacct gtggagaaat ttcctgtact ccaacatagc gctgtatttg 23220

cccgacaagc taaagtacag tccttccaac gtaaaaattt ctgataaccc aaacacctac 23280

gactacatga acaagcgagt ggtggctccc gggctagtgg actgctacat taaccttgga 23340

gcacgctggt cccttgacta tatggacaac gtcaacccat ttaaccacca ccgcaatgct 23400

ggcctgcgct accgctcaat gttgctgggc aatggtcgct atgtgccctt ccacatccag 23460

gtgcctcaga agttctttgc cattaaaaac ctccttctcc tgccgggctc atacacctac 23520

gagtggaact tcaggaagga tgttaacatg gttctgcaga gctccctagg aaatgaccta 23580

agggttgacg gagccagcat taagtttgat agcatttgcc tttacgccac cttcttcccc 23640

atggcccaca acaccgcctc cacgcttgag gccatgctta gaaacgacac caacgaccag 23700

tcctttaacg actatctctc cgccgccaac atgctctacc ctatacccgc caacgctacc 23760

aacgtgccca tatccatccc ctcccgcaac tgggcggctt tccgcggctg ggccttcacg 23820

cgccttaaga ctaaggaaac cccatcactg ggctcgggct acgaccctta ttacacctac 23880

tctggctcta taccctacct agatggaacc ttttacctca accacacctt taagaaggtg 23940

gccattacct ttgactcttc tgtcagctgg cctggcaatg accgcctgct tacccccaac 24000

gagtttgaaa ttaagcgctc agttgacggg gagggttaca acgttgccca gtgtaacatg 24060

accaaagact ggttcctggt acaaatgcta gctaactata acattggcta ccagggcttc 24120

tatatcccag agagctacaa ggaccgcatg tactccttct ttagaaactt ccagcccatg 24180

agccgtcagg tggtggatga tactaaatac aaggactacc aacaggtggg catcctacac 24240

caacacaaca actctggatt tgttggctac cttgccccca ccatgcgcga aggacaggcc 24300

taccctgcta acttccccta tccgcttata ggcaagaccg cagttgacag cattacccag 24360

aaaaagtttc tttgcgatcg cacccttttgg cgcatcccat tctccagtaa ctttatgtcc 24420

atgggcgcac tcacagacct gggccaaaac cttctctacg ccaactccgc ccacgcgcta 24480

gacatgactt ttgaggtgga tcccatggac gagcccaccc ttctttatgt tttgtttgaa 24540

gtctttgacg tggtccgtgt gcaccagccg caccgcggcg tcatcgaaac cgtgtacctg 24600

cgcacgccct tctcggccgg caacgccaca acataaagaa gcaagcaaca tcaacaacag 24660

ctgccgccat gggctccagt gagcaggaac tgaaagccat tgtcaaagat cttggttgtg 24720

ggccatattt tttgggcacc tatgacaagc gctttccagg ctttgtttct ccacacaagc 24780

tcgcctgcgc catagtcaat acggccggtc gcgagactgg gggcgtacac tggatggcct 24840

ttgcctggaa cccgcactca aaaacatgct acctctttga gccctttggc ttttctgacc 24900

agcgactcaa gcaggtttac cagtttgagt acgagtcact cctgcgccgt agcgccattg 24960

cttcttcccc cgaccgctgt ataacgctgg aaaagtccac ccaaagcgta caggggccca 25020

actcggccgc ctgtggacta ttctgctgca tgtttctcca cgcctttgcc aactggcccc 25080

aaactcccat ggatcacaac cccaccatga accttattac cggggtaccc aactccatgc 25140

tcaacagtcc ccaggtacag cccaccctgc gtcgcaacca ggaacagctc tacagcttcc 25200

tggagcgcca ctcgccctac ttccgcagcc acagtgcgca gattaggagc gccacttctt 25260

tttgtcactt gaaaaacatg taaaaataat gtactagaga cactttcaat aaaggcaaat 25320

gcttttattt gtacactctc gggtgattat ttacccccac ccttgccgtc tgcgccgttt 25380

aaaaatcaaa ggggttctgc cgcgcatcgc tatgcgccac tggcagggac acgttgcgat 25440

actggtgttt agtgctccac ttaaactcag gcacaaccat ccgcggcagc tcggtgaagt 25500

tttcactcca caggctgcgc accatcacca acgcgtttag caggtcgggc gccgatatct 25560

tgaagtcgca gttggggcct ccgccctgcg cgcgcgagtt gcgatacaca gggttgcagc 25620

actggaacac tatcagcgcc gggtggtgca cgctggccag cacgctcttg tcggagatca 25680

gatccgcgtc caggtcctcc gcgttgctca gggcgaacgg agtcaacttt ggtagctgcc 25740

ttcccaaaaa gggcgcgtgc ccaggctttg agttgcactc gcaccgtagt ggcatcaaaa 25800

ggtgaccgtg cccggtctgg gcgttaggat acagcgcctg cataaaagcc ttgatctgct 25860

taaaagccac ctgagccttt gcgccttcag agaagaacat gccgcaagac ttgccggaaa 25920

actgattggc cggacaggcc gcgtcgtgca cgcagcacct tgcgtcggtg ttggagatct 25980

gcaccacatt tcggccccac cggttcttca cgatcttggc cttgctagac tgctccttca 26040

gcgcgcgctg cccgttttcg ctcgtcacat ccatttcaat cacgtgctcc ttatttatca 26100

taatgcttcc gtgtagacac ttaagctcgc cttcgatctc agcgcagcgg tgcagccaca 26160

acgcgcagcc cgtgggctcg tgatgcttgt aggtcacctc tgcaaacgac tgcaggtacg 26220

cctgcaggaa tcgccccatc atcgtcacaa aggtcttgtt gctggtgaag gtcagctgca 26280

acccgcggtg ctcctcgttc agccaggtct tgcatacggc cgccagagct tccacttggt 26340

caggcagtag tttgaagttc gcctttagat cgttatccac gtggtacttg tccatcagcg 26400

cgcgcgcagc ctccatgccc ttctcccacg cagacacgat cggcacactc agcgggttca 26460

tcaccgtaat ttcactttcc gcttcgctgg gctcttcctc ttcctcttgc gtccgcatac 26520

cacgcgccac tgggtcgtct tcattcagcc gccgcactgt gcgcttacct cctttgccat 26580

gcttgattag caccggtggg ttgctgaaac ccaccatttg tagcgccaca tcttctcttt 26640

cttcctcgct gtccacgatt acctctggtg atggcgggcg ctcgggcttg ggagaagggc 26700

gcttcttttt cttcttgggc gcaatggcca aatccgccgc cgaggtcgat ggccgcgggc 26760

tgggtgtgcg cggcaccagc gcgtcttgtg atgagtcttc ctcgtcctcg gactcgatac 26820

gccgcctcat ccgcttttttt gggggcgccc ggggaggcgg cggcgacggg gacggggacg 26880

acacgtcctc catggttggg ggacgtcgcg ccgcaccgcg tccgcgctcg ggggtggttt 26940

cgcgctgctc ctcttcccga ctggccattt ccttctccta taggcagaaa aagatcatgg 27000

agtcagtcga gaagaaggac agcctaaccg ccccctctga gttcgccacc accgcctcca 27060

ccgatgccgc caacgcgcct accaccttcc ccgtcgaggc acccccgctt gaggaggagg 27120

aagtgattat cgagcaggac ccaggttttg taagcgaaga cgacgaggac cgctcagtac 27180

caacagagga taaaaagcaa gaccaggaca acgcagaggc aaacgaggaa caagtcgggc 27240

gggggggacga aaggcatggc gactacctag atgtgggaga cgacgtgctg ttgaagcatc 27300

tgcagcgcca gtgcgccatt atctgcgacg cgttgcaaga gcgcagcgat gtgcccctcg 27360

ccatagcgga tgtcagcctt gcctacgaac gccacctatt ctcaccgcgc gtacccccca 27420

aacgccaaga aaacggcaca tgcgagccca acccgcgcct caacttctac cccgtatttg 27480

ccgtgccaga ggtgcttgcc acctatcaca tctttttcca aaactgcaag ataccctat 27540

cctgccgtgc caaccgcagc cgagcggaca agcagctggc cttgcggcag ggcgctgtca 27600

tacctgatat cgcctcgctc aacgaagtgc caaaaatctt tgagggtctt ggacgcgacg 27660

agaagcgcgc ggcaaacgct ctgcaacagg aaaacagcga aaatgaaagt cactctggag 27720

tgttggtgga actcgagggt gacaacgcgc gcctagccgt actaaaacgc agcatcgagg 27780

tcacccactt tgcctacccg gcacttaacc tacccccaa ggtcatgagc acagtcatga 27840

gtgagctgat cgtgcgccgt gcgcagcccc tggagaggga tgcaaatttg caagaacaaa 27900

cagaggaggg cctacccgca gttggcgacg agcagctagc gcgctggctt caaacgcgcg 27960

agcctgccga cttggaggag cgacgcaaac taatgatggc cgcagtgctc gttaccgtgg 28020

agcttgagtg catgcagcgg ttctttgctg acccggagat gcagcgcaag ctagaggaaa 28080

cattgcacta caccttcga cagggctacg tacgccaggc ctgcaagatc tccaacgtgg 28140

agctctgcaa cctggtctcc taccttggaa ttttgcacga aaaccgcctt gggcaaaacg 28200

tgcttcattc cacgctcaag ggcgaggcgc gccgcgacta cgtccgcgac tgcgtttact 28260

tatttctatg ctacacctgg cagacggcca tgggcgtttg gcagcagtgc ttggaggagt 28320

gcaacctcaa ggagctgcag aaactgctaa agcaaaactt gaaggaccta tggacggcct 28380

tcaacgagcg ctccgtggcc gcgcacctgg cggacatcat tttccccgaa cgcctgctta 28440

aaaccctgca acagggtctg ccagacttca ccagtcaaag catgttgcag aactttagga 28500

actttatcct agagcgctca ggaatcttgc ccgccacctg ctgtgcactt cctagcgact 28560

ttgtgcccat taagtaccgc gaatgccctc cgccgctttg gggccactgc taccttctgc 28620

agctagccaa ctaccttgcc taccactctg acataatgga agacgtgagc ggtgacggtc 28680

tactggagtg tcactgtcgc tgcaacctat gcaccccgca ccgctccctg gtttgcaatt 28740

cgcagctgct taacgaaagt caaattatcg gtacctttga gctgcagggt ccctcgcctg 28800

acgaaaagtc cgcggctccg gggttgaaac tcactccggg gctgtggacg tcggcttacc 28860

ttcgcaaatt tgtacctgag gactaccacg cccacgagat taggttctac gaagaccaat 28920

cccgcccgcc taatgcggag cttaccgcct gcgtcattac ccagggccac attcttggcc 28980

aattgcaagc catcaacaaa gcccgccaag agtttctgct acgaaaggga cgggggttt 29040

acttggaccc ccagtccggc gaggagctca acccaatccc cccgccgccg cagccctatc 29100

agcagcagcc gcgggccctt gcttcccagg atggcaccca aaaagaagct gcagctgccg 29160

ccgccaccca cggacgagga ggaatactgg gacagtcagg cagaggaggt tttggacgag 29220

gaggaggagg acatgatgga agactgggag agcctagacg aggaagcttc cgaggtcgaa 29280

gaggtgtcag acgaaacacc gtcaccctcg gtcgcattcc cctcgccggc gccccagaaa 29340

tcggcaaccg gttccagcat ggctacaacc tccgctcctc aggcgccgcc ggcactgccc 29400

gttcgccgac ccaaccgtag atgggacacc actggaacca gggccggtaa gtccaagcag 29460

ccgccgccgt tagcccaaga gcaacaacag cgccaaggct accgctcatg gcgcgggcac 29520

aagaacgcca tagttgcttg cttgcaagac tgtgggggca acatctcctt cgcccgccgc 29580

tttcttctct accatcacgg cgtggccttc ccccgtaaca tcctgcatta ctaccgtcat 29640

ctctacagcc catactgcac cggcggcagc ggcagcaaca gcagcggcca cacagaagca 29700

aaggcgaccg gatagcaaga ctctgacaaa gcccaagaaa tccacagcgg cggcagcagc 29760

aggaggagga gcgctgcgtc tggcgcccaa cgaacccgta tcgacccgcg agcttagaaa 29820

caggattttt cccactctgt atgctatatt tcaacagagc aggggccaag aacaagagct 29880

gaaaataaaa aacaggtctc tgcgatccct cacccgcagc tgcctgtatc acaaaagcga 29940

agatcagctt cggcgcacgc tggaagacgc ggaggctctc ttcagtaaat actgcgcgct 30000

gactcttaag gactagtttc gcgccctttc tcaaatttaa gcgcgaaaac tacgtcatct 30060

ccagcggcca cacccggcgc cagcacctgt tgtcagcgcc attatgagca aggaaattcc 30120

cacgccctac atgtggagtt accagccaca aatgggactt gcggctggag ctgcccaaga 30180

ctactcaacc cgaataaact acatgagcgc gggaccccac atgatatccc gggtcaacgg 30240

aatacgcgcc caccgaaacc gaattctcct ggaacaggcg gctattacca ccacacctcg 30300

taataacctt aatccccgta gttggcccgc tgccctggtg taccaggaaa gtcccgctcc 30360

caccactgtg gtacttccca gagacgccca ggccgaagtt cagatgacta actcaggggc 30420

gcagcttgcg ggcggctttc gtcacagggt gcggtcgccc gggcagggta taactcacct 30480

gacaatcaga gggcgaggta ttcagctcaa cgacgagtcg gtgagctcct cgcttggtct 30540

ccgtccggac gggacatttc agatcggcgg cgccggccgc tcttcattca cgcctcgtca 30600

ggcaatccta actctgcaga cctcgtcctc tgagccgcgc tctggaggca ttggaactct 30660

gcaatttatt gaggagtttg tgccatcggt ctactttaac cccttctcgg gacctcccgg 30720

ccactatccg gatcaattta ttcctaactt tgacgcggta aaggactcgg cggacggcta 30780

cgactgaatg ttaagtggag aggcagagca actgcgcctg aaacacctgg tccactgtcg 30840

ccgccacaag tgctttgccc gcgactccgg tgagttttgc tactttgaat tgcccgagga 30900

tcatatcgag ggcccggcgc acggcgtccg gcttaccgcc cagggagagc ttgcccgtag 30960

cctgattcgg gagtttaccc agcgcccccc gctagttgag cgggacaggg gaccctgtgt 31020

tctcactgtg atttgcaact gtcctaaccc tggattacat caagatcctc tagttaatgt 31080

caggtcgcct aagtcgatta actagagtac ccggggatct tattcccttt aactaataaa 31140

aaaaaataat aaagcatcac ttacttaaaa tcagttagca aatttctgtc cagtttattc 31200

agcagcacct ccttgccctc ctcccagctc tggtattgca gcttcctcct ggctgcaaac 31260

tttctccaca atctaaatgg aatgtcagtt tcctcctgtt cctgtccatc cgcacccact 31320

atcttcatgt tgttgcagat gaagcgcgca agaccgtctg aagatacctt caaccccgtg 31380

tatccatatg acacggaaac cggtcctcca actgtgcctt ttcttactcc tccctttgta 31440

tcccccaatg ggtttcaaga gagtcccccc ggggtactct ctttgcgcct atccgaacct 31500

ctagttacct ccaatggcat gcttgcgctc aaaatgggca acggcctctc tctggacgag 31560

gccggcaacc ttacctccca aaatgtaacc actgtgagcc cacctctcaa aaaaaccaag 31620

tcaaacataa acctggaaat atctgcaccc ctcacagtta cctcagaagc cctaactgtg 31680

gctgccgccg cacctctaat ggtcgcgggc aacacactca ccatgcaatc acaggccccg 31740

ctaaccgtgc acgactccaa acttagcatt gccacccaag gacccctcac agtgtcagaa 31800

ggaaagctag ccctgcaaac atcaggcccc ctcaccacca ccgatagcag tacccttact 31860

atcactgcct cacccccctct aactactgcc actggtagct tgggcattga cttgaaagag 31920

cccatttata cacaaaatgg aaaactagga ctaaagtacg gggctccttt gcatgtaaca 31980

gacgacctaa acactttgac cgtagcaact ggtccaggtg tgactattaa taatacttcc 32040

ttgcaaacta aagttactgg agccttgggt tttgattcac aaggcaatat gcaacttaat 32100

gtagcaggag gactaaggat tgattctcaa aacagacgcc ttatacttga tgttagttat 32160

ccgtttgatg ctcaaaacca actaaatcta agactaggac agggccctct ttttataaac 32220

tcagcccaca acttggatat taactacaac aaaggccttt acttgtttac agcttcaaac 32280

aattccaaaa agcttgaggt taacctaagc actgccaagg ggttgatgtt tgacgctaca 32340

gccatagcca ttaatgcagg agatgggctt gaatttggtt cacctaatgc accaaacaca 32400

aatcccctca aaacaaaaat tggccatggc ctagaatttg attcaaacaa ggctatggtt 32460

cctaaactag gaactggcct tagttttgac agcacaggtg ccattacagt aggaaacaaa 32520

aataatgata agctaacttt gtggaccgga ataaaccctc cacctaactg tcaaattgtg 32580

gaaaacacta atacaaatga tggcaaactt actttagtat tagtaaaaaa tggagggctt 32640

gttaatggct acgtgtctct agttggtgta tcagacactg tgaaccaaat gttcacacaa 32700

aagacagcaa acatccaatt aagattatat tttgactctt ctggaaatct attaactgag 32760

gaatcagact taaaaattcc acttaaaaat aaatcttcta cagcgaccag tgaaactgta 32820

gccagcagca aagcctttat gccaagtact acagcttatc ccttcaacac cactactagg 32880

gatagtgaaa actacattca tggaatatgt tactacatga ctagttatga tagaagtcta 32940

tttcccttga acatttctat aatgctaaac agccgtatga tttcttccaa tgttgcctat 33000

gccatacaat ttgaatggaa tctaaatgca agtgaatctc cagaaagcaa catagctacg 33060

ctgaccacat ccccctttt cttttcttac attacagaag acgacaacta aagaatcgtt 33120

tgtgttatgt ttcaacgtgt ttatttttca attgcagaaa atttcaagtc atttttcatt 33180

cagtagtata gccccaccac cacatagctt atacagatca ccgtacctta atcaaacgtt 33240

ttttttttta ttccaaaaga ttatccaaaa cctcaaaatg aagatctatt aagtgaacgc 33300

gctcccctcc ggtggcgtgg tcaaactcta cagccaaaga acagataatg gcatttgtaa 33360

gatgttgcac aatggcttcc aaaaggcaaa cggccctcac gtccaagtgg acgtaaaggc 33420

taaacccttc agggtgaatc tcctctataa acattccagc accttcaacc atgcccaaat 33480

aattctcatc tcgccacctt ctcaatatat ctctaagcaa atcccgaata ttaagtccgg 33540

ccattgtaaa aatctgctcc agagcgccct ccaccttcag cctcaagcag cgaatcatga 33600

ttgcaaaaat tcaggttcct cacagacctg tataagattc aaaagcggaa cattaacaaa 33660

aataccgcga tcccgtaggt cccttcgcag ggccagctga acataatcgt gcaggtctgc 33720

acggaccagc gcggccactt ccccgccagg aaccatgaca aaagaaccca cactgattat 33780

gacacgcata ctcggagcta tgctaaccag cgtagccccg atgtaagctt gttgcatggg 33840

cggcgatata aaatgcaagg tgctgctcaa aaaatcaggc aaagcctcgc gcaaaaaaga 33900

aagcacatcg tagtcatgct catgcagata aaggcaggta agctccggaa ccaccacaga 33960

aaaagacacc atttttctct caaacatgtc tgcgggtttc tgcataaaca caaaataaaa 34020

taacaaaaaa acatttaaac attagaagcc tgtcttacaa caggaaaaac aacccttata 34080

agcataagac ggactacggc catgccggcg tgaccgtaaa aaaactggtc accgtgatta 34140

aaaagcacca ccgacagctc ctcggtcatg tccggagtca taatgtaaga ctcggtaaac 34200

acatcaggtt gattcacatc ggtcagtgct aaaaagcgac cgaaatagcc cgggggaata 34260

catacccgca ggcgtagaga caacattaca gcccccatag gaggtataac aaaattaata 34320

ggagagaaaa acacataaac acctgaaaaa ccctcctgcc taggcaaaat agcaccctcc 34380

cgctccagaa caacatacag cgcttccaca gcggcagcca taacagtcag ccttaccagt 34440

aaaaaagaaa acctattaaa aaaacaccac tcgacacggc accagctcaa tcagtcacag 34500

tgtaaaaaag ggccaagtgc agagcgagta tataggac taaaaaatga cgtaacggtt 34560

aaagtccaca aaaaacaccc agaaaaccgc acgcgaacct acgcccagaa acgaaagcca 34620

aaaaacccac aacttcctca aatcgtcact tccgttttcc cacgttacgt cacttcccat 34680

tttaagaaaa ctacaattcc caacacatac aagttactcc gccctaaaac ctacgtcacc 34740

cgccccgttc ccacgccccg cgccacgtca caaactccac cccctcatta tcatattggc 34800

ttcaatccaa aataaggtat attattgatg atg 34833

<210> 4
<211> 33075
<212> DNA
<213> Artificial Sequence

<220>
<223> pAdk35-E4dl355

<400> 4
ttaattaaga attaattcga tcctgaatgg cgaatggacg cgccctgtag cggcgcatta 60

agcgcggcgg gtgtggtggt tacgcgcagc gtgaccgcta cacttgccag cgccctagcg 120

cccgctcctt tcgctttctt cccttccttt ctcgccacgt tcgccggctt tccccgtcaa 180

gctctaaatc gggggctccc tttagggttc cgatttagtg ctttacggca cctcgacccc 240

aaaaaacttg attagggtga tggttcacgt agtgggccat cgccctgata gacggttttt 300

cgcccttga cgttggagtc cacgttcttt aatagtggac tcttgttcca aactggaaca 360

acactcaacc ctatctcggt ctattctttt gatttataag ggattttgcc gatttcggcc 420

tattggttaa aaaatgagct gatttaacaa aaattttaac aaaattcaga agaactcgtc 480

aagaaggcga tagaaggcga tgcgctgcga atcgggagcg gcgataccgt aaagcacgag 540

gaagcggtca gcccattcgc cgccaagctc ttcagcaata tcacgggtag ccaacgctat 600

gtcctgatag cggtccgcca cacccagccg gccacagtcg atgaatccag aaaagcggcc 660

attttccacc atgatattcg gcaagcaggc atcgccatgg gtcacgacga gatcctcgcc 720

gtcgggcatg ctcgccttga gcctggcgaa cagttcggct ggcgcgagcc cctgatgctc 780

ttcgtccaga tcatcctgat cgacaagacc ggcttccatc cgagtacgtg ctcgctcgat 840

gcgatgtttc gcttggtggt cgaatgggca ggtagccgga tcaagcgtat gcagccgccg 900

cattgcatca gccatgatgg atactttctc ggcaggagca aggtgagatg acaggagatc 960

ctgccccggc acttcgccca atagcagcca gtcccttccc gcttcagtga caacgtcgag 1020

cacagctgcg caaggaacgc ccgtcgtggc cagccacgat agccgcgctg cctcgtcttg 1080

cagttcattc agggcaccgg acaggtcggt cttgacaaaa agaaccgggc gcccctgcgc 1140

tgacagccgg aacacggcgg catcagagca gccgattgtc tgttgtgccc agtcatagcc 1200

gaatagcctc tccacccaag cggccggaga acctgcgtgc aatccatctt gttcaatcat 1260

gcgaaacgat cctcatcctg tctcttgatc agagcttgat cccctgcgcc atcagatcct 1320

tggcggcaag aaagccatcc agtttacttt gcagggcttc ccaaccttac cagagggcgc 1380

cccagctggc aattccggtt cgcttgctgt ccataaaacc gcccagtcta gctatcgcca 1440

tgtaagccca ctgcaagcta cctgctttct ctttgcgctt gcgttttccc ttgtccagat 1500

agcccagtag ctgacattca tccggggtca gcaccgtttc tgcggactgg ctttctacgt 1560

gaaaaggatc taggtgaaga tccttttga taatctcatg gctgcagcaa tggcaacaac 1620

gttgcgcaaa ctattaactg gcgaactact tactctagct tcccggcaac aattaataga 1680

ctggatggag gcggataaag ttgcaggacc acttctgcgc tcggcccttc cggctggctg 1740

gtttattgct gataaatctg gagccggtga gcgtgggtct cgcggtatca ttgcagcact 1800

ggggccagat ggtaagccct cccgtatcgt agttatctac acgacgggga gtcaggcaac 1860

tatggatgaa cgaaatagac agatcgctga gataggtgcc tcactgatta agcattggta 1920

actgtcagac caagtttact catatatact ttagattgat ttaaaacttc atttttaatt 1980

taaaaggatc taggtgaaga tccttttga taatctcatg accaaaatcc cttaacgtga 2040

gttttcgttc cactgagcgt cagaccccgt agaaaagatc aaaggatctt cttgagatcc 2100

ttttttttctg cgcgtaatct gctgcttgca aacaaaaaaa ccaccgctac cagcggtggt 2160

ttgtttgccg gatcaagagc taccaactct ttttccgaag gtaactggct tcagcagagc 2220

gcagatacca aatactgtcc ttctagtgta gccgtagtta ggccaccact tcaagaactc 2280

tgtagcaccg cctacatacc tcgctctgct aatcctgtta ccagtggctg ctgccagtgg 2340

cgataagtcg tgtcttaccg ggttggactc aagacgatag ttaccggata aggcgcagcg 2400

gtcgggctga acgggggggtt cgtgcacaca gcccagcttg gagcgaacga cctacaccga 2460

actgagatac ctacagcgtg agctatgaga aagcgccacg cttcccgaag ggagaaaggc 2520

ggacaggtat ccggtaagcg gcagggtcgg aacaggagag cgcacgaggg agcttccagg 2580

gggaaacgcc tggtatcttt atagtcctgt cgggtttcgc cacctctgac ttgagcgtcg 2640

atttttgtga tgctcgtcag gggggcggag cctatggaaa aacgccagca acgcggcctt 2700

tttacggttc ctggcctttt gctggccttt tgctcacatg ttctttcctg cgttatcccc 2760

tgattctgtg gataaccgta ttaccgcctt tgagtgagct gataccgctc gccgcagccg 2820

aacgaccgag cgcagcgagt cagtgagcga ggaagcggaa gagcgcctga tgcggtattt 2880

tctccttacg catctgtgcg gtatttcaca ccgcatatgg atccatgcat gttaattaac 2940

atcatcaata atatacctta ttttggattg aagccaatat gataatgagg gggtggagtt 3000

tgtgacgtgg cgcggggcgt gggaacgggg cgggtgacgt agtagtgtgg cggaagtgtg 3060

atgttgcaag tgtggcggaa cacatgtaag cgacggatgt ggcaaaagtg acgttttgg 3120

tgtgcgccgg tgtacacagg aagtgacaat tttcgcgcgg ttttaggcgg atgttgtagt 3180

aaatttgggc gtaaccgagt aagatttggc cattttcgcg ggaaaactga ataagaggaa 3240

gtgaaatctg aataattttg tgttactcat agcgcgtaat aatttaaatt gggcgtggct 3300

taagggtggg aaagaatata taaggtgggg gtcttatgta gttttgtatc tgttttgcag 3360

cagccgccgc cgccatgagc accaactcgt ttgatggaag cattgtgagc tcatatttga 3420

caacgcgcat gcccccatgg gccggggtgc gtcagaatgt gatgggctcc agcattgatg 3480

gtcgccccgt cctgcccgca aactctacta ccttgaccta cgagaccgtg tctggaacgc 3540

cgttggagac tgcagcctcc gccgccgctt cagccgctgc agccaccgcc cgcgggattg 3600

tgactgactt tgctttcctg agcccgcttg caagcagtgc agcttcccgt tcatccgccc 3660

gcgatgacaa gttgacggct cttttggcac aattggattc tttgacccgg gaacttaatg 3720

tcgtttctca gcagctgttg gatctgcgcc agcaggtttc tgccctgaag gcttcctccc 3780

ctcccaatgc ggtttaaaac ataaataaaa aaccagactc tgtttggatt tggatcaagc 3840

aagtgtcttg ctgtctttat ttaggggttt tgcgcgcgcg gtaggcccgg gaccagcggt 3900

ctcggtcgtt gagggtcctg tgtatttttt ccaggacgtg gtaaaggtga ctctggatgt 3960

tcagatacat gggcataagc ccgtctctgg ggtggaggta gcaccactgc agagcttcat 4020

gctgcggggt ggtgttgtag atgatccagt cgtagcagga gcgctgggcg tggtgcctaa 4080

aaatgtcttt cagtagcaag ctgattgcca ggggcaggcc cttggtgtaa gtgtttacaa 4140

agcggttaag ctgggatggg tgcatacgtg gggatatgag atgcatcttg gactgtattt 4200

ttaggttggc tatgttccca gccatatccc tccggggatt catgttgtgc agaaccacca 4260

gcacagtgta tccggtgcac ttgggaaatt tgtcatgtag cttagaagga aatgcgtgga 4320

agaacttgga gacgcccttg tgacctccaa gattttccat gcattcgtcc ataatgatgg 4380

caatgggccc acgggcggcg gcctgggcga agatatttct gggatcacta acgtcatagt 4440

tgtgttccag gatgagatcg tcataggcca tttttacaaa gcgcgggcgg agggtgccag 4500

actgcggtat aatggttcca tccggcccag gggcgtagtt accctcacag atttgcattt 4560

cccacgcttt gagttcagat gggggggatca tgtctacctg cggggcgatg aagaaaacgg 4620

tttccggggt aggggagatc agctgggaag aaagcaggtt cctgagcagc tgcgacttac 4680

cgcagccggt gggcccgtaa atcacaccta ttaccgggtg caactggtag ttaagagagc 4740

tgcagctgcc gtcatccctg agcaggggggg ccacttcgtt aagcatgtcc ctgactcgca 4800

tgttttccct gaccaaatcc gccagaaggc gctcgccgcc cagcgatagc agttcttgca 4860

aggaagcaaa gtttttcaac ggtttgagac cgtccgccgt aggcatgctt ttgagcgttt 4920

gaccaagcag ttccaggcgg tcccacagct cggtcacctg ctctacggca tctcgatcca 4980

gcatatctcc tcgtttcgcg ggttggggcg gctttcgctg tacggcagta gtcggtgctc 5040

gtccagacgg gccagggtca tgtctttcca cgggcgcagg gtcctcgtca gcgtagtctg 5100

ggtcacggtg aaggggtgcg ctccgggctg cgcgctggcc agggtgcgct tgaggctggt 5160

cctgctggtg ctgaagcgct gccggtcttc gccctgcgcg tcggccaggt agcatttgac 5220

catggtgtca tagtccagcc cctccgcggc gtggcccttg gcgcgcagct tgcccttgga 5280

ggaggcgccg cacgaggggc agtgcagact tttgagggcg tagagcttgg gcgcgagaaa 5340

taccgattcc ggggagtagg catccgcgcc gcaggccccg cagacggtct cgcattccac 5400

gagccaggtg agctctggcc gttcggggtc aaaaaccagg tttcccccat gctttttgat 5460

gcgtttctta cctctggttt ccatgagccg gtgtccacgc tcggtgacga aaaggctgtc 5520

cgtgtccccg tatacagact tgagaggcct gtcctcgagc ggtgttccgc ggtcctcctc 5580

gtatagaaac tcggaccact ctgagacaaa ggctcgcgtc caggccagca cgaaggaggc 5640

taagtgggag gggtagcggt cgttgtccac tagggggtcc actcgctcca gggtgtgaag 5700

acacatgtcg ccctcttcgg catcaaggaa ggtgattggt ttgtaggtgt aggccacgtg 5760

accgggtgtt cctgaagggg ggctataaaa gggggtgggg gcgcgttcgt cctcactctc 5820

ttccgcatcg ctgtctgcga gggccagctg ttggggtgag tactccctct gaaaagcggg 5880

catgacttct gcgctaagat tgtcagtttc caaaaacgag gaggatttga tattcacctg 5940

gcccgcggtg atgcctttga gggtggccgc atccatctgg tcagaaaaga caatcttttt 6000

gttgtcaagc ttggtggcaa acgacccgta gagggcgttg gacagcaact tggcgatgga 6060

gcgcagggtt tggtttttgt cgcgatcggc gcgctccttg gccgcgatgt ttagctgcac 6120

gtattcgcgc gcaacgcacc gccattcggg aaagacggtg gtgcgctcgt cgggcaccag 6180

gtgcacgcgc caaccgcggt tgtgcagggt gacaaggtca acgctggtgg ctacctctcc 6240

gcgtaggcgc tcgttggtcc agcagaggcg gccgcccttg cgcgagcaga atggcggtag 6300

ggggtctagc tgcgtctcgt ccgggggggtc tgcgtccacg gtaaagaccc cgggcagcag 6360

gcgcgcgtcg aagtagtcta tcttgcatcc ttgcaagtct agcgcctgct gccatgcgcg 6420

ggcggcaagc gcgcgctcgt atgggttgag tgggggaccc catggcatgg ggtgggtgag 6480

cgcggaggcg tacatgccgc aaatgtcgta aacgtagagg ggctctctga gtattccaag 6540

atatgtaggg tagcatcttc caccgcggat gctggcgcgc acgtaatcgt atagttcgtg 6600

cgagggagcg aggaggtcgg gaccgaggtt gctacgggcg ggctgctctg ctcggaagac 6660

tatctgcctg aagatggcat gtgagttgga tgatatggtt ggacgctgga agacgttgaa 6720

gctggcgtct gtgagaccta ccgcgtcacg cacgaaggag gcgtaggagt cgcgcagctt 6780

gttgaccagc tcggcggtga cctgcacgtc tagggcgcag tagtccaggg tttccttgat 6840

gatgtcatac ttatcctgtc cctttttttt ccacagctcg cggttgagga caaactcttc 6900

gcggtctttc cagtactctt ggatcggaaa cccgtcggcc tccgaacggt aagagcctag 6960

catgtagaac tggttgacgg cctggtaggc gcagcatccc ttttctacgg gtagcgcgta 7020

tgcctgcgcg gccttccgga gcgaggtgtg ggtgagcgca aaggtgtccc tgaccatgac 7080

tttgaggtac tggtatttga agtcagtgtc gtcgcatccg ccctgctccc agagcaaaaa 7140

gtccgtgcgc tttttggaac gcggatttgg cagggcgaag gtgacatcgt tgaagagtat 7200

ctttcccgcg cgaggcataa agttgcgtgt gatgcggaag ggtcccggca cctcggaacg 7260

gttgttaatt acctgggcgg cgagcacgat ctcgtcaaag ccgttgatgt tgtggcccac 7320

aatgtaaagt tccaagaagc gcgggatgcc cttgatggaa ggcaattttt taagttcctc 7380

gtaggtgagc tcttcagggg agctgagccc gtgctctgaa agggcccagt ctgcaagatg 7440

agggttggaa gcgacgaatg agctccacag gtcacgggcc attagcattt gcaggtggtc 7500

gcgaaaggtc ctaaactggc gacctatggc catttttct ggggtgatgc agtagaaggt 7560

aagcgggtct tgttcccagc ggtcccatcc aaggttcgcg gctaggtctc gcgcggcagt 7620

cactagaggc tcatctccgc cgaacttcat gaccagcatg aagggcacga gctgcttccc 7680

aaaggccccc atccaagtat aggtctctac atcgtaggtg acaaagagac gctcggtgcg 7740

aggatgcgag ccgatcggga agaactggat ctcccgccac caattggagg agtggctatt 7800

gatgtggtga aagtagaagt ccctgcgacg ggccgaacac tcgtgctggc ttttgtaaaa 7860

acgtgcgcag tactggcagc ggtgcacggg ctgtacatcc tgcacgaggt tgacctgacg 7920

accgcgcaca aggaagcaga gtgggaattt gagcccctcg cctggcgggt ttggctggtg 7980

gtcttctact tcggctgctt gtccttgacc gtctggctgc tcgaggggag ttacggtgga 8040

tcggaccacc acgccgcgcg agcccaaagt ccagatgtcc gcgcgcggcg gtcggagctt 8100

gatgacaaca tcgcgcagat gggagctgtc catggtctgg agctcccgcg gcgtcaggtc 8160

aggcgggagc tcctgcaggt ttacctcgca tagacgggtc agggcgcggg ctagatccag 8220

gtgataccta atttccaggg gctggttggt ggcggcgtcg atggcttgca agaggccgca 8280

tccccgcggc gcgactacgg taccgcgcgg cgggcggtgg gccgcggggg tgtccttgga 8340

tgatgcatct aaaagcggtg acgcgggcga gcccccggag gtaggggggg ctccggaccc 8400

gccgggagag ggggcagggg cacgtcggcg ccgcgcgcgg gcaggagctg gtgctgcgcg 8460

cgtaggttgc tggcgaacgc gacgacgcgg cggttgatct cctgaatctg gcgcctctgc 8520

gtgaagacga cgggcccggt gagcttgaac ctgaaagaga gttcgacaga atcaatttcg 8580

gtgtcgttga cggcggcctg gcgcaaaatc tcctgcacgt ctcctgagtt gtcttgatag 8640

gcgatctcgg ccatgaactg ctcgatctct tcctcctgga gatctccgcg tccggctcgc 8700

tccacggtgg cggcgaggtc gttggaaatg cgggccatga gctgcgagaa ggcgttgagg 8760

cctccctcgt tccagacgcg gctgtagacc acgccccctt cggcatcgcg ggcgcgcatg 8820

accacctgcg cgagattgag ctccacgtgc cgggcgaaga cggcgtagtt tcgcaggcgc 8880

tgaaagaggt agttgagggt ggtggcggtg tgttctgcca cgaagaagta cataacccag 8940

cgtcgcaacg tggattcgtt gatatccccc aaggcctcaa ggcgctccat ggcctcgtag 9000

aagtccacgg cgaagttgaa aaactgggag ttgcgcgccg acacggttaa ctcctcctcc 9060

agaagacgga tgagctcggc gacagtgtcg cgcacctcgc gctcaaaggc tacaggggcc 9120

tcttcttctt cttcaatctc ctcttccata agggcctccc cttcttcttc ttctggcggc 9180

ggtgggggag gggggacacg gcggcgacga cggcgcaccg ggaggcggtc gacaaagcgc 9240

tcgatcatct ccccgcggcg acggcgcatg gtctcggtga cggcgcggcc gttctcgcgg 9300

gggcgcagtt ggaagacgcc gcccgtcatg tcccggttat gggttggcgg ggggctgcca 9360

tgcggcaggg atacggcgct aacgatgcat ctcaacaatt gttgtgtagg tactccgccg 9420

ccgagggacc tgagcgagtc cgcatcgacc ggatcggaaa acctctcgag aaaggcgtct 9480

aaccagtcac agtcgcaagg taggctgagc accgtggcgg gcggcagcgg gcggcggtcg 9540

gggttgtttc tggcggaggt gctgctgatg atgtaattaa agtaggcggt cttgagacgg 9600

cggatggtcg acagaagcac catgtccttg ggtccggcct gctgaatgcg caggcggtcg 9660

gccatgcccc aggcttcgtt ttgacatcgg cgcaggtctt tgtagtagtc ttgcatgagc 9720

ctttctaccg gcacttcttc ttctccttcc tcttgtcctg catctcttgc atctatcgct 9780

gcggcggcgg cggagtttgg ccgtaggtgg cgccctcttc ctcccatgcg tgtgaccccg 9840

aagcccctca tcggctgaag cagggctagg tcggcgacaa cgcgctcggc taatatggcc 9900

tgctgcacct gcgtgagggt agactggaag tcatccatgt ccacaaagcg gtggtatgcg 9960

cccgtgttga tggtgtaagt gcagttggcc ataacggacc agttaacggt ctggtgaccc 10020

ggctgcgaga gctcggtgta cctgagacgc gagtaagccc tcgagtcaaa tacgtagtcg 10080

ttgcaagtcc gcaccaggta ctggtatccc accaaaaagt gcggcggcgg ctggcggtag 10140

aggggccagc gtagggtggc cggggctccg ggggcgagat cttccaacat aaggcgatga 10200

tatccgtaga tgtacctgga catccaggtg atgccggcgg cggtggtgga ggcgcgcgga 10260

aagtcgcgga cgcggttcca gatgttgcgc agcggcaaaa agtgctccat ggtcgggacg 10320

ctctggccgg tcaggcgcgc gcaatcgttg acgctctagc gtgcaaaagg agagcctgta 10380

agcgggcact cttccgtggt ctggtggata aattcgcaag ggtatcatgg cggacgaccg 10440

gggttcgagc cccgtatccg gccgtccgcc gtgatccatg cggttaccgc ccgcgtgtcg 10500

aacccaggtg tgcgacgtca gacaacgggg gagtgctcct tttggcttcc ttccaggcgc 10560

ggcggctgct gcgctagctt ttttggccac tggccgcgcg cagcgtaagc ggttaggctg 10620

gaaagcgaaa gcattaagtg gctcgctccc tgtagccgga gggttatttt ccaagggttg 10680

agtcgcggga cccccggttc gagtctcgga ccggccggac tgcggcgaac gggggtttgc 10740

ctccccgtca tgcaagaccc cgcttgcaaa ttcctccgga aacagggacg agccccttt 10800

ttgcttttcc cagatgcatc cggtgctgcg gcagatgcgc ccccctcctc agcagcggca 10860

agagcaagag cagcggcaga catgcagggc accctcccct cctcctaccg cgtcaggagg 10920

ggcgacatcc gcggttgacg cggcagcaga tggtgattac gaacccccgc ggcgccgggc 10980

ccggcactac ctggacttgg aggagggcga gggcctggcg cggctaggag cgccctctcc 11040

tgagcggcac ccaagggtgc agctgaagcg tgatacgcgt gaggcgtacg tgccgcggca 11100

gaacctgttt cgcgaccgcg agggagagga gcccgaggag atgcgggatc gaaagttcca 11160

cgcagggcgc gagctgcggc atggcctgaa tcgcgagcgg ttgctgcgcg aggaggactt 11220

tgagcccgac gcgcgaaccg ggattagtcc cgcgcgcgca cacgtggcgg ccgccgacct 11280

ggtaaccgca tacgagcaga cggtgaacca ggagattaac tttcaaaaaa gctttaacaa 11340

ccacgtgcgt acgcttgtgg cgcgcgagga ggtggctata ggactgatgc atctgtggga 11400

ctttgtaagc gcgctggagc aaaacccaaa tagcaagccg ctcatggcgc agctgttcct 11460

tatagtgcag cacagcaggg acaacgaggc attcagggat gcgctgctaa acatagtaga 11520

gcccgagggc cgctggctgc tcgatttgat aaacatcctg cagagcatag tggtgcagga 11580

gcgcagcttg agcctggctg acaaggtggc cgccatcaac tattccatgc ttagcctggg 11640

caagttttac gcccgcaaga tataccatac cccttacgtt cccatagaca aggaggtaaa 11700

gatcgagggg ttctacatgc gcatggcgct gaaggtgctt accttgagcg acgacctggg 11760

cgtttatcgc aacgagcgca tccacaaggc cgtgagcgtg agccggcggc gcgagctcag 11820

cgaccgcgag ctgatgcaca gcctgcaaag ggccctggct ggcacgggca gcggcgatag 11880

agaggccgag tcctactttg acgcgggcgc tgacctgcgc tgggccccaa gccgacgcgc 11940

cctggaggca gctggggccg gacctgggct ggcggtggca cccgcgcgcg ctggcaacgt 12000

cggcggcgtg gaggaatatg acgaggacga tgagtacgag ccagaggacg gcgagtacta 12060

agcggtgatg tttctgatca gatgatgcaa gacgcaacgg acccggcggt gcgggcggcg 12120

ctgcagagcc agccgtccgg ccttaactcc acggacgact ggcgccaggt catggaccgc 12180

atcatgtcgc tgactgcgcg caatcctgac gcgttccggc agcagccgca ggccaaccgg 12240

ctctccgcaa ttctggaagc ggtggtcccg gcgcgcgcaa accccacgca cgagaaggtg 12300

ctggcgatcg taaacgcgct ggccgaaaac agggccatcc ggcccgacga ggccggcctg 12360

gtctacgacg cgctgcttca gcgcgtggct cgttacaaca gcggcaacgt gcagaccaac 12420

ctggaccggc tggtgggggа tgtgcgcgag gccgtggcgc agcgtgagcg cgcgcagcag 12480

cagggcaacc tgggctccat ggttgcacta aacgccttcc tgagtacaca gcccgccaac 12540

gtgccgcggg gacaggagga ctacaccaac tttgtgagcg cactgcggct aatggtgact 12600

gagacaccgc aaagtgaggt gtaccagtct gggccagact atttttcca gaccagtaga 12660

caaggcctgc agaccgtaaa cctgagccag gctttcaaaa acttgcaggg gctgtggggg 12720

gtgcgggctc ccacaggcga ccgcgcgacc gtgtctagct tgctgacgcc caactcgcgc 12780

ctgttgctgc tgctaatagc gcccttcacg gacagtggca gcgtgtcccg ggacacatac 12840

ctaggtcact tgctgacact gtaccgcgag gccataggtc aggcgcatgt ggacgagcat 12900

actttccagg agattacaag tgtcagccgc gcgctggggc aggaggacac gggcagcctg 12960

gaggcaaccc taaactacct gctgaccaac cggcggcaga agatcccctc gttgcacagt 13020

ttaaacagcg aggaggagcg cattttgcgc tacgtgcagc agagcgtgag ccttaacctg 13080

atgcgcgacg gggtaacgcc cagcgtggcg ctggacatga ccgcgcgcaa catggaaccg 13140

ggcatgtatg cctcaaaccg gccgtttatc aaccgcctaa tggactactt gcatcgcgcg 13200

gccgccgtga accccgagta tttcaccaat gccatcttga acccgcactg gctaccgccc 13260

cctggtttct acaccggggg attcgaggtg cccgagggta acgatggatt cctctgggac 13320

gacatagacg acagcgtgtt ttccccgcaa ccgcagaccc tgctagagtt gcaacagcgc 13380

gagcaggcag aggcggcgct gcgaaaggaa agcttccgca ggccaagcag cttgtccgat 13440

ctaggcgctg cggccccgcg gtcagatgct agtagcccat ttccaagctt gatagggtct 13500

cttaccagca ctcgcaccac ccgcccgcgc ctgctgggcg aggaggagta cctaaacaac 13560

tcgctgctgc agccgcagcg cgaaaaaaac ctgcctccgg catttcccaa caacgggata 13620

gagagcctag tggacaagat gagtagatgg aagacgtacg cgcaggagca cagggacgtg 13680

ccaggcccgc gcccgcccac ccgtcgtcaa aggcacgacc gtcagcgggg tctggtgtgg 13740

gaggacgatg actcggcaga cgacagcagc gtcctggatt tgggagggag tggcaacccg 13800

tttgcgcacc ttcgccccag gctggggaga atgttttaaa aaaaaaaaag catgatgcaa 13860

aataaaaaac tcaccaaggc catggcaccg agcgttggtt ttcttgtatt ccccttagta 13920

tgcggcgcgc ggcgatgtat gaggaaggtc ctcctccctc ctacgagagt gtggtgagcg 13980

cggcgccagt ggcggcggcg ctgggttctc ccttcgatgc tcccctggac ccgccgtttg 14040

tgcctccgcg gtacctgcgg cctaccgggg ggagaaacag catccgttac tctgagttgg 14100

caccctatt cgacaccacc cgtgtgtacc tggtggacaa caagtcaacg gatgtggcat 14160

ccctgaacta ccagaacgac cacagcaact ttctgaccac ggtcattcaa aacaatgact 14220

acagcccggg ggaggcaagc acacagacca tcaatcttga cgaccggtcg cactggggcg 14280

gcgacctgaa aaccatcctg cataccaaca tgccaaatgt gaacgagttc atgtttacca 14340

ataagtttaa ggcgcgggtg atggtgtcgc gcttgcctac taaggacaat caggtggagc 14400

tgaaatacga gtgggtggag ttcacgctgc ccgagggcaa ctactccgag accatgacca 14460

tagaccttat gaacaacgcg atcgtggagc actacttgaa agtgggcaga cagaacgggg 14520

ttctggaaag cgacatcggg gtaaagtttg acacccgcaa cttcagactg gggtttgacc 14580

ccgtcactgg tcttgtcatg cctggggtat atacaaacga agccttccat ccagacatca 14640

ttttgctgcc aggatgcggg gtggacttca cccacagccg cctgagcaac ttgttgggca 14700

tccgcaagcg gcaacccttc caggagggct ttaggatcac ctacgatgat ctggagggtg 14760

gtaacattcc cgcactgttg gatgtggacg cctaccaggc gagcttgaaa gatgacaccg 14820

aacagggcgg gggtggcgca ggcggcagca acagcagtgg cagcggcgcg gaagagaact 14880

ccaacgcggc agccgcggca atgcagccgg tggaggacat gaacgatcat gccattcgcg 14940

gcgacacctt tgccacacgg gctgaggaga agcgcgctga ggccgaagca gcggccgaag 15000

ctgccgcccc cgctgcgcaa cccgaggtcg agaagcctca gaagaaaccg gtgatcaaac 15060

ccctgacaga ggacagcaag aaacgcagtt acaacctaat aagcaatgac agcaccttca 15120

cccagtaccg cagctggtac cttgcataca actacggcga ccctcagacc ggaatccgct 15180

catggaccct gctttgcact cctgacgtaa cctgcggctc ggagcaggtc tactggtcgt 15240

tgccagacat gatgcaagac cccgtgacct tccgctccac gcgccagatc agcaactttc 15300

cggtggtggg cgccgagctg ttgcccgtgc actccaagag cttctacaac gaccaggccg 15360

tctactccca actcatccgc cagtttacct ctctgaccca cgtgttcaat cgctttcccg 15420

agaaccagat tttggcgcgc ccgccagccc ccaccatcac caccgtcagt gaaaacgttc 15480

ctgctctcac agatcacggg acgctaccgc tgcgcaacag catcggagga gtccagcgag 15540

tgaccattac tgacgccaga cgccgcacct gcccctacgt ttacaaggcc ctgggcatag 15600

tctcgccgcg cgtcctatcg agccgcactt tttgagcaag catgtccatc cttatatcgc 15660

ccagcaataa cacaggctgg ggcctgcgct tcccaagcaa gatgtttggc ggggccaaga 15720

agcgctccga ccaacaccca gtgcgcgtgc gcgggcacta ccgcgcgccc tggggcgcgc 15780

acaaacgcgg ccgcactggg cgcaccaccg tcgatgacgc catcgacgcg gtggtggagg 15840

aggcgcgcaa ctacacgccc acgccgccac cagtgtccac agtggacgcg gccattcaga 15900

ccgtggtgcg cggagcccgg cgctatgcta aaatgaagag acggcggagg cgcgtagcac 15960

gtcgccaccg ccgccgaccc ggcactgccg cccaacgcgc ggcggcggcc ctgcttaacc 16020

gcgcacgtcg caccggccga cgggcggcca tgcgggccgc tcgaaggctg gccgcgggta 16080

ttgtcactgt gccccccagg tccaggcgac gagcggccgc cgcagcagcc gcggccatta 16140

gtgctatgac tcagggtcgc aggggcaacg tgtattgggt gcgcgactcg gttagcggcc 16200

tgcgcgtgcc cgtgcgcacc cgcccccccgc gcaactagat tgcaagaaaa aactacttag 16260

actcgtactg ttgtatgtat ccagcggcgg cggcgcgcaa cgaagctatg tccaagcgca 16320

aaatcaaaga agagatgctc caggtcatcg cgccggagat ctatggcccc ccgaagaagg 16380

aagagcagga ttacaagccc cgaaagctaa agcgggtcaa aaagaaaaag aaagatgatg 16440

atgatgaact tgacgacgag gtggaactgc tgcacgctac cgcgcccagg cgacgggtac 16500

agtggaaagg tcgacgcgta aaacgtgttt tgcgacccgg caccaccgta gtctttacgc 16560

ccggtgagcg ctccacccgc acctacaagc gcgtgtatga tgaggtgtac ggcgacgagg 16620

acctgcttga gcaggccaac gagcgcctcg gggagtttgc ctacggaaag cggcataagg 16680

acatgctggc gttgccgctg gacgagggca acccaacacc tagcctaaag cccgtaacac 16740

tgcagcaggt gctgcccgcg cttgcaccgt ccgaagaaaa gcgcggccta aagcgcgagt 16800

ctggtgactt ggcacccacc gtgcagctga tggtacccaa gcgccagcga ctggaagatg 16860

tcttggaaaa aatgaccgtg gaacctgggc tggagcccga ggtccgcgtg cggccaatca 16920

agcaggtggc gccgggactg ggcgtgcaga ccgtggacgt tcagataccc actaccagta 16980

gcaccagtat tgccaccgcc acagagggca tggagacaca aacgtccccg gttgcctcag 17040

cggtggcgga tgccgcggtg caggcggtcg ctgcggccgc gtccaagacc tctacggagg 17100

tgcaaacgga cccgtggatg tttcgcgttt cagccccccg gcgcccgcgc cgttcgagga 17160

agtacggcgc cgccagcgcg ctactgcccg aatatgccct acatccttcc attgcgccta 17220

cccccggcta tcgtggctac acctaccgcc ccagaagacg agcaactacc cgacgccgaa 17280

ccaccactgg aacccgccgc cgccgtcgcc gtcgccagcc cgtgctggcc ccgatttccg 17340

tgcgcagggt ggctcgcgaa ggaggcagga ccctggtgct gccaacagcg cgctaccacc 17400

ccagcatcgt ttaaaagccg gtctttgtgg ttcttgcaga tatggccctc acctgccgcc 17460

tccgtttccc ggtgccggga ttccgaggaa gaatgcaccg taggaggggc atggccggcc 17520

acggcctgac gggcggcatg cgtcgtgcgc accaccggcg gcggcgcgcg tcgcaccgtc 17580

gcatgcgcgg cggtatcctg cccctcctta ttccactgat cgccgcggcg attggcgccg 17640

tgcccggaat tgcatccgtg gccttgcagg cgcagagaca ctgattaaaa acaagttgca 17700

tgtggaaaaa tcaaaataaa aagtctggac tctcacgctc gcttggtcct gtaactattt 17760

tgtagaatgg aagacatcaa ctttgcgtct ctggccccgc gacacggctc gcgcccgttc 17820

atgggaaact ggcaagatat cggcaccagc aatatgagcg gtggcgcctt cagctggggc 17880

tcgctgtgga gcggcattaa aaatttcggt tccaccgtta agaactatgg cagcaaggcc 17940

tggaacagca gcacaggcca gatgctgagg gataagttga aagagcaaaa tttccaacaa 18000

aaggtggtag atggcctggc ctctggcatt agcggggtgg tggacctggc caaccaggca 18060

gtgcaaaata agattaacag taagcttgat ccccgccctc ccgtagagga gcctccaccg 18120

gccgtggaga cagtgtctcc agaggggcgt ggcgaaaagc gtccgcgccc cgacagggaa 18180

gaaactctgg tgacgcaaat agacgagcct ccctcgtacg aggaggcact aaagcaaggc 18240

ctgcccacca cccgtcccat cgcgcccatg gctaccggag tgctgggcca gcacacaccc 18300

gtaacgctgg acctgcctcc ccccgccgac acccagcaga aacctgtgct gccaggcccg 18360

accgccgttg ttgtaacccg tcctagccgc gcgtccctgc gccgcgccgc cagcggtccg 18420

cgatcgttgc ggcccgtagc cagtggcaac tggcaaagca cactgaacag catcgtgggt 18480

ctgggggtgc aatccctgaa gcgccgacga tgcttctgat agctaacgtg tcgtatgtgt 18540

gtcatgtatg cgtccatgtc gccgccagag gagctgctga gccgccgcgc gcccgctttc 18600

caagatggct acccccttcga tgatgccgca gtggtcttac atgcacatct cgggccagga 18660

cgcctcggag tacctgagcc ccgggctggt gcagtttgcc cgcgccaccg agacgtactt 18720

cagcctgaat aacaagttta gaaaccccac ggtggcgcct acgcacgacg tgaccacaga 18780

ccggtcccag cgtttgacgc tgcggttcat ccctgtggac cgtgaggata ctgcgtactc 18840

gtacaaggcg cggttcaccc tagctgtggg tgataaccgt gtgctggaca tggcttccac 18900

gtactttgac atccgcggcg tgctggacag gggccctact tttaagccct actctggcac 18960

tgcctacaac gccctggctc ccaagggtgc cccaaatcct tgcgaatggg atgaagctgc 19020

tactgctctt gaaataaacc tagaagaaga ggacgatgac aacgaagacg aagtagacga 19080

gcaagctgag cagcaaaaaa ctcacgtatt tgggcaggcg ccttattctg gtataaatat 19140

tacaaaggag ggtattcaaa taggtgtcga aggtcaaaca cctaaatatg ccgataaaac 19200

atttcaacct gaacctcaaa taggagaatc tcagtggtac gaaacagaaa ttaatcatgc 19260

agctgggaga gtcctaaaaa agactacccc aatgaaacca tgttacggtt catatgcaaa 19320

acccacaaat gaaaatggag ggcaaggcat tcttgtaaag caacaaaatg gaaagctaga 19380

aagtcaagtg gaaatgcaat ttttctcaac tactgaggca gccgcaggca atggtgataa 19440

cttgactcct aaagtggtat tgtacagtga agatgtagat atagaaaccc cagacactca 19500

tatttcttac atgcccacta ttaaggaagg taactcacga gaactaatgg gccaacaatc 19560

tatgcccaac aggcctaatt acattgcttt tagggacaat tttattggtc taatgtatta 19620

caacagcacg ggtaatatgg gtgttctggc gggccaagca tcgcagttga atgctgttgt 19680

agatttgcaa gacagaaaca cagagctttc ataccagctt ttgcttgatt ccattggtga 19740

tagaaccagg tacttttcta tgtggaatca ggctgttgac agctatgatc cagatgttag 19800

aattattgaa aatcatggaa ctgaagatga acttccaaat tactgctttc cactgggagg 19860

tgtgattaat acagagactc ttaccaaggt aaaacctaaa acaggtcagg aaaatggatg 19920

ggaaaaagat gctacagaat tttcagataa aaatgaaata agagttggaa ataattttgc 19980

catggaaatc aatctaaatg ccaacctgtg gagaaatttc ctgtactcca acatagcgct 20040

gtatttgccc gacaagctaa agtacagtcc ttccaacgta aaaatttctg ataacccaaa 20100

cacctacgac tacatgaaca agcgagtggt ggctcccggg ctagtggact gctacattaa 20160

ccttggagca cgctggtccc ttgactatat ggacaacgtc aacccattta accaccaccg 20220

caatgctggc ctgcgctacc gctcaatgtt gctgggcaat ggtcgctatg tgcccttcca 20280

catccaggtg cctcagaagt tctttgccat taaaaacctc cttctcctgc cgggctcata 20340

cacctacgag tggaacttca ggaaggatgt taacatggtt ctgcagagct ccctaggaaa 20400

tgacctaagg gttgacggag ccagcattaa gtttgatagc atttgccttt acgccacctt 20460

cttccccatg gcccacaaca ccgcctccac gcttgaggcc atgcttagaa acgacaccaa 20520

cgaccagtcc tttaacgact atctctccgc cgccaacatg ctctacccta tacccgccaa 20580

cgctaccaac gtgcccatat ccatcccctc ccgcaactgg gcggctttcc gcggctgggc 20640

cttcacgcgc cttaagacta aggaaacccc atcactgggc tcgggctacg acccttatta 20700

cacctactct ggctctatac cctacctaga tggaaccttt tacctcaacc acacctttaa 20760

gaaggtggcc attacctttg actcttctgt cagctggcct ggcaatgacc gcctgcttac 20820

ccccaacgag tttgaaatta agcgctcagt tgacggggag ggttacaacg ttgcccagtg 20880

taacatgacc aaagactggt tcctggtaca aatgctagct aactataaca ttggctacca 20940

gggcttctat atcccagaga gctacaagga ccgcatgtac tccttcttta gaaacttcca 21000

gcccatgagc cgtcaggtgg tggatgatac taaatacaag gactaccaac aggtgggcat 21060

cctacaccaa cacaacaact ctggatttgt tggctacctt gcccccacca tgcgcgaagg 21120

acaggcctac cctgctaact tcccctatcc gcttataggc aagaccgcag ttgacagcat 21180

tacccagaaa aagtttcttt gcgatcgcac cctttggcgc atcccattct ccagtaactt 21240

tatgtccatg ggcgcactca cagacctggg ccaaaacctt ctctacgcca actccgccca 21300

cgcgctagac atgacttttg aggtggatcc catggacgag cccacccttc tttatgtttt 21360

gtttgaagtc tttgacgtgg tccgtgtgca ccagccgcac cgcggcgtca tcgaaaccgt 21420

gtacctgcgc acgcccttct cggccggcaa cgccacaaca taaagaagca agcaacatca 21480

acaacagctg ccgccatggg ctccagtgag caggaactga aagccattgt caaagatctt 21540

ggttgtgggc catatttttt gggcacctat gacaagcgct ttccaggctt tgtttctcca 21600

cacaagctcg cctgcgccat agtcaatacg gccggtcgcg agactggggg cgtacactgg 21660

atggcctttg cctggaaccc gcactcaaaa acatgctacc tctttgagcc ctttggcttt 21720

tctgaccagc gactcaagca ggtttaccag tttgagtacg agtcactcct gcgccgtagc 21780

gccattgctt cttcccccga ccgctgtata acgctggaaa agtccaccca aagcgtacag 21840

gggcccaact cggccgcctg tggactattc tgctgcatgt ttctccacgc ctttgccaac 21900

tggccccaaa ctcccatgga tcacaacccc accatgaacc ttattaccgg ggtacccaac 21960

tccatgctca acagtcccca ggtacagccc accctgcgtc gcaaccagga acagctctac 22020

agcttcctgg agcgccactc gccctacttc cgcagccaca gtgcgcagat taggagcgcc 22080

acttcttttt gtcacttgaa aaacatgtaa aaataatgta ctagagacac tttcaataaa 22140

ggcaaatgct tttatttgta cactctcggg tgattattta cccccaccct tgccgtctgc 22200

gccgtttaaa aatcaaaggg gttctgccgc gcatcgctat gcgccactgg cagggacacg 22260

ttgcgatact ggtgtttagt gctccactta aactcaggca caaccatccg cggcagctcg 22320

gtgaagtttt cactccacag gctgcgcacc atcaccaacg cgtttagcag gtcgggcgcc 22380

gatatcttga agtcgcagtt ggggcctccg ccctgcgcgc gcgagttgcg atacacaggg 22440

ttgcagcact ggaacactat cagcgccggg tggtgcacgc tggccagcac gctcttgtcg 22500

gagatcagat ccgcgtccag gtcctccgcg ttgctcaggg cgaacggagt caactttggt 22560

agctgccttc ccaaaaaggg cgcgtgccca ggctttgagt tgcactcgca ccgtagtggc 22620

atcaaaaggt gaccgtgccc ggtctgggcg ttaggataca gcgcctgcat aaaagccttg 22680

atctgcttaa aagccacctg agcctttgcg ccttcagaga agaacatgcc gcaagacttg 22740

ccggaaaact gattggccgg acaggccgcg tcgtgcacgc agcaccttgc gtcggtgttg 22800

gagatctgca ccacatttcg gccccaccgg ttcttcacga tcttggcctt gctagactgc 22860

tccttcagcg cgcgctgccc gttttcgctc gtcacatcca tttcaatcac gtgctcctta 22920

tttatcataa tgcttccgtg tagacactta agctcgcctt cgatctcagc gcagcggtgc 22980

agccacaacg cgcagcccgt gggctcgtga tgcttgtagg tcacctctgc aaacgactgc 23040

aggtacgcct gcaggaatcg ccccatcatc gtcacaaagg tcttgttgct ggtgaaggtc 23100

agctgcaacc cgcggtgctc ctcgttcagc caggtcttgc atacggccgc cagagcttcc 23160

acttggtcag gcagtagttt gaagttcgcc tttagatcgt tatccacgtg gtacttgtcc 23220

atcagcgcgc gcgcagcctc catgcccttc tcccacgcag acacgatcgg cacactcagc 23280

gggttcatca ccgtaatttc actttccgct tcgctgggct cttcctcttc ctcttgcgtc 23340

cgcataccac gcgccactgg gtcgtcttca ttcagccgcc gcactgtgcg cttacctcct 23400

ttgccatgct tgattagcac cggtgggttg ctgaaaccca ccatttgtag cgccacatct 23460

tctctttctt cctcgctgtc cacgattacc tctggtgatg gcgggcgctc gggcttggga 23520

gaagggcgct tctttttctt cttgggcgca atggccaaat ccgccgccga ggtcgatggc 23580

cgcgggctgg gtgtgcgcgg caccagcgcg tcttgtgatg agtcttcctc gtcctcggac 23640

tcgatacgcc gcctcatccg ctttttttggg ggcgcccggg gaggcggcgg cgacggggac 23700

ggggacgaca cgtcctccat ggttgggggа cgtcgcgccg caccgcgtcc gcgctcgggg 23760

gtggtttcgc gctgctcctc ttcccgactg gccatttcct tctcctatag gcagaaaaag 23820

atcatggagt cagtcgagaa gaaggacagc ctaaccgccc cctctgagtt cgccaccacc 23880

gcctccaccg atgccgccaa cgcgcctacc accttccccg tcgaggcacc cccgcttgag 23940

gaggaggaag tgattatcga gcaggaccca ggttttgtaa gcgaagacga cgaggaccgc 24000

tcagtaccaa cagaggataa aaagcaagac caggacaacg cagaggcaaa cgaggaacaa 24060

gtcgggcggg gggacgaaag gcatggcgac tacctagatg tgggagacga cgtgctgttg 24120

aagcatctgc agcgccagtg cgccattatc tgcgacgcgt tgcaagagcg cagcgatgtg 24180

cccctcgcca tagcggatgt cagccttgcc tacgaacgcc acctattctc accgcgcgta 24240

ccccccaaac gccaagaaaa cggcacatgc gagcccaacc cgcgcctcaa cttctacccc 24300

gtatttgccg tgccagaggt gcttgccacc tatcacatct ttttccaaaa ctgcaagata 24360

cccctatcct gccgtgccaa ccgcagccga gcggacaagc agctggcctt gcggcagggc 24420

gctgtcatac ctgatatcgc ctcgctcaac gaagtgccaa aaatctttga gggtcttgga 24480

cgcgacgaga agcgcgcggc aaacgctctg caacaggaaa acagcgaaaa tgaaagtcac 24540

tctggagtgt tggtggaact cgagggtgac aacgcgcgcc tagccgtact aaaacgcagc 24600

atcgaggtca cccactttgc ctacccggca cttaacctac cccccaaggt catgagcaca 24660

gtcatgagtg agctgatcgt gcgccgtgcg cagcccctgg agagggatgc aaatttgcaa 24720

gaacaaacag aggagggcct acccgcagtt ggcgacgagc agctagcgcg ctggcttcaa 24780

acgcgcgagc ctgccgactt ggaggagcga cgcaaactaa tgatggccgc agtgctcgtt 24840

accgtggagc ttgagtgcat gcagcggttc tttgctgacc cggagatgca gcgcaagcta 24900

gaggaaacat tgcactacac ctttcgacag ggctacgtac gccaggcctg caagatctcc 24960

aacgtggagc tctgcaacct ggtctcctac cttggaattt tgcacgaaaa ccgccttggg 25020

caaaacgtgc ttcattccac gctcaagggc gaggcgcgcc gcgactacgt ccgcgactgc 25080

gtttacttat ttctatgcta cacctggcag acggccatgg gcgtttggca gcagtgcttg 25140

gaggagtgca acctcaagga gctgcagaaa ctgctaaagc aaaacttgaa ggacctatgg 25200

acggccttca acgagcgctc cgtggccgcg cacctggcgg acatcatttt ccccgaacgc 25260

ctgcttaaaa ccctgcaaca gggtctgcca gacttcacca gtcaaagcat gttgcagaac 25320

tttaggaact ttatcctaga gcgctcagga atcttgcccg ccacctgctg tgcacttcct 25380

agcgactttg tgcccattaa gtaccgcgaa tgccctccgc cgctttgggg ccactgctac 25440

cttctgcagc tagccaacta ccttgcctac cactctgaca taatggaaga cgtgagcggt 25500

gacggtctac tggagtgtca ctgtcgctgc aacctatgca ccccgcaccg ctccctggtt 25560

tgcaattcgc agctgcttaa cgaaagtcaa attatcggta cctttgagct gcagggtccc 25620

tcgcctgacg aaaagtccgc ggctccgggg ttgaaactca ctccggggct gtggacgtcg 25680

gcttaccttc gcaaatttgt acctgaggac taccacgccc acgagattag gttctacgaa 25740

gaccaatccc gcccgcctaa tgcggagctt accgcctgcg tcattaccca gggccacatt 25800

cttggccaat tgcaagccat caacaaagcc cgccaagagt ttctgctacg aaagggacgg 25860

ggggtttact tggaccccca gtccggcgag gagctcaacc caatcccccc gccgccgcag 25920

ccctatcagc agcagccgcg ggcccttgct tcccaggatg gcacccaaaa agaagctgca 25980

gctgccgccg ccacccacgg acgaggagga atactgggac agtcaggcag aggaggtttt 26040

ggacgaggag gaggaggaca tgatggaaga ctgggagagc ctagacgagg aagcttccga 26100

ggtcgaagag gtgtcagacg aaacaccgtc accctcggtc gcattcccct cgccggcgcc 26160

ccagaaatcg gcaaccggtt ccagcatggc tacaacctcc gctcctcagg cgccgccggc 26220

actgcccgtt cgccgaccca accgtagatg ggacaccact ggaaccaggg ccggtaagtc 26280

caagcagccg ccgccgttag cccaagagca acaacagcgc caaggctacc gctcatggcg 26340

cgggcacaag aacgccatag ttgcttgctt gcaagactgt gggggcaaca tctccttcgc 26400

ccgccgcttt cttctctacc atcacggcgt ggccttcccc cgtaacatcc tgcattacta 26460

ccgtcatctc tacagcccat actgcaccgg cggcagcggc agcaacagca gcggccacac 26520

agaagcaaag gcgaccggat agcaagactc tgacaaagcc caagaaatcc acagcggcgg 26580

cagcagcagg aggaggagcg ctgcgtctgg cgcccaacga acccgtatcg acccgcgagc 26640

ttagaaacag gatttttccc actctgtatg ctatatttca acagagcagg ggccaagaac 26700

aagagctgaa aataaaaaac aggtctctgc gatccctcac ccgcagctgc ctgtatcaca 26760

aaagcgaaga tcagcttcgg cgcacgctgg aagacgcgga ggctctcttc agtaaatact 26820

gcgcgctgac tcttaaggac tagtttcgcg ccctttctca aatttaagcg cgaaaactac 26880

gtcatctcca gcggccacac ccggcgccag cacctgttgt cagcgccatt atgagcaagg 26940

aaattcccac gccctacatg tggagttacc agccacaaat gggacttgcg gctggagctg 27000

cccaagacta ctcaacccga ataaactaca tgagcgcggg accccacatg atatcccggg 27060

tcaacggaat acgcgcccac cgaaaccgaa ttctcctgga acaggcggct attaccacca 27120

cacctcgtaa taaccttaat ccccgtagtt ggcccgctgc cctggtgtac caggaaagtc 27180

ccgctcccac cactgtggta cttcccagag acgcccaggc cgaagttcag atgactaact 27240

caggggcgca gcttgcgggc ggctttcgtc acagggtgcg gtcgcccggg cagggtataa 27300

ctcacctgac aatcagaggg cgaggtattc agctcaacga cgagtcggtg agctcctcgc 27360

ttggtctccg tccggacggg acatttcaga tcggcggcgc cggccgctct tcattcacgc 27420

ctcgtcaggc aatcctaact ctgcagacct cgtcctctga gccgcgctct ggaggcattg 27480

gaactctgca atttattgag gagtttgtgc catcggtcta ctttaacccc ttctcgggac 27540

ctcccggcca ctatccggat caatttattc ctaactttga cgcggtaaag gactcggcgg 27600

acggctacga ctgaatgtta agtggagagg cagagcaact gcgcctgaaa cacctggtcc 27660

actgtcgccg ccacaagtgc tttgcccgcg actccggtga gttttgctac tttgaattgc 27720

ccgaggatca tatcgagggc ccggcgcacg gcgtccggct taccgcccag ggagagcttg 27780

cccgtagcct gattcgggag tttacccagc gccccctgct agttgagcgg gacaggggac 27840

cctgtgttct cactgtgatt tgcaactgtc ctaaccctgg attacatcaa gatcctctag 27900

ttaatgtcag gtcgcctaag tcgattaact agagtacccg gggatcttat tccctttaac 27960

taataaaaaa aaataataaa gcatcactta cttaaaatca gttagcaaat ttctgtccag 28020

tttattcagc agcacctcct tgccctcctc ccagctctgg tattgcagct tcctcctggc 28080

tgcaaacttt ctccacaatc taaatggaat gtcagtttcc tcctgttcct gtccatccgc 28140

acccactatc ttcatgttgt tgcagatgaa gcgcgcaaga ccgtctgaag ataccttcaa 28200

ccccgtgtat ccatatgaca cggaaaccgg tcctccaact gtgccttttc ttactcctcc 28260

ctttgtatcc cccaatgggt ttcaagagag tccccctggg gtactctctt tgcgcctatc 28320

cgaacctcta gttacctcca atggcatgct tgcgctcaaa atgggcaacg gcctctctct 28380

ggacgaggcc ggcaacctta cctcccaaaa tgtaaccact gtgagcccac ctctcaaaaa 28440

aaccaagtca aacataaacc tggaaatatc tgcacccctc acagttacct cagaagccct 28500

aactgtggct gccgccgcac ctctaatggt cgcgggcaac acactcacca tgcaatcaca 28560

ggccccgcta accgtgcacg actccaaact tagcattgcc acccaaggac ccctcacagt 28620

gtcagaagga aagctagccc tgcaaacatc aggccccctc accaccaccg atagcagtac 28680

ccttactatc actgcctcac cccctctaac tactgccact ggtagcttgg gcattgactt 28740

gaaagagccc atttatacac aaaatggaaa actaggacta aagtacgggg ctcctttgca 28800

tgtaacagac gacctaaaca ctttgaccgt agcaactggt ccaggtgtga ctattaataa 28860

tacttccttg caaactaaag ttactggagc cttgggtttt gattcacaag gcaatatgca 28920

acttaatgta gcaggaggac taaggattga ttctcaaaac agacgcctta tacttgatgt 28980

tagttatccg tttgatgctc aaaaccaact aaatctaaga ctaggacagg gccctctttt 29040

tataaactca gcccacaact tggatattaa ctacaacaaa ggcctttact tgtttacagc 29100

ttcaaacaat tccaaaaagc ttgaggttaa cctaagcact gccaaggggt tgatgtttga 29160

cgctacagcc atagccatta atgcaggaga tgggcttgaa tttggttcac ctaatgcacc 29220

aaacacaaat cccctcaaaa caaaaattgg ccatggccta gaatttgatt caaacaaggc 29280

tatggttcct aaactaggaa ctggccttag ttttgacagc acaggtgcca ttacagtagg 29340

aaacaaaaat aatgataagc taactttgtg gaccggaata aaccctccac ctaactgtca 29400

aattgtggaa aacactaata caaatgatgg caaacttact ttagtattag taaaaaatgg 29460

agggcttgtt aatggctacg tgtctctagt tggtgtatca gacactgtga accaaatgtt 29520

cacacaaaag acagcaaaca tccaattaag attatatttt gactcttctg gaaatctatt 29580

aactgaggaa tcagacttaa aaattccact taaaaataaa tcttctacag cgaccagtga 29640

aactgtagcc agcagcaaag cctttatgcc aagtactaca gcttatccct tcaacaccac 29700

tactagggat agtgaaaact acattcatgg aatatgttac tacatgacta gttatgatag 29760

aagtctattt cccttgaaca tttctataat gctaaacagc cgtatgattt cttccaatgt 29820

tgcctatgcc atacaatttg aatggaatct aaatgcaagt gaatctccag aaagcaacat 29880

agctacgctg accacatccc cctttttctt ttcttacatt acagaagacg acaactaaag 29940

aatcgtttgt gttatgtttc aacgtgttta tttttcaatt gcagaaaatt tcaagtcatt 30000

tttcattcag tagtatagcc ccaccaccac atagcttata cagatcaccg taccttaatc 30060

aaactcacag aaccctagta ttcaacctgc cacctccctc ccaacacaca gagtacacag 30120

tcctttctcc ccggctggcc ttaaaaagca tcatatcatg ggtaacagac atattcttag 30180

gtgttatatt ccacacggtt tcctgtcgag ccaaacgctc atcagtgata ttaataaact 30240

ccccgggcag ctcacttaag ttcatgtcgc tgtccagctg ctgagccaca ggctgctgtc 30300

caacttgcgg ttgcttaacg ggcggcgaag gagaagtcca cgcctacatg ggggtagagt 30360

cataatcgtg catcaggata gggcggtggt gctgcagcag cgcgcgaata aactgctgcc 30420

gccgccgctc cgtcctgcag gaatacaaca tggcagtggt ctcctcagcg atgattcgca 30480

ccgcccgcag cataaggcgc cttgtcctcc gggcacagca gcgcaccctg atctcactta 30540

aatcagcaca gtaactgcag cacagcacca caatattgtt caaaatccca cagtgcaagg 30600

cgctgtatcc aaagctcatg gcgggggacca cagaacccac gtggccatca taccacaagc 30660

gcaggtagat taagtggcga cccctcataa acacgctgga cataaacatt acctcttttg 30720

gcatgttgta attcaccacc tcccctctga ttaaacatgg cgccatccac caccatccta 30780

aaccagctgg ccaaaacctg cccgccggct atacactgca gggaaccggg actggaacaa 30840

tgacagtgga gagcccagga ctcgtaacca tggatcatca tgctcgtcat gatatcaatg 30900

ttggcacaac acaggcacac gtgcatacac ttcctcagga ttacaagctc ctcccgcgtt 30960

agaaccatat cccagggaac aacccattcc tgaatcagcg taaatcccac actgcaggga 31020

agacctcgca cgtaactcac gttgtgcatt gtcaaagtgt tacattcggg cagcagcgga 31080

tgatcctcca gtatggtagc gcgggtttct gtctcaaaag gaggtagacg atccctactg 31140

tacggagtgc gccgagacaa ccgagatcgt gttggtcgta gtgtcatgcc aaatggaacg 31200

ccggacgtag tcatatttcc tgaagcaaaa ccaggtgcgg gcgtgacaaa cagatctgcg 31260

tctccggtct cgccgcttag atcgctctgt gtagtagttg tagtatatcc actctctcaa 31320

agcatccagg cgccccctgg cttcgggttc tatgtaaact ccttcatgcg ccgctgccct 31380

gataacatcc accaccgcag aataagccac acccagccaa cctacacatt cgttctgcga 31440

gtcacacacg ggaggagcgg gaagagctgg aagaaccatg ttttttttt tattccaaaa 31500

gattatccaa aacctcaaaa tgaagatcta ttaagtgaac gcgctcccct ccggtggcgt 31560

ggtcaaactc tacagccaaa gaacagataa tggcatttgt aagatgttgc acaatggctt 31620

ccaaaaggca aacggccctc acgtccaagt ggacgtaaag gctaaaccct tcagggtgaa 31680

tctcctctat aaacattcca gcaccttcaa ccatgcccaa ataattctca tctcgccacc 31740

ttctcaatat atctctaagc aaatcccgaa tattaagtcc ggccattgta aaaatctgct 31800

ccagagcgcc ctccaccttc agcctcaagc agcgaatcat gattgcaaaa attcaggttc 31860

ctcacagacc tgtataagat tcaaaagcgg aacattaaca aaaataccgc gatcccgtag 31920

gtcccttcgc agggccagct gaacataatc gtgcaggtct gcacggacca gcgcggccac 31980

ttccccgcca ggaaccatga caaaagaacc cacactgatt atgacacgca tactcggagc 32040

tatgctaacc agcgtagccc cgatgtaagc ttgttgcatg ggcggcgata taaaatgcaa 32100

ggtgctgctc aaaaaatcag gcaaagcctc gcgcaaaaaa gaaagcacat cgtagtcatg 32160

ctcatgcaga taaaggcagg taagctccgg aaccaccaca gaaaaagaca ccatttttct 32220

ctcaaacatg tctgcgggtt tctgcataaa cacaaaataa aataacaaaa aaacatttaa 32280

acattagaag cctgtcttac aacaggaaaa acaaccctta taagcataag acggactacg 32340

gccatgccgg cgtgaccgta aaaaaactgg tcaccgtgat taaaaagcac caccgacagc 32400

tcctcggtca tgtccggagt cataatgtaa gactcggtaa acacatcagg ttgattcaca 32460

tcggtcagtg ctaaaaagcg accgaaatag cccgggggaa tacatacccg caggcgtaga 32520

gacaacatta cagcccccat aggaggtata acaaaattaa taggagagaa aaacacataa 32580

acacctgaaa aaccctcctg cctaggcaaa atagcaccct cccgctccag aacaacatac 32640

agcgcttcca cagcggcagc cataacagtc agccttacca gtaaaaaaga aaacctatta 32700

aaaaaacacc actcgacacg gcaccagctc aatcagtcac agtgtaaaaa agggccaagt 32760

gcagagcgag tatatatagg actaaaaaat gacgtaacgg ttaaagtcca caaaaaacac 32820

ccagaaaacc gcacgcgaac ctacgcccag aaacgaaagc caaaaaaccc acaacttcct 32880

caaatcgtca cttccgtttt cccacgttac gtcacttccc attttaagaa aactacaatt 32940

cccaacacat acaagttact ccgccctaaa acctacgtca cccgccccgt tcccacgccc 33000

cgcgccacgt cacaaactcc acccccctcat tatcatattg gcttcaatcc aaaataaggt 33060

atattattga tgatg 33075

<210> 5
<211> 31660
<212> DNA
<213> Artificial Sequence

<220>
<223> pAdk35-E4dlO4-7

<400> 5
ttaattaaga attaattcga tcctgaatgg cgaatggacg cgccctgtag cggcgcatta 60

agcgcggcgg gtgtggtggt tacgcgcagc gtgaccgcta cacttgccag cgccctagcg 120

cccgctcctt tcgctttctt cccttccttt ctcgccacgt tcgccggctt tccccgtcaa 180

gctctaaatc gggggctccc tttagggttc cgatttagtg ctttacggca cctcgacccc 240

aaaaaacttg attagggtga tggttcacgt agtgggccat cgccctgata gacggttttt 300

cgcccttga cgttggagtc cacgttcttt aatagtggac tcttgttcca aactggaaca 360

acactcaacc ctatctcggt ctattctttt gatttataag ggattttgcc gatttcggcc 420

tattggttaa aaaatgagct gatttaacaa aaattttaac aaaattcaga agaactcgtc 480

aagaaggcga tagaaggcga tgcgctgcga atcgggagcg gcgataccgt aaagcacgag 540

gaagcggtca gcccattcgc cgccaagctc ttcagcaata tcacgggtag ccaacgctat 600

gtcctgatag cggtccgcca cacccagccg gccacagtcg atgaatccag aaaagcggcc 660

attttccacc atgatattcg gcaagcaggc atcgccatgg gtcacgacga gatcctcgcc 720

gtcgggcatg ctcgccttga gcctggcgaa cagttcggct ggcgcgagcc cctgatgctc 780

ttcgtccaga tcatcctgat cgacaagacc ggcttccatc cgagtacgtg ctcgctcgat 840

gcgatgtttc gcttggtggt cgaatgggca ggtagccgga tcaagcgtat gcagccgccg 900

cattgcatca gccatgatgg atactttctc ggcaggagca aggtgagatg acaggagatc 960

ctgccccggc acttcgccca atagcagcca gtcccttccc gcttcagtga caacgtcgag 1020

cacagctgcg caaggaacgc ccgtcgtggc cagccacgat agccgcgctg cctcgtcttg 1080

cagttcattc agggcaccgg acaggtcggt cttgacaaaa agaaccgggc gcccctgcgc 1140

tgacagccgg aacacggcgg catcagagca gccgattgtc tgttgtgccc agtcatagcc 1200

gaatagcctc tccacccaag cggccggaga acctgcgtgc aatccatctt gttcaatcat 1260

gcgaaacgat cctcatcctg tctcttgatc agagcttgat cccctgcgcc atcagatcct 1320

tggcggcaag aaagccatcc agtttacttt gcagggcttc ccaaccttac cagagggcgc 1380

cccagctggc aattccggtt cgcttgctgt ccataaaacc gcccagtcta gctatcgcca 1440

tgtaagccca ctgcaagcta cctgctttct ctttgcgctt gcgttttccc ttgtccagat 1500

agcccagtag ctgacattca tccggggtca gcaccgtttc tgcggactgg ctttctacgt 1560

gaaaaggatc taggtgaaga tccttttga taatctcatg gctgcagcaa tggcaacaac 1620

gttgcgcaaa ctattaactg gcgaactact tactctagct tcccggcaac aattaataga 1680

ctggatggag gcggataaag ttgcaggacc acttctgcgc tcggcccttc cggctggctg 1740

gtttattgct gataaatctg gagccggtga gcgtgggtct cgcggtatca ttgcagcact 1800

ggggccagat ggtaagccct cccgtatcgt agttatctac acgacgggga gtcaggcaac 1860

tatggatgaa cgaaatagac agatcgctga gataggtgcc tcactgatta agcattggta 1920

actgtcagac caagtttact catatatact ttagattgat ttaaaacttc atttttaatt 1980

taaaaggatc taggtgaaga tccttttga taatctcatg accaaaatcc cttaacgtga 2040

gttttcgttc cactgagcgt cagaccccgt agaaaagatc aaaggatctt cttgagatcc 2100

ttttttctg cgcgtaatct gctgcttgca aacaaaaaaa ccaccgctac cagcggtggt 2160

ttgtttgccg gatcaagagc taccaactct ttttccgaag gtaactggct tcagcagagc 2220

gcagatacca aatactgtcc ttctagtgta gccgtagtta ggccaccact tcaagaactc 2280

tgtagcaccg cctacatacc tcgctctgct aatcctgtta ccagtggctg ctgccagtgg 2340

cgataagtcg tgtcttaccg ggttggactc aagacgatag ttaccggata aggcgcagcg 2400

gtcgggctga acgggggggtt cgtgcacaca gcccagcttg gagcgaacga cctacaccga 2460

actgagatac ctacagcgtg agctatgaga aagcgccacg cttcccgaag ggagaaaggc 2520

ggacaggtat ccggtaagcg gcagggtcgg aacaggagag cgcacgaggg agcttccagg 2580

gggaaacgcc tggtatcttt atagtcctgt cgggtttcgc cacctctgac ttgagcgtcg 2640

atttttgtga tgctcgtcag gggggcggag cctatggaaa aacgccagca acgcggcctt 2700

tttacggttc ctggcctttt gctggccttt tgctcacatg ttctttcctg cgttatcccc 2760

tgattctgtg gataaccgta ttaccgcctt tgagtgagct gataccgctc gccgcagccg 2820

aacgaccgag cgcagcgagt cagtgagcga ggaagcggaa gagcgcctga tgcggtattt 2880

tctccttacg catctgtgcg gtatttcaca ccgcatatgg atccatgcat gttaattaac 2940

atcatcaata atatacctta ttttggattg aagccaatat gataatgagg gggtggagtt 3000

tgtgacgtgg cgcggggcgt gggaacgggg cgggtgacgt agtagtgtgg cggaagtgtg 3060

atgttgcaag tgtggcggaa cacatgtaag cgacggatgt ggcaaaagtg acgttttgg 3120

tgtgcgccgg tgtacacagg aagtgacaat tttcgcgcgg ttttaggcgg atgttgtagt 3180

aaatttgggc gtaaccgagt aagatttggc cattttcgcg ggaaaactga ataagaggaa 3240

gtgaaatctg aataattttg tgttactcat agcgcgtaat aatttaaatt gggcgtggct 3300

taagggtggg aaagaatata taaggtgggg gtcttatgta gttttgtatc tgttttgcag 3360

cagccgccgc cgccatgagc accaactcgt ttgatggaag cattgtgagc tcatatttga 3420

caacgcgcat gcccccatgg gccggggtgc gtcagaatgt gatgggctcc agcattgatg 3480

gtcgccccgt cctgcccgca aactctacta ccttgaccta cgagaccgtg tctggaacgc 3540

cgttggagac tgcagcctcc gccgccgctt cagccgctgc agccaccgcc cgcgggattg 3600

tgactgactt tgctttcctg agcccgcttg caagcagtgc agcttcccgt tcatccgccc 3660

gcgatgacaa gttgacggct cttttggcac aattggattc tttgacccgg gaacttaatg 3720

tcgtttctca gcagctgttg gatctgcgcc agcaggtttc tgccctgaag gcttcctccc 3780

ctcccaatgc ggtttaaaac ataaataaaa aaccagactc tgtttggatt tggatcaagc 3840

aagtgtcttg ctgtctttat ttaggggttt tgcgcgcgcg gtaggcccgg gaccagcggt 3900

ctcggtcgtt gagggtcctg tgtatttttt ccaggacgtg gtaaaggtga ctctggatgt 3960

tcagatacat gggcataagc ccgtctctgg ggtggaggta gcaccactgc agagcttcat 4020

gctgcggggt ggtgttgtag atgatccagt cgtagcagga gcgctgggcg tggtgcctaa 4080

aaatgtcttt cagtagcaag ctgattgcca ggggcaggcc cttggtgtaa gtgtttacaa 4140

agcggttaag ctgggatggg tgcatacgtg gggatatgag atgcatcttg gactgtattt 4200

ttaggttggc tatgttccca gccatatccc tccggggatt catgttgtgc agaaccacca 4260

gcacagtgta tccggtgcac ttgggaaatt tgtcatgtag cttagaagga aatgcgtgga 4320

agaacttgga gacgcccttg tgacctccaa gattttccat gcattcgtcc ataatgatgg 4380

caatgggccc acgggcggcg gcctgggcga agatatttct gggatcacta acgtcatagt 4440

tgtgttccag gatgagatcg tcataggcca tttttacaaa gcgcgggcgg agggtgccag 4500

actgcggtat aatggttcca tccggcccag gggcgtagtt accctcacag atttgcattt 4560

cccacgcttt gagttcagat ggggggatca tgtctacctg cggggcgatg aagaaaacgg 4620

tttccggggt aggggagatc agctgggaag aaagcaggtt cctgagcagc tgcgacttac 4680

cgcagccggt gggcccgtaa atcacaccta ttaccgggtg caactggtag ttaagagagc 4740

tgcagctgcc gtcatccctg agcaggggggg ccacttcgtt aagcatgtcc ctgactcgca 4800

tgttttccct gaccaaatcc gccagaaggc gctcgccgcc cagcgatagc agttcttgca 4860

aggaagcaaa gtttttcaac ggtttgagac cgtccgccgt aggcatgctt ttgagcgttt 4920

gaccaagcag ttccaggcgg tcccacagct cggtcacctg ctctacggca tctcgatcca 4980

gcatatctcc tcgtttcgcg ggttggggcg gctttcgctg tacggcagta gtcggtgctc 5040

gtccagacgg gccagggtca tgtctttcca cgggcgcagg gtcctcgtca gcgtagtctg 5100

ggtcacggtg aaggggtgcg ctccgggctg cgcgctggcc agggtgcgct tgaggctggt 5160

cctgctggtg ctgaagcgct gccggtcttc gccctgcgcg tcggccaggt agcatttgac 5220

catggtgtca tagtccagcc cctccgcggc gtggcccttg gcgcgcagct tgcccttgga 5280

ggaggcgccg cacgaggggc agtgcagact tttgagggcg tagagcttgg gcgcgagaaa 5340

taccgattcc ggggagtagg catccgcgcc gcaggccccg cagacggtct cgcattccac 5400

gagccaggtg agctctggcc gttcggggtc aaaaaccagg tttcccccat gctttttgat 5460

gcgtttctta cctctggttt ccatgagccg gtgtccacgc tcggtgacga aaaggctgtc 5520

cgtgtccccg tatacagact tgagaggcct gtcctcgagc ggtgttccgc ggtcctcctc 5580

gtatagaaac tcggaccact ctgagacaaa ggctcgcgtc caggccagca cgaaggaggc 5640

taagtgggag gggtagcggt cgttgtccac tagggggtcc actcgctcca gggtgtgaag 5700

acacatgtcg ccctcttcgg catcaaggaa ggtgattggt ttgtaggtgt aggccacgtg 5760

accgggtgtt cctgaagggg ggctataaaa gggggtgggg gcgcgttcgt cctcactctc 5820

ttccgcatcg ctgtctgcga gggccagctg ttggggtgag tactccctct gaaaagcggg 5880

catgacttct gcgctaagat tgtcagtttc caaaaacgag gaggatttga tattcacctg 5940

gcccgcggtg atgcctttga gggtggccgc atccatctgg tcagaaaaga caatcttttt 6000

gttgtcaagc ttggtggcaa acgacccgta gagggcgttg gacagcaact tggcgatgga 6060

gcgcagggtt tggtttttgt cgcgatcggc gcgctccttg gccgcgatgt ttagctgcac 6120

gtattcgcgc gcaacgcacc gccattcggg aaagacggtg gtgcgctcgt cgggcaccag 6180

gtgcacgcgc caaccgcggt tgtgcagggt gacaaggtca acgctggtgg ctacctctcc 6240

gcgtaggcgc tcgttggtcc agcagaggcg gccgcccttg cgcgagcaga atggcggtag 6300

ggggtctagc tgcgtctcgt ccgggggggtc tgcgtccacg gtaaagaccc cgggcagcag 6360

gcgcgcgtcg aagtagtcta tcttgcatcc ttgcaagtct agcgcctgct gccatgcgcg 6420

ggcggcaagc gcgcgctcgt atgggttgag tgggggaccc catggcatgg ggtgggtgag 6480

cgcggaggcg tacatgccgc aaatgtcgta aacgtagagg ggctctctga gtattccaag 6540

atatgtaggg tagcatcttc caccgcggat gctggcgcgc acgtaatcgt atagttcgtg 6600

cgagggagcg aggaggtcgg gaccgaggtt gctacgggcg ggctgctctg ctcggaagac 6660

tatctgcctg aagatggcat gtgagttgga tgatatggtt ggacgctgga agacgttgaa 6720

gctggcgtct gtgagaccta ccgcgtcacg cacgaaggag gcgtaggagt cgcgcagctt 6780

gttgaccagc tcggcggtga cctgcacgtc tagggcgcag tagtccaggg tttccttgat 6840

gatgtcatac ttatcctgtc cctttttttt ccacagctcg cggttgagga caaactcttc 6900

gcggtctttc cagtactctt ggatcggaaa cccgtcggcc tccgaacggt aagagcctag 6960

catgtagaac tggttgacgg cctggtaggc gcagcatccc ttttctacgg gtagcgcgta 7020

tgcctgcgcg gccttccgga gcgaggtgtg ggtgagcgca aaggtgtccc tgaccatgac 7080

tttgaggtac tggtatttga agtcagtgtc gtcgcatccg ccctgctccc agagcaaaaa 7140

gtccgtgcgc tttttggaac gcggatttgg cagggcgaag gtgacatcgt tgaagagtat 7200

ctttcccgcg cgaggcataa agttgcgtgt gatgcggaag ggtcccggca cctcggaacg 7260

gttgttaatt acctgggcgg cgagcacgat ctcgtcaaag ccgttgatgt tgtggcccac 7320

aatgtaaagt tccaagaagc gcgggatgcc cttgatggaa ggcaattttt taagttcctc 7380

gtaggtgagc tcttcagggg agctgagccc gtgctctgaa agggcccagt ctgcaagatg 7440

agggttggaa gcgacgaatg agctccacag gtcacgggcc attagcattt gcaggtggtc 7500

gcgaaaggtc ctaaactggc gacctatggc catttttct ggggtgatgc agtagaaggt 7560

aagcgggtct tgttcccagc ggtcccatcc aaggttcgcg gctaggtctc gcgcggcagt 7620

cactagaggc tcatctccgc cgaacttcat gaccagcatg aagggcacga gctgcttccc 7680

aaaggccccc atccaagtat aggtctctac atcgtaggtg acaaagagac gctcggtgcg 7740

aggatgcgag ccgatcggga agaactggat ctcccgccac caattggagg agtggctatt 7800

gatgtggtga aagtagaagt ccctgcgacg ggccgaacac tcgtgctggc ttttgtaaaa 7860

acgtgcgcag tactggcagc ggtgcacggg ctgtacatcc tgcacgaggt tgacctgacg 7920

accgcgcaca aggaagcaga gtgggaattt gagcccctcg cctggcgggt ttggctggtg 7980

gtcttctact tcggctgctt gtccttgacc gtctggctgc tcgaggggag ttacggtgga 8040

tcggaccacc acgccgcgcg agcccaaagt ccagatgtcc gcgcgcggcg gtcggagctt 8100

gatgacaaca tcgcgcagat gggagctgtc catggtctgg agctcccgcg gcgtcaggtc 8160

aggcgggagc tcctgcaggt ttacctcgca tagacgggtc agggcgcggg ctagatccag 8220

gtgataccta atttccaggg gctggttggt ggcggcgtcg atggcttgca agaggccgca 8280

tccccgcggc gcgactacgg taccgcgcgg cgggcggtgg gccgcggggg tgtccttgga 8340

tgatgcatct aaaagcggtg acgcgggcga gcccccggag gtagggggggg ctccggaccc 8400

gccgggagag ggggcagggg cacgtcggcg ccgcgcgcgg gcaggagctg gtgctgcgcg 8460

cgtaggttgc tggcgaacgc gacgacgcgg cggttgatct cctgaatctg gcgcctctgc 8520

gtgaagacga cgggcccggt gagcttgaac ctgaaagaga gttcgacaga atcaatttcg 8580

gtgtcgttga cggcggcctg gcgcaaaatc tcctgcacgt ctcctgagtt gtcttgatag 8640

gcgatctcgg ccatgaactg ctcgatctct tcctcctgga gatctccgcg tccggctcgc 8700

tccacggtgg cggcgaggtc gttggaaatg cgggccatga gctgcgagaa ggcgttgagg 8760

cctccctcgt tccagacgcg gctgtagacc acgccccctt cggcatcgcg ggcgcgcatg 8820

accacctgcg cgagattgag ctccacgtgc cgggcgaaga cggcgtagtt tcgcaggcgc 8880

tgaaagaggt agttgagggt ggtggcggtg tgttctgcca cgaagaagta cataacccag 8940

cgtcgcaacg tggattcgtt gatatccccc aaggcctcaa ggcgctccat ggcctcgtag 9000

aagtccacgg cgaagttgaa aaactgggag ttgcgcgccg acacggttaa ctcctcctcc 9060

agaagacgga tgagctcggc gacagtgtcg cgcacctcgc gctcaaaggc tacaggggcc 9120

tcttcttctt cttcaatctc ctcttccata agggcctccc cttcttcttc ttctggcggc 9180

ggtgggggag gggggacacg gcggcgacga cggcgcaccg ggaggcggtc gacaaagcgc 9240

tcgatcatct ccccgcggcg acggcgcatg gtctcggtga cggcgcggcc gttctcgcgg 9300

gggcgcagtt ggaagacgcc gcccgtcatg tcccggttat gggttggcgg ggggctgcca 9360

tgcggcaggg atacggcgct aacgatgcat ctcaacaatt gttgtgtagg tactccgccg 9420

ccgagggacc tgagcgagtc cgcatcgacc ggatcggaaa acctctcgag aaaggcgtct 9480

aaccagtcac agtcgcaagg taggctgagc accgtggcgg gcggcagcgg gcggcggtcg 9540

gggttgtttc tggcggaggt gctgctgatg atgtaattaa agtaggcggt cttgagacgg 9600

cggatggtcg acagaagcac catgtccttg ggtccggcct gctgaatgcg caggcggtcg 9660

gccatgcccc aggcttcgtt ttgacatcgg cgcaggtctt tgtagtagtc ttgcatgagc 9720

ctttctaccg gcacttcttc ttctccttcc tcttgtcctg catctcttgc atctatcgct 9780

gcggcggcgg cggagtttgg ccgtaggtgg cgccctcttc ctcccatgcg tgtgaccccg 9840

aagcccctca tcggctgaag cagggctagg tcggcgacaa cgcgctcggc taatatggcc 9900

tgctgcacct gcgtgagggt agactggaag tcatccatgt ccacaaagcg gtggtatgcg 9960

cccgtgttga tggtgtaagt gcagttggcc ataacggacc agttaacggt ctggtgaccc 10020

ggctgcgaga gctcggtgta cctgagacgc gagtaagccc tcgagtcaaa tacgtagtcg 10080

ttgcaagtcc gcaccaggta ctggtatccc accaaaaagt gcggcggcgg ctggcggtag 10140

aggggccagc gtagggtggc cggggctccg ggggcgagat cttccaacat aaggcgatga 10200

tatccgtaga tgtacctgga catccaggtg atgccggcgg cggtggtgga ggcgcgcgga 10260

aagtcgcgga cgcggttcca gatgttgcgc agcggcaaaa agtgctccat ggtcgggacg 10320

ctctggccgg tcaggcgcgc gcaatcgttg acgctctagc gtgcaaaagg agagcctgta 10380

agcgggcact cttccgtggt ctggtggata aattcgcaag ggtatcatgg cggacgaccg 10440

gggttcgagc cccgtatccg gccgtccgcc gtgatccatg cggttaccgc ccgcgtgtcg 10500

aacccaggtg tgcgacgtca gacaacgggg gagtgctcct tttggcttcc ttccaggcgc 10560

ggcggctgct gcgctagctt ttttggccac tggccgcgcg cagcgtaagc ggttaggctg 10620

gaaagcgaaa gcattaagtg gctcgctccc tgtagccgga gggttatttt ccaagggttg 10680

agtcgcggga cccccggttc gagtctcgga ccggccggac tgcggcgaac gggggtttgc 10740

ctccccgtca tgcaagaccc cgcttgcaaa ttcctccgga aacagggacg agccccttt 10800

ttgcttttcc cagatgcatc cggtgctgcg gcagatgcgc ccccctcctc agcagcggca 10860

agagcaagag cagcggcaga catgcagggc accctcccct cctcctaccg cgtcaggagg 10920

ggcgacatcc gcggttgacg cggcagcaga tggtgattac gaacccccgc ggcgccgggc 10980

ccggcactac ctggacttgg aggagggcga gggcctggcg cggctaggag cgccctctcc 11040

tgagcggcac ccaagggtgc agctgaagcg tgatacgcgt gaggcgtacg tgccgcggca 11100

gaacctgttt cgcgaccgcg agggagagga gcccgaggag atgcgggatc gaaagttcca 11160

cgcagggcgc gagctgcggc atggcctgaa tcgcgagcgg ttgctgcgcg aggaggactt 11220

tgagcccgac gcgcgaaccg ggattagtcc cgcgcgcgca cacgtggcgg ccgccgacct 11280

ggtaaccgca tacgagcaga cggtgaacca ggagattaac tttcaaaaaa gctttaacaa 11340

ccacgtgcgt acgcttgtgg cgcgcgagga ggtggctata ggactgatgc atctgtggga 11400

ctttgtaagc gcgctggagc aaaacccaaa tagcaagccg ctcatggcgc agctgttcct 11460

tatagtgcag cacagcaggg acaacgaggc attcagggat gcgctgctaa acatagtaga 11520

gcccgagggc cgctggctgc tcgatttgat aaacatcctg cagagcatag tggtgcagga 11580

gcgcagcttg agcctggctg acaaggtggc cgccatcaac tattccatgc ttagcctggg 11640

caagttttac gcccgcaaga tataccatac cccttacgtt cccatagaca aggaggtaaa 11700

gatcgagggg ttctacatgc gcatggcgct gaaggtgctt accttgagcg acgacctggg 11760

cgtttatcgc aacgagcgca tccacaaggc cgtgagcgtg agccggcggc gcgagctcag 11820

cgaccgcgag ctgatgcaca gcctgcaaag ggccctggct ggcacgggca gcggcgatag 11880

agaggccgag tcctactttg acgcgggcgc tgacctgcgc tgggccccaa gccgacgcgc 11940

cctggaggca gctggggccg gacctgggct ggcggtggca cccgcgcgcg ctggcaacgt 12000

cggcggcgtg gaggaatatg acgaggacga tgagtacgag ccagaggacg gcgagtacta 12060

agcggtgatg tttctgatca gatgatgcaa gacgcaacgg acccggcggt gcgggcggcg 12120

ctgcagagcc agccgtccgg ccttaactcc acggacgact ggcgccaggt catggaccgc 12180

atcatgtcgc tgactgcgcg caatcctgac gcgttccggc agcagccgca ggccaaccgg 12240

ctctccgcaa ttctggaagc ggtggtcccg gcgcgcgcaa accccacgca cgagaaggtg 12300

ctggcgatcg taaacgcgct ggccgaaaac agggccatcc ggcccgacga ggccggcctg 12360

gtctacgacg cgctgcttca gcgcgtggct cgttacaaca gcggcaacgt gcagaccaac 12420

ctggaccggc tggtgggggа tgtgcgcgag gccgtggcgc agcgtgagcg cgcgcagcag 12480

cagggcaacc tgggctccat ggttgcacta aacgccttcc tgagtacaca gcccgccaac 12540

gtgccgcggg gacaggagga ctacaccaac tttgtgagcg cactgcggct aatggtgact 12600

gagacaccgc aaagtgaggt gtaccagtct gggccagact atttttcca gaccagtaga 12660

caaggcctgc agaccgtaaa cctgagccag gctttcaaaa acttgcaggg gctgtggggg 12720

gtgcgggctc ccacaggcga ccgcgcgacc gtgtctagct tgctgacgcc caactcgcgc 12780

ctgttgctgc tgctaatagc gcccttcacg gacagtggca gcgtgtcccg ggacacatac 12840

ctaggtcact tgctgacact gtaccgcgag gccataggtc aggcgcatgt ggacgagcat 12900

actttccagg agattacaag tgtcagccgc gcgctggggc aggaggacac gggcagcctg 12960

gaggcaaccc taaactacct gctgaccaac cggcggcaga agatcccctc gttgcacagt 13020

ttaaacagcg aggaggagcg cattttgcgc tacgtgcagc agagcgtgag ccttaacctg 13080

atgcgcgacg gggtaacgcc cagcgtggcg ctggacatga ccgcgcgcaa catggaaccg 13140

ggcatgtatg cctcaaaccg gccgtttatc aaccgcctaa tggactactt gcatcgcgcg 13200

gccgccgtga accccgagta tttcaccaat gccatcttga acccgcactg gctaccgccc 13260

cctggtttct acaccggggg attcgaggtg cccgagggta acgatggatt cctctgggac 13320

gacatagacg acagcgtgtt ttccccgcaa ccgcagaccc tgctagagtt gcaacagcgc 13380

gagcaggcag aggcggcgct gcgaaaggaa agcttccgca ggccaagcag cttgtccgat 13440

ctaggcgctg cggccccgcg gtcagatgct agtagcccat ttccaagctt gatagggtct 13500

cttaccagca ctcgcaccac ccgcccgcgc ctgctgggcg aggaggagta cctaaacaac 13560

tcgctgctgc agccgcagcg cgaaaaaaac ctgcctccgg catttcccaa caacgggata 13620

gagagcctag tggacaagat gagtagatgg aagacgtacg cgcaggagca cagggacgtg 13680

ccaggcccgc gcccgcccac ccgtcgtcaa aggcacgacc gtcagcgggg tctggtgtgg 13740

gaggacgatg actcggcaga cgacagcagc gtcctggatt tgggagggag tggcaacccg 13800

tttgcgcacc ttcgccccag gctggggaga atgttttaaa aaaaaaaaag catgatgcaa 13860

aataaaaaac tcaccaaggc catggcaccg agcgttggtt ttcttgtatt ccccttagta 13920

tgcggcgcgc ggcgatgtat gaggaaggtc ctcctccctc ctacgagagt gtggtgagcg 13980

cggcgccagt ggcggcggcg ctgggttctc ccttcgatgc tcccctggac ccgccgtttg 14040

tgcctccgcg gtacctgcgg cctaccgggg ggagaaacag catccgttac tctgagttgg 14100

caccctatt cgacaccacc cgtgtgtacc tggtggacaa caagtcaacg gatgtggcat 14160

ccctgaacta ccagaacgac cacagcaact ttctgaccac ggtcattcaa aacaatgact 14220

acagcccggg ggaggcaagc acacagacca tcaatcttga cgaccggtcg cactggggcg 14280

gcgacctgaa aaccatcctg cataccaaca tgccaaatgt gaacgagttc atgtttacca 14340

ataagtttaa ggcgcgggtg atggtgtcgc gcttgcctac taaggacaat caggtggagc 14400

tgaaatacga gtgggtggag ttcacgctgc ccgagggcaa ctactccgag accatgacca 14460

tagaccttat gaacaacgcg atcgtggagc actacttgaa agtgggcaga cagaacgggg 14520

ttctggaaag cgacatcggg gtaaagtttg acacccgcaa cttcagactg gggtttgacc 14580

ccgtcactgg tcttgtcatg cctggggtat atacaaacga agccttccat ccagacatca 14640

ttttgctgcc aggatgcggg gtggacttca cccacagccg cctgagcaac ttgttgggca 14700

tccgcaagcg gcaacccttc caggagggct ttaggatcac ctacgatgat ctggagggtg 14760

gtaacattcc cgcactgttg gatgtggacg cctaccaggc gagcttgaaa gatgacaccg 14820

aacagggcgg gggtggcgca ggcggcagca acagcagtgg cagcggcgcg gaagagaact 14880

ccaacgcggc agccgcggca atgcagccgg tggaggacat gaacgatcat gccattcgcg 14940

gcgacacctt tgccacacgg gctgaggaga agcgcgctga ggccgaagca gcggccgaag 15000

ctgccgcccc cgctgcgcaa cccgaggtcg agaagcctca gaagaaaccg gtgatcaaac 15060

ccctgacaga ggacagcaag aaacgcagtt acaacctaat aagcaatgac agcaccttca 15120

cccagtaccg cagctggtac cttgcataca actacggcga ccctcagacc ggaatccgct 15180

catggaccct gctttgcact cctgacgtaa cctgcggctc ggagcaggtc tactggtcgt 15240

tgccagacat gatgcaagac cccgtgacct tccgctccac gcgccagatc agcaactttc 15300

cggtggtggg cgccgagctg ttgcccgtgc actccaagag cttctacaac gaccaggccg 15360

tctactccca actcatccgc cagtttacct ctctgaccca cgtgttcaat cgctttcccg 15420

agaaccagat tttggcgcgc ccgccagccc ccaccatcac caccgtcagt gaaaacgttc 15480

ctgctctcac agatcacggg acgctaccgc tgcgcaacag catcggagga gtccagcgag 15540

tgaccattac tgacgccaga cgccgcacct gcccctacgt ttacaaggcc ctgggcatag 15600

tctcgccgcg cgtcctatcg agccgcactt tttgagcaag catgtccatc cttatatcgc 15660

ccagcaataa cacaggctgg ggcctgcgct tcccaagcaa gatgtttggc ggggccaaga 15720

agcgctccga ccaacaccca gtgcgcgtgc gcgggcacta ccgcgcgccc tggggcgcgc 15780

acaaacgcgg ccgcactggg cgcaccaccg tcgatgacgc catcgacgcg gtggtggagg 15840

aggcgcgcaa ctacacgccc acgccgccac cagtgtccac agtggacgcg gccattcaga 15900

ccgtggtgcg cggagcccgg cgctatgcta aaatgaagag acggcggagg cgcgtagcac 15960

gtcgccaccg ccgccgaccc ggcactgccg cccaacgcgc ggcggcggcc ctgcttaacc 16020

gcgcacgtcg caccggccga cgggcggcca tgcgggccgc tcgaaggctg gccgcgggta 16080

ttgtcactgt gccccccagg tccaggcgac gagcggccgc cgcagcagcc gcggccatta 16140

gtgctatgac tcagggtcgc aggggcaacg tgtattgggt gcgcgactcg gttagcggcc 16200

tgcgcgtgcc cgtgcgcacc cgcccccccgc gcaactagat tgcaagaaaa aactacttag 16260

actcgtactg ttgtatgtat ccagcggcgg cggcgcgcaa cgaagctatg tccaagcgca 16320

aaatcaaaga agagatgctc caggtcatcg cgccggagat ctatggcccc ccgaagaagg 16380

aagagcagga ttacaagccc cgaaagctaa agcgggtcaa aaagaaaaag aaagatgatg 16440

atgatgaact tgacgacgag gtggaactgc tgcacgctac cgcgcccagg cgacgggtac 16500

agtggaaagg tcgacgcgta aaacgtgttt tgcgacccgg caccaccgta gtctttacgc 16560

ccggtgagcg ctccacccgc acctacaagc gcgtgtatga tgaggtgtac ggcgacgagg 16620

acctgcttga gcaggccaac gagcgcctcg gggagtttgc ctacggaaag cggcataagg 16680

acatgctggc gttgccgctg gacgagggca acccaacacc tagcctaaag cccgtaacac 16740

tgcagcaggt gctgcccgcg cttgcaccgt ccgaagaaaa gcgcggccta aagcgcgagt 16800

ctggtgactt ggcacccacc gtgcagctga tggtacccaa gcgccagcga ctggaagatg 16860

tcttggaaaa aatgaccgtg gaacctgggc tggagcccga ggtccgcgtg cggccaatca 16920

agcaggtggc gccgggactg ggcgtgcaga ccgtggacgt tcagataccc actaccagta 16980

gcaccagtat tgccaccgcc acagagggca tggagacaca aacgtccccg gttgcctcag 17040

cggtggcgga tgccgcggtg caggcggtcg ctgcggccgc gtccaagacc tctacggagg 17100

tgcaaacgga cccgtggatg tttcgcgttt cagccccccg gcgcccgcgc cgttcgagga 17160

agtacggcgc cgccagcgcg ctactgcccg aatatgccct acatccttcc attgcgccta 17220

cccccggcta tcgtggctac acctaccgcc ccagaagacg agcaactacc cgacgccgaa 17280

ccaccactgg aacccgccgc cgccgtcgcc gtcgccagcc cgtgctggcc ccgatttccg 17340

tgcgcagggt ggctcgcgaa ggaggcagga ccctggtgct gccaacagcg cgctaccacc 17400

ccagcatcgt ttaaaagccg gtctttgtgg ttcttgcaga tatggccctc acctgccgcc 17460

tccgtttccc ggtgccggga ttccgaggaa gaatgcaccg taggaggggc atggccggcc 17520

acggcctgac gggcggcatg cgtcgtgcgc accaccggcg gcggcgcgcg tcgcaccgtc 17580

gcatgcgcgg cggtatcctg cccctcctta ttccactgat cgccgcggcg attggcgccg 17640

tgcccggaat tgcatccgtg gccttgcagg cgcagagaca ctgattaaaa acaagttgca 17700

tgtggaaaaa tcaaaataaa aagtctggac tctcacgctc gcttggtcct gtaactattt 17760

tgtagaatgg aagacatcaa ctttgcgtct ctggccccgc gacacggctc gcgcccgttc 17820

atgggaaact ggcaagatat cggcaccagc aatatgagcg gtggcgcctt cagctggggc 17880

tcgctgtgga gcggcattaa aaatttcggt tccaccgtta agaactatgg cagcaaggcc 17940

tggaacagca gcacaggcca gatgctgagg gataagttga aagagcaaaa tttccaacaa 18000

aaggtggtag atggcctggc ctctggcatt agcggggtgg tggacctggc caaccaggca 18060

gtgcaaaata agattaacag taagcttgat ccccgccctc ccgtagagga gcctccaccg 18120

gccgtggaga cagtgtctcc agaggggcgt ggcgaaaagc gtccgcgccc cgacagggaa 18180

gaaactctgg tgacgcaaat agacgagcct ccctcgtacg aggaggcact aaagcaaggc 18240

ctgcccacca cccgtcccat cgcgcccatg gctaccggag tgctgggcca gcacacaccc 18300

gtaacgctgg acctgcctcc ccccgccgac acccagcaga aacctgtgct gccaggcccg 18360

accgccgttg ttgtaacccg tcctagccgc gcgtccctgc gccgcgccgc cagcggtccg 18420

cgatcgttgc ggcccgtagc cagtggcaac tggcaaagca cactgaacag catcgtgggt 18480

ctgggggtgc aatccctgaa gcgccgacga tgcttctgat agctaacgtg tcgtatgtgt 18540

gtcatgtatg cgtccatgtc gccgccagag gagctgctga gccgccgcgc gcccgctttc 18600

caagatggct acccccttcga tgatgccgca gtggtcttac atgcacatct cgggccagga 18660

cgcctcggag tacctgagcc ccgggctggt gcagtttgcc cgcgccaccg agacgtactt 18720

cagcctgaat aacaagttta gaaaccccac ggtggcgcct acgcacgacg tgaccacaga 18780

ccggtcccag cgtttgacgc tgcggttcat ccctgtggac cgtgaggata ctgcgtactc 18840

gtacaaggcg cggttcaccc tagctgtggg tgataaccgt gtgctggaca tggcttccac 18900

gtactttgac atccgcggcg tgctggacag gggccctact tttaagccct actctggcac 18960

tgcctacaac gccctggctc ccaagggtgc cccaaatcct tgcgaatggg atgaagctgc 19020

tactgctctt gaaataaacc tagaagaaga ggacgatgac aacgaagacg aagtagacga 19080

gcaagctgag cagcaaaaaa ctcacgtatt tgggcaggcg ccttattctg gtataaatat 19140

tacaaaggag ggtattcaaa taggtgtcga aggtcaaaca cctaaatatg ccgataaaac 19200

atttcaacct gaacctcaaa taggagaatc tcagtggtac gaaacagaaa ttaatcatgc 19260

agctgggaga gtcctaaaaa agactacccc aatgaaacca tgttacggtt catatgcaaa 19320

acccacaaat gaaaatggag ggcaaggcat tcttgtaaag caacaaaatg gaaagctaga 19380

aagtcaagtg gaaatgcaat ttttctcaac tactgaggca gccgcaggca atggtgataa 19440

cttgactcct aaagtggtat tgtacagtga agatgtagat atagaaaccc cagacactca 19500

tatttcttac atgcccacta ttaaggaagg taactcacga gaactaatgg gccaacaatc 19560

tatgcccaac aggcctaatt acattgcttt tagggacaat tttattggtc taatgtatta 19620

caacagcacg ggtaatatgg gtgttctggc gggccaagca tcgcagttga atgctgttgt 19680

agatttgcaa gacagaaaca cagagctttc ataccagctt ttgcttgatt ccattggtga 19740

tagaaccagg tacttttcta tgtggaatca ggctgttgac agctatgatc cagatgttag 19800

aattattgaa aatcatggaa ctgaagatga acttccaaat tactgctttc cactgggagg 19860

tgtgattaat acagagactc ttaccaaggt aaaacctaaa acaggtcagg aaaatggatg 19920

ggaaaaagat gctacagaat tttcagataa aaatgaaata agagttggaa ataattttgc 19980

catggaaatc aatctaaatg ccaacctgtg gagaaatttc ctgtactcca acatagcgct 20040

gtatttgccc gacaagctaa agtacagtcc ttccaacgta aaaatttctg ataacccaaa 20100

cacctacgac tacatgaaca agcgagtggt ggctcccggg ctagtggact gctacattaa 20160

ccttggagca cgctggtccc ttgactatat ggacaacgtc aacccattta accaccaccg 20220

caatgctggc ctgcgctacc gctcaatgtt gctgggcaat ggtcgctatg tgcccttcca 20280

catccaggtg cctcagaagt tctttgccat taaaaacctc cttctcctgc cgggctcata 20340

cacctacgag tggaacttca ggaaggatgt taacatggtt ctgcagagct ccctaggaaa 20400

tgacctaagg gttgacggag ccagcattaa gtttgatagc atttgccttt acgccacctt 20460

cttccccatg gcccacaaca ccgcctccac gcttgaggcc atgcttagaa acgacaccaa 20520

cgaccagtcc tttaacgact atctctccgc cgccaacatg ctctacccta tacccgccaa 20580

cgctaccaac gtgcccatat ccatcccctc ccgcaactgg gcggctttcc gcggctgggc 20640

cttcacgcgc cttaagacta aggaaacccc atcactgggc tcgggctacg acccttatta 20700

cacctactct ggctctatac cctacctaga tggaaccttt tacctcaacc acacctttaa 20760

gaaggtggcc attacctttg actcttctgt cagctggcct ggcaatgacc gcctgcttac 20820

ccccaacgag tttgaaatta agcgctcagt tgacggggag ggttacaacg ttgcccagtg 20880

taacatgacc aaagactggt tcctggtaca aatgctagct aactataaca ttggctacca 20940

gggcttctat atcccagaga gctacaagga ccgcatgtac tccttcttta gaaacttcca 21000

gcccatgagc cgtcaggtgg tggatgatac taaatacaag gactaccaac aggtgggcat 21060

cctacaccaa cacaacaact ctggatttgt tggctacctt gcccccacca tgcgcgaagg 21120

acaggcctac cctgctaact tcccctatcc gcttataggc aagaccgcag ttgacagcat 21180

tacccagaaa aagtttcttt gcgatcgcac cctttggcgc atcccattct ccagtaactt 21240

tatgtccatg ggcgcactca cagacctggg ccaaaacctt ctctacgcca actccgccca 21300

cgcgctagac atgacttttg aggtggatcc catggacgag cccacccttc tttatgtttt 21360

gtttgaagtc tttgacgtgg tccgtgtgca ccagccgcac cgcggcgtca tcgaaaccgt 21420

gtacctgcgc acgcccttct cggccggcaa cgccacaaca taaagaagca agcaacatca 21480

acaacagctg ccgccatggg ctccagtgag caggaactga aagccattgt caaagatctt 21540

ggttgtgggc catatttttt gggcacctat gacaagcgct ttccaggctt tgtttctcca 21600

cacaagctcg cctgcgccat agtcaatacg gccggtcgcg agactggggg cgtacactgg 21660

atggcctttg cctggaaccc gcactcaaaa acatgctacc tctttgagcc ctttggcttt 21720

tctgaccagc gactcaagca ggtttaccag tttgagtacg agtcactcct gcgccgtagc 21780

gccattgctt cttcccccga ccgctgtata acgctggaaa agtccaccca aagcgtacag 21840

gggcccaact cggccgcctg tggactattc tgctgcatgt ttctccacgc ctttgccaac 21900

tggccccaaa ctcccatgga tcacaacccc accatgaacc ttattaccgg ggtacccaac 21960

tccatgctca acagtcccca ggtacagccc accctgcgtc gcaaccagga acagctctac 22020

agcttcctgg agcgccactc gccctacttc cgcagccaca gtgcgcagat taggagcgcc 22080

acttcttttt gtcacttgaa aaacatgtaa aaataatgta ctagagacac tttcaataaa 22140

ggcaaatgct tttatttgta cactctcggg tgattattta cccccaccct tgccgtctgc 22200

gccgtttaaa aatcaaaggg gttctgccgc gcatcgctat gcgccactgg cagggacacg 22260

ttgcgatact ggtgtttagt gctccactta aactcaggca caaccatccg cggcagctcg 22320

gtgaagtttt cactccacag gctgcgcacc atcaccaacg cgtttagcag gtcgggcgcc 22380

gatatcttga agtcgcagtt ggggcctccg ccctgcgcgc gcgagttgcg atacacaggg 22440

ttgcagcact ggaacactat cagcgccggg tggtgcacgc tggccagcac gctcttgtcg 22500

gagatcagat ccgcgtccag gtcctccgcg ttgctcaggg cgaacggagt caactttggt 22560

agctgccttc ccaaaaaggg cgcgtgccca ggctttgagt tgcactcgca ccgtagtggc 22620

atcaaaaggt gaccgtgccc ggtctgggcg ttaggataca gcgcctgcat aaaagccttg 22680

atctgcttaa aagccacctg agcctttgcg ccttcagaga agaacatgcc gcaagacttg 22740

ccggaaaact gattggccgg acaggccgcg tcgtgcacgc agcaccttgc gtcggtgttg 22800

gagatctgca ccacatttcg gccccaccgg ttcttcacga tcttggcctt gctagactgc 22860

tccttcagcg cgcgctgccc gttttcgctc gtcacatcca tttcaatcac gtgctcctta 22920

tttatcataa tgcttccgtg tagacactta agctcgcctt cgatctcagc gcagcggtgc 22980

agccacaacg cgcagcccgt gggctcgtga tgcttgtagg tcacctctgc aaacgactgc 23040

aggtacgcct gcaggaatcg ccccatcatc gtcacaaagg tcttgttgct ggtgaaggtc 23100

agctgcaacc cgcggtgctc ctcgttcagc caggtcttgc atacggccgc cagagcttcc 23160

acttggtcag gcagtagttt gaagttcgcc tttagatcgt tatccacgtg gtacttgtcc 23220

atcagcgcgc gcgcagcctc catgcccttc tcccacgcag acacgatcgg cacactcagc 23280

gggttcatca ccgtaatttc actttccgct tcgctgggct cttcctcttc ctcttgcgtc 23340

cgcataccac gcgccactgg gtcgtcttca ttcagccgcc gcactgtgcg cttacctcct 23400

ttgccatgct tgattagcac cggtgggttg ctgaaaccca ccatttgtag cgccacatct 23460

tctctttctt cctcgctgtc cacgattacc tctggtgatg gcgggcgctc gggcttggga 23520

gaagggcgct tctttttctt cttgggcgca atggccaaat ccgccgccga ggtcgatggc 23580

cgcgggctgg gtgtgcgcgg caccagcgcg tcttgtgatg agtcttcctc gtcctcggac 23640

tcgatacgcc gcctcatccg ctttttttggg ggcgcccggg gaggcggcgg cgacggggac 23700

ggggacgaca cgtcctccat ggttgggggа cgtcgcgccg caccgcgtcc gcgctcgggg 23760

gtggtttcgc gctgctcctc ttcccgactg gccatttcct tctcctatag gcagaaaaag 23820

atcatggagt cagtcgagaa gaaggacagc ctaaccgccc cctctgagtt cgccaccacc 23880

gcctccaccg atgccgccaa cgcgcctacc accttccccg tcgaggcacc cccgcttgag 23940

gaggaggaag tgattatcga gcaggaccca ggttttgtaa gcgaagacga cgaggaccgc 24000

tcagtaccaa cagaggataa aaagcaagac caggacaacg cagaggcaaa cgaggaacaa 24060

gtcgggcggg gggacgaaag gcatggcgac tacctagatg tgggagacga cgtgctgttg 24120

aagcatctgc agcgccagtg cgccattatc tgcgacgcgt tgcaagagcg cagcgatgtg 24180

cccctcgcca tagcggatgt cagccttgcc tacgaacgcc acctattctc accgcgcgta 24240

ccccccaaac gccaagaaaa cggcacatgc gagcccaacc cgcgcctcaa cttctacccc 24300

gtatttgccg tgccagaggt gcttgccacc tatcacatct ttttccaaaa ctgcaagata 24360

cccctatcct gccgtgccaa ccgcagccga gcggacaagc agctggcctt gcggcagggc 24420

gctgtcatac ctgatatcgc ctcgctcaac gaagtgccaa aaatctttga gggtcttgga 24480

cgcgacgaga agcgcgcggc aaacgctctg caacaggaaa acagcgaaaa tgaaagtcac 24540

tctggagtgt tggtggaact cgagggtgac aacgcgcgcc tagccgtact aaaacgcagc 24600

atcgaggtca cccactttgc ctacccggca cttaacctac cccccaaggt catgagcaca 24660

gtcatgagtg agctgatcgt gcgccgtgcg cagcccctgg agagggatgc aaatttgcaa 24720

gaacaaacag aggagggcct acccgcagtt ggcgacgagc agctagcgcg ctggcttcaa 24780

acgcgcgagc ctgccgactt ggaggagcga cgcaaactaa tgatggccgc agtgctcgtt 24840

accgtggagc ttgagtgcat gcagcggttc tttgctgacc cggagatgca gcgcaagcta 24900

gaggaaacat tgcactacac ctttcgacag ggctacgtac gccaggcctg caagatctcc 24960

aacgtggagc tctgcaacct ggtctcctac cttggaattt tgcacgaaaa ccgccttggg 25020

caaaacgtgc ttcattccac gctcaagggc gaggcgcgcc gcgactacgt ccgcgactgc 25080

gtttacttat ttctatgcta cacctggcag acggccatgg gcgtttggca gcagtgcttg 25140

gaggagtgca acctcaagga gctgcagaaa ctgctaaagc aaaacttgaa ggacctatgg 25200

acggccttca acgagcgctc cgtggccgcg cacctggcgg acatcatttt ccccgaacgc 25260

ctgcttaaaa ccctgcaaca gggtctgcca gacttcacca gtcaaagcat gttgcagaac 25320

tttaggaact ttatcctaga gcgctcagga atcttgcccg ccacctgctg tgcacttcct 25380

agcgactttg tgcccattaa gtaccgcgaa tgccctccgc cgctttgggg ccactgctac 25440

cttctgcagc tagccaacta ccttgcctac cactctgaca taatggaaga cgtgagcggt 25500

gacggtctac tggagtgtca ctgtcgctgc aacctatgca ccccgcaccg ctccctggtt 25560

tgcaattcgc agctgcttaa cgaaagtcaa attatcggta cctttgagct gcagggtccc 25620

tcgcctgacg aaaagtccgc ggctccgggg ttgaaactca ctccggggct gtggacgtcg 25680

gcttaccttc gcaaatttgt acctgaggac taccacgccc acgagattag gttctacgaa 25740

gaccaatccc gcccgcctaa tgcggagctt accgcctgcg tcattaccca gggccacatt 25800

cttggccaat tgcaagccat caacaaagcc cgccaagagt ttctgctacg aaagggacgg 25860

ggggtttact tggaccccca gtccggcgag gagctcaacc caatcccccc gccgccgcag 25920

ccctatcagc agcagccgcg ggcccttgct tcccaggatg gcacccaaaa agaagctgca 25980

gctgccgccg ccacccacgg acgaggagga atactgggac agtcaggcag aggaggtttt 26040

ggacgaggag gaggaggaca tgatggaaga ctgggagagc ctagacgagg aagcttccga 26100

ggtcgaagag gtgtcagacg aaacaccgtc accctcggtc gcattcccct cgccggcgcc 26160

ccagaaatcg gcaaccggtt ccagcatggc tacaacctcc gctcctcagg cgccgccggc 26220

actgcccgtt cgccgaccca accgtagatg ggacaccact ggaaccaggg ccggtaagtc 26280

caagcagccg ccgccgttag cccaagagca acaacagcgc caaggctacc gctcatggcg 26340

cgggcacaag aacgccatag ttgcttgctt gcaagactgt gggggcaaca tctccttcgc 26400

ccgccgcttt cttctctacc atcacggcgt ggccttcccc cgtaacatcc tgcattacta 26460

ccgtcatctc tacagcccat actgcaccgg cggcagcggc agcaacagca gcggccacac 26520

agaagcaaag gcgaccggat agcaagactc tgacaaagcc caagaaatcc acagcggcgg 26580

cagcagcagg aggaggagcg ctgcgtctgg cgcccaacga acccgtatcg acccgcgagc 26640

ttagaaacag gatttttccc actctgtatg ctatatttca acagagcagg ggccaagaac 26700

aagagctgaa aataaaaaac aggtctctgc gatccctcac ccgcagctgc ctgtatcaca 26760

aaagcgaaga tcagcttcgg cgcacgctgg aagacgcgga ggctctcttc agtaaatact 26820

gcgcgctgac tcttaaggac tagtttcgcg ccctttctca aatttaagcg cgaaaactac 26880

gtcatctcca gcggccacac ccggcgccag cacctgttgt cagcgccatt atgagcaagg 26940

aaattcccac gccctacatg tggagttacc agccacaaat gggacttgcg gctggagctg 27000

cccaagacta ctcaacccga ataaactaca tgagcgcggg accccacatg atatcccggg 27060

tcaacggaat acgcgcccac cgaaaccgaa ttctcctgga acaggcggct attaccacca 27120

cacctcgtaa taaccttaat ccccgtagtt ggcccgctgc cctggtgtac caggaaagtc 27180

ccgctcccac cactgtggta cttcccagag acgcccaggc cgaagttcag atgactaact 27240

caggggcgca gcttgcgggc ggctttcgtc acagggtgcg gtcgcccggg cagggtataa 27300

ctcacctgac aatcagaggg cgaggtattc agctcaacga cgagtcggtg agctcctcgc 27360

ttggtctccg tccggacggg acatttcaga tcggcggcgc cggccgctct tcattcacgc 27420

ctcgtcaggc aatcctaact ctgcagacct cgtcctctga gccgcgctct ggaggcattg 27480

gaactctgca atttattgag gagtttgtgc catcggtcta ctttaacccc ttctcgggac 27540

ctcccggcca ctatccggat caatttattc ctaactttga cgcggtaaag gactcggcgg 27600

acggctacga ctgaatgtta agtggagagg cagagcaact gcgcctgaaa cacctggtcc 27660

actgtcgccg ccacaagtgc tttgcccgcg actccggtga gttttgctac tttgaattgc 27720

ccgaggatca tatcgagggc ccggcgcacg gcgtccggct taccgcccag ggagagcttg 27780

cccgtagcct gattcgggag tttacccagc gccccctgct agttgagcgg gacaggggac 27840

cctgtgttct cactgtgatt tgcaactgtc ctaaccctgg attacatcaa gatcctctag 27900

ttaatgtcag gtcgcctaag tcgattaact agagtacccg gggatcttat tccctttaac 27960

taataaaaaa aaataataaa gcatcactta cttaaaatca gttagcaaat ttctgtccag 28020

tttattcagc agcacctcct tgccctcctc ccagctctgg tattgcagct tcctcctggc 28080

tgcaaacttt ctccacaatc taaatggaat gtcagtttcc tcctgttcct gtccatccgc 28140

acccactatc ttcatgttgt tgcagatgaa gcgcgcaaga ccgtctgaag ataccttcaa 28200

ccccgtgtat ccatatgaca cggaaaccgg tcctccaact gtgccttttc ttactcctcc 28260

ctttgtatcc cccaatgggt ttcaagagag tccccctggg gtactctctt tgcgcctatc 28320

cgaacctcta gttacctcca atggcatgct tgcgctcaaa atgggcaacg gcctctctct 28380

ggacgaggcc ggcaacctta cctcccaaaa tgtaaccact gtgagcccac ctctcaaaaa 28440

aaccaagtca aacataaacc tggaaatatc tgcacccctc acagttacct cagaagccct 28500

aactgtggct gccgccgcac ctctaatggt cgcgggcaac acactcacca tgcaatcaca 28560

ggccccgcta accgtgcacg actccaaact tagcattgcc acccaaggac ccctcacagt 28620

gtcagaagga aagctagccc tgcaaacatc aggccccctc accaccaccg atagcagtac 28680

ccttactatc actgcctcac cccctctaac tactgccact ggtagcttgg gcattgactt 28740

gaaagagccc atttatacac aaaatggaaa actaggacta aagtacgggg ctcctttgca 28800

tgtaacagac gacctaaaca ctttgaccgt agcaactggt ccaggtgtga ctattaataa 28860

tacttccttg caaactaaag ttactggagc cttgggtttt gattcacaag gcaatatgca 28920

acttaatgta gcaggaggac taaggattga ttctcaaaac agacgcctta tacttgatgt 28980

tagttatccg tttgatgctc aaaaccaact aaatctaaga ctaggacagg gccctctttt 29040

tataaactca gcccacaact tggatattaa ctacaacaaa ggcctttact tgtttacagc 29100

ttcaaacaat tccaaaaagc ttgaggttaa cctaagcact gccaaggggt tgatgtttga 29160

cgctacagcc atagccatta atgcaggaga tgggcttgaa tttggttcac ctaatgcacc 29220

aaacacaaat cccctcaaaa caaaaattgg ccatggccta gaatttgatt caaacaaggc 29280

tatggttcct aaactaggaa ctggccttag ttttgacagc acaggtgcca ttacagtagg 29340

aaacaaaaat aatgataagc taactttgtg gaccggaata aaccctccac ctaactgtca 29400

aattgtggaa aacactaata caaatgatgg caaacttact ttagtattag taaaaaatgg 29460

agggcttgtt aatggctacg tgtctctagt tggtgtatca gacactgtga accaaatgtt 29520

cacacaaaag acagcaaaca tccaattaag attatatttt gactcttctg gaaatctatt 29580

aactgaggaa tcagacttaa aaattccact taaaaataaa tcttctacag cgaccagtga 29640

aactgtagcc agcagcaaag cctttatgcc aagtactaca gcttatccct tcaacaccac 29700

tactagggat agtgaaaact acattcatgg aatatgttac tacatgacta gttatgatag 29760

aagtctattt cccttgaaca tttctataat gctaaacagc cgtatgattt cttccaatgt 29820

tgcctatgcc atacaatttg aatggaatct aaatgcaagt gaatctccag aaagcaacat 29880

agctacgctg accacatccc cctttttctt ttcttacatt acagaagacg acaactaaag 29940

aatcgtttgt gttatgtttc aacgtgttta tttttcaatt gcagaaaatt tcaagtcatt 30000

tttcattcag tagtatagcc ccaccaccac atagcttata cagatcaccg taccttaatc 30060

aaacgttttt ttttttattc caaaagatta tccaaaacct caaaatgaag atctattaag 30120

tgaacgcgct cccctccggt ggcgtggtca aactctacag ccaaagaaca gataatggca 30180

tttgtaagat gttgcacaat ggcttccaaa aggcaaacgg ccctcacgtc caagtggacg 30240

taaaggctaa acccttcagg gtgaatctcc tctataaaca ttccagcacc ttcaaccatg 30300

cccaaataat tctcatctcg ccaccttctc aatatatctc taagcaaatc ccgaatatta 30360

agtccggcca ttgtaaaaat ctgctccaga gcgccctcca ccttcagcct caagcagcga 30420

atcatgattg caaaaattca ggttcctcac agacctgtat aagattcaaa agcggaacat 30480

taacaaaaat accgcgatcc cgtaggtccc ttcgcagggc cagctgaaca taatcgtgca 30540

ggtctgcacg gaccagcgcg gccacttccc cgccaggaac catgacaaaa gaacccacac 30600

tgattatgac acgcatactc ggagctatgc taaccagcgt agccccgatg taagcttgtt 30660

gcatgggcgg cgatataaaa tgcaaggtgc tgctcaaaaa atcaggcaaa gcctcgcgca 30720

aaaaagaaag cacatcgtag tcatgctcat gcagataaag gcaggtaagc tccggaacca 30780

ccacagaaaa agacaccatt tttctctcaa acatgtctgc gggtttctgc ataaacacaa 30840

aataaaataa caaaaaaaca tttaaacatt agaagcctgt cttacaacag gaaaaacaac 30900

ccttataagc ataagacgga ctacggccat gccggcgtga ccgtaaaaaa actggtcacc 30960

gtgattaaaa agcaccaccg acagctcctc ggtcatgtcc ggagtcataa tgtaagactc 31020

ggtaaacaca tcaggttgat tcacatcggt cagtgctaaa aagcgaccga aatagcccgg 31080

gggaatacat acccgcaggc gtagagacaa cattacagcc cccataggag gtataacaaa 31140

attaatagga gagaaaaaca cataaacacc tgaaaaaccc tcctgcctag gcaaaatagc 31200

accctcccgc tccagaacaa catacagcgc ttccacagcg gcagccataa cagtcagcct 31260

taccagtaaa aaagaaaacc tattaaaaaa acaccactcg acacggcacc agctcaatca 31320

gtcacagtgt aaaaaagggc caagtgcaga gcgagtatat ataggactaa aaaatgacgt 31380

aacggttaaa gtccacaaaa aacacccaga aaaccgcacg cgaacctacg cccagaaacg 31440

aaagccaaaa aacccacaac ttcctcaaat cgtcacttcc gttttcccac gttacgtcac 31500

ttcccatttt aagaaaacta caattcccaa cacatacaag ttactccgcc ctaaaaccta 31560

cgtcacccgc cccgttccca cgccccgcgc cacgtcacaa actccacccc ctcattatca 31620

tattggcttc aatccaaaat aaggtatatt attgatgatg 31660

<210> 6
<211> 37105
<212> DNA
<213> Artificial Sequence

<220>
<223> Adk35F2-Spike/E4orf6-E4dl355(E4re#1)

<400> 6
ttaattaaca tcatcaataa tataccttat tttggattga agccaatatg ataatgaggg 60

ggtggagttt gtgacgtggc gcggggcgtg ggaacggggc gggtgacgta gtagtgtggc 120

ggaagtgtga tgttgcaagt gtggcggaac acatgtaagc gacggatgtg gcaaaagtga 180

cgtttttggt gtgcgccggt gtacacagga agtgacaatt ttcgcgcggt tttaggcgga 240

tgttgtagta aatttgggcg taaccgagta agatttggcc attttcgcgg gaaaactgaa 300

taagaggaag tgaaatctga ataattttgt gttactcata gcgcgtaata atttctgtaa 360

tagtaatcaa ttacggggtc attagttcat agcccatata tggagttccg cgttacataa 420

cttacggtaa atggcccgcc tggctgaccg cccaacgacc cccgcccatt gacgtcaata 480

atgacgtatg ttcccatagt aacgccaata gggactttcc attgacgtca atgggtggag 540

tatttacggt aaactgccca cttggcagta catcaagtgt atcatatgcc aagtacgccc 600

cctattgacg tcaatgacgg taaatggccc gcctggcatt atgcccagta catgacctta 660

tgggactttc ctacttggca gtacatctac gtattagtca tcgctattac catggtgatg 720

cggttttggc agtacatcaa tgggcgtgga tagcggtttg actcacgggg atttccaagt 780

ctccacccca ttgacgtcaa tgggagtttg ttttggcacc aaaatcaacg ggactttcca 840

aaatgtcgta acaactccgc cccattgacg caaatgggcg gtaggcgtgt acggtgggag 900

gtctatataa gcagagctct ccctatcagt gatagagatc tccctatcag tgatagagat 960

cgtcgacgag ctcgtttagt gaaccgtcag atcgcctgga gacgccatcc acgctgtttt 1020

gacctccata gaagacaccg ggaccgatcc agcctccgat ttgccaccat gtttgtgttc 1080

ctggtgctgc tgccactggt gtccagccag tgtgtgaacc tgaccaccag gacccaactt 1140

cctcctgcct acaccaactc cttcaccagg ggagtctact accctgacaa ggtgttcagg 1200

tcctctgtgc tgcacagcac ccaggacctg ttcctgccat tcttcagcaa tgtgacctgg 1260

ttccatgcca tccatgtgtc tggcaccaat ggcaccaaga ggtttgacaa ccctgtgctg 1320

ccattcaatg atggagtcta ctttgccagc acagagaaga gcaacatcat caggggctgg 1380

atttttggca ccaccctgga cagcaagacc cagtccctgc tgattgtgaa caatgccacc 1440

aatgtggtga ttaaggtgtg tgagttccag ttctgtaatg acccattcct gggagtctac 1500

taccacaaga acaacaagtc ctggatggag tctgagttca gggtctactc ctctgccaac 1560

aactgtacct ttgaatatgt gagccaacca ttcctgatgg acttggaggg caagcagggc 1620

aacttcaaga acctgaggga gtttgtgttc aagaacattg atggctactt caagatttac 1680

agcaaacaca caccaatcaa cctggtgagg gacctgccac agggcttctc tgccttggaa 1740

ccactggtgg acctgccaat tggcatcaac atcaccaggt tccagaccct gctggctctg 1800

cacaggtcct acctgacacc tggagactcc tcctctggct ggacagcagg agcagcagcc 1860

tactatgtgg gctacctcca accaaggacc ttcctgctga aatacaatga gaatggcacc 1920

atcacagatg ctgtggactg tgccctggac ccactgtctg agaccaagtg taccctgaaa 1980

tccttcacag tggagaaggg catctaccag accagcaact tcagggtcca accaacagag 2040

agcattgtga ggtttccaaa catcaccaac ctgtgtccat ttggagaggt gttcaatgcc 2100

accaggtttg cctctgtcta tgcctggaac aggaagagga ttagcaactg tgtggctgac 2160

tactctgtgc tctacaactc tgcctccttc agcaccttca agtgttatgg agtgagccca 2220

accaaactga atgacctgtg tttcaccaat gtctatgctg actcctttgt gattagggga 2280

gatgaggtga gacagattgc ccctggacaa acaggcaaga ttgctgacta caactacaaa 2340

ctgcctgatg acttcacagg ctgtgtgatt gcctggaaca gcaacaacct ggacagcaag 2400

gtgggaggca actacaacta cctctacaga ctgttcagga agagcaacct gaaaccattt 2460

gagagggaca tcagcacaga gatttaccag gctggcagca caccatgtaa tggagtggag 2520

ggcttcaact gttactttcc actccaatcc tatggcttcc aaccaaccaa tggagtgggc 2580

taccaaccat acagggtggt ggtgctgtcc tttgaactgc tccatgcccc tgccacagtg 2640

tgtggaccaa agaagagcac caacctggtg aagaacaagt gtgtgaactt caacttcaat 2700

ggactgacag gcacaggagt gctgacagag agcaacaaga agttcctgcc attccaacag 2760

tttggcaggg acattgctga caccacagat gctgtgaggg acccacagac cttggagatt 2820

ctggacatca caccatgttc ctttggagga gtgtctgtga ttacacctgg caccaacacc 2880

agcaaccagg tggctgtgct ctaccaggat gtgaactgta ctgaggtgcc tgtggctatc 2940

catgctgacc aacttacacc aacctggagg gtctacagca caggcagcaa tgtgttccag 3000

accagggctg gctgtctgat tggagcagag catgtgaaca actcctatga gtgtgacatc 3060

ccaattggag caggcatctg tgcctcctac cagacccaga ccggtggcgg tgggtcgagg 3120

tctgtggcaa gccagagcat cattgcctac acaatgagtc tgggagcaga gaactctgtg 3180

gcttacagca acaacagcat tgccatccca accaacttca ccatctctgt gaccacagag 3240

attctgcctg tgagtatgac caagacctct gtggactgta caatgtatat ctgtggagac 3300

agcacagagt gtagcaacct gctgctccaa tatggctcct tctgtaccca acttaacagg 3360

gctctgacag gcattgctgt ggaacaggac aagaacaccc aggaggtgtt tgcccaggtg 3420

aagcagattt acaagacacc tccaatcaag gactttggag gcttcaactt cagccagatt 3480

ctgcctgacc caagcaagcc aagcaagagg tccttcattg aggacctgct gttcaacaag 3540

gtgaccctgg ctgatgctgg cttcatcaag caatatggag actgtctggg agacattgct 3600

gccagggacc tgatttgtgc ccagaagttc aatggactga cagtgctgcc tccactgctg 3660

acagatgaga tgattgccca atacacctct gccctgctgg ctggcaccat cacctctggc 3720

tggacctttg gagcaggagc agccctccaa atcccatttg ctatgcagat ggcttacagg 3780

ttcaatggca ttggagtgac ccagaatgtg ctctatgaga accagaaact gattgccaac 3840

cagttcaact ctgccattgg caagattcag gactccctgt ccagcacagc ctctgccctg 3900

ggcaaactcc aagatgtggt gaaccagaat gcccaggctc tgaacaccct ggtgaagcaa 3960

ctttccagca actttggagc catctcctct gtgctgaatg acatcctgag cagactggac 4020

aaggtggagg ctgaggtcca gattgacaga ctgattacag gcagactcca atccctccaa 4080

acctatgtga cccaacaact tatcagggct gctgagatta gggcatctgc caacctggct 4140

gccaccaaga tgagtgagtg tgtgctggga caaagcaaga gggtggactt ctgtggcaag 4200

ggctaccacc tgatgagttt tccacagtct gcccctcatg gagtggtgtt cctgcatgtg 4260

acctatgtgc ctgcccagga gaagaacttc accacagccc ctgccatctg ccatgatggc 4320

aaggctcact ttccaaggga gggagtgttt gtgagcaatg gcacccactg gtttgtgacc 4380

cagaggaact tctatgaacc acagattatc accacagaca acacctttgt gtctggcaac 4440

tgtgatgtgg tgattggcat tgtgaacaac acagtctatg acccactcca acctgaactg 4500

gactccttca aggaggaact ggacaaatac ttcaagaacc acaccagccc tgatgtggac 4560

ctgggagaca tctctggcat caatgcctct gtggtgaaca tccagaagga gattgacaga 4620

ctgaatgagg tggctaagaa cctgaatgag tccctgattg acctccaaga actgggcaaa 4680

tatgaacaat acatcaagtg gccatgaaaa ttgatcataa tcagccatac cacatttgta 4740

gaggttttac ttgctttaaa aaacctccca cacctccccc tgaacctgaa acataaaatg 4800

aatgcaattg ttgttgttaa cttgtttatt gcagcttata atggttacaa ataaagcaat 4860

agcatcacaa atttcacaaa taaagcattt ttttcactgc attctagttg tggtttgtcc 4920

aaactcatca atgtatctta acgcggatcg ctccggtgcc cgtcagtggg cagagcgcac 4980

atcgcccaca gtccccgaga agttgggggg aggggtcggc aattgaaccg gtgcctagag 5040

aaggtggcgc ggggtaaact gggaaagtga tgtcgtgtac tggctccgcc tttttcccga 5100

gggtgggggа gaaccgtata taagtgcagt agtcgccgtg aacgttcttt ttcgcaacgg 5160

gtttgccgcc agaacacagg taagtgccgt gtgtggttcc cgcgggcctg gcctctttac 5220

gggttatggc ccttgcgtgc cttgaattac ttccacgccc ctggctgcag tacgtgattc 5280

ttgatcccga gcttcgggtt ggaagtgggt gggagagttc gaggccttgc gcttaaggag 5340

ccccttcgcc tcgtgcttga gttgaggctt ggcctgggcg ctggggccgc cgcgtgcgaa 5400

tctggtggca ccttcgcgcc tgtctcgctg ctttcgataa gtctctagcc atttaaaatt 5460

tttgatgacc tgctgcgacg ctttttttct ggcaagatag tcttgtaaat gcgggccaag 5520

atctgcacac tggtatttcg gtttttgggg ccgcgggcgg cgacggggcc cgtgcgtccc 5580

agcgcacatg ttcggcgagg cggggcctgc gagcgcggcc accgagaatc ggacgggggt 5640

agtctcaagc tggccggcct gctctggtgc ctggcctcgc gccgccgtgt atcgccccgc 5700

cctgggcggc aaggctggcc cggtcggcac cagttgcgtg agcggaaaga tggccgcttc 5760

ccggccctgc tgcagggagc tcaaaatgga ggacgcggcg ctcgggagag cgggcgggtg 5820

agtcacccac acaaaggaaa agggcctttc cgtcctcagc cgtcgcttca tgtgactcca 5880

cggagtaccg ggcgccgtcc aggcacctcg attagttctc gagcttttgg agtacgtcgt 5940

ctttaggttg gggggagggg ttttatgcga tggagtttcc ccatactgag tgggtggaga 6000

ctgaagttag gccagcttgg cacttgatgt aattctcctt ggaatttgcc ctttttgagt 6060

ttggatcttg gttcattctc aagcctcaga cagtggttca aagtttttt cttccattta 6120

aggtgtcgtg aaaactaccc caagctggcc accatgacta cgtccggcgt tccatttggc 6180

atgacactac gaccaacacg atctcggttg tctcggcgca ctccgtacag tagggatcgt 6240

ctacctcctt ttgagacaga aacccgcgct accatactgg aggatcatcc gctgctgccc 6300

gaatgtaaca ctttgacaat gcacaacgtg agttacgtgc gaggtcttcc ctgcagtgtg 6360

ggatttacgc tgattcagga atgggttgtt ccctgggata tggttctaac gcgggaggag 6420

cttgtaatcc tgaggaagtg tatgcacgtg tgcctgtgtt gtgccaacat tgatatcatg 6480

acgagcatga tgatccatgg ttacgagtcc tgggctctcc actgtcattg ttccagtccc 6540

ggttccctgc agtgtatagc cggcgggcag gttttggcca gctggtttag gatggtggtg 6600

gatggcgcca tgtttaatca gaggtttata tggtaccggg aggtggtgaa ttacaacatg 6660

ccaaaagagg taatgtttat gtccagcgtg tttatgaggg gtcgccactt aatctacctg 6720

cgcttgtggt atgatggcca cgtgggttct gtggtccccg ccatgagctt tggatacagc 6780

gccttgcact gtgggatttt gaacaatatt gtggtgctgt gctgcagtta ctgtgctgat 6840

ttaagtgaga tcagggtgcg ctgctgtgcc cggaggacaa ggcgccttat gctgcgggcg 6900

gtgcgaatca tcgctgagga gaccactgcc atgttgtatt cctgcaggac ggagcggcgg 6960

cggcagcagt ttattcgcgc gctgctgcag caccaccgcc ctatcctgat gcacgattat 7020

gactctaccc ccatgtagaa gcttggggat caattctcta gagctcgctg atcagcctcg 7080

actgtgcctt ctagttgcca gccatctgtt gtttgcccct cccccgtgcc ttccttgacc 7140

ctggaaggtg ccactcccac tgtcctttcc taataaaatg aggaaattgc atcgcattgt 7200

ctgagtaggt gtcattctat tctgggggggt ggggtggggc aggacagcaa gggggaggat 7260

tgggaagaca atagcaggca tgctggggat gcggtgggct ctatggcttc tgaggaaatt 7320

gggcgtggct taagggtggg aaagaatata taaggtgggg gtcttatgta gttttgtatc 7380

tgttttgcag cagccgccgc cgccatgagc accaactcgt ttgatggaag cattgtgagc 7440

tcatatttga caacgcgcat gcccccatgg gccggggtgc gtcagaatgt gatgggctcc 7500

agcattgatg gtcgccccgt cctgcccgca aactctacta ccttgaccta cgagaccgtg 7560

tctggaacgc cgttggagac tgcagcctcc gccgccgctt cagccgctgc agccaccgcc 7620

cgcgggattg tgactgactt tgctttcctg agcccgcttg caagcagtgc agcttcccgt 7680

tcatccgccc gcgatgacaa gttgacggct cttttggcac aattggattc tttgacccgg 7740

gaacttaatg tcgtttctca gcagctgttg gatctgcgcc agcaggtttc tgccctgaag 7800

gcttcctccc ctcccaatgc ggtttaaaac ataaataaaa aaccagactc tgtttggatt 7860

tggatcaagc aagtgtcttg ctgtctttat ttaggggttt tgcgcgcgcg gtaggcccgg 7920

gaccagcggt ctcggtcgtt gagggtcctg tgtatttttt ccaggacgtg gtaaaggtga 7980

ctctggatgt tcagatacat gggcataagc ccgtctctgg ggtggaggta gcaccactgc 8040

agagcttcat gctgcggggt ggtgttgtag atgatccagt cgtagcagga gcgctgggcg 8100

tggtgcctaa aaatgtcttt cagtagcaag ctgattgcca ggggcaggcc cttggtgtaa 8160

gtgtttacaa agcggttaag ctgggatggg tgcatacgtg gggatatgag atgcatcttg 8220

gactgtattt ttaggttggc tatgttccca gccatatccc tccggggatt catgttgtgc 8280

agaaccacca gcacagtgta tccggtgcac ttgggaaatt tgtcatgtag cttagaagga 8340

aatgcgtgga agaacttgga gacgcccttg tgacctccaa gattttccat gcattcgtcc 8400

ataatgatgg caatgggccc acgggcggcg gcctgggcga agatatttct gggatcacta 8460

acgtcatagt tgtgttccag gatgagatcg tcataggcca tttttacaaa gcgcgggcgg 8520

agggtgccag actgcggtat aatggttcca tccggcccag gggcgtagtt accctcacag 8580

atttgcattt cccacgcttt gagttcagat ggggggatca tgtctacctg cggggcgatg 8640

aagaaaacgg tttccggggt aggggagatc agctgggaag aaagcaggtt cctgagcagc 8700

tgcgacttac cgcagccggt gggcccgtaa atcacaccta ttaccgggtg caactggtag 8760

ttaagagagc tgcagctgcc gtcatccctg agcaggggggg ccacttcgtt aagcatgtcc 8820

ctgactcgca tgttttccct gaccaaatcc gccagaaggc gctcgccgcc cagcgatagc 8880

agttcttgca aggaagcaaa gtttttcaac ggtttgagac cgtccgccgt aggcatgctt 8940

ttgagcgttt gaccaagcag ttccaggcgg tcccacagct cggtcacctg ctctacggca 9000

tctcgatcca gcatatctcc tcgtttcgcg ggttggggcg gctttcgctg tacggcagta 9060

gtcggtgctc gtccagacgg gccagggtca tgtctttcca cgggcgcagg gtcctcgtca 9120

gcgtagtctg ggtcacggtg aaggggtgcg ctccgggctg cgcgctggcc agggtgcgct 9180

tgaggctggt cctgctggtg ctgaagcgct gccggtcttc gccctgcgcg tcggccaggt 9240

agcatttgac catggtgtca tagtccagcc cctccgcggc gtggcccttg gcgcgcagct 9300

tgcccttgga ggaggcgccg cacgaggggc agtgcagact tttgagggcg tagagcttgg 9360

gcgcgagaaa taccgattcc ggggagtagg catccgcgcc gcaggccccg cagacggtct 9420

cgcattccac gagccaggtg agctctggcc gttcggggtc aaaaaccagg tttcccccat 9480

gctttttgat gcgtttctta cctctggttt ccatgagccg gtgtccacgc tcggtgacga 9540

aaaggctgtc cgtgtccccg tatacagact tgagaggcct gtcctcgagc ggtgttccgc 9600

ggtcctcctc gtatagaaac tcggaccact ctgagacaaa ggctcgcgtc caggccagca 9660

cgaaggaggc taagtgggag gggtagcggt cgttgtccac tagggggtcc actcgctcca 9720

gggtgtgaag acacatgtcg ccctcttcgg catcaaggaa ggtgattggt ttgtaggtgt 9780

aggccacgtg accgggtgtt cctgaagggg ggctataaaa gggggtgggg gcgcgttcgt 9840

cctcactctc ttccgcatcg ctgtctgcga gggccagctg ttggggtgag tactccctct 9900

gaaaagcggg catgacttct gcgctaagat tgtcagtttc caaaaacgag gaggatttga 9960

tattcacctg gcccgcggtg atgcctttga gggtggccgc atccatctgg tcagaaaaga 10020

caatcttttt gttgtcaagc ttggtggcaa acgacccgta gagggcgttg gacagcaact 10080

tggcgatgga gcgcagggtt tggtttttgt cgcgatcggc gcgctccttg gccgcgatgt 10140

ttagctgcac gtattcgcgc gcaacgcacc gccattcggg aaagacggtg gtgcgctcgt 10200

cgggcaccag gtgcacgcgc caaccgcggt tgtgcagggt gacaaggtca acgctggtgg 10260

ctacctctcc gcgtaggcgc tcgttggtcc agcagaggcg gccgcccttg cgcgagcaga 10320

atggcggtag ggggtctagc tgcgtctcgt ccgggggggtc tgcgtccacg gtaaagaccc 10380

cgggcagcag gcgcgcgtcg aagtagtcta tcttgcatcc ttgcaagtct agcgcctgct 10440

gccatgcgcg ggcggcaagc gcgcgctcgt atgggttgag tgggggaccc catggcatgg 10500

ggtgggtgag cgcggaggcg tacatgccgc aaatgtcgta aacgtagagg ggctctctga 10560

gtattccaag atatgtaggg tagcatcttc caccgcggat gctggcgcgc acgtaatcgt 10620

atagttcgtg cgagggagcg aggaggtcgg gaccgaggtt gctacgggcg ggctgctctg 10680

ctcggaagac tatctgcctg aagatggcat gtgagttgga tgatatggtt ggacgctgga 10740

agacgttgaa gctggcgtct gtgagaccta ccgcgtcacg cacgaaggag gcgtaggagt 10800

cgcgcagctt gttgaccagc tcggcggtga cctgcacgtc tagggcgcag tagtccaggg 10860

tttccttgat gatgtcatac ttatcctgtc ccttttttt ccacagctcg cggttgagga 10920

caaactcttc gcggtctttc cagtactctt ggatcggaaa cccgtcggcc tccgaacggt 10980

aagagcctag catgtagaac tggttgacgg cctggtaggc gcagcatccc ttttctacgg 11040

gtagcgcgta tgcctgcgcg gccttccgga gcgaggtgtg ggtgagcgca aaggtgtccc 11100

tgaccatgac tttgaggtac tggtatttga agtcagtgtc gtcgcatccg ccctgctccc 11160

agagcaaaaa gtccgtgcgc tttttggaac gcggatttgg cagggcgaag gtgacatcgt 11220

tgaagagtat ctttcccgcg cgaggcataa agttgcgtgt gatgcggaag ggtcccggca 11280

cctcggaacg gttgttaatt acctgggcgg cgagcacgat ctcgtcaaag ccgttgatgt 11340

tgtggcccac aatgtaaagt tccaagaagc gcgggatgcc cttgatggaa ggcaattttt 11400

taagttcctc gtaggtgagc tcttcagggg agctgagccc gtgctctgaa agggcccagt 11460

ctgcaagatg agggttggaa gcgacgaatg agctccacag gtcacgggcc attagcattt 11520

gcaggtggtc gcgaaaggtc ctaaactggc gacctatggc catttttct ggggtgatgc 11580

agtagaaggt aagcgggtct tgttcccagc ggtcccatcc aaggttcgcg gctaggtctc 11640

gcgcggcagt cactagaggc tcatctccgc cgaacttcat gaccagcatg aagggcacga 11700

gctgcttccc aaaggccccc atccaagtat aggtctctac atcgtaggtg acaaagagac 11760

gctcggtgcg aggatgcgag ccgatcggga agaactggat ctcccgccac caattggagg 11820

agtggctatt gatgtggtga aagtagaagt ccctgcgacg ggccgaacac tcgtgctggc 11880

ttttgtaaaa acgtgcgcag tactggcagc ggtgcacggg ctgtacatcc tgcacgaggt 11940

tgacctgacg accgcgcaca aggaagcaga gtgggaattt gagcccctcg cctggcgggt 12000

ttggctggtg gtcttctact tcggctgctt gtccttgacc gtctggctgc tcgaggggag 12060

ttacggtgga tcggaccacc acgccgcgcg agcccaaagt ccagatgtcc gcgcgcggcg 12120

gtcggagctt gatgacaaca tcgcgcagat gggagctgtc catggtctgg agctcccgcg 12180

gcgtcaggtc aggcgggagc tcctgcaggt ttacctcgca tagacgggtc agggcgcggg 12240

ctagatccag gtgataccta atttccaggg gctggttggt ggcggcgtcg atggcttgca 12300

agaggccgca tccccgcggc gcgactacgg taccgcgcgg cgggcggtgg gccgcggggg 12360

tgtccttgga tgatgcatct aaaagcggtg acgcgggcga gcccccggag gtaggggggg 12420

ctccggaccc gccgggagag ggggcagggg cacgtcggcg ccgcgcgcgg gcaggagctg 12480

gtgctgcgcg cgtaggttgc tggcgaacgc gacgacgcgg cggttgatct cctgaatctg 12540

gcgcctctgc gtgaagacga cgggcccggt gagcttgaac ctgaaagaga gttcgacaga 12600

atcaatttcg gtgtcgttga cggcggcctg gcgcaaaatc tcctgcacgt ctcctgagtt 12660

gtcttgatag gcgatctcgg ccatgaactg ctcgatctct tcctcctgga gatctccgcg 12720

tccggctcgc tccacggtgg cggcgaggtc gttggaaatg cgggccatga gctgcgagaa 12780

ggcgttgagg cctccctcgt tccagacgcg gctgtagacc acgccccctt cggcatcgcg 12840

ggcgcgcatg accacctgcg cgagattgag ctccacgtgc cgggcgaaga cggcgtagtt 12900

tcgcaggcgc tgaaagaggt agttgagggt ggtggcggtg tgttctgcca cgaagaagta 12960

cataacccag cgtcgcaacg tggattcgtt gatatccccc aaggcctcaa ggcgctccat 13020

ggcctcgtag aagtccacgg cgaagttgaa aaactgggag ttgcgcgccg acacggttaa 13080

ctcctcctcc agaagacgga tgagctcggc gacagtgtcg cgcacctcgc gctcaaaggc 13140

tacaggggcc tcttcttctt cttcaatctc ctcttccata agggcctccc cttcttcttc 13200

ttctggcggc ggtgggggag gggggacacg gcggcgacga cggcgcaccg ggaggcggtc 13260

gacaaagcgc tcgatcatct ccccgcggcg acggcgcatg gtctcggtga cggcgcggcc 13320

gttctcgcgg gggcgcagtt ggaagacgcc gcccgtcatg tcccggttat gggttggcgg 13380

ggggctgcca tgcggcaggg atacggcgct aacgatgcat ctcaacaatt gttgtgtagg 13440

tactccgccg ccgagggacc tgagcgagtc cgcatcgacc ggatcggaaa acctctcgag 13500

aaaggcgtct aaccagtcac agtcgcaagg taggctgagc accgtggcgg gcggcagcgg 13560

gcggcggtcg gggttgtttc tggcggaggt gctgctgatg atgtaattaa agtaggcggt 13620

cttgagacgg cggatggtcg acagaagcac catgtccttg ggtccggcct gctgaatgcg 13680

caggcggtcg gccatgcccc aggcttcgtt ttgacatcgg cgcaggtctt tgtagtagtc 13740

ttgcatgagc ctttctaccg gcacttcttc ttctccttcc tcttgtcctg catctcttgc 13800

atctatcgct gcggcggcgg cggagtttgg ccgtaggtgg cgccctcttc ctcccatgcg 13860

tgtgaccccg aagcccctca tcggctgaag cagggctagg tcggcgacaa cgcgctcggc 13920

taatatggcc tgctgcacct gcgtgagggt agactggaag tcatccatgt ccacaaagcg 13980

gtggtatgcg cccgtgttga tggtgtaagt gcagttggcc ataacggacc agttaacggt 14040

ctggtgaccc ggctgcgaga gctcggtgta cctgagacgc gagtaagccc tcgagtcaaa 14100

tacgtagtcg ttgcaagtcc gcaccaggta ctggtatccc accaaaaagt gcggcggcgg 14160

ctggcggtag aggggccagc gtagggtggc cggggctccg ggggcgagat cttccaacat 14220

aaggcgatga tatccgtaga tgtacctgga catccaggtg atgccggcgg cggtggtgga 14280

ggcgcgcgga aagtcgcgga cgcggttcca gatgttgcgc agcggcaaaa agtgctccat 14340

ggtcgggacg ctctggccgg tcaggcgcgc gcaatcgttg acgctctagc gtgcaaaagg 14400

agagcctgta agcgggcact cttccgtggt ctggtggata aattcgcaag ggtatcatgg 14460

cggacgaccg gggttcgagc cccgtatccg gccgtccgcc gtgatccatg cggttaccgc 14520

ccgcgtgtcg aacccaggtg tgcgacgtca gacaacgggg gagtgctcct tttggcttcc 14580

ttccaggcgc ggcggctgct gcgctagctt ttttggccac tggccgcgcg cagcgtaagc 14640

ggttaggctg gaaagcgaaa gcattaagtg gctcgctccc tgtagccgga gggttatttt 14700

ccaagggttg agtcgcggga cccccggttc gagtctcgga ccggccggac tgcggcgaac 14760

gggggtttgc ctccccgtca tgcaagaccc cgcttgcaaa ttcctccgga aacagggacg 14820

agccccttt ttgcttttcc cagatgcatc cggtgctgcg gcagatgcgc ccccctcctc 14880

agcagcggca agagcaagag cagcggcaga catgcagggc accctcccct cctcctaccg 14940

cgtcaggagg ggcgacatcc gcggttgacg cggcagcaga tggtgattac gaacccccgc 15000

ggcgccgggc ccggcactac ctggacttgg aggagggcga gggcctggcg cggctaggag 15060

cgccctctcc tgagcggcac ccaagggtgc agctgaagcg tgatacgcgt gaggcgtacg 15120

tgccgcggca gaacctgttt cgcgaccgcg agggagagga gcccgaggag atgcgggatc 15180

gaaagttcca cgcagggcgc gagctgcggc atggcctgaa tcgcgagcgg ttgctgcgcg 15240

aggaggactt tgagcccgac gcgcgaaccg ggattagtcc cgcgcgcgca cacgtggcgg 15300

ccgccgacct ggtaaccgca tacgagcaga cggtgaacca ggagattaac tttcaaaaaa 15360

gctttaacaa ccacgtgcgt acgcttgtgg cgcgcgagga ggtggctata ggactgatgc 15420

atctgtggga ctttgtaagc gcgctggagc aaaacccaaa tagcaagccg ctcatggcgc 15480

agctgttcct tatagtgcag cacagcaggg acaacgaggc attcagggat gcgctgctaa 15540

acatagtaga gcccgagggc cgctggctgc tcgatttgat aaacatcctg cagagcatag 15600

tggtgcagga gcgcagcttg agcctggctg acaaggtggc cgccatcaac tattccatgc 15660

ttagcctggg caagttttac gcccgcaaga tataccatac cccttacgtt cccatagaca 15720

aggaggtaaa gatcgagggg ttctacatgc gcatggcgct gaaggtgctt accttgagcg 15780

acgacctggg cgtttatcgc aacgagcgca tccacaaggc cgtgagcgtg agccggcggc 15840

gcgagctcag cgaccgcgag ctgatgcaca gcctgcaaag ggccctggct ggcacgggca 15900

gcggcgatag agaggccgag tcctactttg acgcgggcgc tgacctgcgc tgggccccaa 15960

gccgacgcgc cctggaggca gctggggccg gacctgggct ggcggtggca cccgcgcgcg 16020

ctggcaacgt cggcggcgtg gaggaatatg acgaggacga tgagtacgag ccagaggacg 16080

gcgagtacta agcggtgatg tttctgatca gatgatgcaa gacgcaacgg acccggcggt 16140

gcgggcggcg ctgcagagcc agccgtccgg ccttaactcc acggacgact ggcgccaggt 16200

catggaccgc atcatgtcgc tgactgcgcg caatcctgac gcgttccggc agcagccgca 16260

ggccaaccgg ctctccgcaa ttctggaagc ggtggtcccg gcgcgcgcaa accccacgca 16320

cgagaaggtg ctggcgatcg taaacgcgct ggccgaaaac agggccatcc ggcccgacga 16380

ggccggcctg gtctacgacg cgctgcttca gcgcgtggct cgttacaaca gcggcaacgt 16440

gcagaccaac ctggaccggc tggtggggga tgtgcgcgag gccgtggcgc agcgtgagcg 16500

cgcgcagcag cagggcaacc tgggctccat ggttgcacta aacgccttcc tgagtacaca 16560

gcccgccaac gtgccgcggg gacaggagga ctacaccaac tttgtgagcg cactgcggct 16620

aatggtgact gagacaccgc aaagtgaggt gtaccagtct gggccagact atttttcca 16680

gaccagtaga caaggcctgc agaccgtaaa cctgagccag gctttcaaaa acttgcaggg 16740

gctgtggggg gtgcgggctc ccacaggcga ccgcgcgacc gtgtctagct tgctgacgcc 16800

caactcgcgc ctgttgctgc tgctaatagc gcccttcacg gacagtggca gcgtgtcccg 16860

ggacacatac ctaggtcact tgctgacact gtaccgcgag gccataggtc aggcgcatgt 16920

ggacgagcat actttccagg agattacaag tgtcagccgc gcgctggggc aggaggacac 16980

gggcagcctg gaggcaaccc taaactacct gctgaccaac cggcggcaga agatcccctc 17040

gttgcacagt ttaaacagcg aggaggagcg cattttgcgc tacgtgcagc agagcgtgag 17100

ccttaacctg atgcgcgacg gggtaacgcc cagcgtggcg ctggacatga ccgcgcgcaa 17160

catggaaccg ggcatgtatg cctcaaaccg gccgtttatc aaccgcctaa tggactactt 17220

gcatcgcgcg gccgccgtga accccgagta tttcaccaat gccatcttga acccgcactg 17280

gctaccgccc cctggtttct acaccggggg attcgaggtg cccgagggta acgatggatt 17340

cctctgggac gacatagacg acagcgtgtt ttccccgcaa ccgcagaccc tgctagagtt 17400

gcaacagcgc gagcaggcag aggcggcgct gcgaaaggaa agcttccgca ggccaagcag 17460

cttgtccgat ctaggcgctg cggccccgcg gtcagatgct agtagcccat ttccaagctt 17520

gatagggtct cttaccagca ctcgcaccac ccgcccgcgc ctgctgggcg aggaggagta 17580

cctaaacaac tcgctgctgc agccgcagcg cgaaaaaaac ctgcctccgg catttcccaa 17640

caacgggata gagagcctag tggacaagat gagtagatgg aagacgtacg cgcaggagca 17700

cagggacgtg ccaggcccgc gcccgcccac ccgtcgtcaa aggcacgacc gtcagcgggg 17760

tctggtgtgg gaggacgatg actcggcaga cgacagcagc gtcctggatt tgggagggag 17820

tggcaacccg tttgcgcacc ttcgccccag gctggggaga atgttttaaa aaaaaaaaag 17880

catgatgcaa aataaaaaac tcaccaaggc catggcaccg agcgttggtt ttcttgtatt 17940

ccccttagta tgcggcgcgc ggcgatgtat gaggaaggtc ctcctccctc ctacgagagt 18000

gtggtgagcg cggcgccagt ggcggcggcg ctgggttctc ccttcgatgc tcccctggac 18060

ccgccgtttg tgcctccgcg gtacctgcgg cctaccgggg ggagaaacag catccgttac 18120

tctgagttgg cacccctatt cgacaccacc cgtgtgtacc tggtggacaa caagtcaacg 18180

gatgtggcat ccctgaacta ccagaacgac cacagcaact ttctgaccac ggtcattcaa 18240

aacaatgact acagcccggg ggaggcaagc acacagacca tcaatcttga cgaccggtcg 18300

cactggggcg gcgacctgaa aaccatcctg cataccaaca tgccaaatgt gaacgagttc 18360

atgtttacca ataagtttaa ggcgcgggtg atggtgtcgc gcttgcctac taaggacaat 18420

caggtggagc tgaaatacga gtgggtggag ttcacgctgc ccgagggcaa ctactccgag 18480

accatgacca tagaccttat gaacaacgcg atcgtggagc actacttgaa agtgggcaga 18540

cagaacgggg ttctggaaag cgacatcggg gtaaagtttg acacccgcaa cttcagactg 18600

gggtttgacc ccgtcactgg tcttgtcatg cctggggtat atacaaacga agccttccat 18660

ccagacatca ttttgctgcc aggatgcggg gtggacttca cccacagccg cctgagcaac 18720

ttgttgggca tccgcaagcg gcaacccttc caggagggct ttaggatcac ctacgatgat 18780

ctggagggtg gtaacattcc cgcactgttg gatgtggacg cctaccaggc gagcttgaaa 18840

gatgacaccg aacagggcgg gggtggcgca ggcggcagca acagcagtgg cagcggcgcg 18900

gaagagaact ccaacgcggc agccgcggca atgcagccgg tggaggacat gaacgatcat 18960

gccattcgcg gcgacacctt tgccacacgg gctgaggaga agcgcgctga ggccgaagca 19020

gcggccgaag ctgccgcccc cgctgcgcaa cccgaggtcg agaagcctca gaagaaaccg 19080

gtgatcaaac ccctgacaga ggacagcaag aaacgcagtt acaacctaat aagcaatgac 19140

agcaccttca cccagtaccg cagctggtac cttgcataca actacggcga ccctcagacc 19200

ggaatccgct catggaccct gctttgcact cctgacgtaa cctgcggctc ggagcaggtc 19260

tactggtcgt tgccagacat gatgcaagac cccgtgacct tccgctccac gcgccagatc 19320

agcaactttc cggtggtggg cgccgagctg ttgcccgtgc actccaagag cttctacaac 19380

gaccaggccg tctactccca actcatccgc cagtttacct ctctgaccca cgtgttcaat 19440

cgctttcccg agaaccagat tttggcgcgc ccgccagccc ccaccatcac caccgtcagt 19500

gaaaacgttc ctgctctcac agatcacggg acgctaccgc tgcgcaacag catcggagga 19560

gtccagcgag tgaccattac tgacgccaga cgccgcacct gcccctacgt ttacaaggcc 19620

ctgggcatag tctcgccgcg cgtcctatcg agccgcactt tttgagcaag catgtccatc 19680

cttatatcgc ccagcaataa cacaggctgg ggcctgcgct tcccaagcaa gatgtttggc 19740

ggggccaaga agcgctccga ccaacaccca gtgcgcgtgc gcgggcacta ccgcgcgccc 19800

tggggcgcgc acaaacgcgg ccgcactggg cgcaccaccg tcgatgacgc catcgacgcg 19860

gtggtggagg aggcgcgcaa ctacacgccc acgccgccac cagtgtccac agtggacgcg 19920

gccattcaga ccgtggtgcg cggagcccgg cgctatgcta aaatgaagag acggcggagg 19980

cgcgtagcac gtcgccaccg ccgccgaccc ggcactgccg cccaacgcgc ggcggcggcc 20040

ctgcttaacc gcgcacgtcg caccggccga cgggcggcca tgcgggccgc tcgaaggctg 20100

gccgcgggta ttgtcactgt gccccccagg tccaggcgac gagcggccgc cgcagcagcc 20160

gcggccatta gtgctatgac tcagggtcgc aggggcaacg tgtattgggt gcgcgactcg 20220

gttagcggcc tgcgcgtgcc cgtgcgcacc cgcccccgc gcaactagat tgcaagaaaa 20280

aactacttag actcgtactg ttgtatgtat ccagcggcgg cggcgcgcaa cgaagctatg 20340

tccaagcgca aaatcaaaga agagatgctc caggtcatcg cgccggagat ctatggcccc 20400

ccgaagaagg aagagcagga ttacaagccc cgaaagctaa agcgggtcaa aaagaaaaag 20460

aaagatgatg atgatgaact tgacgacgag gtggaactgc tgcacgctac cgcgcccagg 20520

cgacgggtac agtggaaagg tcgacgcgta aaacgtgttt tgcgacccgg caccaccgta 20580

gtctttacgc ccggtgagcg ctccacccgc acctacaagc gcgtgtatga tgaggtgtac 20640

ggcgacgagg acctgcttga gcaggccaac gagcgcctcg gggagtttgc ctacggaaag 20700

cggcataagg acatgctggc gttgccgctg gacgagggca acccaacacc tagcctaaag 20760

cccgtaacac tgcagcaggt gctgcccgcg cttgcaccgt ccgaagaaaa gcgcggccta 20820

aagcgcgagt ctggtgactt ggcacccacc gtgcagctga tggtacccaa gcgccagcga 20880

ctggaagatg tcttggaaaa aatgaccgtg gaacctgggc tggagcccga ggtccgcgtg 20940

cggccaatca agcaggtggc gccgggactg ggcgtgcaga ccgtggacgt tcagataccc 21000

actaccagta gcaccagtat tgccaccgcc acagagggca tggagacaca aacgtccccg 21060

gttgcctcag cggtggcgga tgccgcggtg caggcggtcg ctgcggccgc gtccaagacc 21120

tctacggagg tgcaaacgga cccgtggatg tttcgcgttt cagccccccg gcgcccgcgc 21180

cgttcgagga agtacggcgc cgccagcgcg ctactgcccg aatatgccct acatccttcc 21240

attgcgccta cccccggcta tcgtggctac acctaccgcc ccagaagacg agcaactacc 21300

cgacgccgaa ccaccactgg aacccgccgc cgccgtcgcc gtcgccagcc cgtgctggcc 21360

ccgatttccg tgcgcagggt ggctcgcgaa ggaggcagga ccctggtgct gccaacagcg 21420

cgctaccacc ccagcatcgt ttaaaagccg gtctttgtgg ttcttgcaga tatggccctc 21480

acctgccgcc tccgtttccc ggtgccggga ttccgaggaa gaatgcaccg taggaggggc 21540

atggccggcc acggcctgac gggcggcatg cgtcgtgcgc accaccggcg gcggcgcgcg 21600

tcgcaccgtc gcatgcgcgg cggtatcctg cccctcctta ttccactgat cgccgcggcg 21660

attggcgccg tgcccggaat tgcatccgtg gccttgcagg cgcagagaca ctgattaaaa 21720

acaagttgca tgtggaaaaa tcaaaataaa aagtctggac tctcacgctc gcttggtcct 21780

gtaactattt tgtagaatgg aagacatcaa ctttgcgtct ctggccccgc gacacggctc 21840

gcgcccgttc atgggaaact ggcaagatat cggcaccagc aatatgagcg gtggcgcctt 21900

cagctggggc tcgctgtgga gcggcattaa aaatttcggt tccaccgtta agaactatgg 21960

cagcaaggcc tggaacagca gcacaggcca gatgctgagg gataagttga aagagcaaaa 22020

tttccaacaa aaggtggtag atggcctggc ctctggcatt agcggggtgg tggacctggc 22080

caaccaggca gtgcaaaata agattaacag taagcttgat ccccgccctc ccgtagagga 22140

gcctccaccg gccgtggaga cagtgtctcc agaggggcgt ggcgaaaagc gtccgcgccc 22200

cgacagggaa gaaactctgg tgacgcaaat agacgagcct ccctcgtacg aggaggcact 22260

aaagcaaggc ctgcccacca cccgtcccat cgcgcccatg gctaccggag tgctgggcca 22320

gcacacaccc gtaacgctgg acctgcctcc ccccgccgac acccagcaga aacctgtgct 22380

gccaggcccg accgccgttg ttgtaacccg tcctagccgc gcgtccctgc gccgcgccgc 22440

cagcggtccg cgatcgttgc ggcccgtagc cagtggcaac tggcaaagca cactgaacag 22500

catcgtgggt ctgggggtgc aatccctgaa gcgccgacga tgcttctgat agctaacgtg 22560

tcgtatgtgt gtcatgtatg cgtccatgtc gccgccagag gagctgctga gccgccgcgc 22620

gcccgctttc caagatggct acccccttcga tgatgccgca gtggtcttac atgcacatct 22680

cgggccagga cgcctcggag tacctgagcc ccgggctggt gcagtttgcc cgcgccaccg 22740

agacgtactt cagcctgaat aacaagttta gaaaccccac ggtggcgcct acgcacgacg 22800

tgaccacaga ccggtcccag cgtttgacgc tgcggttcat ccctgtggac cgtgaggata 22860

ctgcgtactc gtacaaggcg cggttcaccc tagctgtggg tgataaccgt gtgctggaca 22920

tggcttccac gtactttgac atccgcggcg tgctggacag gggccctact tttaagccct 22980

actctggcac tgcctacaac gccctggctc ccaagggtgc cccaaatcct tgcgaatggg 23040

atgaagctgc tactgctctt gaaataaacc tagaagaaga ggacgatgac aacgaagacg 23100

aagtagacga gcaagctgag cagcaaaaaa ctcacgtatt tgggcaggcg ccttattctg 23160

gtataaatat tacaaaggag ggtattcaaa taggtgtcga aggtcaaaca cctaaatatg 23220

ccgataaaac atttcaacct gaacctcaaa taggagaatc tcagtggtac gaaacagaaa 23280

ttaatcatgc agctgggaga gtcctaaaaa agactacccc aatgaaacca tgttacggtt 23340

catatgcaaa acccacaaat gaaaatggag ggcaaggcat tcttgtaaag caacaaaatg 23400

gaaagctaga aagtcaagtg gaaatgcaat ttttctcaac tactgaggca gccgcaggca 23460

atggtgataa cttgactcct aaagtggtat tgtacagtga agatgtagat atagaaaccc 23520

cagacactca tatttcttac atgcccacta ttaaggaagg taactcacga gaactaatgg 23580

gccaacaatc tatgcccaac aggcctaatt acattgcttt tagggacaat tttattggtc 23640

taatgtatta caacagcacg ggtaatatgg gtgttctggc gggccaagca tcgcagttga 23700

atgctgttgt agatttgcaa gacagaaaca cagagctttc ataccagctt ttgcttgatt 23760

ccattggtga tagaaccagg tacttttcta tgtggaatca ggctgttgac agctatgatc 23820

cagatgttag aattattgaa aatcatggaa ctgaagatga acttccaaat tactgctttc 23880

cactgggagg tgtgattaat acagagactc ttaccaaggt aaaacctaaa acaggtcagg 23940

aaaatggatg ggaaaaagat gctacagaat tttcagataa aaatgaaata agagttggaa 24000

ataattttgc catggaaatc aatctaaatg ccaacctgtg gagaaatttc ctgtactcca 24060

acatagcgct gtatttgccc gacaagctaa agtacagtcc ttccaacgta aaaatttctg 24120

ataacccaaa cacctacgac tacatgaaca agcgagtggt ggctcccggg ctagtggact 24180

gctacattaa ccttggagca cgctggtccc ttgactatat ggacaacgtc aacccattta 24240

accaccaccg caatgctggc ctgcgctacc gctcaatgtt gctgggcaat ggtcgctatg 24300

tgcccttcca catccaggtg cctcagaagt tctttgccat taaaaacctc cttctcctgc 24360

cgggctcata cacctacgag tggaacttca ggaaggatgt taacatggtt ctgcagagct 24420

ccctaggaaa tgacctaagg gttgacggag ccagcattaa gtttgatagc atttgccttt 24480

acgccacctt cttccccatg gcccacaaca ccgcctccac gcttgaggcc atgcttagaa 24540

acgacaccaa cgaccagtcc tttaacgact atctctccgc cgccaacatg ctctacccta 24600

tacccgccaa cgctaccaac gtgcccatat ccatcccctc ccgcaactgg gcggctttcc 24660

gcggctgggc cttcacgcgc cttaagacta aggaaacccc atcactgggc tcgggctacg 24720

acccttatta cacctactct ggctctatac cctacctaga tggaaccttt tacctcaacc 24780

acacctttaa gaaggtggcc attacctttg actcttctgt cagctggcct ggcaatgacc 24840

gcctgcttac ccccaacgag tttgaaatta agcgctcagt tgacggggag ggttacaacg 24900

ttgcccagtg taacatgacc aaagactggt tcctggtaca aatgctagct aactataaca 24960

ttggctacca gggcttctat atcccagaga gctacaagga ccgcatgtac tccttcttta 25020

gaaacttcca gcccatgagc cgtcaggtgg tggatgatac taaatacaag gactaccaac 25080

aggtgggcat cctacaccaa cacaacaact ctggatttgt tggctacctt gcccccacca 25140

tgcgcgaagg acaggcctac cctgctaact tcccctatcc gcttataggc aagaccgcag 25200

ttgacagcat tacccagaaa aagtttcttt gcgatcgcac cctttggcgc atcccattct 25260

ccagtaactt tatgtccatg ggcgcactca cagacctggg ccaaaacctt ctctacgcca 25320

actccgccca cgcgctagac atgacttttg aggtggatcc catggacgag cccacccttc 25380

tttatgtttt gtttgaagtc tttgacgtgg tccgtgtgca ccagccgcac cgcggcgtca 25440

tcgaaaccgt gtacctgcgc acgcccttct cggccggcaa cgccacaaca taaagaagca 25500

agcaacatca acaacagctg ccgccatggg ctccagtgag caggaactga aagccattgt 25560

caaagatctt ggttgtgggc catatttttt gggcacctat gacaagcgct ttccaggctt 25620

tgtttctcca cacaagctcg cctgcgccat agtcaatacg gccggtcgcg agactggggg 25680

cgtacactgg atggcctttg cctggaaccc gcactcaaaa acatgctacc tctttgagcc 25740

ctttggcttt tctgaccagc gactcaagca ggtttaccag tttgagtacg agtcactcct 25800

gcgccgtagc gccattgctt cttcccccga ccgctgtata acgctggaaa agtccaccca 25860

aagcgtacag gggcccaact cggccgcctg tggactattc tgctgcatgt ttctccacgc 25920

ctttgccaac tggccccaaa ctcccatgga tcacaacccc accatgaacc ttattaccgg 25980

ggtacccaac tccatgctca acagtcccca ggtacagccc accctgcgtc gcaaccagga 26040

acagctctac agcttcctgg agcgccactc gccctacttc cgcagccaca gtgcgcagat 26100

taggagcgcc acttcttttt gtcacttgaa aaacatgtaa aaataatgta ctagagacac 26160

tttcaataaa ggcaaatgct tttatttgta cactctcggg tgattattta cccccaccct 26220

tgccgtctgc gccgtttaaa aatcaaaggg gttctgccgc gcatcgctat gcgccactgg 26280

cagggacacg ttgcgatact ggtgtttagt gctccactta aactcaggca caaccatccg 26340

cggcagctcg gtgaagtttt cactccacag gctgcgcacc atcaccaacg cgtttagcag 26400

gtcgggcgcc gatatcttga agtcgcagtt ggggcctccg ccctgcgcgc gcgagttgcg 26460

atacacaggg ttgcagcact ggaacactat cagcgccggg tggtgcacgc tggccagcac 26520

gctcttgtcg gagatcagat ccgcgtccag gtcctccgcg ttgctcaggg cgaacggagt 26580

caactttggt agctgccttc ccaaaaaggg cgcgtgccca ggctttgagt tgcactcgca 26640

ccgtagtggc atcaaaaggt gaccgtgccc ggtctgggcg ttaggataca gcgcctgcat 26700

aaaagccttg atctgcttaa aagccacctg agcctttgcg ccttcagaga agaacatgcc 26760

gcaagacttg ccggaaaact gattggccgg acaggccgcg tcgtgcacgc agcaccttgc 26820

gtcggtgttg gagatctgca ccacatttcg gccccaccgg ttcttcacga tcttggcctt 26880

gctagactgc tccttcagcg cgcgctgccc gttttcgctc gtcacatcca tttcaatcac 26940

gtgctcctta tttatcataa tgcttccgtg tagacactta agctcgcctt cgatctcagc 27000

gcagcggtgc agccacaacg cgcagcccgt gggctcgtga tgcttgtagg tcacctctgc 27060

aaacgactgc aggtacgcct gcaggaatcg ccccatcatc gtcacaaagg tcttgttgct 27120

ggtgaaggtc agctgcaacc cgcggtgctc ctcgttcagc caggtcttgc atacggccgc 27180

cagagcttcc acttggtcag gcagtagttt gaagttcgcc tttagatcgt tatccacgtg 27240

gtacttgtcc atcagcgcgc gcgcagcctc catgcccttc tcccacgcag acacgatcgg 27300

cacactcagc gggttcatca ccgtaatttc actttccgct tcgctgggct cttcctcttc 27360

ctcttgcgtc cgcataccac gcgccactgg gtcgtcttca ttcagccgcc gcactgtgcg 27420

cttacctcct ttgccatgct tgattagcac cggtgggttg ctgaaaccca ccatttgtag 27480

cgccacatct tctctttctt cctcgctgtc cacgattacc tctggtgatg gcgggcgctc 27540

gggcttggga gaagggcgct tctttttctt cttgggcgca atggccaaat ccgccgccga 27600

ggtcgatggc cgcgggctgg gtgtgcgcgg caccagcgcg tcttgtgatg agtcttcctc 27660

gtcctcggac tcgatacgcc gcctcatccg ctttttgggg ggcgcccggg gaggcggcgg 27720

cgacggggac ggggacgaca cgtcctccat ggttggggga cgtcgcgccg caccgcgtcc 27780

gcgctcgggg gtggtttcgc gctgctcctc ttcccgactg gccatttcct tctcctatag 27840

gcagaaaaag atcatggagt cagtcgagaa gaaggacagc ctaaccgccc cctctgagtt 27900

cgccaccacc gcctccaccg atgccgccaa cgcgcctacc accttccccg tcgaggcacc 27960

cccgcttgag gaggaggaag tgattatcga gcaggaccca ggttttgtaa gcgaagacga 28020

cgaggaccgc tcagtaccaa cagaggataa aaagcaagac caggacaacg cagaggcaaa 28080

cgaggaacaa gtcgggcggg gggacgaaag gcatggcgac tacctagatg tgggagacga 28140

cgtgctgttg aagcatctgc agcgccagtg cgccattatc tgcgacgcgt tgcaagagcg 28200

cagcgatgtg cccctcgcca tagcggatgt cagccttgcc tacgaacgcc acctattctc 28260

accgcgcgta ccccccaaac gccaagaaaa cggcacatgc gagcccaacc cgcgcctcaa 28320

cttctacccc gtatttgccg tgccagaggt gcttgccacc tatcacatct ttttccaaaa 28380

ctgcaagata cccctatcct gccgtgccaa ccgcagccga gcggacaagc agctggcctt 28440

gcggcagggc gctgtcatac ctgatatcgc ctcgctcaac gaagtgccaa aaatctttga 28500

gggtcttgga cgcgacgaga agcgcgcggc aaacgctctg caacaggaaa acagcgaaaa 28560

tgaaagtcac tctggagtgt tggtggaact cgagggtgac aacgcgcgcc tagccgtact 28620

aaaacgcagc atcgaggtca cccactttgc ctacccggca cttaacctac cccccaaggt 28680

catgagcaca gtcatgagtg agctgatcgt gcgccgtgcg cagcccctgg agagggatgc 28740

aaatttgcaa gaacaaacag aggagggcct acccgcagtt ggcgacgagc agctagcgcg 28800

ctggcttcaa acgcgcgagc ctgccgactt ggaggagcga cgcaaactaa tgatggccgc 28860

agtgctcgtt accgtggagc ttgagtgcat gcagcggttc tttgctgacc cggagatgca 28920

gcgcaagcta gaggaaacat tgcactacac ctttcgacag ggctacgtac gccaggcctg 28980

caagatctcc aacgtggagc tctgcaacct ggtctcctac cttggaattt tgcacgaaaa 29040

ccgccttggg caaaacgtgc ttcattccac gctcaagggc gaggcgcgcc gcgactacgt 29100

ccgcgactgc gtttacttat ttctatgcta cacctggcag acggccatgg gcgtttggca 29160

gcagtgcttg gaggagtgca acctcaagga gctgcagaaa ctgctaaagc aaaacttgaa 29220

ggacctatgg acggccttca acgagcgctc cgtggccgcg cacctggcgg acatcatttt 29280

ccccgaacgc ctgcttaaaa ccctgcaaca gggtctgcca gacttcacca gtcaaagcat 29340

gttgcagaac tttaggaact ttatcctaga gcgctcagga atcttgcccg ccacctgctg 29400

tgcacttcct agcgactttg tgcccattaa gtaccgcgaa tgccctccgc cgctttgggg 29460

ccactgctac cttctgcagc tagccaacta ccttgcctac cactctgaca taatggaaga 29520

cgtgagcggt gacggtctac tggagtgtca ctgtcgctgc aacctatgca ccccgcaccg 29580

ctccctggtt tgcaattcgc agctgcttaa cgaaagtcaa attatcggta cctttgagct 29640

gcagggtccc tcgcctgacg aaaagtccgc ggctccgggg ttgaaactca ctccggggct 29700

gtggacgtcg gcttaccttc gcaaatttgt acctgaggac taccacgccc acgagattag 29760

gttctacgaa gaccaatccc gcccgcctaa tgcggagctt accgcctgcg tcattaccca 29820

gggccacatt cttggccaat tgcaagccat caacaaagcc cgccaagagt ttctgctacg 29880

aaagggacgg ggggtttact tggaccccca gtccggcgag gagctcaacc caatcccccc 29940

gccgccgcag ccctatcagc agcagccgcg ggcccttgct tcccaggatg gcacccaaaa 30000

agaagctgca gctgccgccg ccacccacgg acgaggagga atactgggac agtcaggcag 30060

aggaggtttt ggacgaggag gaggaggaca tgatggaaga ctgggagagc ctagacgagg 30120

aagcttccga ggtcgaagag gtgtcagacg aaacaccgtc accctcggtc gcattcccct 30180

cgccggcgcc ccagaaatcg gcaaccggtt ccagcatggc tacaacctcc gctcctcagg 30240

cgccgccggc actgcccgtt cgccgaccca accgtagatg ggacaccact ggaaccaggg 30300

ccggtaagtc caagcagccg ccgccgttag cccaagagca acaacagcgc caaggctacc 30360

gctcatggcg cgggcacaag aacgccatag ttgcttgctt gcaagactgt gggggcaaca 30420

tctccttcgc ccgccgcttt cttctctacc atcacggcgt ggccttcccc cgtaacatcc 30480

tgcattacta ccgtcatctc tacagcccat actgcaccgg cggcagcggc agcaacagca 30540

gcggccacac agaagcaaag gcgaccggat agcaagactc tgacaaagcc caagaaatcc 30600

acagcggcgg cagcagcagg aggaggagcg ctgcgtctgg cgcccaacga acccgtatcg 30660

acccgcgagc ttagaaacag gatttttccc actctgtatg ctatatttca acagagcagg 30720

ggccaagaac aagagctgaa aataaaaaac aggtctctgc gatccctcac ccgcagctgc 30780

ctgtatcaca aaagcgaaga tcagcttcgg cgcacgctgg aagacgcgga ggctctcttc 30840

agtaaatact gcgcgctgac tcttaaggac tagtttcgcg ccctttctca aatttaagcg 30900

cgaaaactac gtcatctcca gcggccacac ccggcgccag cacctgttgt cagcgccatt 30960

atgagcaagg aaattcccac gccctacatg tggagttacc agccacaaat gggacttgcg 31020

gctggagctg cccaagacta ctcaacccga ataaactaca tgagcgcggg accccacatg 31080

atatcccggg tcaacggaat acgcgcccac cgaaaccgaa ttctcctgga acaggcggct 31140

attaccacca cacctcgtaa taaccttaat ccccgtagtt ggcccgctgc cctggtgtac 31200

caggaaagtc ccgctcccac cactgtggta cttcccagag acgcccaggc cgaagttcag 31260

atgactaact caggggcgca gcttgcgggc ggctttcgtc acagggtgcg gtcgcccggg 31320

cagggtataa ctcacctgac aatcagaggg cgaggtattc agctcaacga cgagtcggtg 31380

agctcctcgc ttggtctccg tccggacggg acatttcaga tcggcggcgc cggccgctct 31440

tcattcacgc ctcgtcaggc aatcctaact ctgcagacct cgtcctctga gccgcgctct 31500

ggaggcattg gaactctgca atttattgag gagtttgtgc catcggtcta ctttaacccc 31560

ttctcgggac ctcccggcca ctatccggat caatttattc ctaactttga cgcggtaaag 31620

gactcggcgg acggctacga ctgaatgtta agtggagagg cagagcaact gcgcctgaaa 31680

cacctggtcc actgtcgccg ccacaagtgc tttgcccgcg actccggtga gttttgctac 31740

tttgaattgc ccgaggatca tatcgagggc ccggcgcacg gcgtccggct taccgcccag 31800

ggagagcttg cccgtagcct gattcgggag tttacccagc gccccctgct agttgagcgg 31860

gacaggggac cctgtgttct cactgtgatt tgcaactgtc ctaaccctgg attacatcaa 31920

gatcctctag ttaatgtcag gtcgcctaag tcgattaact agagtacccg gggatcttat 31980

tccctttaac taataaaaaa aaataataaa gcatcactta cttaaaatca gttagcaaat 32040

ttctgtccag tttattcagc agcacctcct tgccctcctc ccagctctgg tattgcagct 32100

tcctcctggc tgcaaacttt ctccacaatc taaatggaat gtcagtttcc tcctgttcct 32160

gtccatccgc acccactatc ttcatgttgt tgcagatgaa gcgcgcaaga ccgtctgaag 32220

ataccttcaa ccccgtgtat ccatatgaca cggaaaccgg tcctccaact gtgccttttc 32280

ttactcctcc ctttgtatcc cccaatgggt ttcaagagag tccccctggg gtactctctt 32340

tgcgcctatc cgaacctcta gttacctcca atggcatgct tgcgctcaaa atgggcaacg 32400

gcctctctct ggacgaggcc ggcaacctta cctcccaaaa tgtaaccact gtgagcccac 32460

ctctcaaaaa aaccaagtca aacataaacc tggaaatatc tgcacccctc acagttacct 32520

cagaagccct aactgtggct gccgccgcac ctctaatggt cgcgggcaac acactcacca 32580

tgcaatcaca ggccccgcta accgtgcacg actccaaact tagcattgcc acccaaggac 32640

ccctcacagt gtcagaagga aagctagccc tgcaaacatc aggccccctc accaccaccg 32700

atagcagtac ccttactatc actgcctcac cccctctaac tactgccact ggtagcttgg 32760

gcattgactt gaaagagccc atttatacac aaaatggaaa actaggacta aagtacgggg 32820

ctcctttgca tgtaacagac gacctaaaca ctttgaccgt agcaactggt ccaggtgtga 32880

ctattaataa tacttccttg caaactaaag ttactggagc cttgggtttt gattcacaag 32940

gcaatatgca acttaatgta gcaggaggac taaggattga ttctcaaaac agacgcctta 33000

tacttgatgt tagttatccg tttgatgctc aaaaccaact aaatctaaga ctaggacagg 33060

gccctctttt tataaactca gcccacaact tggatattaa ctacaacaaa ggcctttact 33120

tgtttacagc ttcaaacaat tccaaaaagc ttgaggttaa cctaagcact gccaaggggt 33180

tgatgtttga cgctacagcc atagccatta atgcaggaga tgggcttgaa tttggttcac 33240

ctaatgcacc aaacacaaat cccctcaaaa caaaaattgg ccatggccta gaatttgatt 33300

caaacaaggc tatggttcct aaactaggaa ctggccttag ttttgacagc acaggtgcca 33360

ttacagtagg aaacaaaaat aatgataagc taactttgtg gaccggaata aaccctccac 33420

ctaactgtca aattgtggaa aacactaata caaatgatgg caaacttact ttagtattag 33480

taaaaaatgg agggcttgtt aatggctacg tgtctctagt tggtgtatca gacactgtga 33540

accaaatgtt cacacaaaag acagcaaaca tccaattaag attatatttt gactcttctg 33600

gaaatctatt aactgaggaa tcagacttaa aaattccact taaaaataaa tcttctacag 33660

cgaccagtga aactgtagcc agcagcaaag cctttatgcc aagtactaca gcttatccct 33720

tcaacaccac tactagggat agtgaaaact acattcatgg aatatgttac tacatgacta 33780

gttatgatag aagtctattt cccttgaaca tttctataat gctaaacagc cgtatgattt 33840

cttccaatgt tgcctatgcc atacaatttg aatggaatct aaatgcaagt gaatctccag 33900

aaagcaacat agctacgctg accacatccc cctttttctt ttcttacatt acagaagacg 33960

acaactaaag aatcgtttgt gttatgtttc aacgtgttta tttttcaatt gcagaaaatt 34020

tcaagtcatt tttcattcag tagtatagcc ccaccaccac atagcttata cagatcaccg 34080

taccttaatc aaactcacag aaccctagta ttcaacctgc cacctccctc ccaacacaca 34140

gagtacacag tcctttctcc ccggctggcc ttaaaaagca tcatatcatg ggtaacagac 34200

atattcttag gtgttatatt ccacacggtt tcctgtcgag ccaaacgctc atcagtgata 34260

ttaataaact ccccgggcag ctcacttaag ttcatgtcgc tgtccagctg ctgagccaca 34320

ggctgctgtc caacttgcgg ttgcttaacg ggcggcgaag gagaagtcca cgcctacatg 34380

ggggtagagt cataatcgtg catcaggata gggcggtggt gctgcagcag cgcgcgaata 34440

aactgctgcc gccgccgctc cgtcctgcag gaatacaaca tggcagtggt ctcctcagcg 34500

atgattcgca ccgcccgcag cataaggcgc cttgtcctcc gggcacagca gcgcaccctg 34560

atctcactta aatcagcaca gtaactgcag cacagcacca caatattgtt caaaatccca 34620

cagtgcaagg cgctgtatcc aaagctcatg gcggggacca cagaacccac gtggccatca 34680

taccacaagc gcaggtagat taagtggcga cccctcataa acacgctgga cataaacatt 34740

acctcttttg gcatgttgta attcaccacc tcccctctga ttaaacatgg cgccatccac 34800

caccatccta aaccagctgg ccaaaacctg cccgccggct atacactgca gggaaccggg 34860

actggaacaa tgacagtgga gagcccagga ctcgtaacca tggatcatca tgctcgtcat 34920

gatatcaatg ttggcacaac acaggcacac gtgcatacac ttcctcagga ttacaagctc 34980

ctcccgcgtt agaaccatat cccagggaac aacccattcc tgaatcagcg taaatcccac 35040

actgcaggga agacctcgca cgtaactcac gttgtgcatt gtcaaagtgt tacattcggg 35100

cagcagcgga tgatcctcca gtatggtagc gcgggtttct gtctcaaaag gaggtagacg 35160

atccctactg tacggagtgc gccgagacaa ccgagatcgt gttggtcgta gtgtcatgcc 35220

aaatggaacg ccggacgtag tcatatttcc tgaagcaaaa ccaggtgcgg gcgtgacaaa 35280

cagatctgcg tctccggtct cgccgcttag atcgctctgt gtagtagttg tagtatatcc 35340

actctctcaa agcatccagg cgccccctgg cttcgggttc tatgtaaact ccttcatgcg 35400

ccgctgccct gataacatcc accaccgcag aataagccac acccagccaa cctacacatt 35460

cgttctgcga gtcacacacg ggaggagcgg gaagagctgg aagaaccatg ttttttttt 35520

tattccaaaa gattatccaa aacctcaaaa tgaagatcta ttaagtgaac gcgctcccct 35580

ccggtggcgt ggtcaaactc tacagccaaa gaacagataa tggcatttgt aagatgttgc 35640

acaatggctt ccaaaaggca aacggccctc acgtccaagt ggacgtaaag gctaaaccct 35700

tcagggtgaa tctcctctat aaacattcca gcaccttcaa ccatgcccaa ataattctca 35760

tctcgccacc ttctcaatat atctctaagc aaatcccgaa tattaagtcc ggccattgta 35820

aaaatctgct ccagagcgcc ctccaccttc agcctcaagc agcgaatcat gattgcaaaa 35880

attcaggttc ctcacagacc tgtataagat tcaaaagcgg aacattaaca aaaataccgc 35940

gatcccgtag gtcccttcgc agggccagct gaacataatc gtgcaggtct gcacggacca 36000

gcgcggccac ttccccgcca ggaaccatga caaaagaacc cacactgatt atgacacgca 36060

tactcggagc tatgctaacc agcgtagccc cgatgtaagc ttgttgcatg ggcggcgata 36120

taaaatgcaa ggtgctgctc aaaaaatcag gcaaagcctc gcgcaaaaaa gaaagcacat 36180

cgtagtcatg ctcatgcaga taaaggcagg taagctccgg aaccaccaca gaaaaagaca 36240

ccatttttct ctcaaacatg tctgcgggtt tctgcataaa cacaaaataa aataacaaaa 36300

aaacatttaa acattagaag cctgtcttac aacaggaaaa acaaccctta taagcataag 36360

acggactacg gccatgccgg cgtgaccgta aaaaaactgg tcaccgtgat taaaaagcac 36420

caccgacagc tcctcggtca tgtccggagt cataatgtaa gactcggtaa acacatcagg 36480

ttgattcaca tcggtcagtg ctaaaaagcg accgaaatag cccgggggaa tacatacccg 36540

caggcgtaga gacaacatta cagcccccat aggaggtata acaaaattaa taggagagaa 36600

aaacacataa acacctgaaa aaccctcctg cctaggcaaa atagcaccct cccgctccag 36660

aacaacatac agcgcttcca cagcggcagc cataacagtc agccttacca gtaaaaaaga 36720

aaacctatta aaaaaacacc actcgacacg gcaccagctc aatcagtcac agtgtaaaaa 36780

agggccaagt gcagagcgag tatatatagg actaaaaaat gacgtaacgg ttaaagtcca 36840

caaaaaacac ccagaaaacc gcacgcgaac ctacgcccag aaacgaaagc caaaaaaccc 36900

acaacttcct caaatcgtca cttccgtttt cccacgttac gtcacttccc attttaagaa 36960

aactacaatt cccaacacat acaagttact ccgccctaaa acctacgtca cccgccccgt 37020

tcccacgccc cgcgccacgt cacaaactcc acccctcat tatcatattg gcttcaatcc 37080

aaaataaggt atattattga tgatg 37105

<210> 7
<211> 37105
<212> DNA
<213> Artificial Sequence

<220>
<223> Adk35R2-Spike/E4orf6-E4dl355(E4re#2)

<400> 7
ttaattaaca tcatcaataa tataccttat tttggattga agccaatatg ataatgaggg 60

ggtggagttt gtgacgtggc gcggggcgtg ggaacggggc gggtgacgta gtagtgtggc 120

ggaagtgtga tgttgcaagt gtggcggaac acatgtaagc gacggatgtg gcaaaagtga 180

cgtttttggt gtgcgccggt gtacacagga agtgacaatt ttcgcgcggt ttaggcgga 240

tgttgtagta aatttgggcg taaccgagta agatttggcc attttcgcgg gaaaactgaa 300

taagaggaag tgaaatctga ataattttgt gttactcata gcgcgtaata atttcctcag 360

aagccataga gcccaccgca tccccagcat gcctgctatt gtcttcccaa tcctcccccc 420

tgctgtcctg ccccacccca ccccccagaa tagaatgaca cctactcaga caatgcgatg 480

caatttcctc attttattag gaaaggacag tgggagtggc accttccagg gtcaaggaag 540

gcacgggggga ggggcaaaca acagatggct ggcaactaga aggcacagtc gaggctgatc 600

agcgagctct agagaattga tccccaagct tctacatggg ggtagagtca taatcgtgca 660

tcaggatagg gcggtggtgc tgcagcagcg cgcgaataaa ctgctgccgc cgccgctccg 720

tcctgcagga atacaacatg gcagtggtct cctcagcgat gattcgcacc gcccgcagca 780

taaggcgcct tgtcctccgg gcacagcagc gcaccctgat ctcacttaaa tcagcacagt 840

aactgcagca cagcaccaca atattgttca aaatcccaca gtgcaaggcg ctgtatccaa 900

agctcatggc ggggaccaca gaacccacgt ggccatcata ccacaagcgc aggtagatta 960

agtggcgacc cctcataaac acgctggaca taaacattac ctcttttggc atgttgtaat 1020

tcaccacctc ccggtaccat ataaacctct gattaaacat ggcgccatcc accaccatcc 1080

taaaccagct ggccaaaacc tgcccgccgg ctatacactg cagggaaccg ggactggaac 1140

aatgacagtg gagagcccag gactcgtaac catggatcat catgctcgtc atgatatcaa 1200

tgttggcaca acacaggcac acgtgcatac acttcctcag gattacaagc tcctcccgcg 1260

ttagaaccat atcccaggga acaacccatt cctgaatcag cgtaaatccc acactgcagg 1320

gaagacctcg cacgtaactc acgttgtgca ttgtcaaagt gttacattcg ggcagcagcg 1380

gatgatcctc cagtatggta gcgcgggttt ctgtctcaaa aggaggtaga cgatccctac 1440

tgtacggagt gcgccgagac aaccgagatc gtgttggtcg tagtgtcatg ccaaatggaa 1500

cgccggacgt agtcatggtg gccagcttgg ggtagttttc acgacacctt aaatggaaga 1560

aaaaaacttt gaaccactgt ctgaggcttg agaatgaacc aagatccaaa ctcaaaaagg 1620

gcaaattcca aggagaatta catcaagtgc caagctggcc taacttcagt ctccacccac 1680

tcagtatggg gaaactccat cgcataaaac ccctcccccc aacctaaaga cgacgtactc 1740

caaaagctcg agaactaatc gaggtgcctg gacggcgccc ggtactccgt ggagtcacat 1800

gaagcgacgg ctgaggacgg aaaggccctt ttcctttgtg tgggtgactc acccgcccgc 1860

tctcccgagc gccgcgtcct ccattttgag ctccctgcag cagggccggg aagcggccat 1920

ctttccgctc acgcaactgg tgccgaccgg gccagccttg ccgcccaggg cggggcgata 1980

cacggcggcg cgaggccagg caccagagca ggccggccag cttgagacta cccccgtccg 2040

attctcggtg gccgcgctcg caggccccgc ctcgccgaac atgtgcgctg ggacgcacgg 2100

gccccgtcgc cgcccgcggc cccaaaaacc gaaataccag tgtgcagatc ttggcccgca 2160

tttacaagac tatcttgcca gaaaaaaagc gtcgcagcag gtcatcaaaa attttaaatg 2220

gctagagact tatcgaaagc agcgagacag gcgcgaaggt gccaccagat tcgcacgcgg 2280

cggccccagc gcccaggcca agcctcaact caagcacgag gcgaaggggc tccttaagcg 2340

caaggcctcg aactctccca cccacttcca acccgaagct cgggatcaag aatcacgtac 2400

tgcagccagg ggcgtggaag taattcaagg cacgcaaggg ccataacccg taaagaggcc 2460

aggcccgcgg gaaccacaca cggcacttac ctgtgttctg gcggcaaacc cgttgcgaaa 2520

aagaacgttc acggcgacta ctgcacttat atacggttct cccccaccct cgggaaaaag 2580

gcggagccag tacacgacat cactttccca gtttaccccg cgccaccttc tctaggcacc 2640

ggttcaattg ccgacccctc cccccaactt ctcggggact gtgggcgatg tgcgctctgc 2700

ccactgacgg gcaccggagc gatccgcgtt aagatacatt gatgagtttg gacaaaccac 2760

aactagaatg cagtgaaaaa aatgctttat ttgtgaaatt tgtgatgcta ttgctttatt 2820

tgtaaccatt ataagctgca ataaacaagt taacaacaac aattgcattc attttatgtt 2880

tcaggttcag ggggaggtgt gggaggtttt ttaaagcaag taaaacctct acaaatgtgg 2940

tatggctgat tatgatcaat tttcatggcc acttgatgta ttgttcatat ttgcccagtt 3000

cttggaggtc aatcagggac tcattcaggt tcttagccac ctcattcagt ctgtcaatct 3060

ccttctggat gttcaccaca gaggcattga tgccagagat gtctcccagg tccacatcag 3120

ggctggtgtg gttcttgaag tatttgtcca gttcctcctt gaaggagtcc agttcaggtt 3180

ggagtgggtc atagactgtg ttgttcacaa tgccaatcac cacatcacag ttgccagaca 3240

caaaggtgtt gtctgtggtg ataatctgtg gttcatagaa gttcctctgg gtcacaaacc 3300

agtgggtgcc attgctcaca aacactccct cccttggaaa gtgagccttg ccatcatggc 3360

agatggcagg ggctgtggtg aagttcttct cctgggcagg cacataggtc acatgcagga 3420

acaccactcc atgaggggca gactgtggaa aactcatcag gtggtagccc ttgccacaga 3480

agtccaccct cttgctttgt cccagcacac actcactcat cttggtggca gccaggttgg 3540

cagatgccct aatctcagca gccctgataa gttgttgggt cacataggtt tggagggatt 3600

ggagtctgcc tgtaatcagt ctgtcaatct ggacctcagc ctccaccttg tccagtctgc 3660

tcaggatgtc attcagcaca gaggagatgg ctccaaagtt gctggaaagt tgcttcacca 3720

gggtgttcag agcctgggca ttctggttca ccacatcttg gagtttgccc agggcagagg 3780

ctgtgctgga cagggagtcc tgaatcttgc caatggcaga gttgaactgg ttggcaatca 3840

gtttctggtt ctcatagagc acattctggg tcactccaat gccattgaac ctgtaagcca 3900

tctgcatagc aaatgggatt tggagggctg ctcctgctcc aaaggtccag ccagaggtga 3960

tggtgccagc cagcagggca gaggtgtatt gggcaatcat ctcatctgtc agcagtggag 4020

gcagcactgt cagtccattg aacttctggg cacaaatcag gtccctggca gcaatgtctc 4080

ccagacagtc tccatattgc ttgatgaagc cagcatcagc cagggtcacc ttgttgaaca 4140

gcaggtcctc aatgaaggac ctcttgcttg gcttgcttgg gtcaggcaga atctggctga 4200

agttgaagcc tccaaagtcc ttgattggag gtgtcttgta aatctgcttc acctgggcaa 4260

acacctcctg ggtgttcttg tcctgttcca cagcaatgcc tgtcagagcc ctgttaagtt 4320

gggtacagaa ggagccatat tggagcagca ggttgctaca ctctgtgctg tctccacaga 4380

tatacattgt acagtccaca gaggtcttgg tcatactcac aggcagaatc tctgtggtca 4440

cagagatggt gaagttggtt gggatggcaa tgctgttgtt gctgtaagcc acagagttct 4500

ctgctcccag actcattgtg taggcaatga tgctctggct tgccacagac ctcgacccac 4560

cgccaccggt ctgggtctgg taggaggcac agatgcctgc tccaattggg atgtcacact 4620

cataggagtt gttcacatgc tctgctccaa tcagacagcc agccctggtc tggaacacat 4680

tgctgcctgt gctgtagacc ctccaggttg gtgtaagttg gtcagcatgg atagccacag 4740

gcacctcagt acagttcaca tcctggtaga gcacagccac ctggttgctg gtgttggtgc 4800

caggtgtaat cacagacact cctccaaagg aacatggtgt gatgtccaga atctccaagg 4860

tctgtgggtc cctcacagca tctgtggtgt cagcaatgtc cctgccaaac tgttggaatg 4920

gcaggaactt cttgttgctc tctgtcagca ctcctgtgcc tgtcagtcca ttgaagttga 4980

agttcacaca cttgttcttc accaggttgg tgctcttctt tggtccacac actgtggcag 5040

gggcatggag cagttcaaag gacagcacca ccaccctgta tggttggtag cccactccat 5100

tggttggttg gaagccatag gattggagtg gaaagtaaca gttgaagccc tccactccat 5160

tacatggtgt gctgccagcc tggtaaatct ctgtgctgat gtccctctca aatggtttca 5220

ggttgctctt cctgaacagt ctgtagaggt agttgtagtt gcctcccacc ttgctgtcca 5280

ggttgttgct gttccaggca atcacacagc ctgtgaagtc atcaggcagt ttgtagttgt 5340

agtcagcaat cttgcctgtt tgtccagggg caatctgtct cacctcatct cccctaatca 5400

caaaggagtc agcatagaca ttggtgaaac acaggtcatt cagtttggtt gggctcactc 5460

cataacactt gaaggtgctg aaggaggcag agttgtagag cacagagtag tcagccacac 5520

agttgctaat cctcttcctg ttccaggcat agacagaggc aaacctggtg gcattgaaca 5580

cctctccaaa tggacacagg ttggtgatgt ttggaaacct cacaatgctc tctgttggtt 5640

ggaccctgaa gttgctggtc tggtagatgc ccttctccac tgtgaaggat ttcagggtac 5700

acttggtctc agacagtggg tccagggcac agtccacagc atctgtgatg gtgccattct 5760

cattgtattt cagcaggaag gtccttggtt ggaggtagcc cacatagtag gctgctgctc 5820

ctgctgtcca gccagaggag gagtctccag gtgtcaggta ggacctgtgc agagccagca 5880

gggtctggaa cctggtgatg ttgatgccaa ttggcaggtc caccagtggt tccaaggcag 5940

agaagccctg tggcaggtcc ctcaccaggt tgattggtgt gtgtttgctg taaatcttga 6000

agtagccatc aatgttcttg aacacaaact ccctcaggtt cttgaagttg ccctgcttgc 6060

cctccaagtc catcaggaat ggttggctca catattcaaa ggtacagttg ttggcagagg 6120

agtagaccct gaactcagac tccatccagg acttgttgtt cttgtggtag tagactccca 6180

ggaatgggtc attacagaac tggaactcac acaccttaat caccacattg gtggcattgt 6240

tcacaatcag cagggactgg gtcttgctgt ccagggtggt gccaaaaatc cagcccctga 6300

tgatgttgct cttctctgtg ctggcaaagt agactccatc attgaatggc agcacagggt 6360

tgtcaaacct cttggtgcca ttggtgccag acacatggat ggcatggaac caggtcacat 6420

tgctgaagaa tggcaggaac aggtcctggg tgctgtgcag cacagaggac ctgaacacct 6480

tgtcagggta gtagactccc ctggtgaagg agttggtgta ggcaggagga agttgggtcc 6540

tggtggtcag gttcacacac tggctggaca ccagtggcag cagcaccagg aacacaaaca 6600

tggtggcaaa tcggaggctg gatcggtccc ggtgtcttct atggaggtca aaacagcgtg 6660

gatggcgtct ccaggcgatc tgacggttca ctaaacgagc tcgtcgacga tctctatcac 6720

tgatagggag atctctatca ctgataggga gagctctgct tatatagacc tcccaccgta 6780

cacgcctacc gcccatttgc gtcaatgggg cggagttgtt acgacatttt ggaaagtccc 6840

gttgattttg gtgccaaaac aaactcccat tgacgtcaat ggggtggaga cttggaaatc 6900

cccgtgagtc aaaccgctat ccacgcccat tgatgtactg ccaaaaccgc atcaccatgg 6960

taatagcgat gactaatacg tagatgtact gccaagtagg aaagtcccat aaggtcatgt 7020

actgggcata atgccaggcg ggccatttac cgtcattgac gtcaataggg ggcgtacttg 7080

gcatatgata cacttgatgt actgccaagt gggcagttta ccgtaaatac tccacccatt 7140

gacgtcaatg gaaagtccct attggcgtta ctatgggaac atacgtcatt attgacgtca 7200

atgggcgggg gtcgttgggc ggtcagccag gcgggccatt taccgtaagt tatgtaacgc 7260

ggaactccat atatgggcta tgaactaatg accccgtaat tgattactat tacagaaatt 7320

gggcgtggct taagggtggg aaagaatata taaggtgggg gtcttatgta gttttgtatc 7380

tgttttgcag cagccgccgc cgccatgagc accaactcgt ttgatggaag cattgtgagc 7440

tcatatttga caacgcgcat gcccccatgg gccggggtgc gtcagaatgt gatgggctcc 7500

agcattgatg gtcgccccgt cctgcccgca aactctacta ccttgaccta cgagaccgtg 7560

tctggaacgc cgttggagac tgcagcctcc gccgccgctt cagccgctgc agccaccgcc 7620

cgcgggattg tgactgactt tgctttcctg agcccgcttg caagcagtgc agcttcccgt 7680

tcatccgccc gcgatgacaa gttgacggct cttttggcac aattggattc tttgacccgg 7740

gaacttaatg tcgtttctca gcagctgttg gatctgcgcc agcaggtttc tgccctgaag 7800

gcttcctccc ctcccaatgc ggtttaaaac ataaataaaa aaccagactc tgtttggatt 7860

tggatcaagc aagtgtcttg ctgtctttat ttaggggttt tgcgcgcgcg gtaggcccgg 7920

gaccagcggt ctcggtcgtt gagggtcctg tgtatttttt ccaggacgtg gtaaaggtga 7980

ctctggatgt tcagatacat gggcataagc ccgtctctgg ggtggaggta gcaccactgc 8040

agagcttcat gctgcggggt ggtgttgtag atgatccagt cgtagcagga gcgctgggcg 8100

tggtgcctaa aaatgtcttt cagtagcaag ctgattgcca ggggcaggcc cttggtgtaa 8160

gtgtttacaa agcggttaag ctgggatggg tgcatacgtg gggatatgag atgcatcttg 8220

gactgtattt ttaggttggc tatgttccca gccatatccc tccggggatt catgttgtgc 8280

agaaccacca gcacagtgta tccggtgcac ttgggaaatt tgtcatgtag cttagaagga 8340

aatgcgtgga agaacttgga gacgcccttg tgacctccaa gattttccat gcattcgtcc 8400

ataatgatgg caatgggccc acgggcggcg gcctgggcga agatatttct gggatcacta 8460

acgtcatagt tgtgttccag gatgagatcg tcataggcca tttttacaaa gcgcgggcgg 8520

agggtgccag actgcggtat aatggttcca tccggcccag gggcgtagtt accctcacag 8580

atttgcattt cccacgcttt gagttcagat ggggggatca tgtctacctg cggggcgatg 8640

aagaaaacgg tttccggggt aggggagatc agctgggaag aaagcaggtt cctgagcagc 8700

tgcgacttac cgcagccggt gggcccgtaa atcacaccta ttaccgggtg caactggtag 8760

ttaagagagc tgcagctgcc gtcatccctg agcaggggggg ccacttcgtt aagcatgtcc 8820

ctgactcgca tgttttccct gaccaaatcc gccagaaggc gctcgccgcc cagcgatagc 8880

agttcttgca aggaagcaaa gtttttcaac ggtttgagac cgtccgccgt aggcatgctt 8940

ttgagcgttt gaccaagcag ttccaggcgg tcccacagct cggtcacctg ctctacggca 9000

tctcgatcca gcatatctcc tcgtttcgcg ggttggggcg gctttcgctg tacggcagta 9060

gtcggtgctc gtccagacgg gccagggtca tgtctttcca cgggcgcagg gtcctcgtca 9120

gcgtagtctg ggtcacggtg aaggggtgcg ctccgggctg cgcgctggcc agggtgcgct 9180

tgaggctggt cctgctggtg ctgaagcgct gccggtcttc gccctgcgcg tcggccaggt 9240

agcatttgac catggtgtca tagtccagcc cctccgcggc gtggcccttg gcgcgcagct 9300

tgcccttgga ggaggcgccg cacgaggggc agtgcagact tttgagggcg tagagcttgg 9360

gcgcgagaaa taccgattcc ggggagtagg catccgcgcc gcaggccccg cagacggtct 9420

cgcattccac gagccaggtg agctctggcc gttcggggtc aaaaaccagg tttcccccat 9480

gctttttgat gcgtttctta cctctggttt ccatgagccg gtgtccacgc tcggtgacga 9540

aaaggctgtc cgtgtccccg tatacagact tgagaggcct gtcctcgagc ggtgttccgc 9600

ggtcctcctc gtatagaaac tcggaccact ctgagacaaa ggctcgcgtc caggccagca 9660

cgaaggaggc taagtgggag gggtagcggt cgttgtccac tagggggtcc actcgctcca 9720

gggtgtgaag acacatgtcg ccctcttcgg catcaaggaa ggtgattggt ttgtaggtgt 9780

aggccacgtg accgggtgtt cctgaagggg ggctataaaa gggggtgggg gcgcgttcgt 9840

cctcactctc ttccgcatcg ctgtctgcga gggccagctg ttggggtgag tactccctct 9900

gaaaagcggg catgacttct gcgctaagat tgtcagtttc caaaaacgag gaggatttga 9960

tattcacctg gcccgcggtg atgcctttga gggtggccgc atccatctgg tcagaaaaga 10020

caatcttttt gttgtcaagc ttggtggcaa acgacccgta gagggcgttg gacagcaact 10080

tggcgatgga gcgcagggtt tggtttttgt cgcgatcggc gcgctccttg gccgcgatgt 10140

ttagctgcac gtattcgcgc gcaacgcacc gccattcggg aaagacggtg gtgcgctcgt 10200

cgggcaccag gtgcacgcgc caaccgcggt tgtgcagggt gacaaggtca acgctggtgg 10260

ctacctctcc gcgtaggcgc tcgttggtcc agcagaggcg gccgcccttg cgcgagcaga 10320

atggcggtag ggggtctagc tgcgtctcgt ccgggggggtc tgcgtccacg gtaaagaccc 10380

cgggcagcag gcgcgcgtcg aagtagtcta tcttgcatcc ttgcaagtct agcgcctgct 10440

gccatgcgcg ggcggcaagc gcgcgctcgt atgggttgag tgggggaccc catggcatgg 10500

ggtgggtgag cgcggaggcg tacatgccgc aaatgtcgta aacgtagagg ggctctctga 10560

gtattccaag atatgtaggg tagcatcttc caccgcggat gctggcgcgc acgtaatcgt 10620

atagttcgtg cgagggagcg aggaggtcgg gaccgaggtt gctacgggcg ggctgctctg 10680

ctcggaagac tatctgcctg aagatggcat gtgagttgga tgatatggtt ggacgctgga 10740

agacgttgaa gctggcgtct gtgagaccta ccgcgtcacg cacgaaggag gcgtaggagt 10800

cgcgcagctt gttgaccagc tcggcggtga cctgcacgtc tagggcgcag tagtccaggg 10860

tttccttgat gatgtcatac ttatcctgtc cctttttttt ccacagctcg cggttgagga 10920

caaactcttc gcggtctttc cagtactctt ggatcggaaa cccgtcggcc tccgaacggt 10980

aagagcctag catgtagaac tggttgacgg cctggtaggc gcagcatccc ttttctacgg 11040

gtagcgcgta tgcctgcgcg gccttccgga gcgaggtgtg ggtgagcgca aaggtgtccc 11100

tgaccatgac tttgaggtac tggtatttga agtcagtgtc gtcgcatccg ccctgctccc 11160

agagcaaaaa gtccgtgcgc tttttggaac gcggatttgg cagggcgaag gtgacatcgt 11220

tgaagagtat ctttcccgcg cgaggcataa agttgcgtgt gatgcggaag ggtcccggca 11280

cctcggaacg gttgttaatt acctgggcgg cgagcacgat ctcgtcaaag ccgttgatgt 11340

tgtggcccac aatgtaaagt tccaagaagc gcgggatgcc cttgatggaa ggcaattttt 11400

taagttcctc gtaggtgagc tcttcagggg agctgagccc gtgctctgaa agggcccagt 11460

ctgcaagatg agggttggaa gcgacgaatg agctccacag gtcacgggcc attagcattt 11520

gcaggtggtc gcgaaaggtc ctaaactggc gacctatggc catttttct ggggtgatgc 11580

agtagaaggt aagcgggtct tgttcccagc ggtcccatcc aaggttcgcg gctaggtctc 11640

gcgcggcagt cactagaggc tcatctccgc cgaacttcat gaccagcatg aagggcacga 11700

gctgcttccc aaaggccccc atccaagtat aggtctctac atcgtaggtg acaaagagac 11760

gctcggtgcg aggatgcgag ccgatcggga agaactggat ctcccgccac caattggagg 11820

agtggctatt gatgtggtga aagtagaagt ccctgcgacg ggccgaacac tcgtgctggc 11880

ttttgtaaaa acgtgcgcag tactggcagc ggtgcacggg ctgtacatcc tgcacgaggt 11940

tgacctgacg accgcgcaca aggaagcaga gtgggaattt gagcccctcg cctggcgggt 12000

ttggctggtg gtcttctact tcggctgctt gtccttgacc gtctggctgc tcgaggggag 12060

ttacggtgga tcggaccacc acgccgcgcg agcccaaagt ccagatgtcc gcgcgcggcg 12120

gtcggagctt gatgacaaca tcgcgcagat gggagctgtc catggtctgg agctcccgcg 12180

gcgtcaggtc aggcgggagc tcctgcaggt ttacctcgca tagacgggtc agggcgcggg 12240

ctagatccag gtgataccta atttccaggg gctggttggt ggcggcgtcg atggcttgca 12300

agaggccgca tccccgcggc gcgactacgg taccgcgcgg cgggcggtgg gccgcggggg 12360

tgtccttgga tgatgcatct aaaagcggtg acgcgggcga gcccccggag gtaggggggg 12420

ctccggaccc gccgggagag ggggcagggg cacgtcggcg ccgcgcgcgg gcaggagctg 12480

gtgctgcgcg cgtaggttgc tggcgaacgc gacgacgcgg cggttgatct cctgaatctg 12540

gcgcctctgc gtgaagacga cgggcccggt gagcttgaac ctgaaagaga gttcgacaga 12600

atcaatttcg gtgtcgttga cggcggcctg gcgcaaaatc tcctgcacgt ctcctgagtt 12660

gtcttgatag gcgatctcgg ccatgaactg ctcgatctct tcctcctgga gatctccgcg 12720

tccggctcgc tccacggtgg cggcgaggtc gttggaaatg cgggccatga gctgcgagaa 12780

ggcgttgagg cctccctcgt tccagacgcg gctgtagacc acgccccctt cggcatcgcg 12840

ggcgcgcatg accacctgcg cgagattgag ctccacgtgc cgggcgaaga cggcgtagtt 12900

tcgcaggcgc tgaaagaggt agttgagggt ggtggcggtg tgttctgcca cgaagaagta 12960

cataacccag cgtcgcaacg tggattcgtt gatatccccc aaggcctcaa ggcgctccat 13020

ggcctcgtag aagtccacgg cgaagttgaa aaactgggag ttgcgcgccg acacggttaa 13080

ctcctcctcc agaagacgga tgagctcggc gacagtgtcg cgcacctcgc gctcaaaggc 13140

tacaggggcc tcttcttctt cttcaatctc ctcttccata agggcctccc cttcttcttc 13200

ttctggcggc ggtgggggag gggggacacg gcggcgacga cggcgcaccg ggaggcggtc 13260

gacaaagcgc tcgatcatct ccccgcggcg acggcgcatg gtctcggtga cggcgcggcc 13320

gttctcgcgg gggcgcagtt ggaagacgcc gcccgtcatg tcccggttat gggttggcgg 13380

ggggctgcca tgcggcaggg atacggcgct aacgatgcat ctcaacaatt gttgtgtagg 13440

tactccgccg ccgagggacc tgagcgagtc cgcatcgacc ggatcggaaa acctctcgag 13500

aaaggcgtct aaccagtcac agtcgcaagg taggctgagc accgtggcgg gcggcagcgg 13560

gcggcggtcg gggttgtttc tggcggaggt gctgctgatg atgtaattaa agtaggcggt 13620

cttgagacgg cggatggtcg acagaagcac catgtccttg ggtccggcct gctgaatgcg 13680

caggcggtcg gccatgcccc aggcttcgtt ttgacatcgg cgcaggtctt tgtagtagtc 13740

ttgcatgagc ctttctaccg gcacttcttc ttctccttcc tcttgtcctg catctcttgc 13800

atctatcgct gcggcggcgg cggagtttgg ccgtaggtgg cgccctcttc ctcccatgcg 13860

tgtgaccccg aagcccctca tcggctgaag cagggctagg tcggcgacaa cgcgctcggc 13920

taatatggcc tgctgcacct gcgtgagggt agactggaag tcatccatgt ccacaaagcg 13980

gtggtatgcg cccgtgttga tggtgtaagt gcagttggcc ataacggacc agttaacggt 14040

ctggtgaccc ggctgcgaga gctcggtgta cctgagacgc gagtaagccc tcgagtcaaa 14100

tacgtagtcg ttgcaagtcc gcaccaggta ctggtatccc accaaaaagt gcggcggcgg 14160

ctggcggtag aggggccagc gtagggtggc cggggctccg ggggcgagat cttccaacat 14220

aaggcgatga tatccgtaga tgtacctgga catccaggtg atgccggcgg cggtggtgga 14280

ggcgcgcgga aagtcgcgga cgcggttcca gatgttgcgc agcggcaaaa agtgctccat 14340

ggtcgggacg ctctggccgg tcaggcgcgc gcaatcgttg acgctctagc gtgcaaaagg 14400

agagcctgta agcgggcact cttccgtggt ctggtggata aattcgcaag ggtatcatgg 14460

cggacgaccg gggttcgagc cccgtatccg gccgtccgcc gtgatccatg cggttaccgc 14520

ccgcgtgtcg aacccaggtg tgcgacgtca gacaacgggg gagtgctcct tttggcttcc 14580

ttccaggcgc ggcggctgct gcgctagctt ttttggccac tggccgcgcg cagcgtaagc 14640

ggttaggctg gaaagcgaaa gcattaagtg gctcgctccc tgtagccgga gggttatttt 14700

ccaagggttg agtcgcggga cccccggttc gagtctcgga ccggccggac tgcggcgaac 14760

gggggtttgc ctccccgtca tgcaagaccc cgcttgcaaa ttcctccgga aacagggacg 14820

agccccttt ttgcttttcc cagatgcatc cggtgctgcg gcagatgcgc ccccctcctc 14880

agcagcggca agagcaagag cagcggcaga catgcagggc accctcccct cctcctaccg 14940

cgtcaggagg ggcgacatcc gcggttgacg cggcagcaga tggtgattac gaaccccgc 15000

ggcgccgggc ccggcactac ctggacttgg aggagggcga gggcctggcg cggctaggag 15060

cgccctctcc tgagcggcac ccaagggtgc agctgaagcg tgatacgcgt gaggcgtacg 15120

tgccgcggca gaacctgttt cgcgaccgcg agggagagga gcccgaggag atgcgggatc 15180

gaaagttcca cgcagggcgc gagctgcggc atggcctgaa tcgcgagcgg ttgctgcgcg 15240

aggaggactt tgagcccgac gcgcgaaccg ggattagtcc cgcgcgcgca cacgtggcgg 15300

ccgccgacct ggtaaccgca tacgagcaga cggtgaacca ggagattaac tttcaaaaaa 15360

gctttaacaa ccacgtgcgt acgcttgtgg cgcgcgagga ggtggctata ggactgatgc 15420

atctgtggga ctttgtaagc gcgctggagc aaaacccaaa tagcaagccg ctcatggcgc 15480

agctgttcct tatagtgcag cacagcaggg acaacgaggc attcagggat gcgctgctaa 15540

acatagtaga gcccgagggc cgctggctgc tcgatttgat aaacatcctg cagagcatag 15600

tggtgcagga gcgcagcttg agcctggctg acaaggtggc cgccatcaac tattccatgc 15660

ttagcctggg caagttttac gcccgcaaga tataccatac cccttacgtt cccatagaca 15720

aggaggtaaa gatcgagggg ttctacatgc gcatggcgct gaaggtgctt accttgagcg 15780

acgacctggg cgtttatcgc aacgagcgca tccacaaggc cgtgagcgtg agccggcggc 15840

gcgagctcag cgaccgcgag ctgatgcaca gcctgcaaag ggccctggct ggcacgggca 15900

gcggcgatag agaggccgag tcctactttg acgcgggcgc tgacctgcgc tgggccccaa 15960

gccgacgcgc cctggaggca gctggggccg gacctgggct ggcggtggca cccgcgcgcg 16020

ctggcaacgt cggcggcgtg gaggaatatg acgaggacga tgagtacgag ccagaggacg 16080

gcgagtacta agcggtgatg tttctgatca gatgatgcaa gacgcaacgg acccggcggt 16140

gcgggcggcg ctgcagagcc agccgtccgg ccttaactcc acggacgact ggcgccaggt 16200

catggaccgc atcatgtcgc tgactgcgcg caatcctgac gcgttccggc agcagccgca 16260

ggccaaccgg ctctccgcaa ttctggaagc ggtggtcccg gcgcgcgcaa accccacgca 16320

cgagaaggtg ctggcgatcg taaacgcgct ggccgaaaac agggccatcc ggcccgacga 16380

ggccggcctg gtctacgacg cgctgcttca gcgcgtggct cgttacaaca gcggcaacgt 16440

gcagaccaac ctggaccggc tggtgggggа tgtgcgcgag gccgtggcgc agcgtgagcg 16500

cgcgcagcag cagggcaacc tgggctccat ggttgcacta aacgccttcc tgagtacaca 16560

gcccgccaac gtgccgcggg gacaggagga ctacaccaac tttgtgagcg cactgcggct 16620

aatggtgact gagacaccgc aaagtgaggt gtaccagtct gggccagact atttttcca 16680

gaccagtaga caaggcctgc agaccgtaaa cctgagccag gctttcaaaa acttgcaggg 16740

gctgtggggg gtgcgggctc ccacaggcga ccgcgcgacc gtgtctagct tgctgacgcc 16800

caactcgcgc ctgttgctgc tgctaatagc gcccttcacg gacagtggca gcgtgtcccg 16860

ggacacatac ctaggtcact tgctgacact gtaccgcgag gccataggtc aggcgcatgt 16920

ggacgagcat actttccagg agattacaag tgtcagccgc gcgctggggc aggaggacac 16980

gggcagcctg gaggcaaccc taaactacct gctgaccaac cggcggcaga agatcccctc 17040

gttgcacagt ttaaacagcg aggaggagcg cattttgcgc tacgtgcagc agagcgtgag 17100

ccttaacctg atgcgcgacg gggtaacgcc cagcgtggcg ctggacatga ccgcgcgcaa 17160

catggaaccg ggcatgtatg cctcaaaccg gccgtttatc aaccgcctaa tggactactt 17220

gcatcgcgcg gccgccgtga accccgagta tttcaccaat gccatcttga acccgcactg 17280

gctaccgccc cctggtttct acaccggggg attcgaggtg cccgagggta acgatggatt 17340

cctctgggac gacatagacg acagcgtgtt ttccccgcaa ccgcagaccc tgctagagtt 17400

gcaacagcgc gagcaggcag aggcggcgct gcgaaaggaa agcttccgca ggccaagcag 17460

cttgtccgat ctaggcgctg cggccccgcg gtcagatgct agtagcccat ttccaagctt 17520

gatagggtct cttaccagca ctcgcaccac ccgcccgcgc ctgctgggcg aggaggagta 17580

cctaaacaac tcgctgctgc agccgcagcg cgaaaaaaac ctgcctccgg catttcccaa 17640

caacgggata gagagcctag tggacaagat gagtagatgg aagacgtacg cgcaggagca 17700

cagggacgtg ccaggcccgc gcccgcccac ccgtcgtcaa aggcacgacc gtcagcgggg 17760

tctggtgtgg gaggacgatg actcggcaga cgacagcagc gtcctggatt tgggagggag 17820

tggcaacccg tttgcgcacc ttcgccccag gctggggaga atgttttaaa aaaaaaaaag 17880

catgatgcaa aataaaaaac tcaccaaggc catggcaccg agcgttggtt ttcttgtatt 17940

ccccttagta tgcggcgcgc ggcgatgtat gaggaaggtc ctcctccctc ctacgagagt 18000

gtggtgagcg cggcgccagt ggcggcggcg ctgggttctc ccttcgatgc tcccctggac 18060

ccgccgtttg tgcctccgcg gtacctgcgg cctaccgggg ggagaaacag catccgttac 18120

tctgagttgg cacccctatt cgacaccacc cgtgtgtacc tggtggacaa caagtcaacg 18180

gatgtggcat ccctgaacta ccagaacgac cacagcaact ttctgaccac ggtcattcaa 18240

aacaatgact acagcccggg ggaggcaagc acacagacca tcaatcttga cgaccggtcg 18300

cactggggcg gcgacctgaa aaccatcctg cataccaaca tgccaaatgt gaacgagttc 18360

atgtttacca ataagtttaa ggcgcgggtg atggtgtcgc gcttgcctac taaggacaat 18420

caggtggagc tgaaatacga gtgggtggag ttcacgctgc ccgagggcaa ctactccgag 18480

accatgacca tagaccttat gaacaacgcg atcgtggagc actacttgaa agtgggcaga 18540

cagaacgggg ttctggaaag cgacatcggg gtaaagtttg acacccgcaa cttcagactg 18600

gggtttgacc ccgtcactgg tcttgtcatg cctggggtat atacaaacga agccttccat 18660

ccagacatca ttttgctgcc aggatgcggg gtggacttca cccacagccg cctgagcaac 18720

ttgttgggca tccgcaagcg gcaacccttc caggagggct ttaggatcac ctacgatgat 18780

ctggagggtg gtaacattcc cgcactgttg gatgtggacg cctaccaggc gagcttgaaa 18840

gatgacaccg aacagggcgg gggtggcgca ggcggcagca acagcagtgg cagcggcgcg 18900

gaagagaact ccaacgcggc agccgcggca atgcagccgg tggaggacat gaacgatcat 18960

gccattcgcg gcgacacctt tgccacacgg gctgaggaga agcgcgctga ggccgaagca 19020

gcggccgaag ctgccgcccc cgctgcgcaa cccgaggtcg agaagcctca gaagaaaccg 19080

gtgatcaaac ccctgacaga ggacagcaag aaacgcagtt acaacctaat aagcaatgac 19140

agcaccttca cccagtaccg cagctggtac cttgcataca actacggcga ccctcagacc 19200

ggaatccgct catggaccct gctttgcact cctgacgtaa cctgcggctc ggagcaggtc 19260

tactggtcgt tgccagacat gatgcaagac cccgtgacct tccgctccac gcgccagatc 19320

agcaactttc cggtggtggg cgccgagctg ttgcccgtgc actccaagag cttctacaac 19380

gaccaggccg tctactccca actcatccgc cagtttacct ctctgaccca cgtgttcaat 19440

cgctttcccg agaaccagat tttggcgcgc ccgccagccc ccaccatcac caccgtcagt 19500

gaaaacgttc ctgctctcac agatcacggg acgctaccgc tgcgcaacag catcggagga 19560

gtccagcgag tgaccattac tgacgccaga cgccgcacct gcccctacgt ttacaaggcc 19620

ctgggcatag tctcgccgcg cgtcctatcg agccgcactt tttgagcaag catgtccatc 19680

cttatatcgc ccagcaataa cacaggctgg ggcctgcgct tcccaagcaa gatgtttggc 19740

ggggccaaga agcgctccga ccaacaccca gtgcgcgtgc gcgggcacta ccgcgcgccc 19800

tggggcgcgc acaaacgcgg ccgcactggg cgcaccaccg tcgatgacgc catcgacgcg 19860

gtggtggagg aggcgcgcaa ctacacgccc acgccgccac cagtgtccac agtggacgcg 19920

gccattcaga ccgtggtgcg cggagcccgg cgctatgcta aaatgaagag acggcggagg 19980

cgcgtagcac gtcgccaccg ccgccgaccc ggcactgccg cccaacgcgc ggcggcggcc 20040

ctgcttaacc gcgcacgtcg caccggccga cgggcggcca tgcgggccgc tcgaaggctg 20100

gccgcgggta ttgtcactgt gccccccagg tccaggcgac gagcggccgc cgcagcagcc 20160

gcggccatta gtgctatgac tcagggtcgc aggggcaacg tgtattgggt gcgcgactcg 20220

gttagcggcc tgcgcgtgcc cgtgcgcacc cgcccccgc gcaactagat tgcaagaaaa 20280

aactacttag actcgtactg ttgtatgtat ccagcggcgg cggcgcgcaa cgaagctatg 20340

tccaagcgca aaatcaaaga agagatgctc caggtcatcg cgccggagat ctatggcccc 20400

ccgaagaagg aagagcagga ttacaagccc cgaaagctaa agcgggtcaa aaagaaaaag 20460

aaagatgatg atgatgaact tgacgacgag gtggaactgc tgcacgctac cgcgcccagg 20520

cgacgggtac agtggaaagg tcgacgcgta aaacgtgttt tgcgacccgg caccaccgta 20580

gtctttacgc ccggtgagcg ctccacccgc acctacaagc gcgtgtatga tgaggtgtac 20640

ggcgacgagg acctgcttga gcaggccaac gagcgcctcg gggagtttgc ctacggaaag 20700

cggcataagg acatgctggc gttgccgctg gacgagggca acccaacacc tagcctaaag 20760

cccgtaacac tgcagcaggt gctgcccgcg cttgcaccgt ccgaagaaaa gcgcggccta 20820

aagcgcgagt ctggtgactt ggcacccacc gtgcagctga tggtacccaa gcgccagcga 20880

ctggaagatg tcttggaaaa aatgaccgtg gaacctgggc tggagcccga ggtccgcgtg 20940

cggccaatca agcaggtggc gccgggactg ggcgtgcaga ccgtggacgt tcagataccc 21000

actaccagta gcaccagtat tgccaccgcc acagagggca tggagacaca aacgtccccg 21060

gttgcctcag cggtggcgga tgccgcggtg caggcggtcg ctgcggccgc gtccaagacc 21120

tctacggagg tgcaaacgga cccgtggatg tttcgcgttt cagccccccg gcgcccgcgc 21180

cgttcgagga agtacggcgc cgccagcgcg ctactgcccg aatatgccct acatccttcc 21240

attgcgccta cccccggcta tcgtggctac acctaccgcc ccagaagacg agcaactacc 21300

cgacgccgaa ccaccactgg aacccgccgc cgccgtcgcc gtcgccagcc cgtgctggcc 21360

ccgatttccg tgcgcagggt ggctcgcgaa ggaggcagga ccctggtgct gccaacagcg 21420

cgctaccacc ccagcatcgt ttaaaagccg gtctttgtgg ttcttgcaga tatggccctc 21480

acctgccgcc tccgtttccc ggtgccggga ttccgaggaa gaatgcaccg taggaggggc 21540

atggccggcc acggcctgac gggcggcatg cgtcgtgcgc accaccggcg gcggcgcgcg 21600

tcgcaccgtc gcatgcgcgg cggtatcctg cccctcctta ttccactgat cgccgcggcg 21660

attggcgccg tgcccggaat tgcatccgtg gccttgcagg cgcagagaca ctgattaaaa 21720

acaagttgca tgtggaaaaa tcaaaataaa aagtctggac tctcacgctc gcttggtcct 21780

gtaactattt tgtagaatgg aagacatcaa ctttgcgtct ctggccccgc gacacggctc 21840

gcgcccgttc atgggaaact ggcaagatat cggcaccagc aatatgagcg gtggcgcctt 21900

cagctggggc tcgctgtgga gcggcattaa aaatttcggt tccaccgtta agaactatgg 21960

cagcaaggcc tggaacagca gcacaggcca gatgctgagg gataagttga aagagcaaaa 22020

tttccaacaa aaggtggtag atggcctggc ctctggcatt agcggggtgg tggacctggc 22080

caaccaggca gtgcaaaata agattaacag taagcttgat ccccgccctc ccgtagagga 22140

gcctccaccg gccgtggaga cagtgtctcc agaggggcgt ggcgaaaagc gtccgcgccc 22200

cgacagggaa gaaactctgg tgacgcaaat agacgagcct ccctcgtacg aggaggcact 22260

aaagcaaggc ctgcccacca cccgtcccat cgcgcccatg gctaccggag tgctgggcca 22320

gcacacaccc gtaacgctgg acctgcctcc ccccgccgac acccagcaga aacctgtgct 22380

gccaggcccg accgccgttg ttgtaacccg tcctagccgc gcgtccctgc gccgcgccgc 22440

cagcggtccg cgatcgttgc ggcccgtagc cagtggcaac tggcaaagca cactgaacag 22500

catcgtgggt ctgggggtgc aatccctgaa gcgccgacga tgcttctgat agctaacgtg 22560

tcgtatgtgt gtcatgtatg cgtccatgtc gccgccagag gagctgctga gccgccgcgc 22620

gcccgctttc caagatggct acccccttcga tgatgccgca gtggtcttac atgcacatct 22680

cgggccagga cgcctcggag tacctgagcc ccgggctggt gcagtttgcc cgcgccaccg 22740

agacgtactt cagcctgaat aacaagttta gaaaccccac ggtggcgcct acgcacgacg 22800

tgaccacaga ccggtcccag cgtttgacgc tgcggttcat ccctgtggac cgtgaggata 22860

ctgcgtactc gtacaaggcg cggttcaccc tagctgtggg tgataaccgt gtgctggaca 22920

tggcttccac gtactttgac atccgcggcg tgctggacag gggccctact tttaagccct 22980

actctggcac tgcctacaac gccctggctc ccaagggtgc cccaaatcct tgcgaatggg 23040

atgaagctgc tactgctctt gaaataaacc tagaagaaga ggacgatgac aacgaagacg 23100

aagtagacga gcaagctgag cagcaaaaaa ctcacgtatt tgggcaggcg ccttattctg 23160

gtataaatat tacaaaggag ggtattcaaa taggtgtcga aggtcaaaca cctaaatatg 23220

ccgataaaac atttcaacct gaacctcaaa taggagaatc tcagtggtac gaaacagaaa 23280

ttaatcatgc agctgggaga gtcctaaaaa agactacccc aatgaaacca tgttacggtt 23340

catatgcaaa acccacaaat gaaaatggag ggcaaggcat tcttgtaaag caacaaaatg 23400

gaaagctaga aagtcaagtg gaaatgcaat ttttctcaac tactgaggca gccgcaggca 23460

atggtgataa cttgactcct aaagtggtat tgtacagtga agatgtagat atagaaaccc 23520

cagacactca tatttcttac atgcccacta ttaaggaagg taactcacga gaactaatgg 23580

gccaacaatc tatgcccaac aggcctaatt acattgcttt tagggacaat tttattggtc 23640

taatgtatta caacagcacg ggtaatatgg gtgttctggc gggccaagca tcgcagttga 23700

atgctgttgt agatttgcaa gacagaaaca cagagctttc ataccagctt ttgcttgatt 23760

ccattggtga tagaaccagg tacttttcta tgtggaatca ggctgttgac agctatgatc 23820

cagatgttag aattattgaa aatcatggaa ctgaagatga acttccaaat tactgctttc 23880

cactgggagg tgtgattaat acagagactc ttaccaaggt aaaacctaaa acaggtcagg 23940

aaaatggatg ggaaaaagat gctacagaat tttcagataa aaatgaaata agagttggaa 24000

ataattttgc catggaaatc aatctaaatg ccaacctgtg gagaaatttc ctgtactcca 24060

acatagcgct gtatttgccc gacaagctaa agtacagtcc ttccaacgta aaaatttctg 24120

ataacccaaa cacctacgac tacatgaaca agcgagtggt ggctcccggg ctagtggact 24180

gctacattaa ccttggagca cgctggtccc ttgactatat ggacaacgtc aacccattta 24240

accaccaccg caatgctggc ctgcgctacc gctcaatgtt gctgggcaat ggtcgctatg 24300

tgcccttcca catccaggtg cctcagaagt tctttgccat taaaaacctc cttctcctgc 24360

cgggctcata cacctacgag tggaacttca ggaaggatgt taacatggtt ctgcagagct 24420

ccctaggaaa tgacctaagg gttgacggag ccagcattaa gtttgatagc atttgccttt 24480

acgccacctt cttccccatg gcccacaaca ccgcctccac gcttgaggcc atgcttagaa 24540

acgacaccaa cgaccagtcc tttaacgact atctctccgc cgccaacatg ctctacccta 24600

tacccgccaa cgctaccaac gtgcccatat ccatcccctc ccgcaactgg gcggctttcc 24660

gcggctgggc cttcacgcgc cttaagacta aggaaacccc atcactgggc tcgggctacg 24720

acccttatta cacctactct ggctctatac cctacctaga tggaaccttt tacctcaacc 24780

acacctttaa gaaggtggcc attacctttg actcttctgt cagctggcct ggcaatgacc 24840

gcctgcttac ccccaacgag tttgaaatta agcgctcagt tgacggggag ggttacaacg 24900

ttgcccagtg taacatgacc aaagactggt tcctggtaca aatgctagct aactataaca 24960

ttggctacca gggcttctat atcccagaga gctacaagga ccgcatgtac tccttcttta 25020

gaaacttcca gcccatgagc cgtcaggtgg tggatgatac taaatacaag gactaccaac 25080

aggtgggcat cctacaccaa cacaacaact ctggatttgt tggctacctt gcccccacca 25140

tgcgcgaagg acaggcctac cctgctaact tcccctatcc gcttataggc aagaccgcag 25200

ttgacagcat tacccagaaa aagtttcttt gcgatcgcac cctttggcgc atcccattct 25260

ccagtaactt tatgtccatg ggcgcactca cagacctggg ccaaaacctt ctctacgcca 25320

actccgccca cgcgctagac atgacttttg aggtggatcc catggacgag cccacccttc 25380

tttatgtttt gtttgaagtc tttgacgtgg tccgtgtgca ccagccgcac cgcggcgtca 25440

tcgaaaccgt gtacctgcgc acgcccttct cggccggcaa cgccacaaca taaagaagca 25500

agcaacatca acaacagctg ccgccatggg ctccagtgag caggaactga aagccattgt 25560

caaagatctt ggttgtgggc catatttttt gggcacctat gacaagcgct ttccaggctt 25620

tgtttctcca cacaagctcg cctgcgccat agtcaatacg gccggtcgcg agactggggg 25680

cgtacactgg atggcctttg cctggaaccc gcactcaaaa acatgctacc tctttgagcc 25740

ctttggcttt tctgaccagc gactcaagca ggtttaccag tttgagtacg agtcactcct 25800

gcgccgtagc gccattgctt cttcccccga ccgctgtata acgctggaaa agtccaccca 25860

aagcgtacag gggcccaact cggccgcctg tggactattc tgctgcatgt ttctccacgc 25920

ctttgccaac tggccccaaa ctcccatgga tcacaacccc accatgaacc ttattaccgg 25980

ggtacccaac tccatgctca acagtcccca ggtacagccc accctgcgtc gcaaccagga 26040

acagctctac agcttcctgg agcgccactc gccctacttc cgcagccaca gtgcgcagat 26100

taggagcgcc acttcttttt gtcacttgaa aaacatgtaa aaataatgta ctagagacac 26160

tttcaataaa ggcaaatgct tttatttgta cactctcggg tgattattta cccccaccct 26220

tgccgtctgc gccgtttaaa aatcaaaggg gttctgccgc gcatcgctat gcgccactgg 26280

cagggacacg ttgcgatact ggtgtttagt gctccactta aactcaggca caaccatccg 26340

cggcagctcg gtgaagtttt cactccacag gctgcgcacc atcaccaacg cgtttagcag 26400

gtcgggcgcc gatatcttga agtcgcagtt ggggcctccg ccctgcgcgc gcgagttgcg 26460

atacacaggg ttgcagcact ggaacactat cagcgccggg tggtgcacgc tggccagcac 26520

gctcttgtcg gagatcagat ccgcgtccag gtcctccgcg ttgctcaggg cgaacggagt 26580

caactttggt agctgccttc ccaaaaaggg cgcgtgccca ggctttgagt tgcactcgca 26640

ccgtagtggc atcaaaaggt gaccgtgccc ggtctgggcg ttaggataca gcgcctgcat 26700

aaaagccttg atctgcttaa aagccacctg agcctttgcg ccttcagaga agaacatgcc 26760

gcaagacttg ccggaaaact gattggccgg acaggccgcg tcgtgcacgc agcaccttgc 26820

gtcggtgttg gagatctgca ccacatttcg gccccaccgg ttcttcacga tcttggcctt 26880

gctagactgc tccttcagcg cgcgctgccc gttttcgctc gtcacatcca tttcaatcac 26940

gtgctcctta tttatcataa tgcttccgtg tagacactta agctcgcctt cgatctcagc 27000

gcagcggtgc agccacaacg cgcagcccgt gggctcgtga tgcttgtagg tcacctctgc 27060

aaacgactgc aggtacgcct gcaggaatcg ccccatcatc gtcacaaagg tcttgttgct 27120

ggtgaaggtc agctgcaacc cgcggtgctc ctcgttcagc caggtcttgc atacggccgc 27180

cagagcttcc acttggtcag gcagtagttt gaagttcgcc tttagatcgt tatccacgtg 27240

gtacttgtcc atcagcgcgc gcgcagcctc catgcccttc tcccacgcag acacgatcgg 27300

cacactcagc gggttcatca ccgtaatttc actttccgct tcgctgggct cttcctcttc 27360

ctcttgcgtc cgcataccac gcgccactgg gtcgtcttca ttcagccgcc gcactgtgcg 27420

cttacctcct ttgccatgct tgattagcac cggtgggttg ctgaaaccca ccatttgtag 27480

cgccacatct tctctttctt cctcgctgtc cacgattacc tctggtgatg gcgggcgctc 27540

gggcttggga gaagggcgct tctttttctt cttgggcgca atggccaaat ccgccgccga 27600

ggtcgatggc cgcgggctgg gtgtgcgcgg caccagcgcg tcttgtgatg agtcttcctc 27660

gtcctcggac tcgatacgcc gcctcatccg ctttttgggg ggcgcccggg gaggcggcgg 27720

cgacggggac ggggacgaca cgtcctccat ggttgggggа cgtcgcgccg caccgcgtcc 27780

gcgctcgggg gtggtttcgc gctgctcctc ttcccgactg gccatttcct tctcctatag 27840

gcagaaaaag atcatggagt cagtcgagaa gaaggacagc ctaaccgccc cctctgagtt 27900

cgccaccacc gcctccaccg atgccgccaa cgcgcctacc accttccccg tcgaggcacc 27960

cccgcttgag gaggaggaag tgattatcga gcaggaccca ggttttgtaa gcgaagacga 28020

cgaggaccgc tcagtaccaa cagaggataa aaagcaagac caggacaacg cagaggcaaa 28080

cgaggaacaa gtcgggcggg gggacgaaag gcatggcgac tacctagatg tgggagacga 28140

cgtgctgttg aagcatctgc agcgccagtg cgccattatc tgcgacgcgt tgcaagagcg 28200

cagcgatgtg cccctcgcca tagcggatgt cagccttgcc tacgaacgcc acctattctc 28260

accgcgcgta ccccccaaac gccaagaaaa cggcacatgc gagcccaacc cgcgcctcaa 28320

cttctacccc gtatttgccg tgccagaggt gcttgccacc tatcacatct ttttccaaaa 28380

ctgcaagata cccctatcct gccgtgccaa ccgcagccga gcggacaagc agctggcctt 28440

gcggcagggc gctgtcatac ctgatatcgc ctcgctcaac gaagtgccaa aaatctttga 28500

gggtcttgga cgcgacgaga agcgcgcggc aaacgctctg caacaggaaa acagcgaaaa 28560

tgaaagtcac tctggagtgt tggtggaact cgagggtgac aacgcgcgcc tagccgtact 28620

aaaacgcagc atcgaggtca cccactttgc ctacccggca cttaacctac cccccaaggt 28680

catgagcaca gtcatgagtg agctgatcgt gcgccgtgcg cagcccctgg agagggatgc 28740

aaatttgcaa gaacaaacag aggagggcct acccgcagtt ggcgacgagc agctagcgcg 28800

ctggcttcaa acgcgcgagc ctgccgactt ggaggagcga cgcaaactaa tgatggccgc 28860

agtgctcgtt accgtggagc ttgagtgcat gcagcggttc tttgctgacc cggagatgca 28920

gcgcaagcta gaggaaacat tgcactacac ctttcgacag ggctacgtac gccaggcctg 28980

caagatctcc aacgtggagc tctgcaacct ggtctcctac cttggaattt tgcacgaaaa 29040

ccgccttggg caaaacgtgc ttcattccac gctcaagggc gaggcgcgcc gcgactacgt 29100

ccgcgactgc gtttacttat ttctatgcta cacctggcag acggccatgg gcgtttggca 29160

gcagtgcttg gaggagtgca acctcaagga gctgcagaaa ctgctaaagc aaaacttgaa 29220

ggacctatgg acggccttca acgagcgctc cgtggccgcg cacctggcgg acatcatttt 29280

ccccgaacgc ctgcttaaaa ccctgcaaca gggtctgcca gacttcacca gtcaaagcat 29340

gttgcagaac tttaggaact ttatcctaga gcgctcagga atcttgcccg ccacctgctg 29400

tgcacttcct agcgactttg tgcccattaa gtaccgcgaa tgccctccgc cgctttgggg 29460

ccactgctac cttctgcagc tagccaacta ccttgcctac cactctgaca taatggaaga 29520

cgtgagcggt gacggtctac tggagtgtca ctgtcgctgc aacctatgca ccccgcaccg 29580

ctccctggtt tgcaattcgc agctgcttaa cgaaagtcaa attatcggta cctttgagct 29640

gcagggtccc tcgcctgacg aaaagtccgc ggctccgggg ttgaaactca ctccggggct 29700

gtggacgtcg gcttaccttc gcaaatttgt acctgaggac taccacgccc acgagattag 29760

gttctacgaa gaccaatccc gcccgcctaa tgcggagctt accgcctgcg tcattaccca 29820

gggccacatt cttggccaat tgcaagccat caacaaagcc cgccaagagt ttctgctacg 29880

aaagggacgg ggggtttact tggaccccca gtccggcgag gagctcaacc caatcccccc 29940

gccgccgcag ccctatcagc agcagccgcg ggcccttgct tcccaggatg gcacccaaaa 30000

agaagctgca gctgccgccg ccacccacgg acgaggagga atactgggac agtcaggcag 30060

aggaggtttt ggacgaggag gaggaggaca tgatggaaga ctgggagagc ctagacgagg 30120

aagcttccga ggtcgaagag gtgtcagacg aaacaccgtc accctcggtc gcattcccct 30180

cgccggcgcc ccagaaatcg gcaaccggtt ccagcatggc tacaacctcc gctcctcagg 30240

cgccgccggc actgcccgtt cgccgaccca accgtagatg ggacaccact ggaaccaggg 30300

ccggtaagtc caagcagccg ccgccgttag cccaagagca acaacagcgc caaggctacc 30360

gctcatggcg cgggcacaag aacgccatag ttgcttgctt gcaagactgt gggggcaaca 30420

tctccttcgc ccgccgcttt cttctctacc atcacggcgt ggccttcccc cgtaacatcc 30480

tgcattacta ccgtcatctc tacagcccat actgcaccgg cggcagcggc agcaacagca 30540

gcggccacac agaagcaaag gcgaccggat agcaagactc tgacaaagcc caagaaatcc 30600

acagcggcgg cagcagcagg aggaggagcg ctgcgtctgg cgcccaacga acccgtatcg 30660

acccgcgagc ttagaaacag gatttttccc actctgtatg ctatatttca acagagcagg 30720

ggccaagaac aagagctgaa aataaaaaac aggtctctgc gatccctcac ccgcagctgc 30780

ctgtatcaca aaagcgaaga tcagcttcgg cgcacgctgg aagacgcgga ggctctcttc 30840

agtaaatact gcgcgctgac tcttaaggac tagtttcgcg ccctttctca aatttaagcg 30900

cgaaaactac gtcatctcca gcggccacac ccggcgccag cacctgttgt cagcgccatt 30960

atgagcaagg aaattcccac gccctacatg tggagttacc agccacaaat gggacttgcg 31020

gctggagctg cccaagacta ctcaacccga ataaactaca tgagcgcggg accccacatg 31080

atatcccggg tcaacggaat acgcgcccac cgaaaccgaa ttctcctgga acaggcggct 31140

attaccacca cacctcgtaa taaccttaat ccccgtagtt ggcccgctgc cctggtgtac 31200

caggaaagtc ccgctcccac cactgtggta cttcccagag acgcccaggc cgaagttcag 31260

atgactaact caggggcgca gcttgcgggc ggctttcgtc acagggtgcg gtcgcccggg 31320

cagggtataa ctcacctgac aatcagaggg cgaggtattc agctcaacga cgagtcggtg 31380

agctcctcgc ttggtctccg tccggacggg acatttcaga tcggcggcgc cggccgctct 31440

tcattcacgc ctcgtcaggc aatcctaact ctgcagacct cgtcctctga gccgcgctct 31500

ggaggcattg gaactctgca atttattgag gagtttgtgc catcggtcta ctttaacccc 31560

ttctcgggac ctcccggcca ctatccggat caatttattc ctaactttga cgcggtaaag 31620

gactcggcgg acggctacga ctgaatgtta agtggagagg cagagcaact gcgcctgaaa 31680

cacctggtcc actgtcgccg ccacaagtgc tttgcccgcg actccggtga gttttgctac 31740

tttgaattgc ccgaggatca tatcgagggc ccggcgcacg gcgtccggct taccgcccag 31800

ggagagcttg cccgtagcct gattcgggag tttacccagc gccccctgct agttgagcgg 31860

gacaggggac cctgtgttct cactgtgatt tgcaactgtc ctaaccctgg attacatcaa 31920

gatcctctag ttaatgtcag gtcgcctaag tcgattaact agagtacccg gggatcttat 31980

tccctttaac taataaaaaa aaataataaa gcatcactta cttaaaatca gttagcaaat 32040

ttctgtccag tttattcagc agcacctcct tgccctcctc ccagctctgg tattgcagct 32100

tcctcctggc tgcaaacttt ctccacaatc taaatggaat gtcagtttcc tcctgttcct 32160

gtccatccgc acccactatc ttcatgttgt tgcagatgaa gcgcgcaaga ccgtctgaag 32220

ataccttcaa ccccgtgtat ccatatgaca cggaaaccgg tcctccaact gtgccttttc 32280

ttactcctcc ctttgtatcc cccaatgggt ttcaagagag tccccctggg gtactctctt 32340

tgcgcctatc cgaacctcta gttacctcca atggcatgct tgcgctcaaa atgggcaacg 32400

gcctctctct ggacgaggcc ggcaacctta cctcccaaaa tgtaaccact gtgagcccac 32460

ctctcaaaaa aaccaagtca aacataaacc tggaaatatc tgcacccctc acagttacct 32520

cagaagccct aactgtggct gccgccgcac ctctaatggt cgcgggcaac acactcacca 32580

tgcaatcaca ggccccgcta accgtgcacg actccaaact tagcattgcc acccaaggac 32640

ccctcacagt gtcagaagga aagctagccc tgcaaacatc aggccccctc accaccaccg 32700

atagcagtac ccttactatc actgcctcac cccctctaac tactgccact ggtagcttgg 32760

gcattgactt gaaagagccc atttatacac aaaatggaaa actaggacta aagtacgggg 32820

ctcctttgca tgtaacagac gacctaaaca ctttgaccgt agcaactggt ccaggtgtga 32880

ctattaataa tacttccttg caaactaaag ttactggagc cttgggtttt gattcacaag 32940

gcaatatgca acttaatgta gcaggaggac taaggattga ttctcaaaac agacgcctta 33000

tacttgatgt tagttatccg tttgatgctc aaaaccaact aaatctaaga ctaggacagg 33060

gccctctttt tataaactca gcccacaact tggatattaa ctacaacaaa ggcctttact 33120

tgtttacagc ttcaaacaat tccaaaaagc ttgaggttaa cctaagcact gccaaggggt 33180

tgatgtttga cgctacagcc atagccatta atgcaggaga tgggcttgaa tttggttcac 33240

ctaatgcacc aaacacaaat cccctcaaaa caaaaattgg ccatggccta gaatttgatt 33300

caaacaaggc tatggttcct aaactaggaa ctggccttag ttttgacagc acaggtgcca 33360

ttacagtagg aaacaaaaat aatgataagc taactttgtg gaccggaata aaccctccac 33420

ctaactgtca aattgtggaa aacactaata caaatgatgg caaacttact ttagtattag 33480

taaaaaatgg agggcttgtt aatggctacg tgtctctagt tggtgtatca gacactgtga 33540

accaaatgtt cacacaaaag acagcaaaca tccaattaag attatatttt gactcttctg 33600

gaaatctatt aactgaggaa tcagacttaa aaattccact taaaaataaa tcttctacag 33660

cgaccagtga aactgtagcc agcagcaaag cctttatgcc aagtactaca gcttatccct 33720

tcaacaccac tactagggat agtgaaaact acattcatgg aatatgttac tacatgacta 33780

gttatgatag aagtctattt cccttgaaca tttctataat gctaaacagc cgtatgattt 33840

cttccaatgt tgcctatgcc atacaatttg aatggaatct aaatgcaagt gaatctccag 33900

aaagcaacat agctacgctg accacatccc ccttttttctt ttcttacatt acagaagacg 33960

acaactaaag aatcgtttgt gttatgtttc aacgtgttta tttttcaatt gcagaaaatt 34020

tcaagtcatt tttcattcag tagtatagcc ccaccaccac atagcttata cagatcaccg 34080

taccttaatc aaactcacag aaccctagta ttcaacctgc cacctccctc ccaacacaca 34140

gagtacacag tcctttctcc ccggctggcc ttaaaaagca tcatatcatg ggtaacagac 34200

atattcttag gtgttatatt ccacacggtt tcctgtcgag ccaaacgctc atcagtgata 34260

ttaataaact ccccgggcag ctcacttaag ttcatgtcgc tgtccagctg ctgagccaca 34320

ggctgctgtc caacttgcgg ttgcttaacg ggcggcgaag gagaagtcca cgcctacatg 34380

ggggtagagt cataatcgtg catcaggata gggcggtggt gctgcagcag cgcgcgaata 34440

aactgctgcc gccgccgctc cgtcctgcag gaatacaaca tggcagtggt ctcctcagcg 34500

atgattcgca ccgcccgcag cataaggcgc cttgtcctcc gggcacagca gcgcaccctg 34560

atctcactta aatcagcaca gtaactgcag cacagcacca caatattgtt caaaatccca 34620

cagtgcaagg cgctgtatcc aaagctcatg gcggggacca cagaacccac gtggccatca 34680

taccacaagc gcaggtagat taagtggcga cccctcataa acacgctgga cataaacatt 34740

acctcttttg gcatgttgta attcaccacc tcccctctga ttaaacatgg cgccatccac 34800

caccatccta aaccagctgg ccaaaacctg cccgccggct atacactgca gggaaccggg 34860

actggaacaa tgacagtgga gagcccagga ctcgtaacca tggatcatca tgctcgtcat 34920

gatatcaatg ttggcacaac acaggcacac gtgcatacac ttcctcagga ttacaagctc 34980

ctcccgcgtt agaaccatat cccagggaac aacccattcc tgaatcagcg taaatcccac 35040

actgcaggga agacctcgca cgtaactcac gttgtgcatt gtcaaagtgt tacattcggg 35100

cagcagcgga tgatcctcca gtatggtagc gcgggtttct gtctcaaaag gaggtagacg 35160

atccctactg tacggagtgc gccgagacaa ccgagatcgt gttggtcgta gtgtcatgcc 35220

aaatggaacg ccggacgtag tcatatttcc tgaagcaaaa ccaggtgcgg gcgtgacaaa 35280

cagatctgcg tctccggtct cgccgcttag atcgctctgt gtagtagttg tagtatatcc 35340

actctctcaa agcatccagg cgccccctgg cttcgggttc tatgtaaact ccttcatgcg 35400

ccgctgccct gataacatcc accaccgcag aataagccac acccagccaa cctacacatt 35460

cgttctgcga gtcacacacg ggaggagcgg gaagagctgg aagaaccatg ttttttttt 35520

tattccaaaa gattatccaa aacctcaaaa tgaagatcta ttaagtgaac gcgctcccct 35580

ccggtggcgt ggtcaaactc tacagccaaa gaacagataa tggcatttgt aagatgttgc 35640

acaatggctt ccaaaaggca aacggccctc acgtccaagt ggacgtaaag gctaaaccct 35700

tcagggtgaa tctcctctat aaacattcca gcaccttcaa ccatgcccaa ataattctca 35760

tctcgccacc ttctcaatat atctctaagc aaatcccgaa tattaagtcc ggccattgta 35820

aaaatctgct ccagagcgcc ctccaccttc agcctcaagc agcgaatcat gattgcaaaa 35880

attcaggttc ctcacagacc tgtataagat tcaaaagcgg aacattaaca aaaataccgc 35940

gatcccgtag gtcccttcgc agggccagct gaacataatc gtgcaggtct gcacggacca 36000

gcgcggccac ttccccgcca ggaaccatga caaaagaacc cacactgatt atgacacgca 36060

tactcggagc tatgctaacc agcgtagccc cgatgtaagc ttgttgcatg ggcggcgata 36120

taaaatgcaa ggtgctgctc aaaaaatcag gcaaagcctc gcgcaaaaaa gaaagcacat 36180

cgtagtcatg ctcatgcaga taaaggcagg taagctccgg aaccaccaca gaaaaagaca 36240

ccatttttct ctcaaacatg tctgcgggtt tctgcataaa cacaaaataa aataacaaaa 36300

aaacatttaa acattagaag cctgtcttac aacaggaaaa acaaccctta taagcataag 36360

acggactacg gccatgccgg cgtgaccgta aaaaaactgg tcaccgtgat taaaaagcac 36420

caccgacagc tcctcggtca tgtccggagt cataatgtaa gactcggtaa acacatcagg 36480

ttgattcaca tcggtcagtg ctaaaaagcg accgaaatag cccgggggaa tacatacccg 36540

caggcgtaga gacaacatta cagcccccat aggaggtata acaaaattaa taggagagaa 36600

aaacacataa acacctgaaa aaccctcctg cctaggcaaa atagcaccct cccgctccag 36660

aacaacatac agcgcttcca cagcggcagc cataacagtc agccttacca gtaaaaaaga 36720

aaacctatta aaaaaacacc actcgacacg gcaccagctc aatcagtcac agtgtaaaaa 36780

agggccaagt gcagagcgag tatatatagg actaaaaaat gacgtaacgg ttaaagtcca 36840

caaaaaacac ccagaaaacc gcacgcgaac ctacgcccag aaacgaaagc caaaaaaccc 36900

acaacttcct caaatcgtca cttccgtttt cccacgttac gtcacttccc attttaagaa 36960

aactacaatt cccaacacat acaagttact ccgccctaaa acctacgtca cccgccccgt 37020

tcccacgccc cgcgccacgt cacaaactcc acccccctcat tatcatattg gcttcaatcc 37080

aaaataaggt atattattga tgatg 37105

<210> 8
<211> 37105
<212> DNA
<213> Artificial Sequence

<220>
<223> Adk35F2-E4orf6/Spike-E4dl355(E4re#3)

<400> 8
ttaattaaca tcatcaataa tataccttat tttggattga agccaatatg ataatgaggg 60

ggtggagttt gtgacgtggc gcggggcgtg ggaacggggc gggtgacgta gtagtgtggc 120

ggaagtgtga tgttgcaagt gtggcggaac acatgtaagc gacggatgtg gcaaaagtga 180

cgtttttggt gtgcgccggt gtacacagga agtgacaatt ttcgcgcggt tttaggcgga 240

tgttgtagta aatttgggcg taaccgagta agatttggcc attttcgcgg gaaaactgaa 300

taagaggaag tgaaatctga ataattttgt gttactcata gcgcgtaata atttgctccg 360

gtgcccgtca gtgggcagag cgcacatcgc ccacagtccc cgagaagttg gggggagggg 420

tcggcaattg aaccggtgcc tagagaaggt ggcgcggggt aaactgggaa agtgatgtcg 480

tgtactggct ccgccttttt cccgagggtg ggggagaacc gtatataagt gcagtagtcg 540

ccgtgaacgt tctttttcgc aacgggtttg ccgccagaac acaggtaagt gccgtgtgtg 600

gttcccgcgg gcctggcctc tttacgggtt atggcccttg cgtgccttga attacttcca 660

cgcccctggc tgcagtacgt gattcttgat cccgagcttc gggttggaag tgggtgggag 720

agttcgaggc cttgcgctta aggagcccct tcgcctcgtg cttgagttga ggcttggcct 780

gggcgctggg gccgccgcgt gcgaatctgg tggcaccttc gcgcctgtct cgctgctttc 840

gataagtctc tagccattta aaatttttga tgacctgctg cgacgctttt tttctggcaa 900

gatagtcttg taaatgcggg ccaagatctg cacactggta tttcggtttt tggggccgcg 960

ggcggcgacg gggcccgtgc gtcccagcgc acatgttcgg cgaggcgggg cctgcgagcg 1020

cggccaccga gaatcggacg ggggtagtct caagctggcc ggcctgctct ggtgcctggc 1080

ctcgcgccgc cgtgtatcgc cccgccctgg gcggcaaggc tggcccggtc ggcaccagtt 1140

gcgtgagcgg aaagatggcc gcttcccggc cctgctgcag ggagctcaaa atggaggacg 1200

cggcgctcgg gagagcgggc gggtgagtca cccacacaaa ggaaaagggc ctttccgtcc 1260

tcagccgtcg cttcatgtga ctccacggag taccgggcgc cgtccaggca cctcgattag 1320

ttctcgagct tttggagtac gtcgtcttta ggttgggggg aggggtttta tgcgatggag 1380

tttccccata ctgagtgggt ggagactgaa gttaggccag cttggcactt gatgtaattc 1440

tccttggaat ttgccctttt tgagtttgga tcttggttca ttctcaagcc tcagacagtg 1500

gttcaaagtt tttttcttcc atttaaggtg tcgtgaaaac taccccaagc tggccaccat 1560

gactacgtcc ggcgttccat ttggcatgac actacgacca acacgatctc ggttgtctcg 1620

gcgcactccg tacagtaggg atcgtctacc tccttttgag acagaaaccc gcgctaccat 1680

actggaggat catccgctgc tgcccgaatg taacactttg acaatgcaca acgtgagtta 1740

cgtgcgaggt cttccctgca gtgtgggatt tacgctgatt caggaatggg ttgttccctg 1800

ggatatggtt ctaacgcggg aggagcttgt aatcctgagg aagtgtatgc acgtgtgcct 1860

gtgttgtgcc aacattgata tcatgacgag catgatgatc catggttacg agtcctgggc 1920

tctccactgt cattgttcca gtcccggttc cctgcagtgt atagccggcg ggcaggtttt 1980

ggccagctgg tttaggatgg tggtggatgg cgccatgttt aatcagaggt ttatatggta 2040

ccgggaggtg gtgaattaca acatgccaaa agaggtaatg tttatgtcca gcgtgtttat 2100

gaggggtcgc cacttaatct acctgcgctt gtggtatgat ggccacgtgg gttctgtggt 2160

ccccgccatg agctttggat acagcgcctt gcactgtggg attttgaaca atattgtggt 2220

gctgtgctgc agttactgtg ctgatttaag tgagatcagg gtgcgctgct gtgcccggag 2280

gacaaggcgc cttatgctgc gggcggtgcg aatcatcgct gaggagacca ctgccatgtt 2340

gtattcctgc aggacggagc ggcggcggca gcagtttatt cgcgcgctgc tgcagcacca 2400

ccgccctatc ctgatgcacg attatgactc tacccccatg tagaagcttg gggatcaatt 2460

ctctagagct cgctgatcag cctcgactgt gccttctagt tgccagccat ctgttgtttg 2520

cccctccccc gtgccttcct tgaccctgga aggtgccact cccactgtcc tttcctaata 2580

aaatgaggaa attgcatcgc attgtctgag taggtgtcat tctattctgg ggggtggggt 2640

ggggcaggac agcaaggggg aggattggga agacaatagc aggcatgctg gggatgcggt 2700

gggctctatg gcttctgagg ctgtaatagt aatcaattac ggggtcatta gttcatagcc 2760

catatatgga gttccgcgtt acataactta cggtaaatgg cccgcctggc tgaccgccca 2820

acgacccccg cccattgacg tcaataatga cgtatgttcc catagtaacg ccaataggga 2880

ctttccattg acgtcaatgg gtggagtatt tacggtaaac tgcccacttg gcagtacatc 2940

aagtgtatca tatgccaagt acgccccct ttgacgtcaa tgacggtaaa tggcccgcct 3000

ggcattatgc ccagtacatg accttatggg actttcctac ttggcagtac atctacgtat 3060

tagtcatcgc tattaccatg gtgatgcggt tttggcagta catcaatggg cgtggatagc 3120

ggtttgactc acggggattt ccaagtctcc accccattga cgtcaatggg agtttgtttt 3180

ggcaccaaaa tcaacgggac tttccaaaat gtcgtaacaa ctccgcccca ttgacgcaaa 3240

tgggcggtag gcgtgtacgg tgggaggtct atataagcag agctctccct atcagtgata 3300

gagatctccc tatcagtgat agagatcgtc gacgagctcg tttagtgaac cgtcagatcg 3360

cctggagacg ccatccacgc tgttttgacc tccatagaag acaccgggac cgatccagcc 3420

tccgatttgc caccatgttt gtgttcctgg tgctgctgcc actggtgtcc agccagtgtg 3480

tgaacctgac caccaggacc caacttcctc ctgcctacac caactccttc accaggggag 3540

tctactaccc tgacaaggtg ttcaggtcct ctgtgctgca cagcacccag gacctgttcc 3600

tgccattctt cagcaatgtg acctggttcc atgccatcca tgtgtctggc accaatggca 3660

ccaagaggtt tgacaaccct gtgctgccat tcaatgatgg agtctacttt gccagcacag 3720

agaagagcaa catcatcagg ggctggattt ttggcaccac cctggacagc aagacccagt 3780

ccctgctgat tgtgaacaat gccaccaatg tggtgattaa ggtgtgtgag ttccagttct 3840

gtaatgaccc attcctggga gtctactacc acaagaacaa caagtcctgg atggagtctg 3900

agttcagggt ctactcctct gccaacaact gtacctttga atatgtgagc caaccattcc 3960

tgatggactt ggagggcaag cagggcaact tcaagaacct gagggagttt gtgttcaaga 4020

acattgatgg ctacttcaag atttacagca aacacacacc aatcaacctg gtgagggacc 4080

tgccacaggg cttctctgcc ttggaaccac tggtggacct gccaattggc atcaacatca 4140

ccaggttcca gaccctgctg gctctgcaca ggtcctacct gacacctgga gactcctcct 4200

ctggctggac agcaggagca gcagcctact atgtgggcta cctccaacca aggaccttcc 4260

tgctgaaata caatgagaat ggcaccatca cagatgctgt ggactgtgcc ctggacccac 4320

tgtctgagac caagtgtacc ctgaaatcct tcacagtgga gaagggcatc taccagacca 4380

gcaacttcag ggtccaacca acagagagca ttgtgaggtt tccaaacatc accaacctgt 4440

gtccatttgg agaggtgttc aatgccacca ggtttgcctc tgtctatgcc tggaacagga 4500

agaggattag caactgtgtg gctgactact ctgtgctcta caactctgcc tccttcagca 4560

ccttcaagtg ttatggagtg agcccaacca aactgaatga cctgtgtttc accaatgtct 4620

atgctgactc ctttgtgatt aggggagatg aggtgagaca gattgcccct ggacaaacag 4680

gcaagattgc tgactacaac tacaaactgc ctgatgactt cacaggctgt gtgattgcct 4740

ggaacagcaa caacctggac agcaaggtgg gaggcaacta caactacctc tacagactgt 4800

tcaggaagag caacctgaaa ccatttgaga gggacatcag cacagagatt taccaggctg 4860

gcagcacacc atgtaatgga gtggagggct tcaactgtta ctttccactc caatcctatg 4920

gcttccaacc aaccaatgga gtgggctacc aaccatacag ggtggtggtg ctgtcctttg 4980

aactgctcca tgcccctgcc acagtgtgtg gaccaaagaa gagcaccaac ctggtgaaga 5040

acaagtgtgt gaacttcaac ttcaatggac tgacaggcac aggagtgctg acagagagca 5100

acaagaagtt cctgccattc caacagtttg gcagggacat tgctgacacc acagatgctg 5160

tgagggaccc acagaccttg gagattctgg acatcacacc atgttccttt ggaggagtgt 5220

ctgtgattac acctggcacc aacaccagca accaggtggc tgtgctctac caggatgtga 5280

actgtactga ggtgcctgtg gctatccatg ctgaccaact tacaccaacc tggagggtct 5340

acagcacagg cagcaatgtg ttccagacca gggctggctg tctgattgga gcagagcatg 5400

tgaacaactc ctatgagtgt gacatcccaa ttggagcagg catctgtgcc tcctaccaga 5460

cccagaccgg tggcggtggg tcgaggtctg tggcaagcca gagcatcatt gcctacacaa 5520

tgagtctggg agcagagaac tctgtggctt acagcaacaa cagcattgcc atcccaacca 5580

acttcaccat ctctgtgacc acagagattc tgcctgtgag tatgaccaag acctctgtgg 5640

actgtacaat gtatatctgt ggagacagca cagagtgtag caacctgctg ctccaatatg 5700

gctccttctg tacccaactt aacagggctc tgacaggcat tgctgtggaa caggacaaga 5760

acacccagga ggtgtttgcc caggtgaagc agatttacaa gacacctcca atcaaggact 5820

ttggaggctt caacttcagc cagattctgc ctgacccaag caagccaagc aagaggtcct 5880

tcattgagga cctgctgttc aacaaggtga ccctggctga tgctggcttc atcaagcaat 5940

atggagactg tctgggagac attgctgcca gggacctgat ttgtgcccag aagttcaatg 6000

gactgacagt gctgcctcca ctgctgacag atgagatgat tgcccaatac acctctgccc 6060

tgctggctgg caccatcacc tctggctgga cctttggagc aggagcagcc ctccaaatcc 6120

catttgctat gcagatggct tacaggttca atggcattgg agtgacccag aatgtgctct 6180

atgagaacca gaaactgatt gccaaccagt tcaactctgc cattggcaag attcaggact 6240

ccctgtccag cacagcctct gccctgggca aactccaaga tgtggtgaac cagaatgccc 6300

aggctctgaa caccctggtg aagcaacttt ccagcaactt tggagccatc tcctctgtgc 6360

tgaatgacat cctgagcaga ctggacaagg tggaggctga ggtccagatt gacagactga 6420

ttacaggcag actccaatcc ctccaaacct atgtgaccca acaacttatc agggctgctg 6480

agattagggc atctgccaac ctggctgcca ccaagatgag tgagtgtgtg ctgggacaaa 6540

gcaagagggt ggacttctgt ggcaagggct accacctgat gagttttcca cagtctgccc 6600

ctcatggagt ggtgttcctg catgtgacct atgtgcctgc ccaggagaag aacttcacca 6660

cagcccctgc catctgccat gatggcaagg ctcactttcc aagggaggga gtgtttgtga 6720

gcaatggcac ccactggttt gtgacccaga ggaacttcta tgaaccacag attatcacca 6780

cagacaacac ctttgtgtct ggcaactgtg atgtggtgat tggcattgtg aacaacacag 6840

tctatgaccc actccaacct gaactggact ccttcaagga ggaactggac aaatacttca 6900

agaaccacac cagccctgat gtggacctgg gagacatctc tggcatcaat gcctctgtgg 6960

tgaacatcca gaaggagatt gacagactga atgaggtggc taagaacctg aatgagtccc 7020

tgattgacct ccaagaactg ggcaaatatg aacaatacat caagtggcca tgaaaattga 7080

tcataatcag ccataccaca tttgtagagg ttttacttgc tttaaaaaac ctcccacacc 7140

tccccctgaa cctgaaacat aaaatgaatg caattgttgt tgttaacttg tttattgcag 7200

cttataatgg ttacaaataa agcaatagca tcacaaattt cacaaataaa gcatttttt 7260

cactgcattc tagttgtggt ttgtccaaac tcatcaatgt atcttaacgc ggatcaaatt 7320

gggcgtggct taagggtggg aaagaatata taaggtgggg gtcttatgta gttttgtatc 7380

tgttttgcag cagccgccgc cgccatgagc accaactcgt ttgatggaag cattgtgagc 7440

tcatatttga caacgcgcat gcccccatgg gccggggtgc gtcagaatgt gatgggctcc 7500

agcattgatg gtcgccccgt cctgcccgca aactctacta ccttgaccta cgagaccgtg 7560

tctggaacgc cgttggagac tgcagcctcc gccgccgctt cagccgctgc agccaccgcc 7620

cgcgggattg tgactgactt tgctttcctg agcccgcttg caagcagtgc agcttcccgt 7680

tcatccgccc gcgatgacaa gttgacggct cttttggcac aattggattc tttgacccgg 7740

gaacttaatg tcgtttctca gcagctgttg gatctgcgcc agcaggtttc tgccctgaag 7800

gcttcctccc ctcccaatgc ggtttaaaac ataaataaaa aaccagactc tgtttggatt 7860

tggatcaagc aagtgtcttg ctgtctttat ttaggggttt tgcgcgcgcg gtaggcccgg 7920

gaccagcggt ctcggtcgtt gagggtcctg tgtatttttt ccaggacgtg gtaaaggtga 7980

ctctggatgt tcagatacat gggcataagc ccgtctctgg ggtggaggta gcaccactgc 8040

agagcttcat gctgcggggt ggtgttgtag atgatccagt cgtagcagga gcgctgggcg 8100

tggtgcctaa aaatgtcttt cagtagcaag ctgattgcca ggggcaggcc cttggtgtaa 8160

gtgtttacaa agcggttaag ctgggatggg tgcatacgtg gggatatgag atgcatcttg 8220

gactgtattt ttaggttggc tatgttccca gccatatccc tccggggatt catgttgtgc 8280

agaaccacca gcacagtgta tccggtgcac ttgggaaatt tgtcatgtag cttagaagga 8340

aatgcgtgga agaacttgga gacgcccttg tgacctccaa gattttccat gcattcgtcc 8400

ataatgatgg caatgggccc acgggcggcg gcctgggcga agatatttct gggatcacta 8460

acgtcatagt tgtgttccag gatgagatcg tcataggcca tttttacaaa gcgcgggcgg 8520

agggtgccag actgcggtat aatggttcca tccggcccag gggcgtagtt accctcacag 8580

atttgcattt cccacgcttt gagttcagat ggggggatca tgtctacctg cggggcgatg 8640

aagaaaacgg tttccggggt aggggagatc agctgggaag aaagcaggtt cctgagcagc 8700

tgcgacttac cgcagccggt gggcccgtaa atcacaccta ttaccgggtg caactggtag 8760

ttaagagagc tgcagctgcc gtcatccctg agcaggggggg ccacttcgtt aagcatgtcc 8820

ctgactcgca tgttttccct gaccaaatcc gccagaaggc gctcgccgcc cagcgatagc 8880

agttcttgca aggaagcaaa gtttttcaac ggtttgagac cgtccgccgt aggcatgctt 8940

ttgagcgttt gaccaagcag ttccaggcgg tcccacagct cggtcacctg ctctacggca 9000

tctcgatcca gcatatctcc tcgtttcgcg ggttggggcg gctttcgctg tacggcagta 9060

gtcggtgctc gtccagacgg gccagggtca tgtctttcca cgggcgcagg gtcctcgtca 9120

gcgtagtctg ggtcacggtg aaggggtgcg ctccgggctg cgcgctggcc agggtgcgct 9180

tgaggctggt cctgctggtg ctgaagcgct gccggtcttc gccctgcgcg tcggccaggt 9240

agcatttgac catggtgtca tagtccagcc cctccgcggc gtggcccttg gcgcgcagct 9300

tgcccttgga ggaggcgccg cacgaggggc agtgcagact tttgagggcg tagagcttgg 9360

gcgcgagaaa taccgattcc ggggagtagg catccgcgcc gcaggccccg cagacggtct 9420

cgcattccac gagccaggtg agctctggcc gttcggggtc aaaaaccagg tttcccccat 9480

gctttttgat gcgtttctta cctctggttt ccatgagccg gtgtccacgc tcggtgacga 9540

aaaggctgtc cgtgtccccg tatacagact tgagaggcct gtcctcgagc ggtgttccgc 9600

ggtcctcctc gtatagaaac tcggaccact ctgagacaaa ggctcgcgtc caggccagca 9660

cgaaggaggc taagtgggag gggtagcggt cgttgtccac tagggggtcc actcgctcca 9720

gggtgtgaag acacatgtcg ccctcttcgg catcaaggaa ggtgattggt ttgtaggtgt 9780

aggccacgtg accgggtgtt cctgaagggg ggctataaaa gggggtgggg gcgcgttcgt 9840

cctcactctc ttccgcatcg ctgtctgcga gggccagctg ttggggtgag tactccctct 9900

gaaaagcggg catgacttct gcgctaagat tgtcagtttc caaaaacgag gaggatttga 9960

tattcacctg gcccgcggtg atgcctttga gggtggccgc atccatctgg tcagaaaaga 10020

caatcttttt gttgtcaagc ttggtggcaa acgacccgta gagggcgttg gacagcaact 10080

tggcgatgga gcgcagggtt tggtttttgt cgcgatcggc gcgctccttg gccgcgatgt 10140

ttagctgcac gtattcgcgc gcaacgcacc gccattcggg aaagacggtg gtgcgctcgt 10200

cgggcaccag gtgcacgcgc caaccgcggt tgtgcagggt gacaaggtca acgctggtgg 10260

ctacctctcc gcgtaggcgc tcgttggtcc agcagaggcg gccgcccttg cgcgagcaga 10320

atggcggtag ggggtctagc tgcgtctcgt ccgggggggtc tgcgtccacg gtaaagaccc 10380

cgggcagcag gcgcgcgtcg aagtagtcta tcttgcatcc ttgcaagtct agcgcctgct 10440

gccatgcgcg ggcggcaagc gcgcgctcgt atgggttgag tgggggaccc catggcatgg 10500

ggtgggtgag cgcggaggcg tacatgccgc aaatgtcgta aacgtagagg ggctctctga 10560

gtattccaag atatgtaggg tagcatcttc caccgcggat gctggcgcgc acgtaatcgt 10620

atagttcgtg cgagggagcg aggaggtcgg gaccgaggtt gctacgggcg ggctgctctg 10680

ctcggaagac tatctgcctg aagatggcat gtgagttgga tgatatggtt ggacgctgga 10740

agacgttgaa gctggcgtct gtgagaccta ccgcgtcacg cacgaaggag gcgtaggagt 10800

cgcgcagctt gttgaccagc tcggcggtga cctgcacgtc tagggcgcag tagtccaggg 10860

tttccttgat gatgtcatac ttatcctgtc ccttttttt ccacagctcg cggttgagga 10920

caaactcttc gcggtctttc cagtactctt ggatcggaaa cccgtcggcc tccgaacggt 10980

aagagcctag catgtagaac tggttgacgg cctggtaggc gcagcatccc ttttctacgg 11040

gtagcgcgta tgcctgcgcg gccttccgga gcgaggtgtg ggtgagcgca aaggtgtccc 11100

tgaccatgac tttgaggtac tggtatttga agtcagtgtc gtcgcatccg ccctgctccc 11160

agagcaaaaa gtccgtgcgc tttttggaac gcggatttgg cagggcgaag gtgacatcgt 11220

tgaagagtat ctttcccgcg cgaggcataa agttgcgtgt gatgcggaag ggtcccggca 11280

cctcggaacg gttgttaatt acctgggcgg cgagcacgat ctcgtcaaag ccgttgatgt 11340

tgtggcccac aatgtaaagt tccaagaagc gcgggatgcc cttgatggaa ggcaattttt 11400

taagttcctc gtaggtgagc tcttcagggg agctgagccc gtgctctgaa agggcccagt 11460

ctgcaagatg agggttggaa gcgacgaatg agctccacag gtcacgggcc attagcattt 11520

gcaggtggtc gcgaaaggtc ctaaactggc gacctatggc catttttct ggggtgatgc 11580

agtagaaggt aagcgggtct tgttcccagc ggtcccatcc aaggttcgcg gctaggtctc 11640

gcgcggcagt cactagaggc tcatctccgc cgaacttcat gaccagcatg aagggcacga 11700

gctgcttccc aaaggccccc atccaagtat aggtctctac atcgtaggtg acaaagagac 11760

gctcggtgcg aggatgcgag ccgatcggga agaactggat ctcccgccac caattggagg 11820

agtggctatt gatgtggtga aagtagaagt ccctgcgacg ggccgaacac tcgtgctggc 11880

ttttgtaaaa acgtgcgcag tactggcagc ggtgcacggg ctgtacatcc tgcacgaggt 11940

tgacctgacg accgcgcaca aggaagcaga gtgggaattt gagcccctcg cctggcgggt 12000

ttggctggtg gtcttctact tcggctgctt gtccttgacc gtctggctgc tcgaggggag 12060

ttacggtgga tcggaccacc acgccgcgcg agcccaaagt ccagatgtcc gcgcgcggcg 12120

gtcggagctt gatgacaaca tcgcgcagat gggagctgtc catggtctgg agctcccgcg 12180

gcgtcaggtc aggcgggagc tcctgcaggt ttacctcgca tagacgggtc agggcgcggg 12240

ctagatccag gtgataccta atttccaggg gctggttggt ggcggcgtcg atggcttgca 12300

agaggccgca tccccgcggc gcgactacgg taccgcgcgg cgggcggtgg gccgcggggg 12360

tgtccttgga tgatgcatct aaaagcggtg acgcgggcga gcccccggag gtaggggggg 12420

ctccggaccc gccgggagag ggggcagggg cacgtcggcg ccgcgcgcgg gcaggagctg 12480

gtgctgcgcg cgtaggttgc tggcgaacgc gacgacgcgg cggttgatct cctgaatctg 12540

gcgcctctgc gtgaagacga cgggcccggt gagcttgaac ctgaaagaga gttcgacaga 12600

atcaatttcg gtgtcgttga cggcggcctg gcgcaaaatc tcctgcacgt ctcctgagtt 12660

gtcttgatag gcgatctcgg ccatgaactg ctcgatctct tcctcctgga gatctccgcg 12720

tccggctcgc tccacggtgg cggcgaggtc gttggaaatg cgggccatga gctgcgagaa 12780

ggcgttgagg cctccctcgt tccagacgcg gctgtagacc acgccccctt cggcatcgcg 12840

ggcgcgcatg accacctgcg cgagattgag ctccacgtgc cgggcgaaga cggcgtagtt 12900

tcgcaggcgc tgaaagaggt agttgagggt ggtggcggtg tgttctgcca cgaagaagta 12960

cataacccag cgtcgcaacg tggattcgtt gatatccccc aaggcctcaa ggcgctccat 13020

ggcctcgtag aagtccacgg cgaagttgaa aaactgggag ttgcgcgccg acacggttaa 13080

ctcctcctcc agaagacgga tgagctcggc gacagtgtcg cgcacctcgc gctcaaaggc 13140

tacaggggcc tcttcttctt cttcaatctc ctcttccata agggcctccc cttcttcttc 13200

ttctggcggc ggtgggggag gggggacacg gcggcgacga cggcgcaccg ggaggcggtc 13260

gacaaagcgc tcgatcatct ccccgcggcg acggcgcatg gtctcggtga cggcgcggcc 13320

gttctcgcgg gggcgcagtt ggaagacgcc gcccgtcatg tcccggttat gggttggcgg 13380

ggggctgcca tgcggcaggg atacggcgct aacgatgcat ctcaacaatt gttgtgtagg 13440

tactccgccg ccgagggacc tgagcgagtc cgcatcgacc ggatcggaaa acctctcgag 13500

aaaggcgtct aaccagtcac agtcgcaagg taggctgagc accgtggcgg gcggcagcgg 13560

gcggcggtcg gggttgtttc tggcggaggt gctgctgatg atgtaattaa agtaggcggt 13620

cttgagacgg cggatggtcg acagaagcac catgtccttg ggtccggcct gctgaatgcg 13680

caggcggtcg gccatgcccc aggcttcgtt ttgacatcgg cgcaggtctt tgtagtagtc 13740

ttgcatgagc ctttctaccg gcacttcttc ttctccttcc tcttgtcctg catctcttgc 13800

atctatcgct gcggcggcgg cggagtttgg ccgtaggtgg cgccctcttc ctcccatgcg 13860

tgtgaccccg aagcccctca tcggctgaag cagggctagg tcggcgacaa cgcgctcggc 13920

taatatggcc tgctgcacct gcgtgagggt agactggaag tcatccatgt ccacaaagcg 13980

gtggtatgcg cccgtgttga tggtgtaagt gcagttggcc ataacggacc agttaacggt 14040

ctggtgaccc ggctgcgaga gctcggtgta cctgagacgc gagtaagccc tcgagtcaaa 14100

tacgtagtcg ttgcaagtcc gcaccaggta ctggtatccc accaaaaagt gcggcggcgg 14160

ctggcggtag aggggccagc gtagggtggc cggggctccg ggggcgagat cttccaacat 14220

aaggcgatga tatccgtaga tgtacctgga catccaggtg atgccggcgg cggtggtgga 14280

ggcgcgcgga aagtcgcgga cgcggttcca gatgttgcgc agcggcaaaa agtgctccat 14340

ggtcgggacg ctctggccgg tcaggcgcgc gcaatcgttg acgctctagc gtgcaaaagg 14400

agagcctgta agcgggcact cttccgtggt ctggtggata aattcgcaag ggtatcatgg 14460

cggacgaccg gggttcgagc cccgtatccg gccgtccgcc gtgatccatg cggttaccgc 14520

ccgcgtgtcg aacccaggtg tgcgacgtca gacaacgggg gagtgctcct tttggcttcc 14580

ttccaggcgc ggcggctgct gcgctagctt ttttggccac tggccgcgcg cagcgtaagc 14640

ggttaggctg gaaagcgaaa gcattaagtg gctcgctccc tgtagccgga gggttatttt 14700

ccaagggttg agtcgcggga cccccggttc gagtctcgga ccggccggac tgcggcgaac 14760

gggggtttgc ctccccgtca tgcaagaccc cgcttgcaaa ttcctccgga aacagggacg 14820

agccccttt ttgcttttcc cagatgcatc cggtgctgcg gcagatgcgc ccccctcctc 14880

agcagcggca agagcaagag cagcggcaga catgcagggc accctcccct cctcctaccg 14940

cgtcaggagg ggcgacatcc gcggttgacg cggcagcaga tggtgattac gaacccccgc 15000

ggcgccgggc ccggcactac ctggacttgg aggagggcga gggcctggcg cggctaggag 15060

cgccctctcc tgagcggcac ccaagggtgc agctgaagcg tgatacgcgt gaggcgtacg 15120

tgccgcggca gaacctgttt cgcgaccgcg agggagagga gcccgaggag atgcgggatc 15180

gaaagttcca cgcagggcgc gagctgcggc atggcctgaa tcgcgagcgg ttgctgcgcg 15240

aggaggactt tgagcccgac gcgcgaaccg ggattagtcc cgcgcgcgca cacgtggcgg 15300

ccgccgacct ggtaaccgca tacgagcaga cggtgaacca ggagattaac tttcaaaaaa 15360

gctttaacaa ccacgtgcgt acgcttgtgg cgcgcgagga ggtggctata ggactgatgc 15420

atctgtggga ctttgtaagc gcgctggagc aaaacccaaa tagcaagccg ctcatggcgc 15480

agctgttcct tatagtgcag cacagcaggg acaacgaggc attcagggat gcgctgctaa 15540

acatagtaga gcccgagggc cgctggctgc tcgatttgat aaacatcctg cagagcatag 15600

tggtgcagga gcgcagcttg agcctggctg acaaggtggc cgccatcaac tattccatgc 15660

ttagcctggg caagttttac gcccgcaaga tataccatac cccttacgtt cccatagaca 15720

aggaggtaaa gatcgagggg ttctacatgc gcatggcgct gaaggtgctt accttgagcg 15780

acgacctggg cgtttatcgc aacgagcgca tccacaaggc cgtgagcgtg agccggcggc 15840

gcgagctcag cgaccgcgag ctgatgcaca gcctgcaaag ggccctggct ggcacgggca 15900

gcggcgatag agaggccgag tcctactttg acgcgggcgc tgacctgcgc tgggccccaa 15960

gccgacgcgc cctggaggca gctggggccg gacctgggct ggcggtggca cccgcgcgcg 16020

ctggcaacgt cggcggcgtg gaggaatatg acgaggacga tgagtacgag ccagaggacg 16080

gcgagtacta agcggtgatg tttctgatca gatgatgcaa gacgcaacgg acccggcggt 16140

gcgggcggcg ctgcagagcc agccgtccgg ccttaactcc acggacgact ggcgccaggt 16200

catggaccgc atcatgtcgc tgactgcgcg caatcctgac gcgttccggc agcagccgca 16260

ggccaaccgg ctctccgcaa ttctggaagc ggtggtcccg gcgcgcgcaa accccacgca 16320

cgagaaggtg ctggcgatcg taaacgcgct ggccgaaaac agggccatcc ggcccgacga 16380

ggccggcctg gtctacgacg cgctgcttca gcgcgtggct cgttacaaca gcggcaacgt 16440

gcagaccaac ctggaccggc tggtgggggа tgtgcgcgag gccgtggcgc agcgtgagcg 16500

cgcgcagcag cagggcaacc tgggctccat ggttgcacta aacgccttcc tgagtacaca 16560

gcccgccaac gtgccgcggg gacaggagga ctacaccaac tttgtgagcg cactgcggct 16620

aatggtgact gagacaccgc aaagtgaggt gtaccagtct gggccagact atttttcca 16680

gaccagtaga caaggcctgc agaccgtaaa cctgagccag gctttcaaaa acttgcaggg 16740

gctgtggggg gtgcgggctc ccacaggcga ccgcgcgacc gtgtctagct tgctgacgcc 16800

caactcgcgc ctgttgctgc tgctaatagc gcccttcacg gacagtggca gcgtgtcccg 16860

ggacacatac ctaggtcact tgctgacact gtaccgcgag gccataggtc aggcgcatgt 16920

ggacgagcat actttccagg agattacaag tgtcagccgc gcgctggggc aggaggacac 16980

gggcagcctg gaggcaaccc taaactacct gctgaccaac cggcggcaga agatcccctc 17040

gttgcacagt ttaaacagcg aggaggagcg cattttgcgc tacgtgcagc agagcgtgag 17100

ccttaacctg atgcgcgacg gggtaacgcc cagcgtggcg ctggacatga ccgcgcgcaa 17160

catggaaccg ggcatgtatg cctcaaaccg gccgtttatc aaccgcctaa tggactactt 17220

gcatcgcgcg gccgccgtga accccgagta tttcaccaat gccatcttga acccgcactg 17280

gctaccgccc cctggtttct acaccggggg attcgaggtg cccgagggta acgatggatt 17340

cctctgggac gacatagacg acagcgtgtt ttccccgcaa ccgcagaccc tgctagagtt 17400

gcaacagcgc gagcaggcag aggcggcgct gcgaaaggaa agcttccgca ggccaagcag 17460

cttgtccgat ctaggcgctg cggccccgcg gtcagatgct agtagcccat ttccaagctt 17520

gatagggtct cttaccagca ctcgcaccac ccgcccgcgc ctgctgggcg aggaggagta 17580

cctaaacaac tcgctgctgc agccgcagcg cgaaaaaaac ctgcctccgg catttcccaa 17640

caacgggata gagagcctag tggacaagat gagtagatgg aagacgtacg cgcaggagca 17700

cagggacgtg ccaggcccgc gcccgcccac ccgtcgtcaa aggcacgacc gtcagcgggg 17760

tctggtgtgg gaggacgatg actcggcaga cgacagcagc gtcctggatt tgggagggag 17820

tggcaacccg tttgcgcacc ttcgccccag gctggggaga atgttttaaa aaaaaaaaag 17880

catgatgcaa aataaaaaac tcaccaaggc catggcaccg agcgttggtt ttcttgtatt 17940

ccccttagta tgcggcgcgc ggcgatgtat gaggaaggtc ctcctccctc ctacgagagt 18000

gtggtgagcg cggcgccagt ggcggcggcg ctgggttctc ccttcgatgc tcccctggac 18060

ccgccgtttg tgcctccgcg gtacctgcgg cctaccgggg ggagaaacag catccgttac 18120

tctgagttgg cacccctatt cgacaccacc cgtgtgtacc tggtggacaa caagtcaacg 18180

gatgtggcat ccctgaacta ccagaacgac cacagcaact ttctgaccac ggtcattcaa 18240

aacaatgact acagcccggg ggaggcaagc acacagacca tcaatcttga cgaccggtcg 18300

cactggggcg gcgacctgaa aaccatcctg cataccaaca tgccaaatgt gaacgagttc 18360

atgtttacca ataagtttaa ggcgcgggtg atggtgtcgc gcttgcctac taaggacaat 18420

caggtggagc tgaaatacga gtgggtggag ttcacgctgc ccgagggcaa ctactccgag 18480

accatgacca tagaccttat gaacaacgcg atcgtggagc actacttgaa agtgggcaga 18540

cagaacgggg ttctggaaag cgacatcggg gtaaagtttg acacccgcaa cttcagactg 18600

gggtttgacc ccgtcactgg tcttgtcatg cctggggtat atacaaacga agccttccat 18660

ccagacatca ttttgctgcc aggatgcggg gtggacttca cccacagccg cctgagcaac 18720

ttgttgggca tccgcaagcg gcaacccttc caggagggct ttaggatcac ctacgatgat 18780

ctggagggtg gtaacattcc cgcactgttg gatgtggacg cctaccaggc gagcttgaaa 18840

gatgacaccg aacagggcgg gggtggcgca ggcggcagca acagcagtgg cagcggcgcg 18900

gaagagaact ccaacgcggc agccgcggca atgcagccgg tggaggacat gaacgatcat 18960

gccattcgcg gcgacacctt tgccacacgg gctgaggaga agcgcgctga ggccgaagca 19020

gcggccgaag ctgccgcccc cgctgcgcaa cccgaggtcg agaagcctca gaagaaaccg 19080

gtgatcaaac ccctgacaga ggacagcaag aaacgcagtt acaacctaat aagcaatgac 19140

agcaccttca cccagtaccg cagctggtac cttgcataca actacggcga ccctcagacc 19200

ggaatccgct catggaccct gctttgcact cctgacgtaa cctgcggctc ggagcaggtc 19260

tactggtcgt tgccagacat gatgcaagac cccgtgacct tccgctccac gcgccagatc 19320

agcaactttc cggtggtggg cgccgagctg ttgcccgtgc actccaagag cttctacaac 19380

gaccaggccg tctactccca actcatccgc cagtttacct ctctgaccca cgtgttcaat 19440

cgctttcccg agaaccagat tttggcgcgc ccgccagccc ccaccatcac caccgtcagt 19500

gaaaacgttc ctgctctcac agatcacggg acgctaccgc tgcgcaacag catcggagga 19560

gtccagcgag tgaccattac tgacgccaga cgccgcacct gcccctacgt ttacaaggcc 19620

ctgggcatag tctcgccgcg cgtcctatcg agccgcactt tttgagcaag catgtccatc 19680

cttatatcgc ccagcaataa cacaggctgg ggcctgcgct tcccaagcaa gatgtttggc 19740

ggggccaaga agcgctccga ccaacaccca gtgcgcgtgc gcgggcacta ccgcgcgccc 19800

tggggcgcgc acaaacgcgg ccgcactggg cgcaccaccg tcgatgacgc catcgacgcg 19860

gtggtggagg aggcgcgcaa ctacacgccc acgccgccac cagtgtccac agtggacgcg 19920

gccattcaga ccgtggtgcg cggagcccgg cgctatgcta aaatgaagag acggcggagg 19980

cgcgtagcac gtcgccaccg ccgccgaccc ggcactgccg cccaacgcgc ggcggcggcc 20040

ctgcttaacc gcgcacgtcg caccggccga cgggcggcca tgcgggccgc tcgaaggctg 20100

gccgcgggta ttgtcactgt gccccccagg tccaggcgac gagcggccgc cgcagcagcc 20160

gcggccatta gtgctatgac tcagggtcgc aggggcaacg tgtattgggt gcgcgactcg 20220

gttagcggcc tgcgcgtgcc cgtgcgcacc cgcccccgc gcaactagat tgcaagaaaa 20280

aactacttag actcgtactg ttgtatgtat ccagcggcgg cggcgcgcaa cgaagctatg 20340

tccaagcgca aaatcaaaga agagatgctc caggtcatcg cgccggagat ctatggcccc 20400

ccgaagaagg aagagcagga ttacaagccc cgaaagctaa agcgggtcaa aaagaaaaag 20460

aaagatgatg atgatgaact tgacgacgag gtggaactgc tgcacgctac cgcgcccagg 20520

cgacgggtac agtggaaagg tcgacgcgta aaacgtgttt tgcgacccgg caccaccgta 20580

gtctttacgc ccggtgagcg ctccacccgc acctacaagc gcgtgtatga tgaggtgtac 20640

ggcgacgagg acctgcttga gcaggccaac gagcgcctcg gggagtttgc ctacggaaag 20700

cggcataagg acatgctggc gttgccgctg gacgagggca acccaacacc tagcctaaag 20760

cccgtaacac tgcagcaggt gctgcccgcg cttgcaccgt ccgaagaaaa gcgcggccta 20820

aagcgcgagt ctggtgactt ggcacccacc gtgcagctga tggtacccaa gcgccagcga 20880

ctggaagatg tcttggaaaa aatgaccgtg gaacctgggc tggagcccga ggtccgcgtg 20940

cggccaatca agcaggtggc gccgggactg ggcgtgcaga ccgtggacgt tcagataccc 21000

actaccagta gcaccagtat tgccaccgcc acagagggca tggagacaca aacgtccccg 21060

gttgcctcag cggtggcgga tgccgcggtg caggcggtcg ctgcggccgc gtccaagacc 21120

tctacggagg tgcaaacgga cccgtggatg tttcgcgttt cagcccccg gcgcccgcgc 21180

cgttcgagga agtacggcgc cgccagcgcg ctactgcccg aatatgccct acatccttcc 21240

attgcgccta cccccggcta tcgtggctac acctaccgcc ccagaagacg agcaactacc 21300

cgacgccgaa ccaccactgg aacccgccgc cgccgtcgcc gtcgccagcc cgtgctggcc 21360

ccgatttccg tgcgcagggt ggctcgcgaa ggaggcagga ccctggtgct gccaacagcg 21420

cgctaccacc ccagcatcgt ttaaaagccg gtctttgtgg ttcttgcaga tatggccctc 21480

acctgccgcc tccgtttccc ggtgccggga ttccgaggaa gaatgcaccg taggaggggc 21540

atggccggcc acggcctgac gggcggcatg cgtcgtgcgc accaccggcg gcggcgcgcg 21600

tcgcaccgtc gcatgcgcgg cggtatcctg cccctcctta ttccactgat cgccgcggcg 21660

attggcgccg tgcccggaat tgcatccgtg gccttgcagg cgcagagaca ctgattaaaa 21720

acaagttgca tgtggaaaaa tcaaaataaa aagtctggac tctcacgctc gcttggtcct 21780

gtaactattt tgtagaatgg aagacatcaa ctttgcgtct ctggccccgc gacacggctc 21840

gcgcccgttc atgggaaact ggcaagatat cggcaccagc aatatgagcg gtggcgcctt 21900

cagctggggc tcgctgtgga gcggcattaa aaatttcggt tccaccgtta agaactatgg 21960

cagcaaggcc tggaacagca gcacaggcca gatgctgagg gataagttga aagagcaaaa 22020

tttccaacaa aaggtggtag atggcctggc ctctggcatt agcggggtgg tggacctggc 22080

caaccaggca gtgcaaaata agattaacag taagcttgat ccccgccctc ccgtagagga 22140

gcctccaccg gccgtggaga cagtgtctcc agaggggcgt ggcgaaaagc gtccgcgccc 22200

cgacagggaa gaaactctgg tgacgcaaat agacgagcct ccctcgtacg aggaggcact 22260

aaagcaaggc ctgcccacca cccgtcccat cgcgcccatg gctaccggag tgctgggcca 22320

gcacacaccc gtaacgctgg acctgcctcc ccccgccgac acccagcaga aacctgtgct 22380

gccaggcccg accgccgttg ttgtaacccg tcctagccgc gcgtccctgc gccgcgccgc 22440

cagcggtccg cgatcgttgc ggcccgtagc cagtggcaac tggcaaagca cactgaacag 22500

catcgtgggt ctgggggtgc aatccctgaa gcgccgacga tgcttctgat agctaacgtg 22560

tcgtatgtgt gtcatgtatg cgtccatgtc gccgccagag gagctgctga gccgccgcgc 22620

gcccgctttc caagatggct acccccttcga tgatgccgca gtggtcttac atgcacatct 22680

cgggccagga cgcctcggag tacctgagcc ccgggctggt gcagtttgcc cgcgccaccg 22740

agacgtactt cagcctgaat aacaagttta gaaaccccac ggtggcgcct acgcacgacg 22800

tgaccacaga ccggtcccag cgtttgacgc tgcggttcat ccctgtggac cgtgaggata 22860

ctgcgtactc gtacaaggcg cggttcaccc tagctgtggg tgataaccgt gtgctggaca 22920

tggcttccac gtactttgac atccgcggcg tgctggacag gggccctact tttaagccct 22980

actctggcac tgcctacaac gccctggctc ccaagggtgc cccaaatcct tgcgaatggg 23040

atgaagctgc tactgctctt gaaataaacc tagaagaaga ggacgatgac aacgaagacg 23100

aagtagacga gcaagctgag cagcaaaaaa ctcacgtatt tgggcaggcg ccttattctg 23160

gtataaatat tacaaaggag ggtattcaaa taggtgtcga aggtcaaaca cctaaatatg 23220

ccgataaaac atttcaacct gaacctcaaa taggagaatc tcagtggtac gaaacagaaa 23280

ttaatcatgc agctgggaga gtcctaaaaa agactacccc aatgaaacca tgttacggtt 23340

catatgcaaa acccacaaat gaaaatggag ggcaaggcat tcttgtaaag caacaaaatg 23400

gaaagctaga aagtcaagtg gaaatgcaat ttttctcaac tactgaggca gccgcaggca 23460

atggtgataa cttgactcct aaagtggtat tgtacagtga agatgtagat atagaaaccc 23520

cagacactca tatttcttac atgcccacta ttaaggaagg taactcacga gaactaatgg 23580

gccaacaatc tatgcccaac aggcctaatt acattgcttt tagggacaat tttattggtc 23640

taatgtatta caacagcacg ggtaatatgg gtgttctggc gggccaagca tcgcagttga 23700

atgctgttgt agatttgcaa gacagaaaca cagagctttc ataccagctt ttgcttgatt 23760

ccattggtga tagaaccagg tacttttcta tgtggaatca ggctgttgac agctatgatc 23820

cagatgttag aattattgaa aatcatggaa ctgaagatga acttccaaat tactgctttc 23880

cactgggagg tgtgattaat acagagactc ttaccaaggt aaaacctaaa acaggtcagg 23940

aaaatggatg ggaaaaagat gctacagaat tttcagataa aaatgaaata agagttggaa 24000

ataattttgc catggaaatc aatctaaatg ccaacctgtg gagaaatttc ctgtactcca 24060

acatagcgct gtatttgccc gacaagctaa agtacagtcc ttccaacgta aaaatttctg 24120

ataacccaaa cacctacgac tacatgaaca agcgagtggt ggctcccggg ctagtggact 24180

gctacattaa ccttggagca cgctggtccc ttgactatat ggacaacgtc aacccattta 24240

accaccaccg caatgctggc ctgcgctacc gctcaatgtt gctgggcaat ggtcgctatg 24300

tgcccttcca catccaggtg cctcagaagt tctttgccat taaaaacctc cttctcctgc 24360

cgggctcata cacctacgag tggaacttca ggaaggatgt taacatggtt ctgcagagct 24420

ccctaggaaa tgacctaagg gttgacggag ccagcattaa gtttgatagc atttgccttt 24480

acgccacctt cttccccatg gcccacaaca ccgcctccac gcttgaggcc atgcttagaa 24540

acgacaccaa cgaccagtcc tttaacgact atctctccgc cgccaacatg ctctacccta 24600

tacccgccaa cgctaccaac gtgcccatat ccatcccctc ccgcaactgg gcggctttcc 24660

gcggctgggc cttcacgcgc cttaagacta aggaaacccc atcactgggc tcgggctacg 24720

acccttatta cacctactct ggctctatac cctacctaga tggaaccttt tacctcaacc 24780

acacctttaa gaaggtggcc attacctttg actcttctgt cagctggcct ggcaatgacc 24840

gcctgcttac ccccaacgag tttgaaatta agcgctcagt tgacggggag ggttacaacg 24900

ttgcccagtg taacatgacc aaagactggt tcctggtaca aatgctagct aactataaca 24960

ttggctacca gggcttctat atcccagaga gctacaagga ccgcatgtac tccttcttta 25020

gaaacttcca gcccatgagc cgtcaggtgg tggatgatac taaatacaag gactaccaac 25080

aggtgggcat cctacaccaa cacaacaact ctggatttgt tggctacctt gcccccacca 25140

tgcgcgaagg acaggcctac cctgctaact tcccctatcc gcttataggc aagaccgcag 25200

ttgacagcat tacccagaaa aagtttcttt gcgatcgcac cctttggcgc atcccattct 25260

ccagtaactt tatgtccatg ggcgcactca cagacctggg ccaaaacctt ctctacgcca 25320

actccgccca cgcgctagac atgacttttg aggtggatcc catggacgag cccacccttc 25380

tttatgtttt gtttgaagtc tttgacgtgg tccgtgtgca ccagccgcac cgcggcgtca 25440

tcgaaaccgt gtacctgcgc acgcccttct cggccggcaa cgccacaaca taaagaagca 25500

agcaacatca acaacagctg ccgccatggg ctccagtgag caggaactga aagccattgt 25560

caaagatctt ggttgtgggc catatttttt gggcacctat gacaagcgct ttccaggctt 25620

tgtttctcca cacaagctcg cctgcgccat agtcaatacg gccggtcgcg agactggggg 25680

cgtacactgg atggcctttg cctggaaccc gcactcaaaa acatgctacc tctttgagcc 25740

ctttggcttt tctgaccagc gactcaagca ggtttaccag tttgagtacg agtcactcct 25800

gcgccgtagc gccattgctt cttcccccga ccgctgtata acgctggaaa agtccaccca 25860

aagcgtacag gggcccaact cggccgcctg tggactattc tgctgcatgt ttctccacgc 25920

ctttgccaac tggccccaaa ctcccatgga tcacaacccc accatgaacc ttattaccgg 25980

ggtacccaac tccatgctca acagtcccca ggtacagccc accctgcgtc gcaaccagga 26040

acagctctac agcttcctgg agcgccactc gccctacttc cgcagccaca gtgcgcagat 26100

taggagcgcc acttcttttt gtcacttgaa aaacatgtaa aaataatgta ctagagacac 26160

tttcaataaa ggcaaatgct tttatttgta cactctcggg tgattattta cccccaccct 26220

tgccgtctgc gccgtttaaa aatcaaaggg gttctgccgc gcatcgctat gcgccactgg 26280

cagggacacg ttgcgatact ggtgtttagt gctccactta aactcaggca caaccatccg 26340

cggcagctcg gtgaagtttt cactccacag gctgcgcacc atcaccaacg cgtttagcag 26400

gtcgggcgcc gatatcttga agtcgcagtt ggggcctccg ccctgcgcgc gcgagttgcg 26460

atacacaggg ttgcagcact ggaacactat cagcgccggg tggtgcacgc tggccagcac 26520

gctcttgtcg gagatcagat ccgcgtccag gtcctccgcg ttgctcaggg cgaacggagt 26580

caactttggt agctgccttc ccaaaaaggg cgcgtgccca ggctttgagt tgcactcgca 26640

ccgtagtggc atcaaaaggt gaccgtgccc ggtctgggcg ttaggataca gcgcctgcat 26700

aaaagccttg atctgcttaa aagccacctg agcctttgcg ccttcagaga agaacatgcc 26760

gcaagacttg ccggaaaact gattggccgg acaggccgcg tcgtgcacgc agcaccttgc 26820

gtcggtgttg gagatctgca ccacatttcg gccccaccgg ttcttcacga tcttggcctt 26880

gctagactgc tccttcagcg cgcgctgccc gttttcgctc gtcacatcca tttcaatcac 26940

gtgctcctta tttatcataa tgcttccgtg tagacactta agctcgcctt cgatctcagc 27000

gcagcggtgc agccacaacg cgcagcccgt gggctcgtga tgcttgtagg tcacctctgc 27060

aaacgactgc aggtacgcct gcaggaatcg ccccatcatc gtcacaaagg tcttgttgct 27120

ggtgaaggtc agctgcaacc cgcggtgctc ctcgttcagc caggtcttgc atacggccgc 27180

cagagcttcc acttggtcag gcagtagttt gaagttcgcc tttagatcgt tatccacgtg 27240

gtacttgtcc atcagcgcgc gcgcagcctc catgcccttc tcccacgcag acacgatcgg 27300

cacactcagc gggttcatca ccgtaatttc actttccgct tcgctgggct cttcctcttc 27360

ctcttgcgtc cgcataccac gcgccactgg gtcgtcttca ttcagccgcc gcactgtgcg 27420

cttacctcct ttgccatgct tgattagcac cggtgggttg ctgaaaccca ccatttgtag 27480

cgccacatct tctctttctt cctcgctgtc cacgattacc tctggtgatg gcgggcgctc 27540

gggcttggga gaagggcgct tctttttctt cttgggcgca atggccaaat ccgccgccga 27600

ggtcgatggc cgcgggctgg gtgtgcgcgg caccagcgcg tcttgtgatg agtcttcctc 27660

gtcctcggac tcgatacgcc gcctcatccg ctttttgggg ggcgcccggg gaggcggcgg 27720

cgacggggac ggggacgaca cgtcctccat ggttggggga cgtcgcgccg caccgcgtcc 27780

gcgctcgggg gtggtttcgc gctgctcctc ttcccgactg gccatttcct tctcctatag 27840

gcagaaaaag atcatggagt cagtcgagaa gaaggacagc ctaaccgccc cctctgagtt 27900

cgccaccacc gcctccaccg atgccgccaa cgcgcctacc accttccccg tcgaggcacc 27960

cccgcttgag gaggaggaag tgattatcga gcaggaccca ggttttgtaa gcgaagacga 28020

cgaggaccgc tcagtaccaa cagaggataa aaagcaagac caggacaacg cagaggcaaa 28080

cgaggaacaa gtcgggcggg gggacgaaag gcatggcgac tacctagatg tgggagacga 28140

cgtgctgttg aagcatctgc agcgccagtg cgccattatc tgcgacgcgt tgcaagagcg 28200

cagcgatgtg cccctcgcca tagcggatgt cagccttgcc tacgaacgcc acctattctc 28260

accgcgcgta ccccccaaac gccaagaaaa cggcacatgc gagcccaacc cgcgcctcaa 28320

cttctacccc gtatttgccg tgccagaggt gcttgccacc tatcacatct ttttccaaaa 28380

ctgcaagata cccctatcct gccgtgccaa ccgcagccga gcggacaagc agctggcctt 28440

gcggcagggc gctgtcatac ctgatatcgc ctcgctcaac gaagtgccaa aaatctttga 28500

gggtcttgga cgcgacgaga agcgcgcggc aaacgctctg caacaggaaa acagcgaaaa 28560

tgaaagtcac tctggagtgt tggtggaact cgagggtgac aacgcgcgcc tagccgtact 28620

aaaacgcagc atcgaggtca cccactttgc ctacccggca cttaacctac cccccaaggt 28680

catgagcaca gtcatgagtg agctgatcgt gcgccgtgcg cagcccctgg agagggatgc 28740

aaatttgcaa gaacaaacag aggagggcct acccgcagtt ggcgacgagc agctagcgcg 28800

ctggcttcaa acgcgcgagc ctgccgactt ggaggagcga cgcaaactaa tgatggccgc 28860

agtgctcgtt accgtggagc ttgagtgcat gcagcggttc tttgctgacc cggagatgca 28920

gcgcaagcta gaggaaacat tgcactacac ctttcgacag ggctacgtac gccaggcctg 28980

caagatctcc aacgtggagc tctgcaacct ggtctcctac cttggaattt tgcacgaaaa 29040

ccgccttggg caaaacgtgc ttcattccac gctcaagggc gaggcgcgcc gcgactacgt 29100

ccgcgactgc gtttacttat ttctatgcta cacctggcag acggccatgg gcgtttggca 29160

gcagtgcttg gaggagtgca acctcaagga gctgcagaaa ctgctaaagc aaaacttgaa 29220

ggacctatgg acggccttca acgagcgctc cgtggccgcg cacctggcgg acatcatttt 29280

ccccgaacgc ctgcttaaaa ccctgcaaca gggtctgcca gacttcacca gtcaaagcat 29340

gttgcagaac tttaggaact ttatcctaga gcgctcagga atcttgcccg ccacctgctg 29400

tgcacttcct agcgactttg tgcccattaa gtaccgcgaa tgccctccgc cgctttgggg 29460

ccactgctac cttctgcagc tagccaacta ccttgcctac cactctgaca taatggaaga 29520

cgtgagcggt gacggtctac tggagtgtca ctgtcgctgc aacctatgca ccccgcaccg 29580

ctccctggtt tgcaattcgc agctgcttaa cgaaagtcaa attatcggta cctttgagct 29640

gcagggtccc tcgcctgacg aaaagtccgc ggctccgggg ttgaaactca ctccggggct 29700

gtggacgtcg gcttaccttc gcaaatttgt acctgaggac taccacgccc acgagattag 29760

gttctacgaa gaccaatccc gcccgcctaa tgcggagctt accgcctgcg tcattaccca 29820

gggccacatt cttggccaat tgcaagccat caacaaagcc cgccaagagt ttctgctacg 29880

aaagggacgg ggggtttact tggaccccca gtccggcgag gagctcaacc caatcccccc 29940

gccgccgcag ccctatcagc agcagccgcg ggcccttgct tcccaggatg gcacccaaaa 30000

agaagctgca gctgccgccg ccacccacgg acgaggagga atactgggac agtcaggcag 30060

aggaggtttt ggacgaggag gaggaggaca tgatggaaga ctgggagagc ctagacgagg 30120

aagcttccga ggtcgaagag gtgtcagacg aaacaccgtc accctcggtc gcattcccct 30180

cgccggcgcc ccagaaatcg gcaaccggtt ccagcatggc tacaacctcc gctcctcagg 30240

cgccgccggc actgcccgtt cgccgaccca accgtagatg ggacaccact ggaaccaggg 30300

ccggtaagtc caagcagccg ccgccgttag cccaagagca acaacagcgc caaggctacc 30360

gctcatggcg cgggcacaag aacgccatag ttgcttgctt gcaagactgt gggggcaaca 30420

tctccttcgc ccgccgcttt cttctctacc atcacggcgt ggccttcccc cgtaacatcc 30480

tgcattacta ccgtcatctc tacagcccat actgcaccgg cggcagcggc agcaacagca 30540

gcggccacac agaagcaaag gcgaccggat agcaagactc tgacaaagcc caagaaatcc 30600

acagcggcgg cagcagcagg aggaggagcg ctgcgtctgg cgcccaacga acccgtatcg 30660

acccgcgagc ttagaaacag gatttttccc actctgtatg ctatatttca acagagcagg 30720

ggccaagaac aagagctgaa aataaaaaac aggtctctgc gatccctcac ccgcagctgc 30780

ctgtatcaca aaagcgaaga tcagcttcgg cgcacgctgg aagacgcgga ggctctcttc 30840

agtaaatact gcgcgctgac tcttaaggac tagtttcgcg ccctttctca aatttaagcg 30900

cgaaaactac gtcatctcca gcggccacac ccggcgccag cacctgttgt cagcgccatt 30960

atgagcaagg aaattcccac gccctacatg tggagttacc agccacaaat gggacttgcg 31020

gctggagctg cccaagacta ctcaacccga ataaactaca tgagcgcggg accccacatg 31080

atatcccggg tcaacggaat acgcgcccac cgaaaccgaa ttctcctgga acaggcggct 31140

attaccacca cacctcgtaa taaccttaat ccccgtagtt ggcccgctgc cctggtgtac 31200

caggaaagtc ccgctcccac cactgtggta cttcccagag acgcccaggc cgaagttcag 31260

atgactaact caggggcgca gcttgcgggc ggctttcgtc acagggtgcg gtcgcccggg 31320

cagggtataa ctcacctgac aatcagaggg cgaggtattc agctcaacga cgagtcggtg 31380

agctcctcgc ttggtctccg tccggacggg acatttcaga tcggcggcgc cggccgctct 31440

tcattcacgc ctcgtcaggc aatcctaact ctgcagacct cgtcctctga gccgcgctct 31500

ggaggcattg gaactctgca atttattgag gagtttgtgc catcggtcta ctttaacccc 31560

ttctcgggac ctcccggcca ctatccggat caatttattc ctaactttga cgcggtaaag 31620

gactcggcgg acggctacga ctgaatgtta agtggagagg cagagcaact gcgcctgaaa 31680

cacctggtcc actgtcgccg ccacaagtgc tttgcccgcg actccggtga gttttgctac 31740

tttgaattgc ccgaggatca tatcgagggc ccggcgcacg gcgtccggct taccgcccag 31800

ggagagcttg cccgtagcct gattcgggag tttacccagc gccccctgct agttgagcgg 31860

gacaggggac cctgtgttct cactgtgatt tgcaactgtc ctaaccctgg attacatcaa 31920

gatcctctag ttaatgtcag gtcgcctaag tcgattaact agagtacccg gggatcttat 31980

tccctttaac taataaaaaa aaataataaa gcatcactta cttaaaatca gttagcaaat 32040

ttctgtccag tttattcagc agcacctcct tgccctcctc ccagctctgg tattgcagct 32100

tcctcctggc tgcaaacttt ctccacaatc taaatggaat gtcagtttcc tcctgttcct 32160

gtccatccgc acccactatc ttcatgttgt tgcagatgaa gcgcgcaaga ccgtctgaag 32220

ataccttcaa ccccgtgtat ccatatgaca cggaaaccgg tcctccaact gtgccttttc 32280

ttactcctcc ctttgtatcc cccaatgggt ttcaagagag tccccctggg gtactctctt 32340

tgcgcctatc cgaacctcta gttacctcca atggcatgct tgcgctcaaa atgggcaacg 32400

gcctctctct ggacgaggcc ggcaacctta cctcccaaaa tgtaaccact gtgagcccac 32460

ctctcaaaaa aaccaagtca aacataaacc tggaaatatc tgcacccctc acagttacct 32520

cagaagccct aactgtggct gccgccgcac ctctaatggt cgcgggcaac acactcacca 32580

tgcaatcaca ggccccgcta accgtgcacg actccaaact tagcattgcc acccaaggac 32640

ccctcacagt gtcagaagga aagctagccc tgcaaacatc aggccccctc accaccaccg 32700

atagcagtac ccttactatc actgcctcac cccctctaac tactgccact ggtagcttgg 32760

gcattgactt gaaagagccc atttatacac aaaatggaaa actaggacta aagtacgggg 32820

ctcctttgca tgtaacagac gacctaaaca ctttgaccgt agcaactggt ccaggtgtga 32880

ctattaataa tacttccttg caaactaaag ttactggagc cttgggtttt gattcacaag 32940

gcaatatgca acttaatgta gcaggaggac taaggattga ttctcaaaac agacgcctta 33000

tacttgatgt tagttatccg tttgatgctc aaaaccaact aaatctaaga ctaggacagg 33060

gccctctttt tataaactca gcccacaact tggatattaa ctacaacaaa ggcctttact 33120

tgtttacagc ttcaaacaat tccaaaaagc ttgaggttaa cctaagcact gccaaggggt 33180

tgatgtttga cgctacagcc atagccatta atgcaggaga tgggcttgaa tttggttcac 33240

ctaatgcacc aaacacaaat cccctcaaaa caaaaattgg ccatggccta gaatttgatt 33300

caaacaaggc tatggttcct aaactaggaa ctggccttag ttttgacagc acaggtgcca 33360

ttacagtagg aaacaaaaat aatgataagc taactttgtg gaccggaata aaccctccac 33420

ctaactgtca aattgtggaa aacactaata caaatgatgg caaacttact ttagtattag 33480

taaaaaatgg agggcttgtt aatggctacg tgtctctagt tggtgtatca gacactgtga 33540

accaaatgtt cacacaaaag acagcaaaca tccaattaag attatatttt gactcttctg 33600

gaaatctatt aactgaggaa tcagacttaa aaattccact taaaaataaa tcttctacag 33660

cgaccagtga aactgtagcc agcagcaaag cctttatgcc aagtactaca gcttatccct 33720

tcaacaccac tactagggat agtgaaaact acattcatgg aatatgttac tacatgacta 33780

gttatgatag aagtctattt cccttgaaca tttctataat gctaaacagc cgtatgattt 33840

cttccaatgt tgcctatgcc atacaatttg aatggaatct aaatgcaagt gaatctccag 33900

aaagcaacat agctacgctg accacatccc ccttttttctt ttcttacatt acagaagacg 33960

acaactaaag aatcgtttgt gttatgtttc aacgtgttta tttttcaatt gcagaaaatt 34020

tcaagtcatt tttcattcag tagtatagcc ccaccaccac atagcttata cagatcaccg 34080

taccttaatc aaactcacag aaccctagta ttcaacctgc cacctccctc ccaacacaca 34140

gagtacacag tcctttctcc ccggctggcc ttaaaaagca tcatatcatg ggtaacagac 34200

atattcttag gtgttatatt ccacacggtt tcctgtcgag ccaaacgctc atcagtgata 34260

ttaataaact ccccgggcag ctcacttaag ttcatgtcgc tgtccagctg ctgagccaca 34320

ggctgctgtc caacttgcgg ttgcttaacg ggcggcgaag gagaagtcca cgcctacatg 34380

ggggtagagt cataatcgtg catcaggata gggcggtggt gctgcagcag cgcgcgaata 34440

aactgctgcc gccgccgctc cgtcctgcag gaatacaaca tggcagtggt ctcctcagcg 34500

atgattcgca ccgcccgcag cataaggcgc cttgtcctcc gggcacagca gcgcaccctg 34560

atctcactta aatcagcaca gtaactgcag cacagcacca caatattgtt caaaatccca 34620

cagtgcaagg cgctgtatcc aaagctcatg gcgggggacca cagaacccac gtggccatca 34680

taccacaagc gcaggtagat taagtggcga cccctcataa acacgctgga cataaacatt 34740

acctcttttg gcatgttgta attcaccacc tcccctctga ttaaacatgg cgccatccac 34800

caccatccta aaccagctgg ccaaaacctg cccgccggct atacactgca gggaaccggg 34860

actggaacaa tgacagtgga gagcccagga ctcgtaacca tggatcatca tgctcgtcat 34920

gatatcaatg ttggcacaac acaggcacac gtgcatacac ttcctcagga ttacaagctc 34980

ctcccgcgtt agaaccatat cccagggaac aacccattcc tgaatcagcg taaatcccac 35040

actgcaggga agacctcgca cgtaactcac gttgtgcatt gtcaaagtgt tacattcggg 35100

cagcagcgga tgatcctcca gtatggtagc gcgggtttct gtctcaaaag gaggtagacg 35160

atccctactg tacggagtgc gccgagacaa ccgagatcgt gttggtcgta gtgtcatgcc 35220

aaatggaacg ccggacgtag tcatatttcc tgaagcaaaa ccaggtgcgg gcgtgacaaa 35280

cagatctgcg tctccggtct cgccgcttag atcgctctgt gtagtagttg tagtatatcc 35340

actctctcaa agcatccagg cgccccctgg cttcgggttc tatgtaaact ccttcatgcg 35400

ccgctgccct gataacatcc accaccgcag aataagccac acccagccaa cctacacatt 35460

cgttctgcga gtcacacacg ggaggagcgg gaagagctgg aagaaccatg ttttttttt 35520

tattccaaaa gattatccaa aacctcaaaa tgaagatcta ttaagtgaac gcgctcccct 35580

ccggtggcgt ggtcaaactc tacagccaaa gaacagataa tggcatttgt aagatgttgc 35640

acaatggctt ccaaaaggca aacggccctc acgtccaagt ggacgtaaag gctaaaccct 35700

tcagggtgaa tctcctctat aaacattcca gcaccttcaa ccatgcccaa ataattctca 35760

tctcgccacc ttctcaatat atctctaagc aaatcccgaa tattaagtcc ggccattgta 35820

aaaatctgct ccagagcgcc ctccaccttc agcctcaagc agcgaatcat gattgcaaaa 35880

attcaggttc ctcacagacc tgtataagat tcaaaagcgg aacattaaca aaaataccgc 35940

gatcccgtag gtcccttcgc agggccagct gaacataatc gtgcaggtct gcacggacca 36000

gcgcggccac ttccccgcca ggaaccatga caaaagaacc cacactgatt atgacacgca 36060

tactcggagc tatgctaacc agcgtagccc cgatgtaagc ttgttgcatg ggcggcgata 36120

taaaatgcaa ggtgctgctc aaaaaatcag gcaaagcctc gcgcaaaaaa gaaagcacat 36180

cgtagtcatg ctcatgcaga taaaggcagg taagctccgg aaccaccaca gaaaaagaca 36240

ccatttttct ctcaaacatg tctgcgggtt tctgcataaa cacaaaataa aataacaaaa 36300

aaacatttaa acattagaag cctgtcttac aacaggaaaa acaaccctta taagcataag 36360

acggactacg gccatgccgg cgtgaccgta aaaaaactgg tcaccgtgat taaaaagcac 36420

caccgacagc tcctcggtca tgtccggagt cataatgtaa gactcggtaa acacatcagg 36480

ttgattcaca tcggtcagtg ctaaaaagcg accgaaatag cccgggggaa tacatacccg 36540

caggcgtaga gacaacatta cagcccccat aggaggtata acaaaattaa taggagagaa 36600

aaacacataa acacctgaaa aaccctcctg cctaggcaaa atagcaccct cccgctccag 36660

aacaacatac agcgcttcca cagcggcagc cataacagtc agccttacca gtaaaaaaga 36720

aaacctatta aaaaaacacc actcgacacg gcaccagctc aatcagtcac agtgtaaaaa 36780

agggccaagt gcagagcgag tatatatagg actaaaaaat gacgtaacgg ttaaagtcca 36840

caaaaaacac ccagaaaacc gcacgcgaac ctacgcccag aaacgaaagc caaaaaaccc 36900

acaacttcct caaatcgtca cttccgtttt cccacgttac gtcacttccc attttaagaa 36960

aactacaatt cccaacacat acaagttact ccgccctaaa acctacgtca cccgccccgt 37020

tcccacgccc cgcgccacgt cacaaactcc acccccctcat tatcatattg gcttcaatcc 37080

aaaataaggt atattattga tgatg 37105

<210> 9
<211> 37105
<212> DNA
<213> Artificial Sequence

<220>
<223> Adk35R2-E4orf6/Spike-E4dl355(E4re#4)

<400> 9
ttaattaaca tcatcaataa tataccttat tttggattga agccaatatg ataatgaggg 60

ggtggagttt gtgacgtggc gcggggcgtg ggaacggggc gggtgacgta gtagtgtggc 120

ggaagtgtga tgttgcaagt gtggcggaac acatgtaagc gacggatgtg gcaaaagtga 180

cgtttttggt gtgcgccggt gtacacagga agtgacaatt ttcgcgcggt tttaggcgga 240

tgttgtagta aatttgggcg taaccgagta agatttggcc attttcgcgg gaaaactgaa 300

taagaggaag tgaaatctga ataattttgt gttactcata gcgcgtaata atttgatccg 360

cgttaagata cattgatgag tttggacaaa ccacaactag aatgcagtga aaaaaatgct 420

ttatttgtga aatttgtgat gctattgctt tatttgtaac cattataagc tgcaataaac 480

aagttaacaa caacaattgc attcatttta tgtttcaggt tcaggggggag gtgtgggagg 540

ttttttaaag caagtaaaac ctctacaaat gtggtatggc tgattatgat caattttcat 600

ggccacttga tgtattgttc atatttgccc agttcttgga ggtcaatcag ggactcattc 660

aggttcttag ccacctcatt cagtctgtca atctccttct ggatgttcac cacagaggca 720

ttgatgccag agatgtctcc caggtccaca tcagggctgg tgtggttctt gaagtatttg 780

tccagttcct ccttgaagga gtccagttca ggttggagtg ggtcatagac tgtgttgttc 840

acaatgccaa tcaccacatc acagttgcca gacacaaagg tgttgtctgt ggtgataatc 900

tgtggttcat agaagttcct ctgggtcaca aaccagtggg tgccattgct cacaaacact 960

ccctcccttg gaaagtgagc cttgccatca tggcagatgg caggggctgt ggtgaagttc 1020

ttctcctggg caggcacata ggtcacatgc aggaacacca ctccatgagg ggcagactgt 1080

ggaaaactca tcaggtggta gcccttgcca cagaagtcca ccctcttgct ttgtcccagc 1140

acacactcac tcatcttggt ggcagccagg ttggcagatg ccctaatctc agcagccctg 1200

ataagttgtt gggtcacata ggtttggagg gattggagtc tgcctgtaat cagtctgtca 1260

atctggacct cagcctccac cttgtccagt ctgctcagga tgtcattcag cacagaggag 1320

atggctccaa agttgctgga aagttgcttc accagggtgt tcagagcctg ggcattctgg 1380

ttcaccacat cttggagttt gcccagggca gaggctgtgc tggacaggga gtcctgaatc 1440

ttgccaatgg cagagttgaa ctggttggca atcagtttct ggttctcata gagcacattc 1500

tgggtcactc caatgccatt gaacctgtaa gccatctgca tagcaaatgg gatttggagg 1560

gctgctcctg ctccaaaggt ccagccagag gtgatggtgc cagccagcag ggcagaggtg 1620

tattgggcaa tcatctcatc tgtcagcagt ggaggcagca ctgtcagtcc attgaacttc 1680

tgggcacaaa tcaggtccct ggcagcaatg tctcccagac agtctccata ttgcttgatg 1740

aagccagcat cagccagggt caccttgttg aacagcaggt cctcaatgaa ggacctcttg 1800

cttggcttgc ttgggtcagg cagaatctgg ctgaagttga agcctccaaa gtccttgatt 1860

ggaggtgtct tgtaaatctg cttcacctgg gcaaacacct cctgggtgtt cttgtcctgt 1920

tccacagcaa tgcctgtcag agccctgtta agttgggtac agaaggagcc atattggagc 1980

agcaggttgc tacactctgt gctgtctcca cagatataca ttgtacagtc cacagaggtc 2040

ttggtcatac tcacaggcag aatctctgtg gtcacagaga tggtgaagtt ggttgggatg 2100

gcaatgctgt tgttgctgta agccacagag ttctctgctc ccagactcat tgtgtaggca 2160

atgatgctct ggcttgccac agacctcgac ccaccgccac cggtctgggt ctggtaggag 2220

gcacagatgc ctgctccaat tgggatgtca cactcatagg agttgttcac atgctctgct 2280

ccaatcagac agccagccct ggtctggaac acattgctgc ctgtgctgta gaccctccag 2340

gttggtgtaa gttggtcagc atggatagcc acaggcacct cagtacagtt cacatcctgg 2400

tagagcacag ccacctggtt gctggtgttg gtgccaggtg taatcacaga cactcctcca 2460

aaggaacatg gtgtgatgtc cagaatctcc aaggtctgtg ggtccctcac agcatctgtg 2520

gtgtcagcaa tgtccctgcc aaactgttgg aatggcagga acttcttgtt gctctctgtc 2580

agcactcctg tgcctgtcag tccattgaag ttgaagttca cacacttgtt cttcaccagg 2640

ttggtgctct tctttggtcc acacactgtg gcaggggcat ggagcagttc aaaggacagc 2700

accaccaccc tgtatggttg gtagcccact ccattggttg gttggaagcc ataggattgg 2760

agtggaaagt aacagttgaa gccctccact ccattacatg gtgtgctgcc agcctggtaa 2820

atctctgtgc tgatgtccct ctcaaatggt ttcaggttgc tcttcctgaa cagtctgtag 2880

aggtagttgt agttgcctcc caccttgctg tccaggttgt tgctgttcca ggcaatcaca 2940

cagcctgtga agtcatcagg cagtttgtag ttgtagtcag caatcttgcc tgtttgtcca 3000

ggggcaatct gtctcacctc atctccccta atcacaaagg agtcagcata gacattggtg 3060

aaacacaggt cattcagttt ggttgggctc actccataac acttgaaggt gctgaaggag 3120

gcagagttgt agagcacaga gtagtcagcc acacagttgc taatcctctt cctgttccag 3180

gcatagacag aggcaaacct ggtggcattg aacacctctc caaatggaca caggttggtg 3240

atgtttggaa acctcacaat gctctctgtt ggttggaccc tgaagttgct ggtctggtag 3300

atgcccttct ccactgtgaa ggatttcagg gtacacttgg tctcagacag tgggtccagg 3360

gcacagtcca cagcatctgt gatggtgcca ttctcattgt atttcagcag gaaggtcctt 3420

ggttggaggt agcccacata gtaggctgct gctcctgctg tccagccaga ggaggagtct 3480

ccaggtgtca ggtaggacct gtgcagagcc agcagggtct ggaacctggt gatgttgatg 3540

ccaattggca ggtccaccag tggttccaag gcagagaagc cctgtggcag gtccctcacc 3600

aggttgattg gtgtgtgttt gctgtaaatc ttgaagtagc catcaatgtt cttgaacaca 3660

aactccctca ggttcttgaa gttgccctgc ttgccctcca agtccatcag gaatggttgg 3720

ctcacatatt caaaggtaca gttgttggca gaggagtaga ccctgaactc agactccatc 3780

caggacttgt tgttcttgtg gtagtagact cccaggaatg ggtcattaca gaactggaac 3840

tcacacacct taatcaccac attggtggca ttgttcacaa tcagcaggga ctgggtcttg 3900

ctgtccaggg tggtgccaaa aatccagccc ctgatgatgt tgctcttctc tgtgctggca 3960

aagtagactc catcattgaa tggcagcaca gggttgtcaa acctcttggt gccattggtg 4020

ccagacacat ggatggcatg gaaccaggtc acattgctga agaatggcag gaacaggtcc 4080

tgggtgctgt gcagcacaga ggacctgaac accttgtcag ggtagtagac tcccctggtg 4140

aaggagttgg tgtaggcagg aggaagttgg gtcctggtgg tcaggttcac acactggctg 4200

gacaccagtg gcagcagcac caggaacaca aacatggtgg caaatcggag gctggatcgg 4260

tcccggtgtc ttctatggag gtcaaaacag cgtggatggc gtctccaggc gatctgacgg 4320

ttcactaaac gagctcgtcg acgatctcta tcactgatag ggagatctct atcactgata 4380

gggagagctc tgcttatata gacctcccac cgtacacgcc taccgcccat ttgcgtcaat 4440

ggggcggagt tgttacgaca ttttggaaag tcccgttgat tttggtgcca aaacaaactc 4500

ccattgacgt caatggggtg gagacttgga aatccccgtg agtcaaaccg ctatccacgc 4560

ccattgatgt actgccaaaa ccgcatcacc atggtaatag cgatgactaa tacgtagatg 4620

tactgccaag taggaaagtc ccataaggtc atgtactggg cataatgcca ggcgggccat 4680

ttaccgtcat tgacgtcaat agggggcgta cttggcatat gatacacttg atgtactgcc 4740

aagtgggcag tttaccgtaa atactccacc cattgacgtc aatggaaagt ccctattggc 4800

gttactatgg gaacatacgt cattattgac gtcaatgggc gggggtcgtt gggcggtcag 4860

ccaggcgggc catttaccgt aagttatgta acgcggaact ccatatatgg gctatgaact 4920

aatgaccccg taattgatta ctattacagc ctcagaagcc atagagccca ccgcatcccc 4980

agcatgcctg ctattgtctt cccaatcctc ccccttgctg tcctgcccca ccccaccccc 5040

cagaatagaa tgacacctac tcagacaatg cgatgcaatt tcctcatttt attaggaaag 5100

gacagtggga gtggcacctt ccagggtcaa ggaaggcacg ggggaggggc aaacaacaga 5160

tggctggcaa ctagaaggca cagtcgaggc tgatcagcga gctctagaga attgatcccc 5220

aagcttctac atgggggtag agtcataatc gtgcatcagg atagggcggt ggtgctgcag 5280

cagcgcgcga ataaactgct gccgccgccg ctccgtcctg caggaataca acatggcagt 5340

ggtctcctca gcgatgattc gcaccgcccg cagcataagg cgccttgtcc tccgggcaca 5400

gcagcgcacc ctgatctcac ttaaatcagc acagtaactg cagcacagca ccacaatatt 5460

gttcaaaatc ccacagtgca aggcgctgta tccaaagctc atggcgggga ccacagaacc 5520

cacgtggcca tcataccaca agcgcaggta gattaagtgg cgacccctca taaacacgct 5580

ggacataaac attacctctt ttggcatgtt gtaattcacc acctcccggt accatataaa 5640

cctctgatta aacatggcgc catccaccac catcctaaac cagctggcca aaacctgccc 5700

gccggctata cactgcaggg aaccgggact ggaacaatga cagtggagag cccaggactc 5760

gtaaccatgg atcatcatgc tcgtcatgat atcaatgttg gcacaacaca ggcacacgtg 5820

catacacttc ctcaggatta caagctcctc ccgcgttaga accatatccc agggaacaac 5880

ccattcctga atcagcgtaa atcccacact gcagggaaga cctcgcacgt aactcacgtt 5940

gtgcattgtc aaagtgttac attcgggcag cagcggatga tcctccagta tggtagcgcg 6000

ggtttctgtc tcaaaaggag gtagacgatc cctactgtac ggagtgcgcc gagacaaccg 6060

agatcgtgtt ggtcgtagtg tcatgccaaa tggaacgccg gacgtagtca tggtggccag 6120

cttggggtag ttttcacgac accttaaatg gaagaaaaaa actttgaacc actgtctgag 6180

gcttgagaat gaaccaagat ccaaactcaa aaagggcaaa ttccaaggag aattacatca 6240

agtgccaagc tggcctaact tcagtctcca cccactcagt atggggaaac tccatcgcat 6300

aaaacccctc cccccaacct aaagacgacg tactccaaaa gctcgagaac taatcgaggt 6360

gcctggacgg cgcccggtac tccgtggagt cacatgaagc gacggctgag gacggaaagg 6420

ccctttttcct ttgtgtgggt gactcacccg cccgctctcc cgagcgccgc gtcctccatt 6480

ttgagctccc tgcagcaggg ccgggaagcg gccatctttc cgctcacgca actggtgccg 6540

accgggccag ccttgccgcc cagggcgggg cgatacacgg cggcgcgagg ccaggcacca 6600

gagcaggccg gccagcttga gactaccccc gtccgattct cggtggccgc gctcgcaggc 6660

cccgcctcgc cgaacatgtg cgctgggacg cacgggcccc gtcgccgccc gcggccccaa 6720

aaaccgaaat accagtgtgc agatcttggc ccgcatttac aagactatct tgccagaaaa 6780

aaagcgtcgc agcaggtcat caaaaatttt aaatggctag agacttatcg aaagcagcga 6840

gacaggcgcg aaggtgccac cagattcgca cgcggcggcc ccagcgccca ggccaagcct 6900

caactcaagc acgaggcgaa ggggctcctt aagcgcaagg cctcgaactc tcccacccac 6960

ttccaacccg aagctcggga tcaagaatca cgtactgcag ccaggggcgt ggaagtaatt 7020

caaggcacgc aagggccata acccgtaaag aggccaggcc cgcgggaacc acacacggca 7080

cttacctgtg ttctggcggc aaacccgttg cgaaaaagaa cgttcacggc gactactgca 7140

cttatatacg gttctccccc accctcggga aaaaggcgga gccagtacac gacatcactt 7200

tcccagttta ccccgcgcca ccttctctag gcaccggttc aattgccgac ccctcccccc 7260

aacttctcgg ggactgtggg cgatgtgcgc tctgcccact gacgggcacc ggagcaaatt 7320

gggcgtggct taagggtggg aaagaatata taaggtgggg gtcttatgta gttttgtatc 7380

tgttttgcag cagccgccgc cgccatgagc accaactcgt ttgatggaag cattgtgagc 7440

tcatatttga caacgcgcat gcccccatgg gccggggtgc gtcagaatgt gatgggctcc 7500

agcattgatg gtcgccccgt cctgcccgca aactctacta ccttgaccta cgagaccgtg 7560

tctggaacgc cgttggagac tgcagcctcc gccgccgctt cagccgctgc agccaccgcc 7620

cgcgggattg tgactgactt tgctttcctg agcccgcttg caagcagtgc agcttcccgt 7680

tcatccgccc gcgatgacaa gttgacggct cttttggcac aattggattc tttgacccgg 7740

gaacttaatg tcgtttctca gcagctgttg gatctgcgcc agcaggtttc tgccctgaag 7800

gcttcctccc ctcccaatgc ggtttaaaac ataaataaaa aaccagactc tgtttggatt 7860

tggatcaagc aagtgtcttg ctgtctttat ttaggggttt tgcgcgcgcg gtaggcccgg 7920

gaccagcggt ctcggtcgtt gagggtcctg tgtatttttt ccaggacgtg gtaaaggtga 7980

ctctggatgt tcagatacat gggcataagc ccgtctctgg ggtggaggta gcaccactgc 8040

agagcttcat gctgcggggt ggtgttgtag atgatccagt cgtagcagga gcgctgggcg 8100

tggtgcctaa aaatgtcttt cagtagcaag ctgattgcca ggggcaggcc cttggtgtaa 8160

gtgtttacaa agcggttaag ctgggatggg tgcatacgtg gggatatgag atgcatcttg 8220

gactgtattt ttaggttggc tatgttccca gccatatccc tccggggatt catgttgtgc 8280

agaaccacca gcacagtgta tccggtgcac ttgggaaatt tgtcatgtag cttagaagga 8340

aatgcgtgga agaacttgga gacgcccttg tgacctccaa gattttccat gcattcgtcc 8400

ataatgatgg caatgggccc acgggcggcg gcctgggcga agatatttct gggatcacta 8460

acgtcatagt tgtgttccag gatgagatcg tcataggcca tttttacaaa gcgcgggcgg 8520

agggtgccag actgcggtat aatggttcca tccggcccag gggcgtagtt accctcacag 8580

atttgcattt cccacgcttt gagttcagat ggggggatca tgtctacctg cggggcgatg 8640

aagaaaacgg tttccggggt aggggagatc agctgggaag aaagcaggtt cctgagcagc 8700

tgcgacttac cgcagccggt gggcccgtaa atcacaccta ttaccgggtg caactggtag 8760

ttaagagagc tgcagctgcc gtcatccctg agcaggggggg ccacttcgtt aagcatgtcc 8820

ctgactcgca tgttttccct gaccaaatcc gccagaaggc gctcgccgcc cagcgatagc 8880

agttcttgca aggaagcaaa gtttttcaac ggtttgagac cgtccgccgt aggcatgctt 8940

ttgagcgttt gaccaagcag ttccaggcgg tcccacagct cggtcacctg ctctacggca 9000

tctcgatcca gcatatctcc tcgtttcgcg ggttggggcg gctttcgctg tacggcagta 9060

gtcggtgctc gtccagacgg gccagggtca tgtctttcca cgggcgcagg gtcctcgtca 9120

gcgtagtctg ggtcacggtg aaggggtgcg ctccgggctg cgcgctggcc agggtgcgct 9180

tgaggctggt cctgctggtg ctgaagcgct gccggtcttc gccctgcgcg tcggccaggt 9240

agcatttgac catggtgtca tagtccagcc cctccgcggc gtggcccttg gcgcgcagct 9300

tgcccttgga ggaggcgccg cacgaggggc agtgcagact tttgagggcg tagagcttgg 9360

gcgcgagaaa taccgattcc ggggagtagg catccgcgcc gcaggccccg cagacggtct 9420

cgcattccac gagccaggtg agctctggcc gttcggggtc aaaaaccagg tttcccccat 9480

gctttttgat gcgtttctta cctctggttt ccatgagccg gtgtccacgc tcggtgacga 9540

aaaggctgtc cgtgtccccg tatacagact tgagaggcct gtcctcgagc ggtgttccgc 9600

ggtcctcctc gtatagaaac tcggaccact ctgagacaaa ggctcgcgtc caggccagca 9660

cgaaggaggc taagtgggag gggtagcggt cgttgtccac tagggggtcc actcgctcca 9720

gggtgtgaag acacatgtcg ccctcttcgg catcaaggaa ggtgattggt ttgtaggtgt 9780

aggccacgtg accgggtgtt cctgaagggg ggctataaaa gggggtgggg gcgcgttcgt 9840

cctcactctc ttccgcatcg ctgtctgcga gggccagctg ttggggtgag tactccctct 9900

gaaaagcggg catgacttct gcgctaagat tgtcagtttc caaaaacgag gaggatttga 9960

tattcacctg gcccgcggtg atgcctttga gggtggccgc atccatctgg tcagaaaaga 10020

caatcttttt gttgtcaagc ttggtggcaa acgacccgta gagggcgttg gacagcaact 10080

tggcgatgga gcgcagggtt tggtttttgt cgcgatcggc gcgctccttg gccgcgatgt 10140

ttagctgcac gtattcgcgc gcaacgcacc gccattcggg aaagacggtg gtgcgctcgt 10200

cgggcaccag gtgcacgcgc caaccgcggt tgtgcagggt gacaaggtca acgctggtgg 10260

ctacctctcc gcgtaggcgc tcgttggtcc agcagaggcg gccgcccttg cgcgagcaga 10320

atggcggtag ggggtctagc tgcgtctcgt ccgggggggtc tgcgtccacg gtaaagaccc 10380

cgggcagcag gcgcgcgtcg aagtagtcta tcttgcatcc ttgcaagtct agcgcctgct 10440

gccatgcgcg ggcggcaagc gcgcgctcgt atgggttgag tgggggaccc catggcatgg 10500

ggtgggtgag cgcggaggcg tacatgccgc aaatgtcgta aacgtagagg ggctctctga 10560

gtattccaag atatgtaggg tagcatcttc caccgcggat gctggcgcgc acgtaatcgt 10620

atagttcgtg cgagggagcg aggaggtcgg gaccgaggtt gctacgggcg ggctgctctg 10680

ctcggaagac tatctgcctg aagatggcat gtgagttgga tgatatggtt ggacgctgga 10740

agacgttgaa gctggcgtct gtgagaccta ccgcgtcacg cacgaaggag gcgtaggagt 10800

cgcgcagctt gttgaccagc tcggcggtga cctgcacgtc tagggcgcag tagtccaggg 10860

tttccttgat gatgtcatac ttatcctgtc cctttttttt ccacagctcg cggttgagga 10920

caaactcttc gcggtctttc cagtactctt ggatcggaaa cccgtcggcc tccgaacggt 10980

aagagcctag catgtagaac tggttgacgg cctggtaggc gcagcatccc ttttctacgg 11040

gtagcgcgta tgcctgcgcg gccttccgga gcgaggtgtg ggtgagcgca aaggtgtccc 11100

tgaccatgac tttgaggtac tggtatttga agtcagtgtc gtcgcatccg ccctgctccc 11160

agagcaaaaa gtccgtgcgc tttttggaac gcggatttgg cagggcgaag gtgacatcgt 11220

tgaagagtat ctttcccgcg cgaggcataa agttgcgtgt gatgcggaag ggtcccggca 11280

cctcggaacg gttgttaatt acctgggcgg cgagcacgat ctcgtcaaag ccgttgatgt 11340

tgtggcccac aatgtaaagt tccaagaagc gcgggatgcc cttgatggaa ggcaattttt 11400

taagttcctc gtaggtgagc tcttcagggg agctgagccc gtgctctgaa agggcccagt 11460

ctgcaagatg agggttggaa gcgacgaatg agctccacag gtcacgggcc attagcattt 11520

gcaggtggtc gcgaaaggtc ctaaactggc gacctatggc catttttct ggggtgatgc 11580

agtagaaggt aagcgggtct tgttcccagc ggtcccatcc aaggttcgcg gctaggtctc 11640

gcgcggcagt cactagaggc tcatctccgc cgaacttcat gaccagcatg aagggcacga 11700

gctgcttccc aaaggccccc atccaagtat aggtctctac atcgtaggtg acaaagagac 11760

gctcggtgcg aggatgcgag ccgatcggga agaactggat ctcccgccac caattggagg 11820

agtggctatt gatgtggtga aagtagaagt ccctgcgacg ggccgaacac tcgtgctggc 11880

ttttgtaaaa acgtgcgcag tactggcagc ggtgcacggg ctgtacatcc tgcacgaggt 11940

tgacctgacg accgcgcaca aggaagcaga gtgggaattt gagcccctcg cctggcgggt 12000

ttggctggtg gtcttctact tcggctgctt gtccttgacc gtctggctgc tcgaggggag 12060

ttacggtgga tcggaccacc acgccgcgcg agcccaaagt ccagatgtcc gcgcgcggcg 12120

gtcggagctt gatgacaaca tcgcgcagat gggagctgtc catggtctgg agctcccgcg 12180

gcgtcaggtc aggcgggagc tcctgcaggt ttacctcgca tagacgggtc agggcgcggg 12240

ctagatccag gtgataccta atttccaggg gctggttggt ggcggcgtcg atggcttgca 12300

agaggccgca tccccgcggc gcgactacgg taccgcgcgg cgggcggtgg gccgcggggg 12360

tgtccttgga tgatgcatct aaaagcggtg acgcgggcga gcccccggag gtaggggggg 12420

ctccggaccc gccgggagag ggggcagggg cacgtcggcg ccgcgcgcgg gcaggagctg 12480

gtgctgcgcg cgtaggttgc tggcgaacgc gacgacgcgg cggttgatct cctgaatctg 12540

gcgcctctgc gtgaagacga cgggcccggt gagcttgaac ctgaaagaga gttcgacaga 12600

atcaatttcg gtgtcgttga cggcggcctg gcgcaaaatc tcctgcacgt ctcctgagtt 12660

gtcttgatag gcgatctcgg ccatgaactg ctcgatctct tcctcctgga gatctccgcg 12720

tccggctcgc tccacggtgg cggcgaggtc gttggaaatg cgggccatga gctgcgagaa 12780

ggcgttgagg cctccctcgt tccagacgcg gctgtagacc acgccccctt cggcatcgcg 12840

ggcgcgcatg accacctgcg cgagattgag ctccacgtgc cgggcgaaga cggcgtagtt 12900

tcgcaggcgc tgaaagaggt agttgagggt ggtggcggtg tgttctgcca cgaagaagta 12960

cataacccag cgtcgcaacg tggattcgtt gatatccccc aaggcctcaa ggcgctccat 13020

ggcctcgtag aagtccacgg cgaagttgaa aaactgggag ttgcgcgccg acacggttaa 13080

ctcctcctcc agaagacgga tgagctcggc gacagtgtcg cgcacctcgc gctcaaaggc 13140

tacaggggcc tcttcttctt cttcaatctc ctcttccata agggcctccc cttcttcttc 13200

ttctggcggc ggtgggggag gggggacacg gcggcgacga cggcgcaccg ggaggcggtc 13260

gacaaagcgc tcgatcatct ccccgcggcg acggcgcatg gtctcggtga cggcgcggcc 13320

gttctcgcgg gggcgcagtt ggaagacgcc gcccgtcatg tcccggttat gggttggcgg 13380

ggggctgcca tgcggcaggg atacggcgct aacgatgcat ctcaacaatt gttgtgtagg 13440

tactccgccg ccgagggacc tgagcgagtc cgcatcgacc ggatcggaaa acctctcgag 13500

aaaggcgtct aaccagtcac agtcgcaagg taggctgagc accgtggcgg gcggcagcgg 13560

gcggcggtcg gggttgtttc tggcggaggt gctgctgatg atgtaattaa agtaggcggt 13620

cttgagacgg cggatggtcg acagaagcac catgtccttg ggtccggcct gctgaatgcg 13680

caggcggtcg gccatgcccc aggcttcgtt ttgacatcgg cgcaggtctt tgtagtagtc 13740

ttgcatgagc ctttctaccg gcacttcttc ttctccttcc tcttgtcctg catctcttgc 13800

atctatcgct gcggcggcgg cggagtttgg ccgtaggtgg cgccctcttc ctcccatgcg 13860

tgtgaccccg aagcccctca tcggctgaag cagggctagg tcggcgacaa cgcgctcggc 13920

taatatggcc tgctgcacct gcgtgagggt agactggaag tcatccatgt ccacaaagcg 13980

gtggtatgcg cccgtgttga tggtgtaagt gcagttggcc ataacggacc agttaacggt 14040

ctggtgaccc ggctgcgaga gctcggtgta cctgagacgc gagtaagccc tcgagtcaaa 14100

tacgtagtcg ttgcaagtcc gcaccaggta ctggtatccc accaaaaagt gcggcggcgg 14160

ctggcggtag aggggccagc gtagggtggc cggggctccg ggggcgagat cttccaacat 14220

aaggcgatga tatccgtaga tgtacctgga catccaggtg atgccggcgg cggtggtgga 14280

ggcgcgcgga aagtcgcgga cgcggttcca gatgttgcgc agcggcaaaa agtgctccat 14340

ggtcgggacg ctctggccgg tcaggcgcgc gcaatcgttg acgctctagc gtgcaaaagg 14400

agagcctgta agcgggcact cttccgtggt ctggtggata aattcgcaag ggtatcatgg 14460

cggacgaccg gggttcgagc cccgtatccg gccgtccgcc gtgatccatg cggttaccgc 14520

ccgcgtgtcg aacccaggtg tgcgacgtca gacaacgggg gagtgctcct tttggcttcc 14580

ttccaggcgc ggcggctgct gcgctagctt ttttggccac tggccgcgcg cagcgtaagc 14640

ggttaggctg gaaagcgaaa gcattaagtg gctcgctccc tgtagccgga gggttatttt 14700

ccaagggttg agtcgcggga cccccggttc gagtctcgga ccggccggac tgcggcgaac 14760

gggggtttgc ctccccgtca tgcaagaccc cgcttgcaaa ttcctccgga aacagggacg 14820

agccccttt ttgcttttcc cagatgcatc cggtgctgcg gcagatgcgc ccccctcctc 14880

agcagcggca agagcaagag cagcggcaga catgcagggc accctcccct cctcctaccg 14940

cgtcaggagg ggcgacatcc gcggttgacg cggcagcaga tggtgattac gaacccccgc 15000

ggcgccgggc ccggcactac ctggacttgg aggagggcga gggcctggcg cggctaggag 15060

cgccctctcc tgagcggcac ccaagggtgc agctgaagcg tgatacgcgt gaggcgtacg 15120

tgccgcggca gaacctgttt cgcgaccgcg agggagagga gcccgaggag atgcgggatc 15180

gaaagttcca cgcagggcgc gagctgcggc atggcctgaa tcgcgagcgg ttgctgcgcg 15240

aggaggactt tgagcccgac gcgcgaaccg ggattagtcc cgcgcgcgca cacgtggcgg 15300

ccgccgacct ggtaaccgca tacgagcaga cggtgaacca ggagattaac tttcaaaaaa 15360

gctttaacaa ccacgtgcgt acgcttgtgg cgcgcgagga ggtggctata ggactgatgc 15420

atctgtggga ctttgtaagc gcgctggagc aaaacccaaa tagcaagccg ctcatggcgc 15480

agctgttcct tatagtgcag cacagcaggg acaacgaggc attcagggat gcgctgctaa 15540

acatagtaga gcccgagggc cgctggctgc tcgatttgat aaacatcctg cagagcatag 15600

tggtgcagga gcgcagcttg agcctggctg acaaggtggc cgccatcaac tattccatgc 15660

ttagcctggg caagttttac gcccgcaaga tataccatac cccttacgtt cccatagaca 15720

aggaggtaaa gatcgagggg ttctacatgc gcatggcgct gaaggtgctt accttgagcg 15780

acgacctggg cgtttatcgc aacgagcgca tccacaaggc cgtgagcgtg agccggcggc 15840

gcgagctcag cgaccgcgag ctgatgcaca gcctgcaaag ggccctggct ggcacgggca 15900

gcggcgatag agaggccgag tcctactttg acgcgggcgc tgacctgcgc tgggccccaa 15960

gccgacgcgc cctggaggca gctggggccg gacctgggct ggcggtggca cccgcgcgcg 16020

ctggcaacgt cggcggcgtg gaggaatatg acgaggacga tgagtacgag ccagaggacg 16080

gcgagtacta agcggtgatg tttctgatca gatgatgcaa gacgcaacgg acccggcggt 16140

gcgggcggcg ctgcagagcc agccgtccgg ccttaactcc acggacgact ggcgccaggt 16200

catggaccgc atcatgtcgc tgactgcgcg caatcctgac gcgttccggc agcagccgca 16260

ggccaaccgg ctctccgcaa ttctggaagc ggtggtcccg gcgcgcgcaa accccacgca 16320

cgagaaggtg ctggcgatcg taaacgcgct ggccgaaaac agggccatcc ggcccgacga 16380

ggccggcctg gtctacgacg cgctgcttca gcgcgtggct cgttacaaca gcggcaacgt 16440

gcagaccaac ctggaccggc tggtggggga tgtgcgcgag gccgtggcgc agcgtgagcg 16500

cgcgcagcag cagggcaacc tgggctccat ggttgcacta aacgccttcc tgagtacaca 16560

gcccgccaac gtgccgcggg gacaggagga ctacaccaac tttgtgagcg cactgcggct 16620

aatggtgact gagacaccgc aaagtgaggt gtaccagtct gggccagact atttttcca 16680

gaccagtaga caaggcctgc agaccgtaaa cctgagccag gctttcaaaa acttgcaggg 16740

gctgtggggg gtgcgggctc ccacaggcga ccgcgcgacc gtgtctagct tgctgacgcc 16800

caactcgcgc ctgttgctgc tgctaatagc gcccttcacg gacagtggca gcgtgtcccg 16860

ggacacatac ctaggtcact tgctgacact gtaccgcgag gccataggtc aggcgcatgt 16920

ggacgagcat actttccagg agattacaag tgtcagccgc gcgctggggc aggaggacac 16980

gggcagcctg gaggcaaccc taaactacct gctgaccaac cggcggcaga agatcccctc 17040

gttgcacagt ttaaacagcg aggaggagcg cattttgcgc tacgtgcagc agagcgtgag 17100

ccttaacctg atgcgcgacg gggtaacgcc cagcgtggcg ctggacatga ccgcgcgcaa 17160

catggaaccg ggcatgtatg cctcaaaccg gccgtttatc aaccgcctaa tggactactt 17220

gcatcgcgcg gccgccgtga accccgagta tttcaccaat gccatcttga acccgcactg 17280

gctaccgccc cctggtttct acaccggggg attcgaggtg cccgagggta acgatggatt 17340

cctctgggac gacatagacg acagcgtgtt ttccccgcaa ccgcagaccc tgctagagtt 17400

gcaacagcgc gagcaggcag aggcggcgct gcgaaaggaa agcttccgca ggccaagcag 17460

cttgtccgat ctaggcgctg cggccccgcg gtcagatgct agtagcccat ttccaagctt 17520

gatagggtct cttaccagca ctcgcaccac ccgcccgcgc ctgctgggcg aggaggagta 17580

cctaaacaac tcgctgctgc agccgcagcg cgaaaaaaac ctgcctccgg catttcccaa 17640

caacgggata gagagcctag tggacaagat gagtagatgg aagacgtacg cgcaggagca 17700

cagggacgtg ccaggcccgc gcccgcccac ccgtcgtcaa aggcacgacc gtcagcgggg 17760

tctggtgtgg gaggacgatg actcggcaga cgacagcagc gtcctggatt tgggagggag 17820

tggcaacccg tttgcgcacc ttcgccccag gctggggaga atgttttaaa aaaaaaaaag 17880

catgatgcaa aataaaaaac tcaccaaggc catggcaccg agcgttggtt ttcttgtatt 17940

ccccttagta tgcggcgcgc ggcgatgtat gaggaaggtc ctcctccctc ctacgagagt 18000

gtggtgagcg cggcgccagt ggcggcggcg ctgggttctc ccttcgatgc tcccctggac 18060

ccgccgtttg tgcctccgcg gtacctgcgg cctaccgggg ggagaaacag catccgttac 18120

tctgagttgg cacccctatt cgacaccacc cgtgtgtacc tggtggacaa caagtcaacg 18180

gatgtggcat ccctgaacta ccagaacgac cacagcaact ttctgaccac ggtcattcaa 18240

aacaatgact acagcccggg ggaggcaagc acacagacca tcaatcttga cgaccggtcg 18300

cactggggcg gcgacctgaa aaccatcctg cataccaaca tgccaaatgt gaacgagttc 18360

atgtttacca ataagtttaa ggcgcgggtg atggtgtcgc gcttgcctac taaggacaat 18420

caggtggagc tgaaatacga gtgggtggag ttcacgctgc ccgagggcaa ctactccgag 18480

accatgacca tagaccttat gaacaacgcg atcgtggagc actacttgaa agtgggcaga 18540

cagaacgggg ttctggaaag cgacatcggg gtaaagtttg acacccgcaa cttcagactg 18600

gggtttgacc ccgtcactgg tcttgtcatg cctggggtat atacaaacga agccttccat 18660

ccagacatca ttttgctgcc aggatgcggg gtggacttca cccacagccg cctgagcaac 18720

ttgttgggca tccgcaagcg gcaacccttc caggagggct ttaggatcac ctacgatgat 18780

ctggagggtg gtaacattcc cgcactgttg gatgtggacg cctaccaggc gagcttgaaa 18840

gatgacaccg aacagggcgg gggtggcgca ggcggcagca acagcagtgg cagcggcgcg 18900

gaagagaact ccaacgcggc agccgcggca atgcagccgg tggaggacat gaacgatcat 18960

gccattcgcg gcgacacctt tgccacacgg gctgaggaga agcgcgctga ggccgaagca 19020

gcggccgaag ctgccgcccc cgctgcgcaa cccgaggtcg agaagcctca gaagaaaccg 19080

gtgatcaaac ccctgacaga ggacagcaag aaacgcagtt acaacctaat aagcaatgac 19140

agcaccttca cccagtaccg cagctggtac cttgcataca actacggcga ccctcagacc 19200

ggaatccgct catggaccct gctttgcact cctgacgtaa cctgcggctc ggagcaggtc 19260

tactggtcgt tgccagacat gatgcaagac cccgtgacct tccgctccac gcgccagatc 19320

agcaactttc cggtggtggg cgccgagctg ttgcccgtgc actccaagag cttctacaac 19380

gaccaggccg tctactccca actcatccgc cagtttacct ctctgaccca cgtgttcaat 19440

cgctttcccg agaaccagat tttggcgcgc ccgccagccc ccaccatcac caccgtcagt 19500

gaaaacgttc ctgctctcac agatcacggg acgctaccgc tgcgcaacag catcggagga 19560

gtccagcgag tgaccattac tgacgccaga cgccgcacct gcccctacgt ttacaaggcc 19620

ctgggcatag tctcgccgcg cgtcctatcg agccgcactt tttgagcaag catgtccatc 19680

cttatatcgc ccagcaataa cacaggctgg ggcctgcgct tcccaagcaa gatgtttggc 19740

ggggccaaga agcgctccga ccaacaccca gtgcgcgtgc gcgggcacta ccgcgcgccc 19800

tggggcgcgc acaaacgcgg ccgcactggg cgcaccaccg tcgatgacgc catcgacgcg 19860

gtggtggagg aggcgcgcaa ctacacgccc acgccgccac cagtgtccac agtggacgcg 19920

gccattcaga ccgtggtgcg cggagcccgg cgctatgcta aaatgaagag acggcggagg 19980

cgcgtagcac gtcgccaccg ccgccgaccc ggcactgccg cccaacgcgc ggcggcggcc 20040

ctgcttaacc gcgcacgtcg caccggccga cgggcggcca tgcgggccgc tcgaaggctg 20100

gccgcgggta ttgtcactgt gccccccagg tccaggcgac gagcggccgc cgcagcagcc 20160

gcggccatta gtgctatgac tcagggtcgc aggggcaacg tgtattgggt gcgcgactcg 20220

gttagcggcc tgcgcgtgcc cgtgcgcacc cgccccccgc gcaactagat tgcaagaaaa 20280

aactacttag actcgtactg ttgtatgtat ccagcggcgg cggcgcgcaa cgaagctatg 20340

tccaagcgca aaatcaaaga agagatgctc caggtcatcg cgccggagat ctatggcccc 20400

ccgaagaagg aagagcagga ttacaagccc cgaaagctaa agcgggtcaa aaagaaaaag 20460

aaagatgatg atgatgaact tgacgacgag gtggaactgc tgcacgctac cgcgcccagg 20520

cgacgggtac agtggaaagg tcgacgcgta aaacgtgttt tgcgacccgg caccaccgta 20580

gtctttacgc ccggtgagcg ctccacccgc acctacaagc gcgtgtatga tgaggtgtac 20640

ggcgacgagg acctgcttga gcaggccaac gagcgcctcg gggagtttgc ctacggaaag 20700

cggcataagg acatgctggc gttgccgctg gacgagggca acccaacacc tagcctaaag 20760

cccgtaacac tgcagcaggt gctgcccgcg cttgcaccgt ccgaagaaaa gcgcggccta 20820

aagcgcgagt ctggtgactt ggcacccacc gtgcagctga tggtacccaa gcgccagcga 20880

ctggaagatg tcttggaaaa aatgaccgtg gaacctgggc tggagcccga ggtccgcgtg 20940

cggccaatca agcaggtggc gccgggactg ggcgtgcaga ccgtggacgt tcagataccc 21000

actaccagta gcaccagtat tgccaccgcc acagagggca tggagacaca aacgtccccg 21060

gttgcctcag cggtggcgga tgccgcggtg caggcggtcg ctgcggccgc gtccaagacc 21120

tctacggagg tgcaaacgga cccgtggatg tttcgcgttt cagccccccg gcgcccgcgc 21180

cgttcgagga agtacggcgc cgccagcgcg ctactgcccg aatatgccct acatccttcc 21240

attgcgccta cccccggcta tcgtggctac acctaccgcc ccagaagacg agcaactacc 21300

cgacgccgaa ccaccactgg aacccgccgc cgccgtcgcc gtcgccagcc cgtgctggcc 21360

ccgatttccg tgcgcagggt ggctcgcgaa ggaggcagga ccctggtgct gccaacagcg 21420

cgctaccacc ccagcatcgt ttaaaagccg gtctttgtgg ttcttgcaga tatggccctc 21480

acctgccgcc tccgtttccc ggtgccggga ttccgaggaa gaatgcaccg taggaggggc 21540

atggccggcc acggcctgac gggcggcatg cgtcgtgcgc accaccggcg gcggcgcgcg 21600

tcgcaccgtc gcatgcgcgg cggtatcctg cccctcctta ttccactgat cgccgcggcg 21660

attggcgccg tgcccggaat tgcatccgtg gccttgcagg cgcagagaca ctgattaaaa 21720

acaagttgca tgtggaaaaa tcaaaataaa aagtctggac tctcacgctc gcttggtcct 21780

gtaactattt tgtagaatgg aagacatcaa ctttgcgtct ctggccccgc gacacggctc 21840

gcgcccgttc atgggaaact ggcaagatat cggcaccagc aatatgagcg gtggcgcctt 21900

cagctggggc tcgctgtgga gcggcattaa aaatttcggt tccaccgtta agaactatgg 21960

cagcaaggcc tggaacagca gcacaggcca gatgctgagg gataagttga aagagcaaaa 22020

tttccaacaa aaggtggtag atggcctggc ctctggcatt agcggggtgg tggacctggc 22080

caaccaggca gtgcaaaata agattaacag taagcttgat ccccgccctc ccgtagagga 22140

gcctccaccg gccgtggaga cagtgtctcc agaggggcgt ggcgaaaagc gtccgcgccc 22200

cgacagggaa gaaactctgg tgacgcaaat agacgagcct ccctcgtacg aggaggcact 22260

aaagcaaggc ctgcccacca cccgtcccat cgcgcccatg gctaccggag tgctgggcca 22320

gcacacaccc gtaacgctgg acctgcctcc ccccgccgac acccagcaga aacctgtgct 22380

gccaggcccg accgccgttg ttgtaacccg tcctagccgc gcgtccctgc gccgcgccgc 22440

cagcggtccg cgatcgttgc ggcccgtagc cagtggcaac tggcaaagca cactgaacag 22500

catcgtgggt ctgggggtgc aatccctgaa gcgccgacga tgcttctgat agctaacgtg 22560

tcgtatgtgt gtcatgtatg cgtccatgtc gccgccagag gagctgctga gccgccgcgc 22620

gcccgctttc caagatggct acccccttcga tgatgccgca gtggtcttac atgcacatct 22680

cgggccagga cgcctcggag tacctgagcc ccgggctggt gcagtttgcc cgcgccaccg 22740

agacgtactt cagcctgaat aacaagttta gaaaccccac ggtggcgcct acgcacgacg 22800

tgaccacaga ccggtcccag cgtttgacgc tgcggttcat ccctgtggac cgtgaggata 22860

ctgcgtactc gtacaaggcg cggttcaccc tagctgtggg tgataaccgt gtgctggaca 22920

tggcttccac gtactttgac atccgcggcg tgctggacag gggccctact tttaagccct 22980

actctggcac tgcctacaac gccctggctc ccaagggtgc cccaaatcct tgcgaatggg 23040

atgaagctgc tactgctctt gaaataaacc tagaagaaga ggacgatgac aacgaagacg 23100

aagtagacga gcaagctgag cagcaaaaaa ctcacgtatt tgggcaggcg ccttattctg 23160

gtataaatat tacaaaggag ggtattcaaa taggtgtcga aggtcaaaca cctaaatatg 23220

ccgataaaac atttcaacct gaacctcaaa taggagaatc tcagtggtac gaaacagaaa 23280

ttaatcatgc agctgggaga gtcctaaaaa agactacccc aatgaaacca tgttacggtt 23340

catatgcaaa acccacaaat gaaaatggag ggcaaggcat tcttgtaaag caacaaaatg 23400

gaaagctaga aagtcaagtg gaaatgcaat ttttctcaac tactgaggca gccgcaggca 23460

atggtgataa cttgactcct aaagtggtat tgtacagtga agatgtagat atagaaaccc 23520

cagacactca tatttcttac atgcccacta ttaaggaagg taactcacga gaactaatgg 23580

gccaacaatc tatgcccaac aggcctaatt acattgcttt tagggacaat tttattggtc 23640

taatgtatta caacagcacg ggtaatatgg gtgttctggc gggccaagca tcgcagttga 23700

atgctgttgt agatttgcaa gacagaaaca cagagctttc ataccagctt ttgcttgatt 23760

ccattggtga tagaaccagg tacttttcta tgtggaatca ggctgttgac agctatgatc 23820

cagatgttag aattattgaa aatcatggaa ctgaagatga acttccaaat tactgctttc 23880

cactgggagg tgtgattaat acagagactc ttaccaaggt aaaacctaaa acaggtcagg 23940

aaaatggatg ggaaaaagat gctacagaat tttcagataa aaatgaaata agagttggaa 24000

ataattttgc catggaaatc aatctaaatg ccaacctgtg gagaaatttc ctgtactcca 24060

acatagcgct gtatttgccc gacaagctaa agtacagtcc ttccaacgta aaaatttctg 24120

ataacccaaa cacctacgac tacatgaaca agcgagtggt ggctcccggg ctagtggact 24180

gctacattaa ccttggagca cgctggtccc ttgactatat ggacaacgtc aacccattta 24240

accaccaccg caatgctggc ctgcgctacc gctcaatgtt gctgggcaat ggtcgctatg 24300

tgcccttcca catccaggtg cctcagaagt tctttgccat taaaaacctc cttctcctgc 24360

cgggctcata cacctacgag tggaacttca ggaaggatgt taacatggtt ctgcagagct 24420

ccctaggaaa tgacctaagg gttgacggag ccagcattaa gtttgatagc atttgccttt 24480

acgccacctt cttccccatg gcccacaaca ccgcctccac gcttgaggcc atgcttagaa 24540

acgacaccaa cgaccagtcc tttaacgact atctctccgc cgccaacatg ctctacccta 24600

tacccgccaa cgctaccaac gtgcccatat ccatcccctc ccgcaactgg gcggctttcc 24660

gcggctgggc cttcacgcgc cttaagacta aggaaacccc atcactgggc tcgggctacg 24720

acccttatta cacctactct ggctctatac cctacctaga tggaaccttt tacctcaacc 24780

acacctttaa gaaggtggcc attacctttg actcttctgt cagctggcct ggcaatgacc 24840

gcctgcttac ccccaacgag tttgaaatta agcgctcagt tgacggggag ggttacaacg 24900

ttgcccagtg taacatgacc aaagactggt tcctggtaca aatgctagct aactataaca 24960

ttggctacca gggcttctat atcccagaga gctacaagga ccgcatgtac tccttcttta 25020

gaaacttcca gcccatgagc cgtcaggtgg tggatgatac taaatacaag gactaccaac 25080

aggtgggcat cctacaccaa cacaacaact ctggatttgt tggctacctt gcccccacca 25140

tgcgcgaagg acaggcctac cctgctaact tcccctatcc gcttataggc aagaccgcag 25200

ttgacagcat tacccagaaa aagtttcttt gcgatcgcac cctttggcgc atcccattct 25260

ccagtaactt tatgtccatg ggcgcactca cagacctggg ccaaaacctt ctctacgcca 25320

actccgccca cgcgctagac atgacttttg aggtggatcc catggacgag cccacccttc 25380

tttatgtttt gtttgaagtc tttgacgtgg tccgtgtgca ccagccgcac cgcggcgtca 25440

tcgaaaccgt gtacctgcgc acgcccttct cggccggcaa cgccacaaca taaagaagca 25500

agcaacatca acaacagctg ccgccatggg ctccagtgag caggaactga aagccattgt 25560

caaagatctt ggttgtgggc catatttttt gggcacctat gacaagcgct ttccaggctt 25620

tgtttctcca cacaagctcg cctgcgccat agtcaatacg gccggtcgcg agactggggg 25680

cgtacactgg atggcctttg cctggaaccc gcactcaaaa acatgctacc tctttgagcc 25740

ctttggcttt tctgaccagc gactcaagca ggtttaccag tttgagtacg agtcactcct 25800

gcgccgtagc gccattgctt cttcccccga ccgctgtata acgctggaaa agtccaccca 25860

aagcgtacag gggcccaact cggccgcctg tggactattc tgctgcatgt ttctccacgc 25920

ctttgccaac tggccccaaa ctcccatgga tcacaacccc accatgaacc ttattaccgg 25980

ggtacccaac tccatgctca acagtcccca ggtacagccc accctgcgtc gcaaccagga 26040

acagctctac agcttcctgg agcgccactc gccctacttc cgcagccaca gtgcgcagat 26100

taggagcgcc acttcttttt gtcacttgaa aaacatgtaa aaataatgta ctagagacac 26160

tttcaataaa ggcaaatgct tttatttgta cactctcggg tgattattta cccccaccct 26220

tgccgtctgc gccgtttaaa aatcaaaggg gttctgccgc gcatcgctat gcgccactgg 26280

cagggacacg ttgcgatact ggtgtttagt gctccactta aactcaggca caaccatccg 26340

cggcagctcg gtgaagtttt cactccacag gctgcgcacc atcaccaacg cgtttagcag 26400

gtcgggcgcc gatatcttga agtcgcagtt ggggcctccg ccctgcgcgc gcgagttgcg 26460

atacacaggg ttgcagcact ggaacactat cagcgccggg tggtgcacgc tggccagcac 26520

gctcttgtcg gagatcagat ccgcgtccag gtcctccgcg ttgctcaggg cgaacggagt 26580

caactttggt agctgccttc ccaaaaaggg cgcgtgccca ggctttgagt tgcactcgca 26640

ccgtagtggc atcaaaaggt gaccgtgccc ggtctgggcg ttaggataca gcgcctgcat 26700

aaaagccttg atctgcttaa aagccacctg agcctttgcg ccttcagaga agaacatgcc 26760

gcaagacttg ccggaaaact gattggccgg acaggccgcg tcgtgcacgc agcaccttgc 26820

gtcggtgttg gagatctgca ccacatttcg gccccaccgg ttcttcacga tcttggcctt 26880

gctagactgc tccttcagcg cgcgctgccc gttttcgctc gtcacatcca tttcaatcac 26940

gtgctcctta tttatcataa tgcttccgtg tagacactta agctcgcctt cgatctcagc 27000

gcagcggtgc agccacaacg cgcagcccgt gggctcgtga tgcttgtagg tcacctctgc 27060

aaacgactgc aggtacgcct gcaggaatcg ccccatcatc gtcacaaagg tcttgttgct 27120

ggtgaaggtc agctgcaacc cgcggtgctc ctcgttcagc caggtcttgc atacggccgc 27180

cagagcttcc acttggtcag gcagtagttt gaagttcgcc tttagatcgt tatccacgtg 27240

gtacttgtcc atcagcgcgc gcgcagcctc catgcccttc tcccacgcag acacgatcgg 27300

cacactcagc gggttcatca ccgtaatttc actttccgct tcgctgggct cttcctcttc 27360

ctcttgcgtc cgcataccac gcgccactgg gtcgtcttca ttcagccgcc gcactgtgcg 27420

cttacctcct ttgccatgct tgattagcac cggtgggttg ctgaaaccca ccatttgtag 27480

cgccacatct tctctttctt cctcgctgtc cacgattacc tctggtgatg gcgggcgctc 27540

gggcttggga gaagggcgct tctttttctt cttgggcgca atggccaaat ccgccgccga 27600

ggtcgatggc cgcgggctgg gtgtgcgcgg caccagcgcg tcttgtgatg agtcttcctc 27660

gtcctcggac tcgatacgcc gcctcatccg ctttttgggg ggcgcccggg gaggcggcgg 27720

cgacggggac ggggacgaca cgtcctccat ggttgggggа cgtcgcgccg caccgcgtcc 27780

gcgctcgggg gtggtttcgc gctgctcctc ttcccgactg gccatttcct tctcctatag 27840

gcagaaaaag atcatggagt cagtcgagaa gaaggacagc ctaaccgccc cctctgagtt 27900

cgccaccacc gcctccaccg atgccgccaa cgcgcctacc accttccccg tcgaggcacc 27960

cccgcttgag gaggaggaag tgattatcga gcaggaccca ggttttgtaa gcgaagacga 28020

cgaggaccgc tcagtaccaa cagaggataa aaagcaagac caggacaacg cagaggcaaa 28080

cgaggaacaa gtcgggcggg gggacgaaag gcatggcgac tacctagatg tgggagacga 28140

cgtgctgttg aagcatctgc agcgccagtg cgccattatc tgcgacgcgt tgcaagagcg 28200

cagcgatgtg cccctcgcca tagcggatgt cagccttgcc tacgaacgcc acctattctc 28260

accgcgcgta ccccccaaac gccaagaaaa cggcacatgc gagcccaacc cgcgcctcaa 28320

cttctacccc gtatttgccg tgccagaggt gcttgccacc tatcacatct ttttccaaaa 28380

ctgcaagata cccctatcct gccgtgccaa ccgcagccga gcggacaagc agctggcctt 28440

gcggcagggc gctgtcatac ctgatatcgc ctcgctcaac gaagtgccaa aaatctttga 28500

gggtcttgga cgcgacgaga agcgcgcggc aaacgctctg caacaggaaa acagcgaaaa 28560

tgaaagtcac tctggagtgt tggtggaact cgagggtgac aacgcgcgcc tagccgtact 28620

aaaacgcagc atcgaggtca cccactttgc ctacccggca cttaacctac cccccaaggt 28680

catgagcaca gtcatgagtg agctgatcgt gcgccgtgcg cagcccctgg agagggatgc 28740

aaatttgcaa gaacaaacag aggagggcct acccgcagtt ggcgacgagc agctagcgcg 28800

ctggcttcaa acgcgcgagc ctgccgactt ggaggagcga cgcaaactaa tgatggccgc 28860

agtgctcgtt accgtggagc ttgagtgcat gcagcggttc tttgctgacc cggagatgca 28920

gcgcaagcta gaggaaacat tgcactacac ctttcgacag ggctacgtac gccaggcctg 28980

caagatctcc aacgtggagc tctgcaacct ggtctcctac cttggaattt tgcacgaaaa 29040

ccgccttggg caaaacgtgc ttcattccac gctcaagggc gaggcgcgcc gcgactacgt 29100

ccgcgactgc gtttacttat ttctatgcta cacctggcag acggccatgg gcgtttggca 29160

gcagtgcttg gaggagtgca acctcaagga gctgcagaaa ctgctaaagc aaaacttgaa 29220

ggacctatgg acggccttca acgagcgctc cgtggccgcg cacctggcgg acatcatttt 29280

ccccgaacgc ctgcttaaaa ccctgcaaca gggtctgcca gacttcacca gtcaaagcat 29340

gttgcagaac tttaggaact ttatcctaga gcgctcagga atcttgcccg ccacctgctg 29400

tgcacttcct agcgactttg tgcccattaa gtaccgcgaa tgccctccgc cgctttgggg 29460

ccactgctac cttctgcagc tagccaacta ccttgcctac cactctgaca taatggaaga 29520

cgtgagcggt gacggtctac tggagtgtca ctgtcgctgc aacctatgca ccccgcaccg 29580

ctccctggtt tgcaattcgc agctgcttaa cgaaagtcaa attatcggta cctttgagct 29640

gcagggtccc tcgcctgacg aaaagtccgc ggctccgggg ttgaaactca ctccggggct 29700

gtggacgtcg gcttaccttc gcaaatttgt acctgaggac taccacgccc acgagattag 29760

gttctacgaa gaccaatccc gcccgcctaa tgcggagctt accgcctgcg tcattaccca 29820

gggccacatt cttggccaat tgcaagccat caacaaagcc cgccaagagt ttctgctacg 29880

aaagggacgg ggggtttact tggaccccca gtccggcgag gagctcaacc caatcccccc 29940

gccgccgcag ccctatcagc agcagccgcg ggcccttgct tcccaggatg gcacccaaaa 30000

agaagctgca gctgccgccg ccacccacgg acgaggagga atactgggac agtcaggcag 30060

aggaggtttt ggacgaggag gaggaggaca tgatggaaga ctgggagagc ctagacgagg 30120

aagcttccga ggtcgaagag gtgtcagacg aaacaccgtc accctcggtc gcattcccct 30180

cgccggcgcc ccagaaatcg gcaaccggtt ccagcatggc tacaacctcc gctcctcagg 30240

cgccgccggc actgcccgtt cgccgaccca accgtagatg ggacaccact ggaaccaggg 30300

ccggtaagtc caagcagccg ccgccgttag cccaagagca acaacagcgc caaggctacc 30360

gctcatggcg cgggcacaag aacgccatag ttgcttgctt gcaagactgt gggggcaaca 30420

tctccttcgc ccgccgcttt cttctctacc atcacggcgt ggccttcccc cgtaacatcc 30480

tgcattacta ccgtcatctc tacagcccat actgcaccgg cggcagcggc agcaacagca 30540

gcggccacac agaagcaaag gcgaccggat agcaagactc tgacaaagcc caagaaatcc 30600

acagcggcgg cagcagcagg aggaggagcg ctgcgtctgg cgcccaacga acccgtatcg 30660

acccgcgagc ttagaaacag gatttttccc actctgtatg ctatatttca acagagcagg 30720

ggccaagaac aagagctgaa aataaaaaac aggtctctgc gatccctcac ccgcagctgc 30780

ctgtatcaca aaagcgaaga tcagcttcgg cgcacgctgg aagacgcgga ggctctcttc 30840

agtaaatact gcgcgctgac tcttaaggac tagtttcgcg ccctttctca aatttaagcg 30900

cgaaaactac gtcatctcca gcggccacac ccggcgccag cacctgttgt cagcgccatt 30960

atgagcaagg aaattcccac gccctacatg tggagttacc agccacaaat gggacttgcg 31020

gctggagctg cccaagacta ctcaacccga ataaactaca tgagcgcggg accccacatg 31080

atatcccggg tcaacggaat acgcgcccac cgaaaccgaa ttctcctgga acaggcggct 31140

attaccacca cacctcgtaa taaccttaat ccccgtagtt ggcccgctgc cctggtgtac 31200

caggaaagtc ccgctcccac cactgtggta cttcccagag acgcccaggc cgaagttcag 31260

atgactaact caggggcgca gcttgcgggc ggctttcgtc acagggtgcg gtcgcccggg 31320

cagggtataa ctcacctgac aatcagaggg cgaggtattc agctcaacga cgagtcggtg 31380

agctcctcgc ttggtctccg tccggacggg acatttcaga tcggcggcgc cggccgctct 31440

tcattcacgc ctcgtcaggc aatcctaact ctgcagacct cgtcctctga gccgcgctct 31500

ggaggcattg gaactctgca atttattgag gagtttgtgc catcggtcta ctttaacccc 31560

ttctcgggac ctcccggcca ctatccggat caatttattc ctaactttga cgcggtaaag 31620

gactcggcgg acggctacga ctgaatgtta agtggagagg cagagcaact gcgcctgaaa 31680

cacctggtcc actgtcgccg ccacaagtgc tttgcccgcg actccggtga gttttgctac 31740

tttgaattgc ccgaggatca tatcgagggc ccggcgcacg gcgtccggct taccgcccag 31800

ggagagcttg cccgtagcct gattcgggag tttacccagc gccccctgct agttgagcgg 31860

gacaggggac cctgtgttct cactgtgatt tgcaactgtc ctaaccctgg attacatcaa 31920

gatcctctag ttaatgtcag gtcgcctaag tcgattaact agagtacccg gggatcttat 31980

tccctttaac taataaaaaa aaataataaa gcatcactta cttaaaatca gttagcaaat 32040

ttctgtccag tttattcagc agcacctcct tgccctcctc ccagctctgg tattgcagct 32100

tcctcctggc tgcaaacttt ctccacaatc taaatggaat gtcagtttcc tcctgttcct 32160

gtccatccgc acccactatc ttcatgttgt tgcagatgaa gcgcgcaaga ccgtctgaag 32220

ataccttcaa ccccgtgtat ccatatgaca cggaaaccgg tcctccaact gtgccttttc 32280

ttactcctcc ctttgtatcc cccaatgggt ttcaagagag tccccctggg gtactctctt 32340

tgcgcctatc cgaacctcta gttacctcca atggcatgct tgcgctcaaa atgggcaacg 32400

gcctctctct ggacgaggcc ggcaacctta cctcccaaaa tgtaaccact gtgagcccac 32460

ctctcaaaaa aaccaagtca aacataaacc tggaaatatc tgcacccctc acagttacct 32520

cagaagccct aactgtggct gccgccgcac ctctaatggt cgcgggcaac acactcacca 32580

tgcaatcaca ggccccgcta accgtgcacg actccaaact tagcattgcc acccaaggac 32640

ccctcacagt gtcagaagga aagctagccc tgcaaacatc aggccccctc accaccaccg 32700

atagcagtac ccttactatc actgcctcac cccctctaac tactgccact ggtagcttgg 32760

gcattgactt gaaagagccc atttatacac aaaatggaaa actaggacta aagtacgggg 32820

ctcctttgca tgtaacagac gacctaaaca ctttgaccgt agcaactggt ccaggtgtga 32880

ctattaataa tacttccttg caaactaaag ttactggagc cttgggtttt gattcacaag 32940

gcaatatgca acttaatgta gcaggaggac taaggattga ttctcaaaac agacgcctta 33000

tacttgatgt tagttatccg tttgatgctc aaaaccaact aaatctaaga ctaggacagg 33060

gccctctttt tataaactca gcccacaact tggatattaa ctacaacaaa ggcctttact 33120

tgtttacagc ttcaaacaat tccaaaaagc ttgaggttaa cctaagcact gccaaggggt 33180

tgatgtttga cgctacagcc atagccatta atgcaggaga tgggcttgaa tttggttcac 33240

ctaatgcacc aaacacaaat cccctcaaaa caaaaattgg ccatggccta gaatttgatt 33300

caaacaaggc tatggttcct aaactaggaa ctggccttag ttttgacagc acaggtgcca 33360

ttacagtagg aaacaaaaat aatgataagc taactttgtg gaccggaata aaccctccac 33420

ctaactgtca aattgtggaa aacactaata caaatgatgg caaacttact ttagtattag 33480

taaaaaatgg agggcttgtt aatggctacg tgtctctagt tggtgtatca gacactgtga 33540

accaaatgtt cacacaaaag acagcaaaca tccaattaag attatatttt gactcttctg 33600

gaaatctatt aactgaggaa tcagacttaa aaattccact taaaaataaa tcttctacag 33660

cgaccagtga aactgtagcc agcagcaaag cctttatgcc aagtactaca gcttatccct 33720

tcaacaccac tactagggat agtgaaaact acattcatgg aatatgttac tacatgacta 33780

gttatgatag aagtctattt cccttgaaca tttctataat gctaaacagc cgtatgattt 33840

cttccaatgt tgcctatgcc atacaatttg aatggaatct aaatgcaagt gaatctccag 33900

aaagcaacat agctacgctg accacatccc ccttttttctt ttcttacatt acagaagacg 33960

acaactaaag aatcgtttgt gttatgtttc aacgtgttta tttttcaatt gcagaaaatt 34020

tcaagtcatt tttcattcag tagtatagcc ccaccaccac atagcttata cagatcaccg 34080

taccttaatc aaactcacag aaccctagta ttcaacctgc cacctccctc ccaacacaca 34140

gagtacacag tcctttctcc ccggctggcc ttaaaaagca tcatatcatg ggtaacagac 34200

atattcttag gtgttatatt ccacacggtt tcctgtcgag ccaaacgctc atcagtgata 34260

ttaataaact ccccgggcag ctcacttaag ttcatgtcgc tgtccagctg ctgagccaca 34320

ggctgctgtc caacttgcgg ttgcttaacg ggcggcgaag gagaagtcca cgcctacatg 34380

ggggtagagt cataatcgtg catcaggata gggcggtggt gctgcagcag cgcgcgaata 34440

aactgctgcc gccgccgctc cgtcctgcag gaatacaaca tggcagtggt ctcctcagcg 34500

atgattcgca ccgcccgcag cataaggcgc cttgtcctcc gggcacagca gcgcaccctg 34560

atctcactta aatcagcaca gtaactgcag cacagcacca caatattgtt caaaatccca 34620

cagtgcaagg cgctgtatcc aaagctcatg gcggggacca cagaacccac gtggccatca 34680

taccacaagc gcaggtagat taagtggcga cccctcataa acacgctgga cataaacatt 34740

acctcttttg gcatgttgta attcaccacc tcccctctga ttaaacatgg cgccatccac 34800

caccatccta aaccagctgg ccaaaacctg cccgccggct atacactgca gggaaccggg 34860

actggaacaa tgacagtgga gagcccagga ctcgtaacca tggatcatca tgctcgtcat 34920

gatatcaatg ttggcacaac acaggcacac gtgcatacac ttcctcagga ttacaagctc 34980

ctcccgcgtt agaaccatat cccagggaac aacccattcc tgaatcagcg taaatcccac 35040

actgcaggga agacctcgca cgtaactcac gttgtgcatt gtcaaagtgt tacattcggg 35100

cagcagcgga tgatcctcca gtatggtagc gcgggtttct gtctcaaaag gaggtagacg 35160

atccctactg tacggagtgc gccgagacaa ccgagatcgt gttggtcgta gtgtcatgcc 35220

aaatggaacg ccggacgtag tcatatttcc tgaagcaaaa ccaggtgcgg gcgtgacaaa 35280

cagatctgcg tctccggtct cgccgcttag atcgctctgt gtagtagttg tagtatatcc 35340

actctctcaa agcatccagg cgccccctgg cttcgggttc tatgtaaact ccttcatgcg 35400

ccgctgccct gataacatcc accaccgcag aataagccac acccagccaa cctacacatt 35460

cgttctgcga gtcacacacg ggaggagcgg gaagagctgg aagaaccatg ttttttttt 35520

tattccaaaa gattatccaa aacctcaaaa tgaagatcta ttaagtgaac gcgctcccct 35580

ccggtggcgt ggtcaaactc tacagccaaa gaacagataa tggcatttgt aagatgttgc 35640

acaatggctt ccaaaaggca aacggccctc acgtccaagt ggacgtaaag gctaaaccct 35700

tcagggtgaa tctcctctat aaacattcca gcaccttcaa ccatgcccaa ataattctca 35760

tctcgccacc ttctcaatat atctctaagc aaatcccgaa tattaagtcc ggccattgta 35820

aaaatctgct ccagagcgcc ctccaccttc agcctcaagc agcgaatcat gattgcaaaa 35880

attcaggttc ctcacagacc tgtataagat tcaaaagcgg aacattaaca aaaataccgc 35940

gatcccgtag gtcccttcgc agggccagct gaacataatc gtgcaggtct gcacggacca 36000

gcgcggccac ttccccgcca ggaaccatga caaaagaacc cacactgatt atgacacgca 36060

tactcggagc tatgctaacc agcgtagccc cgatgtaagc ttgttgcatg ggcggcgata 36120

taaaatgcaa ggtgctgctc aaaaaatcag gcaaagcctc gcgcaaaaaa gaaagcacat 36180

cgtagtcatg ctcatgcaga taaaggcagg taagctccgg aaccaccaca gaaaaagaca 36240

ccatttttct ctcaaacatg tctgcgggtt tctgcataaa cacaaaataa aataacaaaa 36300

aaacatttaa acattagaag cctgtcttac aacaggaaaa acaaccctta taagcataag 36360

acggactacg gccatgccgg cgtgaccgta aaaaaactgg tcaccgtgat taaaaagcac 36420

caccgacagc tcctcggtca tgtccggagt cataatgtaa gactcggtaa acacatcagg 36480

ttgattcaca tcggtcagtg ctaaaaagcg accgaaatag cccgggggaa tacatacccg 36540

caggcgtaga gacaacatta cagcccccat aggaggtata acaaaattaa taggagagaa 36600

aaacacataa acacctgaaa aaccctcctg cctaggcaaa atagcaccct cccgctccag 36660

aacaacatac agcgcttcca cagcggcagc cataacagtc agccttacca gtaaaaaaga 36720

aaacctatta aaaaaacacc actcgacacg gcaccagctc aatcagtcac agtgtaaaaa 36780

agggccaagt gcagagcgag tatatatagg actaaaaaat gacgtaacgg ttaaagtcca 36840

caaaaaacac ccagaaaacc gcacgcgaac ctacgcccag aaacgaaagc caaaaaaccc 36900

acaacttcct caaatcgtca cttccgtttt cccacgttac gtcacttccc attttaagaa 36960

aactacaatt cccaacacat acaagttact ccgccctaaa acctacgtca cccgccccgt 37020

tcccacgccc cgcgccacgt cacaaactcc acccctcat tatcatattg gcttcaatcc 37080

aaaataaggt atattattga tgatg 37105

<210> 10
<211> 35690
<212> DNA
<213> Artificial Sequence

<220>
<223> Adk35F2-Spike/E4orf6-E4dlO4-7(E4re#5)

<400> 10
ttaattaaca tcatcaataa tataccttat tttggattga agccaatatg ataatgaggg 60

ggtggagttt gtgacgtggc gcggggcgtg ggaacggggc gggtgacgta gtagtgtggc 120

ggaagtgtga tgttgcaagt gtggcggaac acatgtaagc gacggatgtg gcaaaagtga 180

cgtttttggt gtgcgccggt gtacacagga agtgacaatt ttcgcgcggt tttaggcgga 240

tgttgtagta aatttgggcg taaccgagta agatttggcc attttcgcgg gaaaactgaa 300

taagaggaag tgaaatctga ataattttgt gttactcata gcgcgtaata atttctgtaa 360

tagtaatcaa ttacggggtc attagttcat agcccatata tggagttccg cgttacataa 420

cttacggtaa atggcccgcc tggctgaccg cccaacgacc cccgcccatt gacgtcaata 480

atgacgtatg ttcccatagt aacgccaata gggactttcc attgacgtca atgggtggag 540

tatttacggt aaactgccca cttggcagta catcaagtgt atcatatgcc aagtacgccc 600

cctattgacg tcaatgacgg taaatggccc gcctggcatt atgcccagta catgacctta 660

tgggactttc ctacttggca gtacatctac gtattagtca tcgctattac catggtgatg 720

cggttttggc agtacatcaa tgggcgtgga tagcggtttg actcacgggg atttccaagt 780

ctccacccca ttgacgtcaa tgggagtttg ttttggcacc aaaatcaacg ggactttcca 840

aaatgtcgta acaactccgc cccattgacg caaatgggcg gtaggcgtgt acggtgggag 900

gtctatataa gcagagctct ccctatcagt gatagagatc tccctatcag tgatagagat 960

cgtcgacgag ctcgtttagt gaaccgtcag atcgcctgga gacgccatcc acgctgtttt 1020

gacctccata gaagacaccg ggaccgatcc agcctccgat ttgccaccat gtttgtgttc 1080

ctggtgctgc tgccactggt gtccagccag tgtgtgaacc tgaccaccag gacccaactt 1140

cctcctgcct acaccaactc cttcaccagg ggagtctact accctgacaa ggtgttcagg 1200

tcctctgtgc tgcacagcac ccaggacctg ttcctgccat tcttcagcaa tgtgacctgg 1260

ttccatgcca tccatgtgtc tggcaccaat ggcaccaaga ggtttgacaa ccctgtgctg 1320

ccattcaatg atggagtcta ctttgccagc acagagaaga gcaacatcat caggggctgg 1380

atttttggca ccaccctgga cagcaagacc cagtccctgc tgattgtgaa caatgccacc 1440

aatgtggtga ttaaggtgtg tgagttccag ttctgtaatg acccattcct gggagtctac 1500

taccacaaga acaacaagtc ctggatggag tctgagttca gggtctactc ctctgccaac 1560

aactgtacct ttgaatatgt gagccaacca ttcctgatgg acttggaggg caagcagggc 1620

aacttcaaga acctgaggga gtttgtgttc aagaacattg atggctactt caagatttac 1680

agcaaacaca caccaatcaa cctggtgagg gacctgccac agggcttctc tgccttggaa 1740

ccactggtgg acctgccaat tggcatcaac atcaccaggt tccagaccct gctggctctg 1800

cacaggtcct acctgacacc tggagactcc tcctctggct ggacagcagg agcagcagcc 1860

tactatgtgg gctacctcca accaaggacc ttcctgctga aatacaatga gaatggcacc 1920

atcacagatg ctgtggactg tgccctggac ccactgtctg agaccaagtg taccctgaaa 1980

tccttcacag tggagaaggg catctaccag accagcaact tcagggtcca accaacagag 2040

agcattgtga ggtttccaaa catcaccaac ctgtgtccat ttggagaggt gttcaatgcc 2100

accaggtttg cctctgtcta tgcctggaac aggaagagga ttagcaactg tgtggctgac 2160

tactctgtgc tctacaactc tgcctccttc agcaccttca agtgttatgg agtgagccca 2220

accaaactga atgacctgtg tttcaccaat gtctatgctg actcctttgt gattagggga 2280

gatgaggtga gacagattgc ccctggacaa acaggcaaga ttgctgacta caactacaaa 2340

ctgcctgatg acttcacagg ctgtgtgatt gcctggaaca gcaacaacct ggacagcaag 2400

gtgggaggca actacaacta cctctacaga ctgttcagga agagcaacct gaaaccattt 2460

gagagggaca tcagcacaga gatttaccag gctggcagca caccatgtaa tggagtggag 2520

ggcttcaact gttactttcc actccaatcc tatggcttcc aaccaaccaa tggagtgggc 2580

taccaaccat acagggtggt ggtgctgtcc tttgaactgc tccatgcccc tgccacagtg 2640

tgtggaccaa agaagagcac caacctggtg aagaacaagt gtgtgaactt caacttcaat 2700

ggactgacag gcacaggagt gctgacagag agcaacaaga agttcctgcc attccaacag 2760

tttggcaggg acattgctga caccacagat gctgtgaggg acccacagac cttggagatt 2820

ctggacatca caccatgttc ctttggagga gtgtctgtga ttacacctgg caccaacacc 2880

agcaaccagg tggctgtgct ctaccaggat gtgaactgta ctgaggtgcc tgtggctatc 2940

catgctgacc aacttacacc aacctggagg gtctacagca caggcagcaa tgtgttccag 3000

accagggctg gctgtctgat tggagcagag catgtgaaca actcctatga gtgtgacatc 3060

ccaattggag caggcatctg tgcctcctac cagacccaga ccggtggcgg tgggtcgagg 3120

tctgtggcaa gccagagcat cattgcctac acaatgagtc tgggagcaga gaactctgtg 3180

gcttacagca acaacagcat tgccatccca accaacttca ccatctctgt gaccacagag 3240

attctgcctg tgagtatgac caagacctct gtggactgta caatgtatat ctgtggagac 3300

agcacagagt gtagcaacct gctgctccaa tatggctcct tctgtaccca acttaacagg 3360

gctctgacag gcattgctgt ggaacaggac aagaacaccc aggaggtgtt tgcccaggtg 3420

aagcagattt acaagacacc tccaatcaag gactttggag gcttcaactt cagccagatt 3480

ctgcctgacc caagcaagcc aagcaagagg tccttcattg aggacctgct gttcaacaag 3540

gtgaccctgg ctgatgctgg cttcatcaag caatatggag actgtctggg agacattgct 3600

gccagggacc tgatttgtgc ccagaagttc aatggactga cagtgctgcc tccactgctg 3660

acagatgaga tgattgccca atacacctct gccctgctgg ctggcaccat cacctctggc 3720

tggacctttg gagcaggagc agccctccaa atcccatttg ctatgcagat ggcttacagg 3780

ttcaatggca ttggagtgac ccagaatgtg ctctatgaga accagaaact gattgccaac 3840

cagttcaact ctgccattgg caagattcag gactccctgt ccagcacagc ctctgccctg 3900

ggcaaactcc aagatgtggt gaaccagaat gcccaggctc tgaacaccct ggtgaagcaa 3960

ctttccagca actttggagc catctcctct gtgctgaatg acatcctgag cagactggac 4020

aaggtggagg ctgaggtcca gattgacaga ctgattacag gcagactcca atccctccaa 4080

acctatgtga cccaacaact tatcagggct gctgagatta gggcatctgc caacctggct 4140

gccaccaaga tgagtgagtg tgtgctggga caaagcaaga gggtggactt ctgtggcaag 4200

ggctaccacc tgatgagttt tccacagtct gcccctcatg gagtggtgtt cctgcatgtg 4260

acctatgtgc ctgcccagga gaagaacttc accacagccc ctgccatctg ccatgatggc 4320

aaggctcact ttccaaggga gggagtgttt gtgagcaatg gcacccactg gtttgtgacc 4380

cagaggaact tctatgaacc acagattatc accacagaca acacctttgt gtctggcaac 4440

tgtgatgtgg tgattggcat tgtgaacaac acagtctatg acccactcca acctgaactg 4500

gactccttca aggaggaact ggacaaatac ttcaagaacc acaccagccc tgatgtggac 4560

ctgggagaca tctctggcat caatgcctct gtggtgaaca tccagaagga gattgacaga 4620

ctgaatgagg tggctaagaa cctgaatgag tccctgattg acctccaaga actgggcaaa 4680

tatgaacaat acatcaagtg gccatgaaaa ttgatcataa tcagccatac cacatttgta 4740

gaggttttac ttgctttaaa aaacctccca cacctccccc tgaacctgaa acataaaatg 4800

aatgcaattg ttgttgttaa cttgtttatt gcagcttata atggttacaa ataaagcaat 4860

agcatcacaa atttcacaaa taaagcattt ttttcactgc attctagttg tggtttgtcc 4920

aaactcatca atgtatctta acgcggatcg ctccggtgcc cgtcagtggg cagagcgcac 4980

atcgcccaca gtccccgaga agttgggggg aggggtcggc aattgaaccg gtgcctagag 5040

aaggtggcgc ggggtaaact gggaaagtga tgtcgtgtac tggctccgcc tttttcccga 5100

gggtggggga gaaccgtata taagtgcagt agtcgccgtg aacgttcttt ttcgcaacgg 5160

gtttgccgcc agaacacagg taagtgccgt gtgtggttcc cgcgggcctg gcctctttac 5220

gggttatggc ccttgcgtgc cttgaattac ttccacgccc ctggctgcag tacgtgattc 5280

ttgatcccga gcttcgggtt ggaagtgggt gggagagttc gaggccttgc gcttaaggag 5340

ccccttcgcc tcgtgcttga gttgaggctt ggcctgggcg ctggggccgc cgcgtgcgaa 5400

tctggtggca ccttcgcgcc tgtctcgctg ctttcgataa gtctctagcc atttaaaatt 5460

tttgatgacc tgctgcgacg ctttttttct ggcaagatag tcttgtaaat gcgggccaag 5520

atctgcacac tggtatttcg gtttttgggg ccgcgggcgg cgacggggcc cgtgcgtccc 5580

agcgcacatg ttcggcgagg cggggcctgc gagcgcggcc accgagaatc ggacgggggt 5640

agtctcaagc tggccggcct gctctggtgc ctggcctcgc gccgccgtgt atcgccccgc 5700

cctgggcggc aaggctggcc cggtcggcac cagttgcgtg agcggaaaga tggccgcttc 5760

ccggccctgc tgcagggagc tcaaaatgga ggacgcggcg ctcgggagag cgggcgggtg 5820

agtcacccac acaaaggaaa agggcctttc cgtcctcagc cgtcgcttca tgtgactcca 5880

cggagtaccg ggcgccgtcc aggcacctcg attagttctc gagcttttgg agtacgtcgt 5940

ctttaggttg gggggagggg ttttatgcga tggagtttcc ccatactgag tgggtggaga 6000

ctgaagttag gccagcttgg cacttgatgt aattctcctt ggaatttgcc ctttttgagt 6060

ttggatcttg gttcattctc aagcctcaga cagtggttca aagtttttt cttccattta 6120

aggtgtcgtg aaaactaccc caagctggcc accatgacta cgtccggcgt tccatttggc 6180

atgacactac gaccaacacg atctcggttg tctcggcgca ctccgtacag tagggatcgt 6240

ctacctcctt ttgagacaga aacccgcgct accatactgg aggatcatcc gctgctgccc 6300

gaatgtaaca ctttgacaat gcacaacgtg agttacgtgc gaggtcttcc ctgcagtgtg 6360

ggatttacgc tgattcagga atgggttgtt ccctgggata tggttctaac gcgggaggag 6420

cttgtaatcc tgaggaagtg tatgcacgtg tgcctgtgtt gtgccaacat tgatatcatg 6480

acgagcatga tgatccatgg ttacgagtcc tgggctctcc actgtcattg ttccagtccc 6540

ggttccctgc agtgtatagc cggcgggcag gttttggcca gctggtttag gatggtggtg 6600

gatggcgcca tgtttaatca gaggtttata tggtaccggg aggtggtgaa ttacaacatg 6660

ccaaaagagg taatgtttat gtccagcgtg tttatgaggg gtcgccactt aatctacctg 6720

cgcttgtggt atgatggcca cgtgggttct gtggtccccg ccatgagctt tggatacagc 6780

gccttgcact gtgggatttt gaacaatatt gtggtgctgt gctgcagtta ctgtgctgat 6840

ttaagtgaga tcagggtgcg ctgctgtgcc cggaggacaa ggcgccttat gctgcgggcg 6900

gtgcgaatca tcgctgagga gaccactgcc atgttgtatt cctgcaggac ggagcggcgg 6960

cggcagcagt ttattcgcgc gctgctgcag caccaccgcc ctatcctgat gcacgattat 7020

gactctaccc ccatgtagaa gcttggggat caattctcta gagctcgctg atcagcctcg 7080

actgtgcctt ctagttgcca gccatctgtt gtttgcccct cccccgtgcc ttccttgacc 7140

ctggaaggtg ccactcccac tgtcctttcc taataaaatg aggaaattgc atcgcattgt 7200

ctgagtaggt gtcattctat tctgggggggt ggggtggggc aggacagcaa gggggaggat 7260

tgggaagaca atagcaggca tgctggggat gcggtgggct ctatggcttc tgaggaaatt 7320

gggcgtggct taagggtggg aaagaatata taaggtgggg gtcttatgta gttttgtatc 7380

tgttttgcag cagccgccgc cgccatgagc accaactcgt ttgatggaag cattgtgagc 7440

tcatatttga caacgcgcat gcccccatgg gccggggtgc gtcagaatgt gatgggctcc 7500

agcattgatg gtcgccccgt cctgcccgca aactctacta ccttgaccta cgagaccgtg 7560

tctggaacgc cgttggagac tgcagcctcc gccgccgctt cagccgctgc agccaccgcc 7620

cgcgggattg tgactgactt tgctttcctg agcccgcttg caagcagtgc agcttcccgt 7680

tcatccgccc gcgatgacaa gttgacggct cttttggcac aattggattc tttgacccgg 7740

gaacttaatg tcgtttctca gcagctgttg gatctgcgcc agcaggtttc tgccctgaag 7800

gcttcctccc ctcccaatgc ggtttaaaac ataaataaaa aaccagactc tgtttggatt 7860

tggatcaagc aagtgtcttg ctgtctttat ttaggggttt tgcgcgcgcg gtaggcccgg 7920

gaccagcggt ctcggtcgtt gagggtcctg tgtatttttt ccaggacgtg gtaaaggtga 7980

ctctggatgt tcagatacat gggcataagc ccgtctctgg ggtggaggta gcaccactgc 8040

agagcttcat gctgcggggt ggtgttgtag atgatccagt cgtagcagga gcgctgggcg 8100

tggtgcctaa aaatgtcttt cagtagcaag ctgattgcca ggggcaggcc cttggtgtaa 8160

gtgtttacaa agcggttaag ctgggatggg tgcatacgtg gggatatgag atgcatcttg 8220

gactgtattt ttaggttggc tatgttccca gccatatccc tccggggatt catgttgtgc 8280

agaaccacca gcacagtgta tccggtgcac ttgggaaatt tgtcatgtag cttagaagga 8340

aatgcgtgga agaacttgga gacgcccttg tgacctccaa gattttccat gcattcgtcc 8400

ataatgatgg caatgggccc acgggcggcg gcctgggcga agatatttct gggatcacta 8460

acgtcatagt tgtgttccag gatgagatcg tcataggcca tttttacaaa gcgcgggcgg 8520

agggtgccag actgcggtat aatggttcca tccggcccag gggcgtagtt accctcacag 8580

atttgcattt cccacgcttt gagttcagat ggggggatca tgtctacctg cggggcgatg 8640

aagaaaacgg tttccggggt aggggagatc agctgggaag aaagcaggtt cctgagcagc 8700

tgcgacttac cgcagccggt gggcccgtaa atcacaccta ttaccgggtg caactggtag 8760

ttaagagagc tgcagctgcc gtcatccctg agcaggggggg ccacttcgtt aagcatgtcc 8820

ctgactcgca tgttttccct gaccaaatcc gccagaaggc gctcgccgcc cagcgatagc 8880

agttcttgca aggaagcaaa gtttttcaac ggtttgagac cgtccgccgt aggcatgctt 8940

ttgagcgttt gaccaagcag ttccaggcgg tcccacagct cggtcacctg ctctacggca 9000

tctcgatcca gcatatctcc tcgtttcgcg ggttggggcg gctttcgctg tacggcagta 9060

gtcggtgctc gtccagacgg gccagggtca tgtctttcca cgggcgcagg gtcctcgtca 9120

gcgtagtctg ggtcacggtg aaggggtgcg ctccgggctg cgcgctggcc agggtgcgct 9180

tgaggctggt cctgctggtg ctgaagcgct gccggtcttc gccctgcgcg tcggccaggt 9240

agcatttgac catggtgtca tagtccagcc cctccgcggc gtggcccttg gcgcgcagct 9300

tgcccttgga ggaggcgccg cacgaggggc agtgcagact tttgagggcg tagagcttgg 9360

gcgcgagaaa taccgattcc ggggagtagg catccgcgcc gcaggccccg cagacggtct 9420

cgcattccac gagccaggtg agctctggcc gttcggggtc aaaaaccagg tttcccccat 9480

gctttttgat gcgtttctta cctctggttt ccatgagccg gtgtccacgc tcggtgacga 9540

aaaggctgtc cgtgtccccg tatacagact tgagaggcct gtcctcgagc ggtgttccgc 9600

ggtcctcctc gtatagaaac tcggaccact ctgagacaaa ggctcgcgtc caggccagca 9660

cgaaggaggc taagtgggag gggtagcggt cgttgtccac tagggggtcc actcgctcca 9720

gggtgtgaag acacatgtcg ccctcttcgg catcaaggaa ggtgattggt ttgtaggtgt 9780

aggccacgtg accgggtgtt cctgaagggg ggctataaaa gggggtgggg gcgcgttcgt 9840

cctcactctc ttccgcatcg ctgtctgcga gggccagctg ttggggtgag tactccctct 9900

gaaaagcggg catgacttct gcgctaagat tgtcagtttc caaaaacgag gaggatttga 9960

tattcacctg gcccgcggtg atgcctttga gggtggccgc atccatctgg tcagaaaaga 10020

caatcttttt gttgtcaagc ttggtggcaa acgacccgta gagggcgttg gacagcaact 10080

tggcgatgga gcgcagggtt tggtttttgt cgcgatcggc gcgctccttg gccgcgatgt 10140

ttagctgcac gtattcgcgc gcaacgcacc gccattcggg aaagacggtg gtgcgctcgt 10200

cgggcaccag gtgcacgcgc caaccgcggt tgtgcagggt gacaaggtca acgctggtgg 10260

ctacctctcc gcgtaggcgc tcgttggtcc agcagaggcg gccgcccttg cgcgagcaga 10320

atggcggtag ggggtctagc tgcgtctcgt ccgggggggtc tgcgtccacg gtaaagaccc 10380

cgggcagcag gcgcgcgtcg aagtagtcta tcttgcatcc ttgcaagtct agcgcctgct 10440

gccatgcgcg ggcggcaagc gcgcgctcgt atgggttgag tgggggaccc catggcatgg 10500

ggtgggtgag cgcggaggcg tacatgccgc aaatgtcgta aacgtagagg ggctctctga 10560

gtattccaag atatgtaggg tagcatcttc caccgcggat gctggcgcgc acgtaatcgt 10620

atagttcgtg cgagggagcg aggaggtcgg gaccgaggtt gctacgggcg ggctgctctg 10680

ctcggaagac tatctgcctg aagatggcat gtgagttgga tgatatggtt ggacgctgga 10740

agacgttgaa gctggcgtct gtgagaccta ccgcgtcacg cacgaaggag gcgtaggagt 10800

cgcgcagctt gttgaccagc tcggcggtga cctgcacgtc tagggcgcag tagtccaggg 10860

tttccttgat gatgtcatac ttatcctgtc ccttttttt ccacagctcg cggttgagga 10920

caaactcttc gcggtctttc cagtactctt ggatcggaaa cccgtcggcc tccgaacggt 10980

aagagcctag catgtagaac tggttgacgg cctggtaggc gcagcatccc ttttctacgg 11040

gtagcgcgta tgcctgcgcg gccttccgga gcgaggtgtg ggtgagcgca aaggtgtccc 11100

tgaccatgac tttgaggtac tggtatttga agtcagtgtc gtcgcatccg ccctgctccc 11160

agagcaaaaa gtccgtgcgc tttttggaac gcggatttgg cagggcgaag gtgacatcgt 11220

tgaagagtat ctttcccgcg cgaggcataa agttgcgtgt gatgcggaag ggtcccggca 11280

cctcggaacg gttgttaatt acctgggcgg cgagcacgat ctcgtcaaag ccgttgatgt 11340

tgtggcccac aatgtaaagt tccaagaagc gcgggatgcc cttgatggaa ggcaattttt 11400

taagttcctc gtaggtgagc tcttcagggg agctgagccc gtgctctgaa agggcccagt 11460

ctgcaagatg agggttggaa gcgacgaatg agctccacag gtcacgggcc attagcattt 11520

gcaggtggtc gcgaaaggtc ctaaactggc gacctatggc catttttct ggggtgatgc 11580

agtagaaggt aagcgggtct tgttcccagc ggtcccatcc aaggttcgcg gctaggtctc 11640

gcgcggcagt cactagaggc tcatctccgc cgaacttcat gaccagcatg aagggcacga 11700

gctgcttccc aaaggccccc atccaagtat aggtctctac atcgtaggtg acaaagagac 11760

gctcggtgcg aggatgcgag ccgatcggga agaactggat ctcccgccac caattggagg 11820

agtggctatt gatgtggtga aagtagaagt ccctgcgacg ggccgaacac tcgtgctggc 11880

ttttgtaaaa acgtgcgcag tactggcagc ggtgcacggg ctgtacatcc tgcacgaggt 11940

tgacctgacg accgcgcaca aggaagcaga gtgggaattt gagcccctcg cctggcgggt 12000

ttggctggtg gtcttctact tcggctgctt gtccttgacc gtctggctgc tcgaggggag 12060

ttacggtgga tcggaccacc acgccgcgcg agcccaaagt ccagatgtcc gcgcgcggcg 12120

gtcggagctt gatgacaaca tcgcgcagat gggagctgtc catggtctgg agctcccgcg 12180

gcgtcaggtc aggcgggagc tcctgcaggt ttacctcgca tagacgggtc agggcgcggg 12240

ctagatccag gtgataccta atttccaggg gctggttggt ggcggcgtcg atggcttgca 12300

agaggccgca tccccgcggc gcgactacgg taccgcgcgg cgggcggtgg gccgcggggg 12360

tgtccttgga tgatgcatct aaaagcggtg acgcgggcga gcccccggag gtaggggggg 12420

ctccggaccc gccgggagag ggggcagggg cacgtcggcg ccgcgcgcgg gcaggagctg 12480

gtgctgcgcg cgtaggttgc tggcgaacgc gacgacgcgg cggttgatct cctgaatctg 12540

gcgcctctgc gtgaagacga cgggcccggt gagcttgaac ctgaaagaga gttcgacaga 12600

atcaatttcg gtgtcgttga cggcggcctg gcgcaaaatc tcctgcacgt ctcctgagtt 12660

gtcttgatag gcgatctcgg ccatgaactg ctcgatctct tcctcctgga gatctccgcg 12720

tccggctcgc tccacggtgg cggcgaggtc gttggaaatg cgggccatga gctgcgagaa 12780

ggcgttgagg cctccctcgt tccagacgcg gctgtagacc acgccccctt cggcatcgcg 12840

ggcgcgcatg accacctgcg cgagattgag ctccacgtgc cgggcgaaga cggcgtagtt 12900

tcgcaggcgc tgaaagaggt agttgagggt ggtggcggtg tgttctgcca cgaagaagta 12960

cataacccag cgtcgcaacg tggattcgtt gatatccccc aaggcctcaa ggcgctccat 13020

ggcctcgtag aagtccacgg cgaagttgaa aaactgggag ttgcgcgccg acacggttaa 13080

ctcctcctcc agaagacgga tgagctcggc gacagtgtcg cgcacctcgc gctcaaaggc 13140

tacaggggcc tcttcttctt cttcaatctc ctcttccata agggcctccc cttcttcttc 13200

ttctggcggc ggtgggggag gggggacacg gcggcgacga cggcgcaccg ggaggcggtc 13260

gacaaagcgc tcgatcatct ccccgcggcg acggcgcatg gtctcggtga cggcgcggcc 13320

gttctcgcgg gggcgcagtt ggaagacgcc gcccgtcatg tcccggttat gggttggcgg 13380

ggggctgcca tgcggcaggg atacggcgct aacgatgcat ctcaacaatt gttgtgtagg 13440

tactccgccg ccgagggacc tgagcgagtc cgcatcgacc ggatcggaaa acctctcgag 13500

aaaggcgtct aaccagtcac agtcgcaagg taggctgagc accgtggcgg gcggcagcgg 13560

gcggcggtcg gggttgtttc tggcggaggt gctgctgatg atgtaattaa agtaggcggt 13620

cttgagacgg cggatggtcg acagaagcac catgtccttg ggtccggcct gctgaatgcg 13680

caggcggtcg gccatgcccc aggcttcgtt ttgacatcgg cgcaggtctt tgtagtagtc 13740

ttgcatgagc ctttctaccg gcacttcttc ttctccttcc tcttgtcctg catctcttgc 13800

atctatcgct gcggcggcgg cggagtttgg ccgtaggtgg cgccctcttc ctcccatgcg 13860

tgtgaccccg aagcccctca tcggctgaag cagggctagg tcggcgacaa cgcgctcggc 13920

taatatggcc tgctgcacct gcgtgagggt agactggaag tcatccatgt ccacaaagcg 13980

gtggtatgcg cccgtgttga tggtgtaagt gcagttggcc ataacggacc agttaacggt 14040

ctggtgaccc ggctgcgaga gctcggtgta cctgagacgc gagtaagccc tcgagtcaaa 14100

tacgtagtcg ttgcaagtcc gcaccaggta ctggtatccc accaaaaagt gcggcggcgg 14160

ctggcggtag aggggccagc gtagggtggc cggggctccg ggggcgagat cttccaacat 14220

aaggcgatga tatccgtaga tgtacctgga catccaggtg atgccggcgg cggtggtgga 14280

ggcgcgcgga aagtcgcgga cgcggttcca gatgttgcgc agcggcaaaa agtgctccat 14340

ggtcgggacg ctctggccgg tcaggcgcgc gcaatcgttg acgctctagc gtgcaaaagg 14400

agagcctgta agcgggcact cttccgtggt ctggtggata aattcgcaag ggtatcatgg 14460

cggacgaccg gggttcgagc cccgtatccg gccgtccgcc gtgatccatg cggttaccgc 14520

ccgcgtgtcg aacccaggtg tgcgacgtca gacaacgggg gagtgctcct tttggcttcc 14580

ttccaggcgc ggcggctgct gcgctagctt ttttggccac tggccgcgcg cagcgtaagc 14640

ggttaggctg gaaagcgaaa gcattaagtg gctcgctccc tgtagccgga gggttatttt 14700

ccaagggttg agtcgcggga cccccggttc gagtctcgga ccggccggac tgcggcgaac 14760

gggggtttgc ctccccgtca tgcaagaccc cgcttgcaaa ttcctccgga aacagggacg 14820

agccccttt ttgcttttcc cagatgcatc cggtgctgcg gcagatgcgc ccccctcctc 14880

agcagcggca agagcaagag cagcggcaga catgcagggc accctcccct cctcctaccg 14940

cgtcaggagg ggcgacatcc gcggttgacg cggcagcaga tggtgattac gaacccccgc 15000

ggcgccgggc ccggcactac ctggacttgg aggagggcga gggcctggcg cggctaggag 15060

cgccctctcc tgagcggcac ccaagggtgc agctgaagcg tgatacgcgt gaggcgtacg 15120

tgccgcggca gaacctgttt cgcgaccgcg agggagagga gcccgaggag atgcgggatc 15180

gaaagttcca cgcagggcgc gagctgcggc atggcctgaa tcgcgagcgg ttgctgcgcg 15240

aggaggactt tgagcccgac gcgcgaaccg ggattagtcc cgcgcgcgca cacgtggcgg 15300

ccgccgacct ggtaaccgca tacgagcaga cggtgaacca ggagattaac tttcaaaaaa 15360

gctttaacaa ccacgtgcgt acgcttgtgg cgcgcgagga ggtggctata ggactgatgc 15420

atctgtggga ctttgtaagc gcgctggagc aaaacccaaa tagcaagccg ctcatggcgc 15480

agctgttcct tatagtgcag cacagcaggg acaacgaggc attcagggat gcgctgctaa 15540

acatagtaga gcccgagggc cgctggctgc tcgatttgat aaacatcctg cagagcatag 15600

tggtgcagga gcgcagcttg agcctggctg acaaggtggc cgccatcaac tattccatgc 15660

ttagcctggg caagttttac gcccgcaaga tataccatac cccttacgtt cccatagaca 15720

aggaggtaaa gatcgagggg ttctacatgc gcatggcgct gaaggtgctt accttgagcg 15780

acgacctggg cgtttatcgc aacgagcgca tccacaaggc cgtgagcgtg agccggcggc 15840

gcgagctcag cgaccgcgag ctgatgcaca gcctgcaaag ggccctggct ggcacgggca 15900

gcggcgatag agaggccgag tcctactttg acgcgggcgc tgacctgcgc tgggccccaa 15960

gccgacgcgc cctggaggca gctggggccg gacctgggct ggcggtggca cccgcgcgcg 16020

ctggcaacgt cggcggcgtg gaggaatatg acgaggacga tgagtacgag ccagaggacg 16080

gcgagtacta agcggtgatg tttctgatca gatgatgcaa gacgcaacgg acccggcggt 16140

gcgggcggcg ctgcagagcc agccgtccgg ccttaactcc acggacgact ggcgccaggt 16200

catggaccgc atcatgtcgc tgactgcgcg caatcctgac gcgttccggc agcagccgca 16260

ggccaaccgg ctctccgcaa ttctggaagc ggtggtcccg gcgcgcgcaa accccacgca 16320

cgagaaggtg ctggcgatcg taaacgcgct ggccgaaaac agggccatcc ggcccgacga 16380

ggccggcctg gtctacgacg cgctgcttca gcgcgtggct cgttacaaca gcggcaacgt 16440

gcagaccaac ctggaccggc tggtggggga tgtgcgcgag gccgtggcgc agcgtgagcg 16500

cgcgcagcag cagggcaacc tgggctccat ggttgcacta aacgccttcc tgagtacaca 16560

gcccgccaac gtgccgcggg gacaggagga ctacaccaac tttgtgagcg cactgcggct 16620

aatggtgact gagacaccgc aaagtgaggt gtaccagtct gggccagact atttttcca 16680

gaccagtaga caaggcctgc agaccgtaaa cctgagccag gctttcaaaa acttgcaggg 16740

gctgtggggg gtgcgggctc ccacaggcga ccgcgcgacc gtgtctagct tgctgacgcc 16800

caactcgcgc ctgttgctgc tgctaatagc gcccttcacg gacagtggca gcgtgtcccg 16860

ggacacatac ctaggtcact tgctgacact gtaccgcgag gccataggtc aggcgcatgt 16920

ggacgagcat actttccagg agattacaag tgtcagccgc gcgctggggc aggaggacac 16980

gggcagcctg gaggcaaccc taaactacct gctgaccaac cggcggcaga agatcccctc 17040

gttgcacagt ttaaacagcg aggaggagcg cattttgcgc tacgtgcagc agagcgtgag 17100

ccttaacctg atgcgcgacg gggtaacgcc cagcgtggcg ctggacatga ccgcgcgcaa 17160

catggaaccg ggcatgtatg cctcaaaccg gccgtttatc aaccgcctaa tggactactt 17220

gcatcgcgcg gccgccgtga accccgagta tttcaccaat gccatcttga acccgcactg 17280

gctaccgccc cctggtttct acaccggggg attcgaggtg cccgagggta acgatggatt 17340

cctctgggac gacatagacg acagcgtgtt ttccccgcaa ccgcagaccc tgctagagtt 17400

gcaacagcgc gagcaggcag aggcggcgct gcgaaaggaa agcttccgca ggccaagcag 17460

cttgtccgat ctaggcgctg cggccccgcg gtcagatgct agtagcccat ttccaagctt 17520

gatagggtct cttaccagca ctcgcaccac ccgcccgcgc ctgctgggcg aggaggagta 17580

cctaaacaac tcgctgctgc agccgcagcg cgaaaaaaac ctgcctccgg catttcccaa 17640

caacgggata gagagcctag tggacaagat gagtagatgg aagacgtacg cgcaggagca 17700

cagggacgtg ccaggcccgc gcccgcccac ccgtcgtcaa aggcacgacc gtcagcgggg 17760

tctggtgtgg gaggacgatg actcggcaga cgacagcagc gtcctggatt tgggagggag 17820

tggcaacccg tttgcgcacc ttcgccccag gctggggaga atgttttaaa aaaaaaaaag 17880

catgatgcaa aataaaaaac tcaccaaggc catggcaccg agcgttggtt ttcttgtatt 17940

ccccttagta tgcggcgcgc ggcgatgtat gaggaaggtc ctcctccctc ctacgagagt 18000

gtggtgagcg cggcgccagt ggcggcggcg ctgggttctc ccttcgatgc tcccctggac 18060

ccgccgtttg tgcctccgcg gtacctgcgg cctaccgggg ggagaaacag catccgttac 18120

tctgagttgg caccctatt cgacaccacc cgtgtgtacc tggtggacaa caagtcaacg 18180

gatgtggcat ccctgaacta ccagaacgac cacagcaact ttctgaccac ggtcattcaa 18240

aacaatgact acagcccggg ggaggcaagc acacagacca tcaatcttga cgaccggtcg 18300

cactggggcg gcgacctgaa aaccatcctg cataccaaca tgccaaatgt gaacgagttc 18360

atgtttacca ataagtttaa ggcgcgggtg atggtgtcgc gcttgcctac taaggacaat 18420

caggtggagc tgaaatacga gtgggtggag ttcacgctgc ccgagggcaa ctactccgag 18480

accatgacca tagaccttat gaacaacgcg atcgtggagc actacttgaa agtgggcaga 18540

cagaacgggg ttctggaaag cgacatcggg gtaaagtttg acacccgcaa cttcagactg 18600

gggtttgacc ccgtcactgg tcttgtcatg cctggggtat atacaaacga agccttccat 18660

ccagacatca ttttgctgcc aggatgcggg gtggacttca cccacagccg cctgagcaac 18720

ttgttgggca tccgcaagcg gcaacccttc caggagggct ttaggatcac ctacgatgat 18780

ctggagggtg gtaacattcc cgcactgttg gatgtggacg cctaccaggc gagcttgaaa 18840

gatgacaccg aacagggcgg gggtggcgca ggcggcagca acagcagtgg cagcggcgcg 18900

gaagagaact ccaacgcggc agccgcggca atgcagccgg tggaggacat gaacgatcat 18960

gccattcgcg gcgacacctt tgccacacgg gctgaggaga agcgcgctga ggccgaagca 19020

gcggccgaag ctgccgcccc cgctgcgcaa cccgaggtcg agaagcctca gaagaaaccg 19080

gtgatcaaac ccctgacaga ggacagcaag aaacgcagtt acaacctaat aagcaatgac 19140

agcaccttca cccagtaccg cagctggtac cttgcataca actacggcga ccctcagacc 19200

ggaatccgct catggaccct gctttgcact cctgacgtaa cctgcggctc ggagcaggtc 19260

tactggtcgt tgccagacat gatgcaagac cccgtgacct tccgctccac gcgccagatc 19320

agcaactttc cggtggtggg cgccgagctg ttgcccgtgc actccaagag cttctacaac 19380

gaccaggccg tctactccca actcatccgc cagtttacct ctctgaccca cgtgttcaat 19440

cgctttcccg agaaccagat tttggcgcgc ccgccagccc ccaccatcac caccgtcagt 19500

gaaaacgttc ctgctctcac agatcacggg acgctaccgc tgcgcaacag catcggagga 19560

gtccagcgag tgaccattac tgacgccaga cgccgcacct gcccctacgt ttacaaggcc 19620

ctgggcatag tctcgccgcg cgtcctatcg agccgcactt tttgagcaag catgtccatc 19680

cttatatcgc ccagcaataa cacaggctgg ggcctgcgct tcccaagcaa gatgtttggc 19740

ggggccaaga agcgctccga ccaacaccca gtgcgcgtgc gcgggcacta ccgcgcgccc 19800

tggggcgcgc acaaacgcgg ccgcactggg cgcaccaccg tcgatgacgc catcgacgcg 19860

gtggtggagg aggcgcgcaa ctacacgccc acgccgccac cagtgtccac agtggacgcg 19920

gccattcaga ccgtggtgcg cggagcccgg cgctatgcta aaatgaagag acggcggagg 19980

cgcgtagcac gtcgccaccg ccgccgaccc ggcactgccg cccaacgcgc ggcggcggcc 20040

ctgcttaacc gcgcacgtcg caccggccga cgggcggcca tgcgggccgc tcgaaggctg 20100

gccgcgggta ttgtcactgt gccccccagg tccaggcgac gagcggccgc cgcagcagcc 20160

gcggccatta gtgctatgac tcagggtcgc aggggcaacg tgtattgggt gcgcgactcg 20220

gttagcggcc tgcgcgtgcc cgtgcgcacc cgcccccgc gcaactagat tgcaagaaaa 20280

aactacttag actcgtactg ttgtatgtat ccagcggcgg cggcgcgcaa cgaagctatg 20340

tccaagcgca aaatcaaaga agagatgctc caggtcatcg cgccggagat ctatggcccc 20400

ccgaagaagg aagagcagga ttacaagccc cgaaagctaa agcgggtcaa aaagaaaaag 20460

aaagatgatg atgatgaact tgacgacgag gtggaactgc tgcacgctac cgcgcccagg 20520

cgacgggtac agtggaaagg tcgacgcgta aaacgtgttt tgcgacccgg caccaccgta 20580

gtctttacgc ccggtgagcg ctccacccgc acctacaagc gcgtgtatga tgaggtgtac 20640

ggcgacgagg acctgcttga gcaggccaac gagcgcctcg gggagtttgc ctacggaaag 20700

cggcataagg acatgctggc gttgccgctg gacgagggca acccaacacc tagcctaaag 20760

cccgtaacac tgcagcaggt gctgcccgcg cttgcaccgt ccgaagaaaa gcgcggccta 20820

aagcgcgagt ctggtgactt ggcacccacc gtgcagctga tggtacccaa gcgccagcga 20880

ctggaagatg tcttggaaaa aatgaccgtg gaacctgggc tggagcccga ggtccgcgtg 20940

cggccaatca agcaggtggc gccgggactg ggcgtgcaga ccgtggacgt tcagataccc 21000

actaccagta gcaccagtat tgccaccgcc acagagggca tggagacaca aacgtccccg 21060

gttgcctcag cggtggcgga tgccgcggtg caggcggtcg ctgcggccgc gtccaagacc 21120

tctacggagg tgcaaacgga cccgtggatg tttcgcgttt cagcccccg gcgcccgcgc 21180

cgttcgagga agtacggcgc cgccagcgcg ctactgcccg aatatgccct acatccttcc 21240

attgcgccta cccccggcta tcgtggctac acctaccgcc ccagaagacg agcaactacc 21300

cgacgccgaa ccaccactgg aacccgccgc cgccgtcgcc gtcgccagcc cgtgctggcc 21360

ccgatttccg tgcgcagggt ggctcgcgaa ggaggcagga ccctggtgct gccaacagcg 21420

cgctaccacc ccagcatcgt ttaaaagccg gtctttgtgg ttcttgcaga tatggccctc 21480

acctgccgcc tccgtttccc ggtgccggga ttccgaggaa gaatgcaccg taggaggggc 21540

atggccggcc acggcctgac gggcggcatg cgtcgtgcgc accaccggcg gcggcgcgcg 21600

tcgcaccgtc gcatgcgcgg cggtatcctg cccctcctta ttccactgat cgccgcggcg 21660

attggcgccg tgcccggaat tgcatccgtg gccttgcagg cgcagagaca ctgattaaaa 21720

acaagttgca tgtggaaaaa tcaaaataaa aagtctggac tctcacgctc gcttggtcct 21780

gtaactattt tgtagaatgg aagacatcaa ctttgcgtct ctggccccgc gacacggctc 21840

gcgcccgttc atgggaaact ggcaagatat cggcaccagc aatatgagcg gtggcgcctt 21900

cagctggggc tcgctgtgga gcggcattaa aaatttcggt tccaccgtta agaactatgg 21960

cagcaaggcc tggaacagca gcacaggcca gatgctgagg gataagttga aagagcaaaa 22020

tttccaacaa aaggtggtag atggcctggc ctctggcatt agcggggtgg tggacctggc 22080

caaccaggca gtgcaaaata agattaacag taagcttgat ccccgccctc ccgtagagga 22140

gcctccaccg gccgtggaga cagtgtctcc agaggggcgt ggcgaaaagc gtccgcgccc 22200

cgacagggaa gaaactctgg tgacgcaaat agacgagcct ccctcgtacg aggaggcact 22260

aaagcaaggc ctgcccacca cccgtcccat cgcgcccatg gctaccggag tgctgggcca 22320

gcacacaccc gtaacgctgg acctgcctcc ccccgccgac acccagcaga aacctgtgct 22380

gccaggcccg accgccgttg ttgtaacccg tcctagccgc gcgtccctgc gccgcgccgc 22440

cagcggtccg cgatcgttgc ggcccgtagc cagtggcaac tggcaaagca cactgaacag 22500

catcgtgggt ctgggggtgc aatccctgaa gcgccgacga tgcttctgat agctaacgtg 22560

tcgtatgtgt gtcatgtatg cgtccatgtc gccgccagag gagctgctga gccgccgcgc 22620

gcccgctttc caagatggct acccccttcga tgatgccgca gtggtcttac atgcacatct 22680

cgggccagga cgcctcggag tacctgagcc ccgggctggt gcagtttgcc cgcgccaccg 22740

agacgtactt cagcctgaat aacaagttta gaaaccccac ggtggcgcct acgcacgacg 22800

tgaccacaga ccggtcccag cgtttgacgc tgcggttcat ccctgtggac cgtgaggata 22860

ctgcgtactc gtacaaggcg cggttcaccc tagctgtggg tgataaccgt gtgctggaca 22920

tggcttccac gtactttgac atccgcggcg tgctggacag gggccctact tttaagccct 22980

actctggcac tgcctacaac gccctggctc ccaagggtgc cccaaatcct tgcgaatggg 23040

atgaagctgc tactgctctt gaaataaacc tagaagaaga ggacgatgac aacgaagacg 23100

aagtagacga gcaagctgag cagcaaaaaa ctcacgtatt tgggcaggcg ccttattctg 23160

gtataaatat tacaaaggag ggtattcaaa taggtgtcga aggtcaaaca cctaaatatg 23220

ccgataaaac atttcaacct gaacctcaaa taggagaatc tcagtggtac gaaacagaaa 23280

ttaatcatgc agctgggaga gtcctaaaaa agactacccc aatgaaacca tgttacggtt 23340

catatgcaaa acccacaaat gaaaatggag ggcaaggcat tcttgtaaag caacaaaatg 23400

gaaagctaga aagtcaagtg gaaatgcaat ttttctcaac tactgaggca gccgcaggca 23460

atggtgataa cttgactcct aaagtggtat tgtacagtga agatgtagat atagaaaccc 23520

cagacactca tatttcttac atgcccacta ttaaggaagg taactcacga gaactaatgg 23580

gccaacaatc tatgcccaac aggcctaatt acattgcttt tagggacaat tttattggtc 23640

taatgtatta caacagcacg ggtaatatgg gtgttctggc gggccaagca tcgcagttga 23700

atgctgttgt agatttgcaa gacagaaaca cagagctttc ataccagctt ttgcttgatt 23760

ccattggtga tagaaccagg tacttttcta tgtggaatca ggctgttgac agctatgatc 23820

cagatgttag aattattgaa aatcatggaa ctgaagatga acttccaaat tactgctttc 23880

cactgggagg tgtgattaat acagagactc ttaccaaggt aaaacctaaa acaggtcagg 23940

aaaatggatg ggaaaaagat gctacagaat tttcagataa aaatgaaata agagttggaa 24000

ataattttgc catggaaatc aatctaaatg ccaacctgtg gagaaatttc ctgtactcca 24060

acatagcgct gtatttgccc gacaagctaa agtacagtcc ttccaacgta aaaatttctg 24120

ataacccaaa cacctacgac tacatgaaca agcgagtggt ggctcccggg ctagtggact 24180

gctacattaa ccttggagca cgctggtccc ttgactatat ggacaacgtc aacccattta 24240

accaccaccg caatgctggc ctgcgctacc gctcaatgtt gctgggcaat ggtcgctatg 24300

tgcccttcca catccaggtg cctcagaagt tctttgccat taaaaacctc cttctcctgc 24360

cgggctcata cacctacgag tggaacttca ggaaggatgt taacatggtt ctgcagagct 24420

ccctaggaaa tgacctaagg gttgacggag ccagcattaa gtttgatagc atttgccttt 24480

acgccacctt cttccccatg gcccacaaca ccgcctccac gcttgaggcc atgcttagaa 24540

acgacaccaa cgaccagtcc tttaacgact atctctccgc cgccaacatg ctctacccta 24600

tacccgccaa cgctaccaac gtgcccatat ccatcccctc ccgcaactgg gcggctttcc 24660

gcggctgggc cttcacgcgc cttaagacta aggaaacccc atcactgggc tcgggctacg 24720

acccttatta cacctactct ggctctatac cctacctaga tggaaccttt tacctcaacc 24780

acacctttaa gaaggtggcc attacctttg actcttctgt cagctggcct ggcaatgacc 24840

gcctgcttac ccccaacgag tttgaaatta agcgctcagt tgacggggag ggttacaacg 24900

ttgcccagtg taacatgacc aaagactggt tcctggtaca aatgctagct aactataaca 24960

ttggctacca gggcttctat atcccagaga gctacaagga ccgcatgtac tccttcttta 25020

gaaacttcca gcccatgagc cgtcaggtgg tggatgatac taaatacaag gactaccaac 25080

aggtgggcat cctacaccaa cacaacaact ctggatttgt tggctacctt gcccccacca 25140

tgcgcgaagg acaggcctac cctgctaact tcccctatcc gcttataggc aagaccgcag 25200

ttgacagcat tacccagaaa aagtttcttt gcgatcgcac cctttggcgc atcccattct 25260

ccagtaactt tatgtccatg ggcgcactca cagacctggg ccaaaacctt ctctacgcca 25320

actccgccca cgcgctagac atgacttttg aggtggatcc catggacgag cccacccttc 25380

tttatgtttt gtttgaagtc tttgacgtgg tccgtgtgca ccagccgcac cgcggcgtca 25440

tcgaaaccgt gtacctgcgc acgcccttct cggccggcaa cgccacaaca taaagaagca 25500

agcaacatca acaacagctg ccgccatggg ctccagtgag caggaactga aagccattgt 25560

caaagatctt ggttgtgggc catatttttt gggcacctat gacaagcgct ttccaggctt 25620

tgtttctcca cacaagctcg cctgcgccat agtcaatacg gccggtcgcg agactggggg 25680

cgtacactgg atggcctttg cctggaaccc gcactcaaaa acatgctacc tctttgagcc 25740

ctttggcttt tctgaccagc gactcaagca ggtttaccag tttgagtacg agtcactcct 25800

gcgccgtagc gccattgctt cttcccccga ccgctgtata acgctggaaa agtccaccca 25860

aagcgtacag gggcccaact cggccgcctg tggactattc tgctgcatgt ttctccacgc 25920

ctttgccaac tggccccaaa ctcccatgga tcacaacccc accatgaacc ttattaccgg 25980

ggtacccaac tccatgctca acagtcccca ggtacagccc accctgcgtc gcaaccagga 26040

acagctctac agcttcctgg agcgccactc gccctacttc cgcagccaca gtgcgcagat 26100

taggagcgcc acttcttttt gtcacttgaa aaacatgtaa aaataatgta ctagagacac 26160

tttcaataaa ggcaaatgct tttatttgta cactctcggg tgattattta cccccaccct 26220

tgccgtctgc gccgtttaaa aatcaaaggg gttctgccgc gcatcgctat gcgccactgg 26280

cagggacacg ttgcgatact ggtgtttagt gctccactta aactcaggca caaccatccg 26340

cggcagctcg gtgaagtttt cactccacag gctgcgcacc atcaccaacg cgtttagcag 26400

gtcgggcgcc gatatcttga agtcgcagtt ggggcctccg ccctgcgcgc gcgagttgcg 26460

atacacaggg ttgcagcact ggaacactat cagcgccggg tggtgcacgc tggccagcac 26520

gctcttgtcg gagatcagat ccgcgtccag gtcctccgcg ttgctcaggg cgaacggagt 26580

caactttggt agctgccttc ccaaaaaggg cgcgtgccca ggctttgagt tgcactcgca 26640

ccgtagtggc atcaaaaggt gaccgtgccc ggtctgggcg ttaggataca gcgcctgcat 26700

aaaagccttg atctgcttaa aagccacctg agcctttgcg ccttcagaga agaacatgcc 26760

gcaagacttg ccggaaaact gattggccgg acaggccgcg tcgtgcacgc agcaccttgc 26820

gtcggtgttg gagatctgca ccacatttcg gccccaccgg ttcttcacga tcttggcctt 26880

gctagactgc tccttcagcg cgcgctgccc gttttcgctc gtcacatcca tttcaatcac 26940

gtgctcctta tttatcataa tgcttccgtg tagacactta agctcgcctt cgatctcagc 27000

gcagcggtgc agccacaacg cgcagcccgt gggctcgtga tgcttgtagg tcacctctgc 27060

aaacgactgc aggtacgcct gcaggaatcg ccccatcatc gtcacaaagg tcttgttgct 27120

ggtgaaggtc agctgcaacc cgcggtgctc ctcgttcagc caggtcttgc atacggccgc 27180

cagagcttcc acttggtcag gcagtagttt gaagttcgcc tttagatcgt tatccacgtg 27240

gtacttgtcc atcagcgcgc gcgcagcctc catgcccttc tcccacgcag acacgatcgg 27300

cacactcagc gggttcatca ccgtaatttc actttccgct tcgctgggct cttcctcttc 27360

ctcttgcgtc cgcataccac gcgccactgg gtcgtcttca ttcagccgcc gcactgtgcg 27420

cttacctcct ttgccatgct tgattagcac cggtgggttg ctgaaaccca ccatttgtag 27480

cgccacatct tctctttctt cctcgctgtc cacgattacc tctggtgatg gcgggcgctc 27540

gggcttggga gaagggcgct tctttttctt cttgggcgca atggccaaat ccgccgccga 27600

ggtcgatggc cgcgggctgg gtgtgcgcgg caccagcgcg tcttgtgatg agtcttcctc 27660

gtcctcggac tcgatacgcc gcctcatccg ctttttgggg ggcgcccggg gaggcggcgg 27720

cgacggggac ggggacgaca cgtcctccat ggttgggggа cgtcgcgccg caccgcgtcc 27780

gcgctcgggg gtggtttcgc gctgctcctc ttcccgactg gccatttcct tctcctatag 27840

gcagaaaaag atcatggagt cagtcgagaa gaaggacagc ctaaccgccc cctctgagtt 27900

cgccaccacc gcctccaccg atgccgccaa cgcgcctacc accttccccg tcgaggcacc 27960

cccgcttgag gaggaggaag tgattatcga gcaggaccca ggttttgtaa gcgaagacga 28020

cgaggaccgc tcagtaccaa cagaggataa aaagcaagac caggacaacg cagaggcaaa 28080

cgaggaacaa gtcgggcggg gggacgaaag gcatggcgac tacctagatg tgggagacga 28140

cgtgctgttg aagcatctgc agcgccagtg cgccattatc tgcgacgcgt tgcaagagcg 28200

cagcgatgtg cccctcgcca tagcggatgt cagccttgcc tacgaacgcc acctattctc 28260

accgcgcgta ccccccaaac gccaagaaaa cggcacatgc gagcccaacc cgcgcctcaa 28320

cttctacccc gtatttgccg tgccagaggt gcttgccacc tatcacatct ttttccaaaa 28380

ctgcaagata cccctatcct gccgtgccaa ccgcagccga gcggacaagc agctggcctt 28440

gcggcagggc gctgtcatac ctgatatcgc ctcgctcaac gaagtgccaa aaatctttga 28500

gggtcttgga cgcgacgaga agcgcgcggc aaacgctctg caacaggaaa acagcgaaaa 28560

tgaaagtcac tctggagtgt tggtggaact cgagggtgac aacgcgcgcc tagccgtact 28620

aaaacgcagc atcgaggtca cccactttgc ctacccggca cttaacctac cccccaaggt 28680

catgagcaca gtcatgagtg agctgatcgt gcgccgtgcg cagcccctgg agagggatgc 28740

aaatttgcaa gaacaaacag aggagggcct acccgcagtt ggcgacgagc agctagcgcg 28800

ctggcttcaa acgcgcgagc ctgccgactt ggaggagcga cgcaaactaa tgatggccgc 28860

agtgctcgtt accgtggagc ttgagtgcat gcagcggttc tttgctgacc cggagatgca 28920

gcgcaagcta gaggaaacat tgcactacac ctttcgacag ggctacgtac gccaggcctg 28980

caagatctcc aacgtggagc tctgcaacct ggtctcctac cttggaattt tgcacgaaaa 29040

ccgccttggg caaaacgtgc ttcattccac gctcaagggc gaggcgcgcc gcgactacgt 29100

ccgcgactgc gtttacttat ttctatgcta cacctggcag acggccatgg gcgtttggca 29160

gcagtgcttg gaggagtgca acctcaagga gctgcagaaa ctgctaaagc aaaacttgaa 29220

ggacctatgg acggccttca acgagcgctc cgtggccgcg cacctggcgg acatcatttt 29280

ccccgaacgc ctgcttaaaa ccctgcaaca gggtctgcca gacttcacca gtcaaagcat 29340

gttgcagaac tttaggaact ttatcctaga gcgctcagga atcttgcccg ccacctgctg 29400

tgcacttcct agcgactttg tgcccattaa gtaccgcgaa tgccctccgc cgctttgggg 29460

ccactgctac cttctgcagc tagccaacta ccttgcctac cactctgaca taatggaaga 29520

cgtgagcggt gacggtctac tggagtgtca ctgtcgctgc aacctatgca ccccgcaccg 29580

ctccctggtt tgcaattcgc agctgcttaa cgaaagtcaa attatcggta cctttgagct 29640

gcagggtccc tcgcctgacg aaaagtccgc ggctccgggg ttgaaactca ctccggggct 29700

gtggacgtcg gcttaccttc gcaaatttgt acctgaggac taccacgccc acgagattag 29760

gttctacgaa gaccaatccc gcccgcctaa tgcggagctt accgcctgcg tcattaccca 29820

gggccacatt cttggccaat tgcaagccat caacaaagcc cgccaagagt ttctgctacg 29880

aaagggacgg ggggtttact tggaccccca gtccggcgag gagctcaacc caatcccccc 29940

gccgccgcag ccctatcagc agcagccgcg ggcccttgct tcccaggatg gcacccaaaa 30000

agaagctgca gctgccgccg ccacccacgg acgaggagga atactgggac agtcaggcag 30060

aggaggtttt ggacgaggag gaggaggaca tgatggaaga ctgggagagc ctagacgagg 30120

aagcttccga ggtcgaagag gtgtcagacg aaacaccgtc accctcggtc gcattccccc 30180

cgccggcgcc ccagaaatcg gcaaccggtt ccagcatggc tacaacctcc gctcctcagg 30240

cgccgccggc actgcccgtt cgccgaccca accgtagatg ggacaccact ggaaccaggg 30300

ccggtaagtc caagcagccg ccgccgttag cccaagagca acaacagcgc caaggctacc 30360

gctcatggcg cgggcacaag aacgccatag ttgcttgctt gcaagactgt gggggcaaca 30420

tctccttcgc ccgccgcttt cttctctacc atcacggcgt ggccttcccc cgtaacatcc 30480

tgcattacta ccgtcatctc tacagcccat actgcaccgg cggcagcggc agcaacagca 30540

gcggccacac agaagcaaag gcgaccggat agcaagactc tgacaaagcc caagaaatcc 30600

acagcggcgg cagcagcagg aggaggagcg ctgcgtctgg cgcccaacga acccgtatcg 30660

acccgcgagc ttagaaacag gatttttccc actctgtatg ctatatttca acagagcagg 30720

ggccaagaac aagagctgaa aataaaaaac aggtctctgc gatccctcac ccgcagctgc 30780

ctgtatcaca aaagcgaaga tcagcttcgg cgcacgctgg aagacgcgga ggctctcttc 30840

agtaaatact gcgcgctgac tcttaaggac tagtttcgcg ccctttctca aatttaagcg 30900

cgaaaactac gtcatctcca gcggccacac ccggcgccag cacctgttgt cagcgccatt 30960

atgagcaagg aaattcccac gccctacatg tggagttacc agccacaaat gggacttgcg 31020

gctggagctg cccaagacta ctcaacccga ataaactaca tgagcgcggg accccacatg 31080

atatcccggg tcaacggaat acgcgcccac cgaaaccgaa ttctcctgga acaggcggct 31140

attaccacca cacctcgtaa taaccttaat ccccgtagtt ggcccgctgc cctggtgtac 31200

caggaaagtc ccgctcccac cactgtggta cttcccagag acgcccaggc cgaagttcag 31260

atgactaact caggggcgca gcttgcgggc ggctttcgtc acagggtgcg gtcgcccggg 31320

cagggtataa ctcacctgac aatcagaggg cgaggtattc agctcaacga cgagtcggtg 31380

agctcctcgc ttggtctccg tccggacggg acatttcaga tcggcggcgc cggccgctct 31440

tcattcacgc ctcgtcaggc aatcctaact ctgcagacct cgtcctctga gccgcgctct 31500

ggaggcattg gaactctgca atttattgag gagtttgtgc catcggtcta ctttaacccc 31560

ttctcgggac ctcccggcca ctatccggat caatttattc ctaactttga cgcggtaaag 31620

gactcggcgg acggctacga ctgaatgtta agtggagagg cagagcaact gcgcctgaaa 31680

cacctggtcc actgtcgccg ccacaagtgc tttgcccgcg actccggtga gttttgctac 31740

tttgaattgc ccgaggatca tatcgagggc ccggcgcacg gcgtccggct taccgcccag 31800

ggagagcttg cccgtagcct gattcgggag tttacccagc gccccctgct agttgagcgg 31860

gacaggggac cctgtgttct cactgtgatt tgcaactgtc ctaaccctgg attacatcaa 31920

gatcctctag ttaatgtcag gtcgcctaag tcgattaact agagtacccg gggatcttat 31980

tccctttaac taataaaaaa aaataataaa gcatcactta cttaaaatca gttagcaaat 32040

ttctgtccag tttattcagc agcacctcct tgccctcctc ccagctctgg tattgcagct 32100

tcctcctggc tgcaaacttt ctccacaatc taaatggaat gtcagtttcc tcctgttcct 32160

gtccatccgc acccactatc ttcatgttgt tgcagatgaa gcgcgcaaga ccgtctgaag 32220

ataccttcaa ccccgtgtat ccatatgaca cggaaaccgg tcctccaact gtgccttttc 32280

ttactcctcc ctttgtatcc cccaatgggt ttcaagagag tccccctggg gtactctctt 32340

tgcgcctatc cgaacctcta gttacctcca atggcatgct tgcgctcaaa atgggcaacg 32400

gcctctctct ggacgaggcc ggcaacctta cctcccaaaa tgtaaccact gtgagcccac 32460

ctctcaaaaa aaccaagtca aacataaacc tggaaatatc tgcacccctc acagttacct 32520

cagaagccct aactgtggct gccgccgcac ctctaatggt cgcgggcaac acactcacca 32580

tgcaatcaca ggccccgcta accgtgcacg actccaaact tagcattgcc acccaaggac 32640

ccctcacagt gtcagaagga aagctagccc tgcaaacatc aggccccctc accaccaccg 32700

atagcagtac ccttactatc actgcctcac cccctctaac tactgccact ggtagcttgg 32760

gcattgactt gaaagagccc atttatacac aaaatggaaa actaggacta aagtacgggg 32820

ctcctttgca tgtaacagac gacctaaaca ctttgaccgt agcaactggt ccaggtgtga 32880

ctattaataa tacttccttg caaactaaag ttactggagc cttgggtttt gattcacaag 32940

gcaatatgca acttaatgta gcaggaggac taaggattga ttctcaaaac agacgcctta 33000

tacttgatgt tagttatccg tttgatgctc aaaaccaact aaatctaaga ctaggacagg 33060

gccctctttt tataaactca gcccacaact tggatattaa ctacaacaaa ggcctttact 33120

tgtttacagc ttcaaacaat tccaaaaagc ttgaggttaa cctaagcact gccaaggggt 33180

tgatgtttga cgctacagcc atagccatta atgcaggaga tgggcttgaa tttggttcac 33240

ctaatgcacc aaacacaaat cccctcaaaa caaaaattgg ccatggccta gaatttgatt 33300

caaacaaggc tatggttcct aaactaggaa ctggccttag ttttgacagc acaggtgcca 33360

ttacagtagg aaacaaaaat aatgataagc taactttgtg gaccggaata aaccctccac 33420

ctaactgtca aattgtggaa aacactaata caaatgatgg caaacttact ttagtattag 33480

taaaaaatgg agggcttgtt aatggctacg tgtctctagt tggtgtatca gacactgtga 33540

accaaatgtt cacacaaaag acagcaaaca tccaattaag attatatttt gactcttctg 33600

gaaatctatt aactgaggaa tcagacttaa aaattccact taaaaataaa tcttctacag 33660

cgaccagtga aactgtagcc agcagcaaag cctttatgcc aagtactaca gcttatccct 33720

tcaacaccac tactagggat agtgaaaact acattcatgg aatatgttac tacatgacta 33780

gttatgatag aagtctattt cccttgaaca tttctataat gctaaacagc cgtatgattt 33840

cttccaatgt tgcctatgcc atacaatttg aatggaatct aaatgcaagt gaatctccag 33900

aaagcaacat agctacgctg accacatccc ccttttttctt ttcttacatt acagaagacg 33960

acaactaaag aatcgtttgt gttatgtttc aacgtgttta tttttcaatt gcagaaaatt 34020

tcaagtcatt tttcattcag tagtatagcc ccaccaccac atagcttata cagatcaccg 34080

taccttaatc aaacgttttt ttttttattc caaaagatta tccaaaacct caaaatgaag 34140

atctattaag tgaacgcgct cccctccggt ggcgtggtca aactctacag ccaaagaaca 34200

gataatggca tttgtaagat gttgcacaat ggcttccaaa aggcaaacgg ccctcacgtc 34260

caagtggacg taaaggctaa acccttcagg gtgaatctcc tctataaaca ttccagcacc 34320

ttcaaccatg cccaaataat tctcatctcg ccaccttctc aatatatctc taagcaaatc 34380

ccgaatatta agtccggcca ttgtaaaaat ctgctccaga gcgccctcca ccttcagcct 34440

caagcagcga atcatgattg caaaaattca ggttcctcac agacctgtat aagattcaaa 34500

agcggaacat taacaaaaat accgcgatcc cgtaggtccc ttcgcagggc cagctgaaca 34560

taatcgtgca ggtctgcacg gaccagcgcg gccacttccc cgccaggaac catgacaaaa 34620

gaacccacac tgattatgac acgcatactc ggagctatgc taaccagcgt agccccgatg 34680

taagcttgtt gcatgggcgg cgatataaaa tgcaaggtgc tgctcaaaaa atcaggcaaa 34740

gcctcgcgca aaaaagaaag cacatcgtag tcatgctcat gcagataaag gcaggtaagc 34800

tccggaacca ccacagaaaa agacaccatt tttctctcaa acatgtctgc gggtttctgc 34860

ataaacacaa aataaaataa caaaaaaaca tttaaacatt agaagcctgt cttacaacag 34920

gaaaaacaac ccttataagc ataagacgga ctacggccat gccggcgtga ccgtaaaaaa 34980

actggtcacc gtgattaaaa agcaccaccg acagctcctc ggtcatgtcc ggagtcataa 35040

tgtaagactc ggtaaacaca tcaggttgat tcacatcggt cagtgctaaa aagcgaccga 35100

aatagcccgg gggaatacat acccgcaggc gtagagacaa cattacagcc cccataggag 35160

gtataacaaa attaatagga gagaaaaaca cataaacacc tgaaaaaccc tcctgcctag 35220

gcaaaatagc accctcccgc tccagaacaa catacagcgc ttccacagcg gcagccataa 35280

cagtcagcct taccagtaaa aaagaaaacc tattaaaaaa acaccactcg acacggcacc 35340

agctcaatca gtcacagtgt aaaaaagggc caagtgcaga gcgagtatat ataggactaa 35400

aaaatgacgt aacggttaaa gtccacaaaa aacacccaga aaaccgcacg cgaacctacg 35460

cccagaaacg aaagccaaaa aacccacaac ttcctcaaat cgtcacttcc gttttcccac 35520

gttacgtcac ttcccatttt aagaaaacta caattcccaa cacatacaag ttactccgcc 35580

ctaaaaccta cgtcacccgc cccgttccca cgccccgcgc cacgtcacaa actccacccc 35640

ctcattatca tattggcttc aatccaaaat aaggtatatt attgatgatg 35690

<210> 11
<211> 35690
<212> DNA
<213> Artificial Sequence

<220>
<223> Adk35R2-Spike/E4orf6-E4dlO4-7(E4re#6)

<400> 11
ttaattaaca tcatcaataa tataccttat tttggattga agccaatatg ataatgaggg 60

ggtggagttt gtgacgtggc gcggggcgtg ggaacggggc gggtgacgta gtagtgtggc 120

ggaagtgtga tgttgcaagt gtggcggaac acatgtaagc gacggatgtg gcaaaagtga 180

cgtttttggt gtgcgccggt gtacacagga agtgacaatt ttcgcgcggt tttaggcgga 240

tgttgtagta aatttgggcg taaccgagta agatttggcc attttcgcgg gaaaactgaa 300

taagaggaag tgaaatctga ataattttgt gttactcata gcgcgtaata atttcctcag 360

aagccataga gcccaccgca tccccagcat gcctgctatt gtcttcccaa tcctcccccc 420

tgctgtcctg ccccacccca ccccccagaa tagaatgaca cctactcaga caatgcgatg 480

caatttcctc attttattag gaaaggacag tgggagtggc accttccagg gtcaaggaag 540

gcacgggggga ggggcaaaca acagatggct ggcaactaga aggcacagtc gaggctgatc 600

agcgagctct agagaattga tccccaagct tctacatggg ggtagagtca taatcgtgca 660

tcaggatagg gcggtggtgc tgcagcagcg cgcgaataaa ctgctgccgc cgccgctccg 720

tcctgcagga atacaacatg gcagtggtct cctcagcgat gattcgcacc gcccgcagca 780

taaggcgcct tgtcctccgg gcacagcagc gcaccctgat ctcacttaaa tcagcacagt 840

aactgcagca cagcaccaca atattgttca aaatcccaca gtgcaaggcg ctgtatccaa 900

agctcatggc ggggaccaca gaacccacgt ggccatcata ccacaagcgc aggtagatta 960

agtggcgacc cctcataaac acgctggaca taaacattac ctcttttggc atgttgtaat 1020

tcaccacctc ccggtaccat ataaacctct gattaaacat ggcgccatcc accaccatcc 1080

taaaccagct ggccaaaacc tgcccgccgg ctatacactg cagggaaccg ggactggaac 1140

aatgacagtg gagagcccag gactcgtaac catggatcat catgctcgtc atgatatcaa 1200

tgttggcaca acacaggcac acgtgcatac acttcctcag gattacaagc tcctcccgcg 1260

ttagaaccat atcccaggga acaacccatt cctgaatcag cgtaaatccc acactgcagg 1320

gaagacctcg cacgtaactc acgttgtgca ttgtcaaagt gttacattcg ggcagcagcg 1380

gatgatcctc cagtatggta gcgcgggttt ctgtctcaaa aggaggtaga cgatccctac 1440

tgtacggagt gcgccgagac aaccgagatc gtgttggtcg tagtgtcatg ccaaatggaa 1500

cgccggacgt agtcatggtg gccagcttgg ggtagttttc acgacacctt aaatggaaga 1560

aaaaaacttt gaaccactgt ctgaggcttg agaatgaacc aagatccaaa ctcaaaaagg 1620

gcaaattcca aggagaatta catcaagtgc caagctggcc taacttcagt ctccacccac 1680

tcagtatggg gaaactccat cgcataaaac ccctcccccc aacctaaaga cgacgtactc 1740

caaaagctcg agaactaatc gaggtgcctg gacggcgccc ggtactccgt ggagtcacat 1800

gaagcgacgg ctgaggacgg aaaggccctt ttcctttgtg tgggtgactc acccgcccgc 1860

tctcccgagc gccgcgtcct ccattttgag ctccctgcag cagggccggg aagcggccat 1920

ctttccgctc acgcaactgg tgccgaccgg gccagccttg ccgcccaggg cggggcgata 1980

cacggcggcg cgaggccagg caccagagca ggccggccag cttgagacta cccccgtccg 2040

attctcggtg gccgcgctcg caggccccgc ctcgccgaac atgtgcgctg ggacgcacgg 2100

gccccgtcgc cgcccgcggc cccaaaaacc gaaataccag tgtgcagatc ttggcccgca 2160

tttacaagac tatcttgcca gaaaaaaagc gtcgcagcag gtcatcaaaa attttaaatg 2220

gctagagact tatcgaaagc agcgagacag gcgcgaaggt gccaccagat tcgcacgcgg 2280

cggccccagc gcccaggcca agcctcaact caagcacgag gcgaaggggc tccttaagcg 2340

caaggcctcg aactctccca cccacttcca acccgaagct cgggatcaag aatcacgtac 2400

tgcagccagg ggcgtggaag taattcaagg cacgcaaggg ccataacccg taaagaggcc 2460

aggcccgcgg gaaccacaca cggcacttac ctgtgttctg gcggcaaacc cgttgcgaaa 2520

aagaacgttc acggcgacta ctgcacttat atacggttct cccccaccct cgggaaaaag 2580

gcggagccag tacacgacat cactttccca gtttaccccg cgccaccttc tctaggcacc 2640

ggttcaattg ccgacccctc cccccaactt ctcggggact gtgggcgatg tgcgctctgc 2700

ccactgacgg gcaccggagc gatccgcgtt aagatacatt gatgagtttg gacaaaccac 2760

aactagaatg cagtgaaaaa aatgctttat ttgtgaaatt tgtgatgcta ttgctttatt 2820

tgtaaccatt ataagctgca ataaacaagt taacaacaac aattgcattc attttatgtt 2880

tcaggttcag ggggaggtgt gggaggtttt ttaaagcaag taaaacctct acaaatgtgg 2940

tatggctgat tatgatcaat tttcatggcc acttgatgta ttgttcatat ttgcccagtt 3000

cttggaggtc aatcagggac tcattcaggt tcttagccac ctcattcagt ctgtcaatct 3060

ccttctggat gttcaccaca gaggcattga tgccagagat gtctcccagg tccacatcag 3120

ggctggtgtg gttcttgaag tatttgtcca gttcctcctt gaaggagtcc agttcaggtt 3180

ggagtgggtc atagactgtg ttgttcacaa tgccaatcac cacatcacag ttgccagaca 3240

caaaggtgtt gtctgtggtg ataatctgtg gttcatagaa gttcctctgg gtcacaaacc 3300

agtgggtgcc attgctcaca aacactccct cccttggaaa gtgagccttg ccatcatggc 3360

agatggcagg ggctgtggtg aagttcttct cctgggcagg cacataggtc acatgcagga 3420

acaccactcc atgaggggca gactgtggaa aactcatcag gtggtagccc ttgccacaga 3480

agtccaccct cttgctttgt cccagcacac actcactcat cttggtggca gccaggttgg 3540

cagatgccct aatctcagca gccctgataa gttgttgggt cacataggtt tggagggatt 3600

ggagtctgcc tgtaatcagt ctgtcaatct ggacctcagc ctccaccttg tccagtctgc 3660

tcaggatgtc attcagcaca gaggagatgg ctccaaagtt gctggaaagt tgcttcacca 3720

gggtgttcag agcctgggca ttctggttca ccacatcttg gagtttgccc agggcagagg 3780

ctgtgctgga cagggagtcc tgaatcttgc caatggcaga gttgaactgg ttggcaatca 3840

gtttctggtt ctcatagagc acattctggg tcactccaat gccattgaac ctgtaagcca 3900

tctgcatagc aaatgggatt tggagggctg ctcctgctcc aaaggtccag ccagaggtga 3960

tggtgccagc cagcagggca gaggtgtatt gggcaatcat ctcatctgtc agcagtggag 4020

gcagcactgt cagtccattg aacttctggg cacaaatcag gtccctggca gcaatgtctc 4080

ccagacagtc tccatattgc ttgatgaagc cagcatcagc cagggtcacc ttgttgaaca 4140

gcaggtcctc aatgaaggac ctcttgcttg gcttgcttgg gtcaggcaga atctggctga 4200

agttgaagcc tccaaagtcc ttgattggag gtgtcttgta aatctgcttc acctgggcaa 4260

acacctcctg ggtgttcttg tcctgttcca cagcaatgcc tgtcagagcc ctgttaagtt 4320

gggtacagaa ggagccatat tggagcagca ggttgctaca ctctgtgctg tctccacaga 4380

tatacattgt acagtccaca gaggtcttgg tcatactcac aggcagaatc tctgtggtca 4440

cagagatggt gaagttggtt gggatggcaa tgctgttgtt gctgtaagcc acagagttct 4500

ctgctcccag actcattgtg taggcaatga tgctctggct tgccacagac ctcgacccac 4560

cgccaccggt ctgggtctgg taggaggcac agatgcctgc tccaattggg atgtcacact 4620

cataggagtt gttcacatgc tctgctccaa tcagacagcc agccctggtc tggaacacat 4680

tgctgcctgt gctgtagacc ctccaggttg gtgtaagttg gtcagcatgg atagccacag 4740

gcacctcagt acagttcaca tcctggtaga gcacagccac ctggttgctg gtgttggtgc 4800

caggtgtaat cacagacact cctccaaagg aacatggtgt gatgtccaga atctccaagg 4860

tctgtgggtc cctcacagca tctgtggtgt cagcaatgtc cctgccaaac tgttggaatg 4920

gcaggaactt cttgttgctc tctgtcagca ctcctgtgcc tgtcagtcca ttgaagttga 4980

agttcacaca cttgttcttc accaggttgg tgctcttctt tggtccacac actgtggcag 5040

gggcatggag cagttcaaag gacagcacca ccaccctgta tggttggtag cccactccat 5100

tggttggttg gaagccatag gattggagtg gaaagtaaca gttgaagccc tccactccat 5160

tacatggtgt gctgccagcc tggtaaatct ctgtgctgat gtccctctca aatggtttca 5220

ggttgctctt cctgaacagt ctgtagaggt agttgtagtt gcctcccacc ttgctgtcca 5280

ggttgttgct gttccaggca atcacacagc ctgtgaagtc atcaggcagt ttgtagttgt 5340

agtcagcaat cttgcctgtt tgtccagggg caatctgtct cacctcatct cccctaatca 5400

caaaggagtc agcatagaca ttggtgaaac acaggtcatt cagtttggtt gggctcactc 5460

cataacactt gaaggtgctg aaggaggcag agttgtagag cacagagtag tcagccacac 5520

agttgctaat cctcttcctg ttccaggcat agacagaggc aaacctggtg gcattgaaca 5580

cctctccaaa tggacacagg ttggtgatgt ttggaaacct cacaatgctc tctgttggtt 5640

ggaccctgaa gttgctggtc tggtagatgc ccttctccac tgtgaaggat ttcagggtac 5700

acttggtctc agacagtggg tccagggcac agtccacagc atctgtgatg gtgccattct 5760

cattgtattt cagcaggaag gtccttggtt ggaggtagcc cacatagtag gctgctgctc 5820

ctgctgtcca gccagaggag gagtctccag gtgtcaggta ggacctgtgc agagccagca 5880

gggtctggaa cctggtgatg ttgatgccaa ttggcaggtc caccagtggt tccaaggcag 5940

agaagccctg tggcaggtcc ctcaccaggt tgattggtgt gtgtttgctg taaatcttga 6000

agtagccatc aatgttcttg aacacaaact ccctcaggtt cttgaagttg ccctgcttgc 6060

cctccaagtc catcaggaat ggttggctca catattcaaa ggtacagttg ttggcagagg 6120

agtagaccct gaactcagac tccatccagg acttgttgtt cttgtggtag tagactccca 6180

ggaatgggtc attacagaac tggaactcac acaccttaat caccacattg gtggcattgt 6240

tcacaatcag cagggactgg gtcttgctgt ccagggtggt gccaaaaatc cagcccctga 6300

tgatgttgct cttctctgtg ctggcaaagt agactccatc attgaatggc agcacagggt 6360

tgtcaaacct cttggtgcca ttggtgccag acacatggat ggcatggaac caggtcacat 6420

tgctgaagaa tggcaggaac aggtcctggg tgctgtgcag cacagaggac ctgaacacct 6480

tgtcagggta gtagactccc ctggtgaagg agttggtgta ggcaggagga agttgggtcc 6540

tggtggtcag gttcacacac tggctggaca ccagtggcag cagcaccagg aacacaaaca 6600

tggtggcaaa tcggaggctg gatcggtccc ggtgtcttct atggaggtca aaacagcgtg 6660

gatggcgtct ccaggcgatc tgacggttca ctaaacgagc tcgtcgacga tctctatcac 6720

tgatagggag atctctatca ctgataggga gagctctgct tatatagacc tcccaccgta 6780

cacgcctacc gcccatttgc gtcaatgggg cggagttgtt acgacatttt ggaaagtccc 6840

gttgattttg gtgccaaaac aaactcccat tgacgtcaat ggggtggaga cttggaaatc 6900

cccgtgagtc aaaccgctat ccacgcccat tgatgtactg ccaaaaccgc atcaccatgg 6960

taatagcgat gactaatacg tagatgtact gccaagtagg aaagtcccat aaggtcatgt 7020

actgggcata atgccaggcg ggccatttac cgtcattgac gtcaataggg ggcgtacttg 7080

gcatatgata cacttgatgt actgccaagt gggcagttta ccgtaaatac tccacccatt 7140

gacgtcaatg gaaagtccct attggcgtta ctatgggaac atacgtcatt attgacgtca 7200

atgggcgggg gtcgttgggc ggtcagccag gcgggccatt taccgtaagt tatgtaacgc 7260

ggaactccat atatgggcta tgaactaatg accccgtaat tgattactat tacagaaatt 7320

gggcgtggct taagggtggg aaagaatata taaggtgggg gtcttatgta gttttgtatc 7380

tgttttgcag cagccgccgc cgccatgagc accaactcgt ttgatggaag cattgtgagc 7440

tcatatttga caacgcgcat gcccccatgg gccggggtgc gtcagaatgt gatgggctcc 7500

agcattgatg gtcgccccgt cctgcccgca aactctacta ccttgaccta cgagaccgtg 7560

tctggaacgc cgttggagac tgcagcctcc gccgccgctt cagccgctgc agccaccgcc 7620

cgcgggattg tgactgactt tgctttcctg agcccgcttg caagcagtgc agcttcccgt 7680

tcatccgccc gcgatgacaa gttgacggct cttttggcac aattggattc tttgacccgg 7740

gaacttaatg tcgtttctca gcagctgttg gatctgcgcc agcaggtttc tgccctgaag 7800

gcttcctccc ctcccaatgc ggtttaaaac ataaataaaa aaccagactc tgtttggatt 7860

tggatcaagc aagtgtcttg ctgtctttat ttaggggttt tgcgcgcgcg gtaggcccgg 7920

gaccagcggt ctcggtcgtt gagggtcctg tgtatttttt ccaggacgtg gtaaaggtga 7980

ctctggatgt tcagatacat gggcataagc ccgtctctgg ggtggaggta gcaccactgc 8040

agagcttcat gctgcggggt ggtgttgtag atgatccagt cgtagcagga gcgctgggcg 8100

tggtgcctaa aaatgtcttt cagtagcaag ctgattgcca ggggcaggcc cttggtgtaa 8160

gtgtttacaa agcggttaag ctgggatggg tgcatacgtg gggatatgag atgcatcttg 8220

gactgtattt ttaggttggc tatgttccca gccatatccc tccggggatt catgttgtgc 8280

agaaccacca gcacagtgta tccggtgcac ttgggaaatt tgtcatgtag cttagaagga 8340

aatgcgtgga agaacttgga gacgcccttg tgacctccaa gattttccat gcattcgtcc 8400

ataatgatgg caatgggccc acgggcggcg gcctgggcga agatatttct gggatcacta 8460

acgtcatagt tgtgttccag gatgagatcg tcataggcca tttttacaaa gcgcgggcgg 8520

agggtgccag actgcggtat aatggttcca tccggcccag gggcgtagtt accctcacag 8580

atttgcattt cccacgcttt gagttcagat ggggggatca tgtctacctg cggggcgatg 8640

aagaaaacgg tttccggggt aggggagatc agctgggaag aaagcaggtt cctgagcagc 8700

tgcgacttac cgcagccggt gggcccgtaa atcacaccta ttaccgggtg caactggtag 8760

ttaagagagc tgcagctgcc gtcatccctg agcaggggggg ccacttcgtt aagcatgtcc 8820

ctgactcgca tgttttccct gaccaaatcc gccagaaggc gctcgccgcc cagcgatagc 8880

agttcttgca aggaagcaaa gtttttcaac ggtttgagac cgtccgccgt aggcatgctt 8940

ttgagcgttt gaccaagcag ttccaggcgg tcccacagct cggtcacctg ctctacggca 9000

tctcgatcca gcatatctcc tcgtttcgcg ggttggggcg gctttcgctg tacggcagta 9060

gtcggtgctc gtccagacgg gccagggtca tgtctttcca cgggcgcagg gtcctcgtca 9120

gcgtagtctg ggtcacggtg aaggggtgcg ctccgggctg cgcgctggcc agggtgcgct 9180

tgaggctggt cctgctggtg ctgaagcgct gccggtcttc gccctgcgcg tcggccaggt 9240

agcatttgac catggtgtca tagtccagcc cctccgcggc gtggcccttg gcgcgcagct 9300

tgcccttgga ggaggcgccg cacgaggggc agtgcagact tttgagggcg tagagcttgg 9360

gcgcgagaaa taccgattcc ggggagtagg catccgcgcc gcaggccccg cagacggtct 9420

cgcattccac gagccaggtg agctctggcc gttcggggtc aaaaaccagg tttcccccat 9480

gctttttgat gcgtttctta cctctggttt ccatgagccg gtgtccacgc tcggtgacga 9540

aaaggctgtc cgtgtccccg tatacagact tgagaggcct gtcctcgagc ggtgttccgc 9600

ggtcctcctc gtatagaaac tcggaccact ctgagacaaa ggctcgcgtc caggccagca 9660

cgaaggaggc taagtgggag gggtagcggt cgttgtccac tagggggtcc actcgctcca 9720

gggtgtgaag acacatgtcg ccctcttcgg catcaaggaa ggtgattggt ttgtaggtgt 9780

aggccacgtg accgggtgtt cctgaagggg ggctataaaa gggggtgggg gcgcgttcgt 9840

cctcactctc ttccgcatcg ctgtctgcga gggccagctg ttggggtgag tactccctct 9900

gaaaagcggg catgacttct gcgctaagat tgtcagtttc caaaaacgag gaggatttga 9960

tattcacctg gcccgcggtg atgcctttga gggtggccgc atccatctgg tcagaaaaga 10020

caatcttttt gttgtcaagc ttggtggcaa acgacccgta gagggcgttg gacagcaact 10080

tggcgatgga gcgcagggtt tggtttttgt cgcgatcggc gcgctccttg gccgcgatgt 10140

ttagctgcac gtattcgcgc gcaacgcacc gccattcggg aaagacggtg gtgcgctcgt 10200

cgggcaccag gtgcacgcgc caaccgcggt tgtgcagggt gacaaggtca acgctggtgg 10260

ctacctctcc gcgtaggcgc tcgttggtcc agcagaggcg gccgcccttg cgcgagcaga 10320

atggcggtag ggggtctagc tgcgtctcgt ccgggggggtc tgcgtccacg gtaaagaccc 10380

cgggcagcag gcgcgcgtcg aagtagtcta tcttgcatcc ttgcaagtct agcgcctgct 10440

gccatgcgcg ggcggcaagc gcgcgctcgt atgggttgag tgggggaccc catggcatgg 10500

ggtgggtgag cgcggaggcg tacatgccgc aaatgtcgta aacgtagagg ggctctctga 10560

gtattccaag atatgtaggg tagcatcttc caccgcggat gctggcgcgc acgtaatcgt 10620

atagttcgtg cgagggagcg aggaggtcgg gaccgaggtt gctacgggcg ggctgctctg 10680

ctcggaagac tatctgcctg aagatggcat gtgagttgga tgatatggtt ggacgctgga 10740

agacgttgaa gctggcgtct gtgagaccta ccgcgtcacg cacgaaggag gcgtaggagt 10800

cgcgcagctt gttgaccagc tcggcggtga cctgcacgtc tagggcgcag tagtccaggg 10860

tttccttgat gatgtcatac ttatcctgtc cctttttttt ccacagctcg cggttgagga 10920

caaactcttc gcggtctttc cagtactctt ggatcggaaa cccgtcggcc tccgaacggt 10980

aagagcctag catgtagaac tggttgacgg cctggtaggc gcagcatccc ttttctacgg 11040

gtagcgcgta tgcctgcgcg gccttccgga gcgaggtgtg ggtgagcgca aaggtgtccc 11100

tgaccatgac tttgaggtac tggtatttga agtcagtgtc gtcgcatccg ccctgctccc 11160

agagcaaaaa gtccgtgcgc tttttggaac gcggatttgg cagggcgaag gtgacatcgt 11220

tgaagagtat ctttcccgcg cgaggcataa agttgcgtgt gatgcggaag ggtcccggca 11280

cctcggaacg gttgttaatt acctgggcgg cgagcacgat ctcgtcaaag ccgttgatgt 11340

tgtggcccac aatgtaaagt tccaagaagc gcgggatgcc cttgatggaa ggcaattttt 11400

taagttcctc gtaggtgagc tcttcagggg agctgagccc gtgctctgaa agggcccagt 11460

ctgcaagatg agggttggaa gcgacgaatg agctccacag gtcacgggcc attagcattt 11520

gcaggtggtc gcgaaaggtc ctaaactggc gacctatggc catttttct ggggtgatgc 11580

agtagaaggt aagcgggtct tgttcccagc ggtcccatcc aaggttcgcg gctaggtctc 11640

gcgcggcagt cactagaggc tcatctccgc cgaacttcat gaccagcatg aagggcacga 11700

gctgcttccc aaaggccccc atccaagtat aggtctctac atcgtaggtg acaaagagac 11760

gctcggtgcg aggatgcgag ccgatcggga agaactggat ctcccgccac caattggagg 11820

agtggctatt gatgtggtga aagtagaagt ccctgcgacg ggccgaacac tcgtgctggc 11880

ttttgtaaaa acgtgcgcag tactggcagc ggtgcacggg ctgtacatcc tgcacgaggt 11940

tgacctgacg accgcgcaca aggaagcaga gtgggaattt gagcccctcg cctggcgggt 12000

ttggctggtg gtcttctact tcggctgctt gtccttgacc gtctggctgc tcgaggggag 12060

ttacggtgga tcggaccacc acgccgcgcg agcccaaagt ccagatgtcc gcgcgcggcg 12120

gtcggagctt gatgacaaca tcgcgcagat gggagctgtc catggtctgg agctcccgcg 12180

gcgtcaggtc aggcgggagc tcctgcaggt ttacctcgca tagacgggtc agggcgcggg 12240

ctagatccag gtgataccta atttccaggg gctggttggt ggcggcgtcg atggcttgca 12300

agaggccgca tccccgcggc gcgactacgg taccgcgcgg cgggcggtgg gccgcggggg 12360

tgtccttgga tgatgcatct aaaagcggtg acgcgggcga gcccccggag gtaggggggg 12420

ctccggaccc gccgggagag ggggcagggg cacgtcggcg ccgcgcgcgg gcaggagctg 12480

gtgctgcgcg cgtaggttgc tggcgaacgc gacgacgcgg cggttgatct cctgaatctg 12540

gcgcctctgc gtgaagacga cgggcccggt gagcttgaac ctgaaagaga gttcgacaga 12600

atcaatttcg gtgtcgttga cggcggcctg gcgcaaaatc tcctgcacgt ctcctgagtt 12660

gtcttgatag gcgatctcgg ccatgaactg ctcgatctct tcctcctgga gatctccgcg 12720

tccggctcgc tccacggtgg cggcgaggtc gttggaaatg cgggccatga gctgcgagaa 12780

ggcgttgagg cctccctcgt tccagacgcg gctgtagacc acgccccctt cggcatcgcg 12840

ggcgcgcatg accacctgcg cgagattgag ctccacgtgc cgggcgaaga cggcgtagtt 12900

tcgcaggcgc tgaaagaggt agttgagggt ggtggcggtg tgttctgcca cgaagaagta 12960

cataacccag cgtcgcaacg tggattcgtt gatatccccc aaggcctcaa ggcgctccat 13020

ggcctcgtag aagtccacgg cgaagttgaa aaactgggag ttgcgcgccg acacggttaa 13080

ctcctcctcc agaagacgga tgagctcggc gacagtgtcg cgcacctcgc gctcaaaggc 13140

tacaggggcc tcttcttctt cttcaatctc ctcttccata agggcctccc cttcttcttc 13200

ttctggcggc ggtgggggag gggggacacg gcggcgacga cggcgcaccg ggaggcggtc 13260

gacaaagcgc tcgatcatct ccccgcggcg acggcgcatg gtctcggtga cggcgcggcc 13320

gttctcgcgg gggcgcagtt ggaagacgcc gcccgtcatg tcccggttat gggttggcgg 13380

ggggctgcca tgcggcaggg atacggcgct aacgatgcat ctcaacaatt gttgtgtagg 13440

tactccgccg ccgagggacc tgagcgagtc cgcatcgacc ggatcggaaa acctctcgag 13500

aaaggcgtct aaccagtcac agtcgcaagg taggctgagc accgtggcgg gcggcagcgg 13560

gcggcggtcg gggttgtttc tggcggaggt gctgctgatg atgtaattaa agtaggcggt 13620

cttgagacgg cggatggtcg acagaagcac catgtccttg ggtccggcct gctgaatgcg 13680

caggcggtcg gccatgcccc aggcttcgtt ttgacatcgg cgcaggtctt tgtagtagtc 13740

ttgcatgagc ctttctaccg gcacttcttc ttctccttcc tcttgtcctg catctcttgc 13800

atctatcgct gcggcggcgg cggagtttgg ccgtaggtgg cgccctcttc ctcccatgcg 13860

tgtgaccccg aagcccctca tcggctgaag cagggctagg tcggcgacaa cgcgctcggc 13920

taatatggcc tgctgcacct gcgtgagggt agactggaag tcatccatgt ccacaaagcg 13980

gtggtatgcg cccgtgttga tggtgtaagt gcagttggcc ataacggacc agttaacggt 14040

ctggtgaccc ggctgcgaga gctcggtgta cctgagacgc gagtaagccc tcgagtcaaa 14100

tacgtagtcg ttgcaagtcc gcaccaggta ctggtatccc accaaaaagt gcggcggcgg 14160

ctggcggtag aggggccagc gtagggtggc cggggctccg ggggcgagat cttccaacat 14220

aaggcgatga tatccgtaga tgtacctgga catccaggtg atgccggcgg cggtggtgga 14280

ggcgcgcgga aagtcgcgga cgcggttcca gatgttgcgc agcggcaaaa agtgctccat 14340

ggtcgggacg ctctggccgg tcaggcgcgc gcaatcgttg acgctctagc gtgcaaaagg 14400

agagcctgta agcgggcact cttccgtggt ctggtggata aattcgcaag ggtatcatgg 14460

cggacgaccg gggttcgagc cccgtatccg gccgtccgcc gtgatccatg cggttaccgc 14520

ccgcgtgtcg aacccaggtg tgcgacgtca gacaacgggg gagtgctcct tttggcttcc 14580

ttccaggcgc ggcggctgct gcgctagctt ttttggccac tggccgcgcg cagcgtaagc 14640

ggttaggctg gaaagcgaaa gcattaagtg gctcgctccc tgtagccgga gggttatttt 14700

ccaagggttg agtcgcggga cccccggttc gagtctcgga ccggccggac tgcggcgaac 14760

gggggtttgc ctccccgtca tgcaagaccc cgcttgcaaa ttcctccgga aacagggacg 14820

agccccttt ttgcttttcc cagatgcatc cggtgctgcg gcagatgcgc ccccctcctc 14880

agcagcggca agagcaagag cagcggcaga catgcagggc accctcccct cctcctaccg 14940

cgtcaggagg ggcgacatcc gcggttgacg cggcagcaga tggtgattac gaacccccgc 15000

ggcgccgggc ccggcactac ctggacttgg aggagggcga gggcctggcg cggctaggag 15060

cgccctctcc tgagcggcac ccaagggtgc agctgaagcg tgatacgcgt gaggcgtacg 15120

tgccgcggca gaacctgttt cgcgaccgcg agggagagga gcccgaggag atgcgggatc 15180

gaaagttcca cgcagggcgc gagctgcggc atggcctgaa tcgcgagcgg ttgctgcgcg 15240

aggaggactt tgagcccgac gcgcgaaccg ggattagtcc cgcgcgcgca cacgtggcgg 15300

ccgccgacct ggtaaccgca tacgagcaga cggtgaacca ggagattaac tttcaaaaaa 15360

gctttaacaa ccacgtgcgt acgcttgtgg cgcgcgagga ggtggctata ggactgatgc 15420

atctgtggga ctttgtaagc gcgctggagc aaaacccaaa tagcaagccg ctcatggcgc 15480

agctgttcct tatagtgcag cacagcaggg acaacgaggc attcagggat gcgctgctaa 15540

acatagtaga gcccgagggc cgctggctgc tcgatttgat aaacatcctg cagagcatag 15600

tggtgcagga gcgcagcttg agcctggctg acaaggtggc cgccatcaac tattccatgc 15660

ttagcctggg caagttttac gcccgcaaga tataccatac cccttacgtt cccatagaca 15720

aggaggtaaa gatcgagggg ttctacatgc gcatggcgct gaaggtgctt accttgagcg 15780

acgacctggg cgtttatcgc aacgagcgca tccacaaggc cgtgagcgtg agccggcggc 15840

gcgagctcag cgaccgcgag ctgatgcaca gcctgcaaag ggccctggct ggcacgggca 15900

gcggcgatag agaggccgag tcctactttg acgcgggcgc tgacctgcgc tgggccccaa 15960

gccgacgcgc cctggaggca gctggggccg gacctgggct ggcggtggca cccgcgcgcg 16020

ctggcaacgt cggcggcgtg gaggaatatg acgaggacga tgagtacgag ccagaggacg 16080

gcgagtacta agcggtgatg tttctgatca gatgatgcaa gacgcaacgg acccggcggt 16140

gcgggcggcg ctgcagagcc agccgtccgg ccttaactcc acggacgact ggcgccaggt 16200

catggaccgc atcatgtcgc tgactgcgcg caatcctgac gcgttccggc agcagccgca 16260

ggccaaccgg ctctccgcaa ttctggaagc ggtggtcccg gcgcgcgcaa accccacgca 16320

cgagaaggtg ctggcgatcg taaacgcgct ggccgaaaac agggccatcc ggcccgacga 16380

ggccggcctg gtctacgacg cgctgcttca gcgcgtggct cgttacaaca gcggcaacgt 16440

gcagaccaac ctggaccggc tggtggggga tgtgcgcgag gccgtggcgc agcgtgagcg 16500

cgcgcagcag cagggcaacc tgggctccat ggttgcacta aacgccttcc tgagtacaca 16560

gcccgccaac gtgccgcggg gacaggagga ctacaccaac tttgtgagcg cactgcggct 16620

aatggtgact gagacaccgc aaagtgaggt gtaccagtct gggccagact atttttcca 16680

gaccagtaga caaggcctgc agaccgtaaa cctgagccag gctttcaaaa acttgcaggg 16740

gctgtggggg gtgcgggctc ccacaggcga ccgcgcgacc gtgtctagct tgctgacgcc 16800

caactcgcgc ctgttgctgc tgctaatagc gcccttcacg gacagtggca gcgtgtcccg 16860

ggacacatac ctaggtcact tgctgacact gtaccgcgag gccataggtc aggcgcatgt 16920

ggacgagcat actttccagg agattacaag tgtcagccgc gcgctggggc aggaggacac 16980

gggcagcctg gaggcaaccc taaactacct gctgaccaac cggcggcaga agatcccctc 17040

gttgcacagt ttaaacagcg aggaggagcg cattttgcgc tacgtgcagc agagcgtgag 17100

ccttaacctg atgcgcgacg gggtaacgcc cagcgtggcg ctggacatga ccgcgcgcaa 17160

catggaaccg ggcatgtatg cctcaaaccg gccgtttatc aaccgcctaa tggactactt 17220

gcatcgcgcg gccgccgtga accccgagta tttcaccaat gccatcttga acccgcactg 17280

gctaccgccc cctggtttct acaccggggg attcgaggtg cccgagggta acgatggatt 17340

cctctgggac gacatagacg acagcgtgtt ttccccgcaa ccgcagaccc tgctagagtt 17400

gcaacagcgc gagcaggcag aggcggcgct gcgaaaggaa agcttccgca ggccaagcag 17460

cttgtccgat ctaggcgctg cggccccgcg gtcagatgct agtagcccat ttccaagctt 17520

gatagggtct cttaccagca ctcgcaccac ccgcccgcgc ctgctgggcg aggaggagta 17580

cctaaacaac tcgctgctgc agccgcagcg cgaaaaaaac ctgcctccgg catttcccaa 17640

caacgggata gagagcctag tggacaagat gagtagatgg aagacgtacg cgcaggagca 17700

cagggacgtg ccaggcccgc gcccgcccac ccgtcgtcaa aggcacgacc gtcagcgggg 17760

tctggtgtgg gaggacgatg actcggcaga cgacagcagc gtcctggatt tgggagggag 17820

tggcaacccg tttgcgcacc ttcgccccag gctggggaga atgttttaaa aaaaaaaaag 17880

catgatgcaa aataaaaaac tcaccaaggc catggcaccg agcgttggtt ttcttgtatt 17940

ccccttagta tgcggcgcgc ggcgatgtat gaggaaggtc ctcctccctc ctacgagagt 18000

gtggtgagcg cggcgccagt ggcggcggcg ctgggttctc ccttcgatgc tcccctggac 18060

ccgccgtttg tgcctccgcg gtacctgcgg cctaccgggg ggagaaacag catccgttac 18120

tctgagttgg cacccctatt cgacaccacc cgtgtgtacc tggtggacaa caagtcaacg 18180

gatgtggcat ccctgaacta ccagaacgac cacagcaact ttctgaccac ggtcattcaa 18240

aacaatgact acagcccggg ggaggcaagc acacagacca tcaatcttga cgaccggtcg 18300

cactggggcg gcgacctgaa aaccatcctg cataccaaca tgccaaatgt gaacgagttc 18360

atgtttacca ataagtttaa ggcgcgggtg atggtgtcgc gcttgcctac taaggacaat 18420

caggtggagc tgaaatacga gtgggtggag ttcacgctgc ccgagggcaa ctactccgag 18480

accatgacca tagaccttat gaacaacgcg atcgtggagc actacttgaa agtgggcaga 18540

cagaacgggg ttctggaaag cgacatcggg gtaaagtttg acacccgcaa cttcagactg 18600

gggtttgacc ccgtcactgg tcttgtcatg cctggggtat atacaaacga agccttccat 18660

ccagacatca ttttgctgcc aggatgcggg gtggacttca cccacagccg cctgagcaac 18720

ttgttgggca tccgcaagcg gcaacccttc caggagggct ttaggatcac ctacgatgat 18780

ctggagggtg gtaacattcc cgcactgttg gatgtggacg cctaccaggc gagcttgaaa 18840

gatgacaccg aacagggcgg gggtggcgca ggcggcagca acagcagtgg cagcggcgcg 18900

gaagagaact ccaacgcggc agccgcggca atgcagccgg tggaggacat gaacgatcat 18960

gccattcgcg gcgacacctt tgccacacgg gctgaggaga agcgcgctga ggccgaagca 19020

gcggccgaag ctgccgcccc cgctgcgcaa cccgaggtcg agaagcctca gaagaaaccg 19080

gtgatcaaac ccctgacaga ggacagcaag aaacgcagtt acaacctaat aagcaatgac 19140

agcaccttca cccagtaccg cagctggtac cttgcataca actacggcga ccctcagacc 19200

ggaatccgct catggaccct gctttgcact cctgacgtaa cctgcggctc ggagcaggtc 19260

tactggtcgt tgccagacat gatgcaagac cccgtgacct tccgctccac gcgccagatc 19320

agcaactttc cggtggtggg cgccgagctg ttgcccgtgc actccaagag cttctacaac 19380

gaccaggccg tctactccca actcatccgc cagtttacct ctctgaccca cgtgttcaat 19440

cgctttcccg agaaccagat tttggcgcgc ccgccagccc ccaccatcac caccgtcagt 19500

gaaaacgttc ctgctctcac agatcacggg acgctaccgc tgcgcaacag catcggagga 19560

gtccagcgag tgaccattac tgacgccaga cgccgcacct gcccctacgt ttacaaggcc 19620

ctgggcatag tctcgccgcg cgtcctatcg agccgcactt tttgagcaag catgtccatc 19680

cttatatcgc ccagcaataa cacaggctgg ggcctgcgct tcccaagcaa gatgtttggc 19740

ggggccaaga agcgctccga ccaacaccca gtgcgcgtgc gcgggcacta ccgcgcgccc 19800

tggggcgcgc acaaacgcgg ccgcactggg cgcaccaccg tcgatgacgc catcgacgcg 19860

gtggtggagg aggcgcgcaa ctacacgccc acgccgccac cagtgtccac agtggacgcg 19920

gccattcaga ccgtggtgcg cggagcccgg cgctatgcta aaatgaagag acggcggagg 19980

cgcgtagcac gtcgccaccg ccgccgaccc ggcactgccg cccaacgcgc ggcggcggcc 20040

ctgcttaacc gcgcacgtcg caccggccga cgggcggcca tgcgggccgc tcgaaggctg 20100

gccgcgggta ttgtcactgt gccccccagg tccaggcgac gagcggccgc cgcagcagcc 20160

gcggccatta gtgctatgac tcagggtcgc aggggcaacg tgtattgggt gcgcgactcg 20220

gttagcggcc tgcgcgtgcc cgtgcgcacc cgccccccgc gcaactagat tgcaagaaaa 20280

aactacttag actcgtactg ttgtatgtat ccagcggcgg cggcgcgcaa cgaagctatg 20340

tccaagcgca aaatcaaaga agagatgctc caggtcatcg cgccggagat ctatggcccc 20400

ccgaagaagg aagagcagga ttacaagccc cgaaagctaa agcgggtcaa aaagaaaaag 20460

aaagatgatg atgatgaact tgacgacgag gtggaactgc tgcacgctac cgcgcccagg 20520

cgacgggtac agtggaaagg tcgacgcgta aaacgtgttt tgcgacccgg caccaccgta 20580

gtctttacgc ccggtgagcg ctccacccgc acctacaagc gcgtgtatga tgaggtgtac 20640

ggcgacgagg acctgcttga gcaggccaac gagcgcctcg gggagtttgc ctacggaaag 20700

cggcataagg acatgctggc gttgccgctg gacgagggca acccaacacc tagcctaaag 20760

cccgtaacac tgcagcaggt gctgcccgcg cttgcaccgt ccgaagaaaa gcgcggccta 20820

aagcgcgagt ctggtgactt ggcacccacc gtgcagctga tggtacccaa gcgccagcga 20880

ctggaagatg tcttggaaaa aatgaccgtg gaacctgggc tggagcccga ggtccgcgtg 20940

cggccaatca agcaggtggc gccgggactg ggcgtgcaga ccgtggacgt tcagataccc 21000

actaccagta gcaccagtat tgccaccgcc acagagggca tggagacaca aacgtccccg 21060

gttgcctcag cggtggcgga tgccgcggtg caggcggtcg ctgcggccgc gtccaagacc 21120

tctacggagg tgcaaacgga cccgtggatg tttcgcgttt cagccccccg gcgcccgcgc 21180

cgttcgagga agtacggcgc cgccagcgcg ctactgcccg aatatgccct acatccttcc 21240

attgcgccta cccccggcta tcgtggctac acctaccgcc ccagaagacg agcaactacc 21300

cgacgccgaa ccaccactgg aacccgccgc cgccgtcgcc gtcgccagcc cgtgctggcc 21360

ccgatttccg tgcgcagggt ggctcgcgaa ggaggcagga ccctggtgct gccaacagcg 21420

cgctaccacc ccagcatcgt ttaaaagccg gtctttgtgg ttcttgcaga tatggccctc 21480

acctgccgcc tccgtttccc ggtgccggga ttccgaggaa gaatgcaccg taggaggggc 21540

atggccggcc acggcctgac gggcggcatg cgtcgtgcgc accaccggcg gcggcgcgcg 21600

tcgcaccgtc gcatgcgcgg cggtatcctg cccctcctta ttccactgat cgccgcggcg 21660

attggcgccg tgcccggaat tgcatccgtg gccttgcagg cgcagagaca ctgattaaaa 21720

acaagttgca tgtggaaaaa tcaaaataaa aagtctggac tctcacgctc gcttggtcct 21780

gtaactattt tgtagaatgg aagacatcaa ctttgcgtct ctggccccgc gacacggctc 21840

gcgcccgttc atgggaaact ggcaagatat cggcaccagc aatatgagcg gtggcgcctt 21900

cagctggggc tcgctgtgga gcggcattaa aaatttcggt tccaccgtta agaactatgg 21960

cagcaaggcc tggaacagca gcacaggcca gatgctgagg gataagttga aagagcaaaa 22020

tttccaacaa aaggtggtag atggcctggc ctctggcatt agcggggtgg tggacctggc 22080

caaccaggca gtgcaaaata agattaacag taagcttgat ccccgccctc ccgtagagga 22140

gcctccaccg gccgtggaga cagtgtctcc agaggggcgt ggcgaaaagc gtccgcgccc 22200

cgacagggaa gaaactctgg tgacgcaaat agacgagcct ccctcgtacg aggaggcact 22260

aaagcaaggc ctgcccacca cccgtcccat cgcgcccatg gctaccggag tgctgggcca 22320

gcacacaccc gtaacgctgg acctgcctcc ccccgccgac acccagcaga aacctgtgct 22380

gccaggcccg accgccgttg ttgtaacccg tcctagccgc gcgtccctgc gccgcgccgc 22440

cagcggtccg cgatcgttgc ggcccgtagc cagtggcaac tggcaaagca cactgaacag 22500

catcgtgggt ctgggggtgc aatccctgaa gcgccgacga tgcttctgat agctaacgtg 22560

tcgtatgtgt gtcatgtatg cgtccatgtc gccgccagag gagctgctga gccgccgcgc 22620

gcccgctttc caagatggct acccccttcga tgatgccgca gtggtcttac atgcacatct 22680

cgggccagga cgcctcggag tacctgagcc ccgggctggt gcagtttgcc cgcgccaccg 22740

agacgtactt cagcctgaat aacaagttta gaaaccccac ggtggcgcct acgcacgacg 22800

tgaccacaga ccggtcccag cgtttgacgc tgcggttcat ccctgtggac cgtgaggata 22860

ctgcgtactc gtacaaggcg cggttcaccc tagctgtggg tgataaccgt gtgctggaca 22920

tggcttccac gtactttgac atccgcggcg tgctggacag gggccctact tttaagccct 22980

actctggcac tgcctacaac gccctggctc ccaagggtgc cccaaatcct tgcgaatggg 23040

atgaagctgc tactgctctt gaaataaacc tagaagaaga ggacgatgac aacgaagacg 23100

aagtagacga gcaagctgag cagcaaaaaa ctcacgtatt tgggcaggcg ccttattctg 23160

gtataaatat tacaaaggag ggtattcaaa taggtgtcga aggtcaaaca cctaaatatg 23220

ccgataaaac atttcaacct gaacctcaaa taggagaatc tcagtggtac gaaacagaaa 23280

ttaatcatgc agctgggaga gtcctaaaaa agactacccc aatgaaacca tgttacggtt 23340

catatgcaaa acccacaaat gaaaatggag ggcaaggcat tcttgtaaag caacaaaatg 23400

gaaagctaga aagtcaagtg gaaatgcaat ttttctcaac tactgaggca gccgcaggca 23460

atggtgataa cttgactcct aaagtggtat tgtacagtga agatgtagat atagaaaccc 23520

cagacactca tatttcttac atgcccacta ttaaggaagg taactcacga gaactaatgg 23580

gccaacaatc tatgcccaac aggcctaatt acattgcttt tagggacaat tttattggtc 23640

taatgtatta caacagcacg ggtaatatgg gtgttctggc gggccaagca tcgcagttga 23700

atgctgttgt agatttgcaa gacagaaaca cagagctttc ataccagctt ttgcttgatt 23760

ccattggtga tagaaccagg tacttttcta tgtggaatca ggctgttgac agctatgatc 23820

cagatgttag aattattgaa aatcatggaa ctgaagatga acttccaaat tactgctttc 23880

cactgggagg tgtgattaat acagagactc ttaccaaggt aaaacctaaa acaggtcagg 23940

aaaatggatg ggaaaaagat gctacagaat tttcagataa aaatgaaata agagttggaa 24000

ataattttgc catggaaatc aatctaaatg ccaacctgtg gagaaatttc ctgtactcca 24060

acatagcgct gtatttgccc gacaagctaa agtacagtcc ttccaacgta aaaatttctg 24120

ataacccaaa cacctacgac tacatgaaca agcgagtggt ggctcccggg ctagtggact 24180

gctacattaa ccttggagca cgctggtccc ttgactatat ggacaacgtc aacccattta 24240

accaccaccg caatgctggc ctgcgctacc gctcaatgtt gctgggcaat ggtcgctatg 24300

tgcccttcca catccaggtg cctcagaagt tctttgccat taaaaacctc cttctcctgc 24360

cgggctcata cacctacgag tggaacttca ggaaggatgt taacatggtt ctgcagagct 24420

ccctaggaaa tgacctaagg gttgacggag ccagcattaa gtttgatagc atttgccttt 24480

acgccacctt cttccccatg gcccacaaca ccgcctccac gcttgaggcc atgcttagaa 24540

acgacaccaa cgaccagtcc tttaacgact atctctccgc cgccaacatg ctctacccta 24600

tacccgccaa cgctaccaac gtgcccatat ccatcccctc ccgcaactgg gcggctttcc 24660

gcggctgggc cttcacgcgc cttaagacta aggaaacccc atcactgggc tcgggctacg 24720

acccttatta cacctactct ggctctatac cctacctaga tggaaccttt tacctcaacc 24780

acacctttaa gaaggtggcc attacctttg actcttctgt cagctggcct ggcaatgacc 24840

gcctgcttac ccccaacgag tttgaaatta agcgctcagt tgacggggag ggttacaacg 24900

ttgcccagtg taacatgacc aaagactggt tcctggtaca aatgctagct aactataaca 24960

ttggctacca gggcttctat atcccagaga gctacaagga ccgcatgtac tccttcttta 25020

gaaacttcca gcccatgagc cgtcaggtgg tggatgatac taaatacaag gactaccaac 25080

aggtgggcat cctacaccaa cacaacaact ctggatttgt tggctacctt gcccccacca 25140

tgcgcgaagg acaggcctac cctgctaact tcccctatcc gcttataggc aagaccgcag 25200

ttgacagcat tacccagaaa aagtttcttt gcgatcgcac cctttggcgc atcccattct 25260

ccagtaactt tatgtccatg ggcgcactca cagacctggg ccaaaacctt ctctacgcca 25320

actccgccca cgcgctagac atgacttttg aggtggatcc catggacgag cccacccttc 25380

tttatgtttt gtttgaagtc tttgacgtgg tccgtgtgca ccagccgcac cgcggcgtca 25440

tcgaaaccgt gtacctgcgc acgcccttct cggccggcaa cgccacaaca taaagaagca 25500

agcaacatca acaacagctg ccgccatggg ctccagtgag caggaactga aagccattgt 25560

caaagatctt ggttgtgggc catatttttt gggcacctat gacaagcgct ttccaggctt 25620

tgtttctcca cacaagctcg cctgcgccat agtcaatacg gccggtcgcg agactggggg 25680

cgtacactgg atggcctttg cctggaaccc gcactcaaaa acatgctacc tctttgagcc 25740

ctttggcttt tctgaccagc gactcaagca ggtttaccag tttgagtacg agtcactcct 25800

gcgccgtagc gccattgctt cttcccccga ccgctgtata acgctggaaa agtccaccca 25860

aagcgtacag gggcccaact cggccgcctg tggactattc tgctgcatgt ttctccacgc 25920

ctttgccaac tggccccaaa ctcccatgga tcacaacccc accatgaacc ttattaccgg 25980

ggtacccaac tccatgctca acagtcccca ggtacagccc accctgcgtc gcaaccagga 26040

acagctctac agcttcctgg agcgccactc gccctacttc cgcagccaca gtgcgcagat 26100

taggagcgcc acttcttttt gtcacttgaa aaacatgtaa aaataatgta ctagagacac 26160

tttcaataaa ggcaaatgct tttatttgta cactctcggg tgattattta cccccaccct 26220

tgccgtctgc gccgtttaaa aatcaaaggg gttctgccgc gcatcgctat gcgccactgg 26280

cagggacacg ttgcgatact ggtgtttagt gctccactta aactcaggca caaccatccg 26340

cggcagctcg gtgaagtttt cactccacag gctgcgcacc atcaccaacg cgtttagcag 26400

gtcgggcgcc gatatcttga agtcgcagtt ggggcctccg ccctgcgcgc gcgagttgcg 26460

atacacaggg ttgcagcact ggaacactat cagcgccggg tggtgcacgc tggccagcac 26520

gctcttgtcg gagatcagat ccgcgtccag gtcctccgcg ttgctcaggg cgaacggagt 26580

caactttggt agctgccttc ccaaaaaggg cgcgtgccca ggctttgagt tgcactcgca 26640

ccgtagtggc atcaaaaggt gaccgtgccc ggtctgggcg ttaggataca gcgcctgcat 26700

aaaagccttg atctgcttaa aagccacctg agcctttgcg ccttcagaga agaacatgcc 26760

gcaagacttg ccggaaaact gattggccgg acaggccgcg tcgtgcacgc agcaccttgc 26820

gtcggtgttg gagatctgca ccacatttcg gccccaccgg ttcttcacga tcttggcctt 26880

gctagactgc tccttcagcg cgcgctgccc gttttcgctc gtcacatcca tttcaatcac 26940

gtgctcctta tttatcataa tgcttccgtg tagacactta agctcgcctt cgatctcagc 27000

gcagcggtgc agccacaacg cgcagcccgt gggctcgtga tgcttgtagg tcacctctgc 27060

aaacgactgc aggtacgcct gcaggaatcg ccccatcatc gtcacaaagg tcttgttgct 27120

ggtgaaggtc agctgcaacc cgcggtgctc ctcgttcagc caggtcttgc atacggccgc 27180

cagagcttcc acttggtcag gcagtagttt gaagttcgcc tttagatcgt tatccacgtg 27240

gtacttgtcc atcagcgcgc gcgcagcctc catgcccttc tcccacgcag acacgatcgg 27300

cacactcagc gggttcatca ccgtaatttc actttccgct tcgctgggct cttcctcttc 27360

ctcttgcgtc cgcataccac gcgccactgg gtcgtcttca ttcagccgcc gcactgtgcg 27420

cttacctcct ttgccatgct tgattagcac cggtgggttg ctgaaaccca ccatttgtag 27480

cgccacatct tctctttctt cctcgctgtc cacgattacc tctggtgatg gcgggcgctc 27540

gggcttggga gaagggcgct tctttttctt cttgggcgca atggccaaat ccgccgccga 27600

ggtcgatggc cgcgggctgg gtgtgcgcgg caccagcgcg tcttgtgatg agtcttcctc 27660

gtcctcggac tcgatacgcc gcctcatccg ctttttgggg ggcgcccggg gaggcggcgg 27720

cgacggggac ggggacgaca cgtcctccat ggttgggggа cgtcgcgccg caccgcgtcc 27780

gcgctcgggg gtggtttcgc gctgctcctc ttcccgactg gccatttcct tctcctatag 27840

gcagaaaaag atcatggagt cagtcgagaa gaaggacagc ctaaccgccc cctctgagtt 27900

cgccaccacc gcctccaccg atgccgccaa cgcgcctacc accttccccg tcgaggcacc 27960

cccgcttgag gaggaggaag tgattatcga gcaggaccca ggttttgtaa gcgaagacga 28020

cgaggaccgc tcagtaccaa cagaggataa aaagcaagac caggacaacg cagaggcaaa 28080

cgaggaacaa gtcgggcggg gggacgaaag gcatggcgac tacctagatg tgggagacga 28140

cgtgctgttg aagcatctgc agcgccagtg cgccattatc tgcgacgcgt tgcaagagcg 28200

cagcgatgtg cccctcgcca tagcggatgt cagccttgcc tacgaacgcc acctattctc 28260

accgcgcgta ccccccaaac gccaagaaaa cggcacatgc gagcccaacc cgcgcctcaa 28320

cttctacccc gtatttgccg tgccagaggt gcttgccacc tatcacatct ttttccaaaa 28380

ctgcaagata cccctatcct gccgtgccaa ccgcagccga gcggacaagc agctggcctt 28440

gcggcagggc gctgtcatac ctgatatcgc ctcgctcaac gaagtgccaa aaatctttga 28500

gggtcttgga cgcgacgaga agcgcgcggc aaacgctctg caacaggaaa acagcgaaaa 28560

tgaaagtcac tctggagtgt tggtggaact cgagggtgac aacgcgcgcc tagccgtact 28620

aaaacgcagc atcgaggtca cccactttgc ctacccggca cttaacctac cccccaaggt 28680

catgagcaca gtcatgagtg agctgatcgt gcgccgtgcg cagcccctgg agagggatgc 28740

aaatttgcaa gaacaaacag aggagggcct acccgcagtt ggcgacgagc agctagcgcg 28800

ctggcttcaa acgcgcgagc ctgccgactt ggaggagcga cgcaaactaa tgatggccgc 28860

agtgctcgtt accgtggagc ttgagtgcat gcagcggttc tttgctgacc cggagatgca 28920

gcgcaagcta gaggaaacat tgcactacac ctttcgacag ggctacgtac gccaggcctg 28980

caagatctcc aacgtggagc tctgcaacct ggtctcctac cttggaattt tgcacgaaaa 29040

ccgccttggg caaaacgtgc ttcattccac gctcaagggc gaggcgcgcc gcgactacgt 29100

ccgcgactgc gtttacttat ttctatgcta cacctggcag acggccatgg gcgtttggca 29160

gcagtgcttg gaggagtgca acctcaagga gctgcagaaa ctgctaaagc aaaacttgaa 29220

ggacctatgg acggccttca acgagcgctc cgtggccgcg cacctggcgg acatcatttt 29280

ccccgaacgc ctgcttaaaa ccctgcaaca gggtctgcca gacttcacca gtcaaagcat 29340

gttgcagaac tttaggaact ttatcctaga gcgctcagga atcttgcccg ccacctgctg 29400

tgcacttcct agcgactttg tgcccattaa gtaccgcgaa tgccctccgc cgctttgggg 29460

ccactgctac cttctgcagc tagccaacta ccttgcctac cactctgaca taatggaaga 29520

cgtgagcggt gacggtctac tggagtgtca ctgtcgctgc aacctatgca ccccgcaccg 29580

ctccctggtt tgcaattcgc agctgcttaa cgaaagtcaa attatcggta cctttgagct 29640

gcagggtccc tcgcctgacg aaaagtccgc ggctccgggg ttgaaactca ctccggggct 29700

gtggacgtcg gcttaccttc gcaaatttgt acctgaggac taccacgccc acgagattag 29760

gttctacgaa gaccaatccc gcccgcctaa tgcggagctt accgcctgcg tcattaccca 29820

gggccacatt cttggccaat tgcaagccat caacaaagcc cgccaagagt ttctgctacg 29880

aaagggacgg ggggtttact tggaccccca gtccggcgag gagctcaacc caatcccccc 29940

gccgccgcag ccctatcagc agcagccgcg ggcccttgct tcccaggatg gcacccaaaa 30000

agaagctgca gctgccgccg ccacccacgg acgaggagga atactgggac agtcaggcag 30060

aggaggtttt ggacgaggag gaggaggaca tgatggaaga ctgggagagc ctagacgagg 30120

aagcttccga ggtcgaagag gtgtcagacg aaacaccgtc accctcggtc gcattcccct 30180

cgccggcgcc ccagaaatcg gcaaccggtt ccagcatggc tacaacctcc gctcctcagg 30240

cgccgccggc actgcccgtt cgccgaccca accgtagatg ggacaccact ggaaccaggg 30300

ccggtaagtc caagcagccg ccgccgttag cccaagagca acaacagcgc caaggctacc 30360

gctcatggcg cgggcacaag aacgccatag ttgcttgctt gcaagactgt gggggcaaca 30420

tctccttcgc ccgccgcttt cttctctacc atcacggcgt ggccttcccc cgtaacatcc 30480

tgcattacta ccgtcatctc tacagcccat actgcaccgg cggcagcggc agcaacagca 30540

gcggccacac agaagcaaag gcgaccggat agcaagactc tgacaaagcc caagaaatcc 30600

acagcggcgg cagcagcagg aggaggagcg ctgcgtctgg cgcccaacga acccgtatcg 30660

acccgcgagc ttagaaacag gatttttccc actctgtatg ctatatttca acagagcagg 30720

ggccaagaac aagagctgaa aataaaaaac aggtctctgc gatccctcac ccgcagctgc 30780

ctgtatcaca aaagcgaaga tcagcttcgg cgcacgctgg aagacgcgga ggctctcttc 30840

agtaaatact gcgcgctgac tcttaaggac tagtttcgcg ccctttctca aatttaagcg 30900

cgaaaactac gtcatctcca gcggccacac ccggcgccag cacctgttgt cagcgccatt 30960

atgagcaagg aaattcccac gccctacatg tggagttacc agccacaaat gggacttgcg 31020

gctggagctg cccaagacta ctcaacccga ataaactaca tgagcgcggg accccacatg 31080

atatcccggg tcaacggaat acgcgcccac cgaaaccgaa ttctcctgga acaggcggct 31140

attaccacca cacctcgtaa taaccttaat ccccgtagtt ggcccgctgc cctggtgtac 31200

caggaaagtc ccgctcccac cactgtggta cttcccagag acgcccaggc cgaagttcag 31260

atgactaact caggggcgca gcttgcgggc ggctttcgtc acagggtgcg gtcgcccggg 31320

cagggtataa ctcacctgac aatcagaggg cgaggtattc agctcaacga cgagtcggtg 31380

agctcctcgc ttggtctccg tccggacggg acatttcaga tcggcggcgc cggccgctct 31440

tcattcacgc ctcgtcaggc aatcctaact ctgcagacct cgtcctctga gccgcgctct 31500

ggaggcattg gaactctgca atttattgag gagtttgtgc catcggtcta ctttaacccc 31560

ttctcgggac ctcccggcca ctatccggat caatttattc ctaactttga cgcggtaaag 31620

gactcggcgg acggctacga ctgaatgtta agtggagagg cagagcaact gcgcctgaaa 31680

cacctggtcc actgtcgccg ccacaagtgc tttgcccgcg actccggtga gttttgctac 31740

tttgaattgc ccgaggatca tatcgagggc ccggcgcacg gcgtccggct taccgcccag 31800

ggagagcttg cccgtagcct gattcgggag tttacccagc gccccctgct agttgagcgg 31860

gacaggggac cctgtgttct cactgtgatt tgcaactgtc ctaaccctgg attacatcaa 31920

gatcctctag ttaatgtcag gtcgcctaag tcgattaact agagtacccg gggatcttat 31980

tccctttaac taataaaaaa aaataataaa gcatcactta cttaaaatca gttagcaaat 32040

ttctgtccag tttattcagc agcacctcct tgccctcctc ccagctctgg tattgcagct 32100

tcctcctggc tgcaaacttt ctccacaatc taaatggaat gtcagtttcc tcctgttcct 32160

gtccatccgc acccactatc ttcatgttgt tgcagatgaa gcgcgcaaga ccgtctgaag 32220

ataccttcaa ccccgtgtat ccatatgaca cggaaaccgg tcctccaact gtgccttttc 32280

ttactcctcc ctttgtatcc cccaatgggt ttcaagagag tccccctggg gtactctctt 32340

tgcgcctatc cgaacctcta gttacctcca atggcatgct tgcgctcaaa atgggcaacg 32400

gcctctctct ggacgaggcc ggcaacctta cctcccaaaa tgtaaccact gtgagcccac 32460

ctctcaaaaa aaccaagtca aacataaacc tggaaatatc tgcacccctc acagttacct 32520

cagaagccct aactgtggct gccgccgcac ctctaatggt cgcgggcaac acactcacca 32580

tgcaatcaca ggccccgcta accgtgcacg actccaaact tagcattgcc acccaaggac 32640

ccctcacagt gtcagaagga aagctagccc tgcaaacatc aggccccctc accaccaccg 32700

atagcagtac ccttactatc actgcctcac cccctctaac tactgccact ggtagcttgg 32760

gcattgactt gaaagagccc atttatacac aaaatggaaa actaggacta aagtacgggg 32820

ctcctttgca tgtaacagac gacctaaaca ctttgaccgt agcaactggt ccaggtgtga 32880

ctattaataa tacttccttg caaactaaag ttactggagc cttgggtttt gattcacaag 32940

gcaatatgca acttaatgta gcaggaggac taaggattga ttctcaaaac agacgcctta 33000

tacttgatgt tagttatccg tttgatgctc aaaaccaact aaatctaaga ctaggacagg 33060

gccctctttt tataaactca gcccacaact tggatattaa ctacaacaaa ggcctttact 33120

tgtttacagc ttcaaacaat tccaaaaagc ttgaggttaa cctaagcact gccaaggggt 33180

tgatgtttga cgctacagcc atagccatta atgcaggaga tgggcttgaa tttggttcac 33240

ctaatgcacc aaacacaaat cccctcaaaa caaaaattgg ccatggccta gaatttgatt 33300

caaacaaggc tatggttcct aaactaggaa ctggccttag ttttgacagc acaggtgcca 33360

ttacagtagg aaacaaaaat aatgataagc taactttgtg gaccggaata aaccctccac 33420

ctaactgtca aattgtggaa aacactaata caaatgatgg caaacttact ttagtattag 33480

taaaaaatgg agggcttgtt aatggctacg tgtctctagt tggtgtatca gacactgtga 33540

accaaatgtt cacacaaaag acagcaaaca tccaattaag attatatttt gactcttctg 33600

gaaatctatt aactgaggaa tcagacttaa aaattccact taaaaataaa tcttctacag 33660

cgaccagtga aactgtagcc agcagcaaag cctttatgcc aagtactaca gcttatccct 33720

tcaacaccac tactagggat agtgaaaact acattcatgg aatatgttac tacatgacta 33780

gttatgatag aagtctattt cccttgaaca tttctataat gctaaacagc cgtatgattt 33840

cttccaatgt tgcctatgcc atacaatttg aatggaatct aaatgcaagt gaatctccag 33900

aaagcaacat agctacgctg accacatccc ccttttttctt ttcttacatt acagaagacg 33960

acaactaaag aatcgtttgt gttatgtttc aacgtgttta tttttcaatt gcagaaaatt 34020

tcaagtcatt tttcattcag tagtatagcc ccaccaccac atagcttata cagatcaccg 34080

taccttaatc aaacgttttt ttttttattc caaaagatta tccaaaacct caaaatgaag 34140

atctattaag tgaacgcgct cccctccggt ggcgtggtca aactctacag ccaaagaaca 34200

gataatggca tttgtaagat gttgcacaat ggcttccaaa aggcaaacgg ccctcacgtc 34260

caagtggacg taaaggctaa acccttcagg gtgaatctcc tctataaaca ttccagcacc 34320

ttcaaccatg cccaaataat tctcatctcg ccaccttctc aatatatctc taagcaaatc 34380

ccgaatatta agtccggcca ttgtaaaaat ctgctccaga gcgccctcca ccttcagcct 34440

caagcagcga atcatgattg caaaaattca ggttcctcac agacctgtat aagattcaaa 34500

agcggaacat taacaaaaat accgcgatcc cgtaggtccc ttcgcagggc cagctgaaca 34560

taatcgtgca ggtctgcacg gaccagcgcg gccacttccc cgccaggaac catgacaaaa 34620

gaacccacac tgattatgac acgcatactc ggagctatgc taaccagcgt agccccgatg 34680

taagcttgtt gcatgggcgg cgatataaaa tgcaaggtgc tgctcaaaaa atcaggcaaa 34740

gcctcgcgca aaaaagaaag cacatcgtag tcatgctcat gcagataaag gcaggtaagc 34800

tccggaacca ccacagaaaa agacaccatt tttctctcaa acatgtctgc gggtttctgc 34860

ataaacacaa aataaaataa caaaaaaaca tttaaacatt agaagcctgt cttacaacag 34920

gaaaaacaac ccttataagc ataagacgga ctacggccat gccggcgtga ccgtaaaaaa 34980

actggtcacc gtgattaaaa agcaccaccg acagctcctc ggtcatgtcc ggagtcataa 35040

tgtaagactc ggtaaacaca tcaggttgat tcacatcggt cagtgctaaa aagcgaccga 35100

aatagcccgg gggaatacat acccgcaggc gtagagacaa cattacagcc cccataggag 35160

gtataacaaa attaatagga gagaaaaaca cataaacacc tgaaaaaccc tcctgcctag 35220

gcaaaatagc accctcccgc tccagaacaa catacagcgc ttccacagcg gcagccataa 35280

cagtcagcct taccagtaaa aaagaaaacc tattaaaaaa acaccactcg acacggcacc 35340

agctcaatca gtcacagtgt aaaaaagggc caagtgcaga gcgagtatat ataggactaa 35400

aaaatgacgt aacggttaaa gtccacaaaa aacacccaga aaaccgcacg cgaacctacg 35460

cccagaaacg aaagccaaaa aacccacaac ttcctcaaat cgtcacttcc gttttcccac 35520

gttacgtcac ttcccatttt aagaaaacta caattcccaa cacatacaag ttactccgcc 35580

ctaaaaccta cgtcacccgc cccgttccca cgccccgcgc cacgtcacaa actccacccc 35640

ctcattatca tattggcttc aatccaaaat aaggtatatt attgatgatg 35690

<210> 12
<211> 35690
<212> DNA
<213> Artificial Sequence

<220>
<223> Adk35F2-E4orf6/Spike-E4dlO4-7(E4re#7)

<400> 12
ttaattaaca tcatcaataa tataccttat tttggattga agccaatatg ataatgaggg 60

ggtggagttt gtgacgtggc gcggggcgtg ggaacggggc gggtgacgta gtagtgtggc 120

ggaagtgtga tgttgcaagt gtggcggaac acatgtaagc gacggatgtg gcaaaagtga 180

cgtttttggt gtgcgccggt gtacacagga agtgacaatt ttcgcgcggt tttaggcgga 240

tgttgtagta aatttgggcg taaccgagta agatttggcc attttcgcgg gaaaactgaa 300

taagaggaag tgaaatctga ataattttgt gttactcata gcgcgtaata atttgctccg 360

gtgcccgtca gtgggcagag cgcacatcgc ccacagtccc cgagaagttg gggggagggg 420

tcggcaattg aaccggtgcc tagagaaggt ggcgcggggt aaactgggaa agtgatgtcg 480

tgtactggct ccgccttttt cccgagggtg ggggagaacc gtatataagt gcagtagtcg 540

ccgtgaacgt tctttttcgc aacgggtttg ccgccagaac acaggtaagt gccgtgtgtg 600

gttcccgcgg gcctggcctc tttacgggtt atggcccttg cgtgccttga attacttcca 660

cgcccctggc tgcagtacgt gattcttgat cccgagcttc gggttggaag tgggtgggag 720

agttcgaggc cttgcgctta aggagcccct tcgcctcgtg cttgagttga ggcttggcct 780

gggcgctggg gccgccgcgt gcgaatctgg tggcaccttc gcgcctgtct cgctgctttc 840

gataagtctc tagccattta aaatttttga tgacctgctg cgacgctttt tttctggcaa 900

gatagtcttg taaatgcggg ccaagatctg cacactggta tttcggtttt tggggccgcg 960

ggcggcgacg gggcccgtgc gtcccagcgc acatgttcgg cgaggcgggg cctgcgagcg 1020

cggccaccga gaatcggacg ggggtagtct caagctggcc ggcctgctct ggtgcctggc 1080

ctcgcgccgc cgtgtatcgc cccgccctgg gcggcaaggc tggcccggtc ggcaccagtt 1140

gcgtgagcgg aaagatggcc gcttcccggc cctgctgcag ggagctcaaa atggaggacg 1200

cggcgctcgg gagagcgggc gggtgagtca cccacacaaa ggaaaagggc ctttccgtcc 1260

tcagccgtcg cttcatgtga ctccacggag taccgggcgc cgtccaggca cctcgattag 1320

ttctcgagct tttggagtac gtcgtcttta ggttgggggg aggggtttta tgcgatggag 1380

tttccccata ctgagtgggt ggagactgaa gttaggccag cttggcactt gatgtaattc 1440

tccttggaat ttgccctttt tgagtttgga tcttggttca ttctcaagcc tcagacagtg 1500

gttcaaagtt tttttcttcc atttaaggtg tcgtgaaaac taccccaagc tggccaccat 1560

gactacgtcc ggcgttccat ttggcatgac actacgacca acacgatctc ggttgtctcg 1620

gcgcactccg tacagtaggg atcgtctacc tccttttgag acagaaaccc gcgctaccat 1680

actggaggat catccgctgc tgcccgaatg taacactttg acaatgcaca acgtgagtta 1740

cgtgcgaggt cttccctgca gtgtgggatt tacgctgatt caggaatggg ttgttccctg 1800

ggatatggtt ctaacgcggg aggagcttgt aatcctgagg aagtgtatgc acgtgtgcct 1860

gtgttgtgcc aacattgata tcatgacgag catgatgatc catggttacg agtcctgggc 1920

tctccactgt cattgttcca gtcccggttc cctgcagtgt atagccggcg ggcaggtttt 1980

ggccagctgg tttaggatgg tggtggatgg cgccatgttt aatcagaggt ttatatggta 2040

ccgggaggtg gtgaattaca acatgccaaa agaggtaatg tttatgtcca gcgtgtttat 2100

gaggggtcgc cacttaatct acctgcgctt gtggtatgat ggccacgtgg gttctgtggt 2160

ccccgccatg agctttggat acagcgcctt gcactgtggg attttgaaca atattgtggt 2220

gctgtgctgc agttactgtg ctgatttaag tgagatcagg gtgcgctgct gtgcccggag 2280

gacaaggcgc cttatgctgc gggcggtgcg aatcatcgct gaggagacca ctgccatgtt 2340

gtattcctgc aggacggagc ggcggcggca gcagtttatt cgcgcgctgc tgcagcacca 2400

ccgccctatc ctgatgcacg attatgactc tacccccatg tagaagcttg gggatcaatt 2460

ctctagagct cgctgatcag cctcgactgt gccttctagt tgccagccat ctgttgtttg 2520

cccctccccc gtgccttcct tgaccctgga aggtgccact cccactgtcc tttcctaata 2580

aaatgaggaa attgcatcgc attgtctgag taggtgtcat tctattctgg ggggtggggt 2640

ggggcaggac agcaaggggg aggattggga agacaatagc aggcatgctg gggatgcggt 2700

gggctctatg gcttctgagg ctgtaatagt aatcaattac ggggtcatta gttcatagcc 2760

catatatgga gttccgcgtt acataactta cggtaaatgg cccgcctggc tgaccgccca 2820

acgacccccg cccattgacg tcaataatga cgtatgttcc catagtaacg ccaataggga 2880

ctttccattg acgtcaatgg gtggagtatt tacggtaaac tgcccacttg gcagtacatc 2940

aagtgtatca tatgccaagt acgccccct ttgacgtcaa tgacggtaaa tggcccgcct 3000

ggcattatgc ccagtacatg accttatggg actttcctac ttggcagtac atctacgtat 3060

tagtcatcgc tattaccatg gtgatgcggt tttggcagta catcaatggg cgtggatagc 3120

ggtttgactc acggggattt ccaagtctcc accccattga cgtcaatggg agtttgtttt 3180

ggcaccaaaa tcaacgggac tttccaaaat gtcgtaacaa ctccgcccca ttgacgcaaa 3240

tgggcggtag gcgtgtacgg tgggaggtct atataagcag agctctccct atcagtgata 3300

gagatctccc tatcagtgat agagatcgtc gacgagctcg tttagtgaac cgtcagatcg 3360

cctggagacg ccatccacgc tgttttgacc tccatagaag acaccgggac cgatccagcc 3420

tccgatttgc caccatgttt gtgttcctgg tgctgctgcc actggtgtcc agccagtgtg 3480

tgaacctgac caccaggacc caacttcctc ctgcctacac caactccttc accaggggag 3540

tctactaccc tgacaaggtg ttcaggtcct ctgtgctgca cagcacccag gacctgttcc 3600

tgccattctt cagcaatgtg acctggttcc atgccatcca tgtgtctggc accaatggca 3660

ccaagaggtt tgacaaccct gtgctgccat tcaatgatgg agtctacttt gccagcacag 3720

agaagagcaa catcatcagg ggctggattt ttggcaccac cctggacagc aagacccagt 3780

ccctgctgat tgtgaacaat gccaccaatg tggtgattaa ggtgtgtgag ttccagttct 3840

gtaatgaccc attcctggga gtctactacc acaagaacaa caagtcctgg atggagtctg 3900

agttcagggt ctactcctct gccaacaact gtacctttga atatgtgagc caaccattcc 3960

tgatggactt ggagggcaag cagggcaact tcaagaacct gagggagttt gtgttcaaga 4020

acattgatgg ctacttcaag atttacagca aacacacacc aatcaacctg gtgagggacc 4080

tgccacaggg cttctctgcc ttggaaccac tggtggacct gccaattggc atcaacatca 4140

ccaggttcca gaccctgctg gctctgcaca ggtcctacct gacacctgga gactcctcct 4200

ctggctggac agcaggagca gcagcctact atgtgggcta cctccaacca aggaccttcc 4260

tgctgaaata caatgagaat ggcaccatca cagatgctgt ggactgtgcc ctggacccac 4320

tgtctgagac caagtgtacc ctgaaatcct tcacagtgga gaagggcatc taccagacca 4380

gcaacttcag ggtccaacca acagagagca ttgtgaggtt tccaaacatc accaacctgt 4440

gtccatttgg agaggtgttc aatgccacca ggtttgcctc tgtctatgcc tggaacagga 4500

agaggattag caactgtgtg gctgactact ctgtgctcta caactctgcc tccttcagca 4560

ccttcaagtg ttatggagtg agcccaacca aactgaatga cctgtgtttc accaatgtct 4620

atgctgactc ctttgtgatt aggggagatg aggtgagaca gattgcccct ggacaaacag 4680

gcaagattgc tgactacaac tacaaactgc ctgatgactt cacaggctgt gtgattgcct 4740

ggaacagcaa caacctggac agcaaggtgg gaggcaacta caactacctc tacagactgt 4800

tcaggaagag caacctgaaa ccatttgaga gggacatcag cacagagatt taccaggctg 4860

gcagcacacc atgtaatgga gtggagggct tcaactgtta ctttccactc caatcctatg 4920

gcttccaacc aaccaatgga gtgggctacc aaccatacag ggtggtggtg ctgtcctttg 4980

aactgctcca tgcccctgcc acagtgtgtg gaccaaagaa gagcaccaac ctggtgaaga 5040

acaagtgtgt gaacttcaac ttcaatggac tgacaggcac aggagtgctg acagagagca 5100

acaagaagtt cctgccattc caacagtttg gcagggacat tgctgacacc acagatgctg 5160

tgagggaccc acagaccttg gagattctgg acatcacacc atgttccttt ggaggagtgt 5220

ctgtgattac acctggcacc aacaccagca accaggtggc tgtgctctac caggatgtga 5280

actgtactga ggtgcctgtg gctatccatg ctgaccaact tacaccaacc tggagggtct 5340

acagcacagg cagcaatgtg ttccagacca gggctggctg tctgattgga gcagagcatg 5400

tgaacaactc ctatgagtgt gacatcccaa ttggagcagg catctgtgcc tcctaccaga 5460

cccagaccgg tggcggtggg tcgaggtctg tggcaagcca gagcatcatt gcctacacaa 5520

tgagtctggg agcagagaac tctgtggctt acagcaacaa cagcattgcc atcccaacca 5580

acttcaccat ctctgtgacc acagagattc tgcctgtgag tatgaccaag acctctgtgg 5640

actgtacaat gtatatctgt ggagacagca cagagtgtag caacctgctg ctccaatatg 5700

gctccttctg tacccaactt aacagggctc tgacaggcat tgctgtggaa caggacaaga 5760

acacccagga ggtgtttgcc caggtgaagc agatttacaa gacacctcca atcaaggact 5820

ttggaggctt caacttcagc cagattctgc ctgacccaag caagccaagc aagaggtcct 5880

tcattgagga cctgctgttc aacaaggtga ccctggctga tgctggcttc atcaagcaat 5940

atggagactg tctgggagac attgctgcca gggacctgat ttgtgcccag aagttcaatg 6000

gactgacagt gctgcctcca ctgctgacag atgagatgat tgcccaatac acctctgccc 6060

tgctggctgg caccatcacc tctggctgga cctttggagc aggagcagcc ctccaaatcc 6120

catttgctat gcagatggct tacaggttca atggcattgg agtgacccag aatgtgctct 6180

atgagaacca gaaactgatt gccaaccagt tcaactctgc cattggcaag attcaggact 6240

ccctgtccag cacagcctct gccctgggca aactccaaga tgtggtgaac cagaatgccc 6300

aggctctgaa caccctggtg aagcaacttt ccagcaactt tggagccatc tcctctgtgc 6360

tgaatgacat cctgagcaga ctggacaagg tggaggctga ggtccagatt gacagactga 6420

ttacaggcag actccaatcc ctccaaacct atgtgaccca acaacttatc agggctgctg 6480

agattagggc atctgccaac ctggctgcca ccaagatgag tgagtgtgtg ctgggacaaa 6540

gcaagagggt ggacttctgt ggcaagggct accacctgat gagttttcca cagtctgccc 6600

ctcatggagt ggtgttcctg catgtgacct atgtgcctgc ccaggagaag aacttcacca 6660

cagcccctgc catctgccat gatggcaagg ctcactttcc aagggaggga gtgtttgtga 6720

gcaatggcac ccactggttt gtgacccaga ggaacttcta tgaaccacag attatcacca 6780

cagacaacac ctttgtgtct ggcaactgtg atgtggtgat tggcattgtg aacaacacag 6840

tctatgaccc actccaacct gaactggact ccttcaagga ggaactggac aaatacttca 6900

agaaccacac cagccctgat gtggacctgg gagacatctc tggcatcaat gcctctgtgg 6960

tgaacatcca gaaggagatt gacagactga atgaggtggc taagaacctg aatgagtccc 7020

tgattgacct ccaagaactg ggcaaatatg aacaatacat caagtggcca tgaaaattga 7080

tcataatcag ccataccaca tttgtagagg ttttacttgc tttaaaaaac ctcccacacc 7140

tccccctgaa cctgaaacat aaaatgaatg caattgttgt tgttaacttg tttattgcag 7200

cttataatgg ttacaaataa agcaatagca tcacaaattt cacaaataaa gcatttttt 7260

cactgcattc tagttgtggt ttgtccaaac tcatcaatgt atcttaacgc ggatcaaatt 7320

gggcgtggct taagggtggg aaagaatata taaggtgggg gtcttatgta gttttgtatc 7380

tgttttgcag cagccgccgc cgccatgagc accaactcgt ttgatggaag cattgtgagc 7440

tcatatttga caacgcgcat gcccccatgg gccggggtgc gtcagaatgt gatgggctcc 7500

agcattgatg gtcgccccgt cctgcccgca aactctacta ccttgaccta cgagaccgtg 7560

tctggaacgc cgttggagac tgcagcctcc gccgccgctt cagccgctgc agccaccgcc 7620

cgcgggattg tgactgactt tgctttcctg agcccgcttg caagcagtgc agcttcccgt 7680

tcatccgccc gcgatgacaa gttgacggct cttttggcac aattggattc tttgacccgg 7740

gaacttaatg tcgtttctca gcagctgttg gatctgcgcc agcaggtttc tgccctgaag 7800

gcttcctccc ctcccaatgc ggtttaaaac ataaataaaa aaccagactc tgtttggatt 7860

tggatcaagc aagtgtcttg ctgtctttat ttaggggttt tgcgcgcgcg gtaggcccgg 7920

gaccagcggt ctcggtcgtt gagggtcctg tgtatttttt ccaggacgtg gtaaaggtga 7980

ctctggatgt tcagatacat gggcataagc ccgtctctgg ggtggaggta gcaccactgc 8040

agagcttcat gctgcggggt ggtgttgtag atgatccagt cgtagcagga gcgctgggcg 8100

tggtgcctaa aaatgtcttt cagtagcaag ctgattgcca ggggcaggcc cttggtgtaa 8160

gtgtttacaa agcggttaag ctgggatggg tgcatacgtg gggatatgag atgcatcttg 8220

gactgtattt ttaggttggc tatgttccca gccatatccc tccggggatt catgttgtgc 8280

agaaccacca gcacagtgta tccggtgcac ttgggaaatt tgtcatgtag cttagaagga 8340

aatgcgtgga agaacttgga gacgcccttg tgacctccaa gattttccat gcattcgtcc 8400

ataatgatgg caatgggccc acgggcggcg gcctgggcga agatatttct gggatcacta 8460

acgtcatagt tgtgttccag gatgagatcg tcataggcca tttttacaaa gcgcgggcgg 8520

agggtgccag actgcggtat aatggttcca tccggcccag gggcgtagtt accctcacag 8580

atttgcattt cccacgcttt gagttcagat ggggggatca tgtctacctg cggggcgatg 8640

aagaaaacgg tttccggggt aggggagatc agctgggaag aaagcaggtt cctgagcagc 8700

tgcgacttac cgcagccggt gggcccgtaa atcacaccta ttaccgggtg caactggtag 8760

ttaagagagc tgcagctgcc gtcatccctg agcaggggggg ccacttcgtt aagcatgtcc 8820

ctgactcgca tgttttccct gaccaaatcc gccagaaggc gctcgccgcc cagcgatagc 8880

agttcttgca aggaagcaaa gtttttcaac ggtttgagac cgtccgccgt aggcatgctt 8940

ttgagcgttt gaccaagcag ttccaggcgg tcccacagct cggtcacctg ctctacggca 9000

tctcgatcca gcatatctcc tcgtttcgcg ggttggggcg gctttcgctg tacggcagta 9060

gtcggtgctc gtccagacgg gccagggtca tgtctttcca cgggcgcagg gtcctcgtca 9120

gcgtagtctg ggtcacggtg aaggggtgcg ctccgggctg cgcgctggcc agggtgcgct 9180

tgaggctggt cctgctggtg ctgaagcgct gccggtcttc gccctgcgcg tcggccaggt 9240

agcatttgac catggtgtca tagtccagcc cctccgcggc gtggcccttg gcgcgcagct 9300

tgcccttgga ggaggcgccg cacgaggggc agtgcagact tttgagggcg tagagcttgg 9360

gcgcgagaaa taccgattcc ggggagtagg catccgcgcc gcaggccccg cagacggtct 9420

cgcattccac gagccaggtg agctctggcc gttcggggtc aaaaaccagg tttcccccat 9480

gctttttgat gcgtttctta cctctggttt ccatgagccg gtgtccacgc tcggtgacga 9540

aaaggctgtc cgtgtccccg tatacagact tgagaggcct gtcctcgagc ggtgttccgc 9600

ggtcctcctc gtatagaaac tcggaccact ctgagacaaa ggctcgcgtc caggccagca 9660

cgaaggaggc taagtgggag gggtagcggt cgttgtccac tagggggtcc actcgctcca 9720

gggtgtgaag acacatgtcg ccctcttcgg catcaaggaa ggtgattggt ttgtaggtgt 9780

aggccacgtg accgggtgtt cctgaagggg ggctataaaa gggggtgggg gcgcgttcgt 9840

cctcactctc ttccgcatcg ctgtctgcga gggccagctg ttggggtgag tactccctct 9900

gaaaagcggg catgacttct gcgctaagat tgtcagtttc caaaaacgag gaggatttga 9960

tattcacctg gcccgcggtg atgcctttga gggtggccgc atccatctgg tcagaaaaga 10020

caatcttttt gttgtcaagc ttggtggcaa acgacccgta gagggcgttg gacagcaact 10080

tggcgatgga gcgcagggtt tggtttttgt cgcgatcggc gcgctccttg gccgcgatgt 10140

ttagctgcac gtattcgcgc gcaacgcacc gccattcggg aaagacggtg gtgcgctcgt 10200

cgggcaccag gtgcacgcgc caaccgcggt tgtgcagggt gacaaggtca acgctggtgg 10260

ctacctctcc gcgtaggcgc tcgttggtcc agcagaggcg gccgcccttg cgcgagcaga 10320

atggcggtag ggggtctagc tgcgtctcgt ccgggggggtc tgcgtccacg gtaaagaccc 10380

cgggcagcag gcgcgcgtcg aagtagtcta tcttgcatcc ttgcaagtct agcgcctgct 10440

gccatgcgcg ggcggcaagc gcgcgctcgt atgggttgag tgggggaccc catggcatgg 10500

ggtgggtgag cgcggaggcg tacatgccgc aaatgtcgta aacgtagagg ggctctctga 10560

gtattccaag atatgtaggg tagcatcttc caccgcggat gctggcgcgc acgtaatcgt 10620

atagttcgtg cgagggagcg aggaggtcgg gaccgaggtt gctacgggcg ggctgctctg 10680

ctcggaagac tatctgcctg aagatggcat gtgagttgga tgatatggtt ggacgctgga 10740

agacgttgaa gctggcgtct gtgagaccta ccgcgtcacg cacgaaggag gcgtaggagt 10800

cgcgcagctt gttgaccagc tcggcggtga cctgcacgtc tagggcgcag tagtccaggg 10860

tttccttgat gatgtcatac ttatcctgtc ccttttttt ccacagctcg cggttgagga 10920

caaactcttc gcggtctttc cagtactctt ggatcggaaa cccgtcggcc tccgaacggt 10980

aagagcctag catgtagaac tggttgacgg cctggtaggc gcagcatccc ttttctacgg 11040

gtagcgcgta tgcctgcgcg gccttccgga gcgaggtgtg ggtgagcgca aaggtgtccc 11100

tgaccatgac tttgaggtac tggtatttga agtcagtgtc gtcgcatccg ccctgctccc 11160

agagcaaaaa gtccgtgcgc tttttggaac gcggatttgg cagggcgaag gtgacatcgt 11220

tgaagagtat ctttcccgcg cgaggcataa agttgcgtgt gatgcggaag ggtcccggca 11280

cctcggaacg gttgttaatt acctgggcgg cgagcacgat ctcgtcaaag ccgttgatgt 11340

tgtggcccac aatgtaaagt tccaagaagc gcgggatgcc cttgatggaa ggcaattttt 11400

taagttcctc gtaggtgagc tcttcagggg agctgagccc gtgctctgaa agggcccagt 11460

ctgcaagatg agggttggaa gcgacgaatg agctccacag gtcacgggcc attagcattt 11520

gcaggtggtc gcgaaaggtc ctaaactggc gacctatggc catttttct ggggtgatgc 11580

agtagaaggt aagcgggtct tgttcccagc ggtcccatcc aaggttcgcg gctaggtctc 11640

gcgcggcagt cactagaggc tcatctccgc cgaacttcat gaccagcatg aagggcacga 11700

gctgcttccc aaaggccccc atccaagtat aggtctctac atcgtaggtg acaaagagac 11760

gctcggtgcg aggatgcgag ccgatcggga agaactggat ctcccgccac caattggagg 11820

agtggctatt gatgtggtga aagtagaagt ccctgcgacg ggccgaacac tcgtgctggc 11880

ttttgtaaaa acgtgcgcag tactggcagc ggtgcacggg ctgtacatcc tgcacgaggt 11940

tgacctgacg accgcgcaca aggaagcaga gtgggaattt gagcccctcg cctggcgggt 12000

ttggctggtg gtcttctact tcggctgctt gtccttgacc gtctggctgc tcgaggggag 12060

ttacggtgga tcggaccacc acgccgcgcg agcccaaagt ccagatgtcc gcgcgcggcg 12120

gtcggagctt gatgacaaca tcgcgcagat gggagctgtc catggtctgg agctcccgcg 12180

gcgtcaggtc aggcgggagc tcctgcaggt ttacctcgca tagacgggtc agggcgcggg 12240

ctagatccag gtgataccta atttccaggg gctggttggt ggcggcgtcg atggcttgca 12300

agaggccgca tccccgcggc gcgactacgg taccgcgcgg cgggcggtgg gccgcggggg 12360

tgtccttgga tgatgcatct aaaagcggtg acgcgggcga gcccccggag gtaggggggg 12420

ctccggaccc gccgggagag ggggcagggg cacgtcggcg ccgcgcgcgg gcaggagctg 12480

gtgctgcgcg cgtaggttgc tggcgaacgc gacgacgcgg cggttgatct cctgaatctg 12540

gcgcctctgc gtgaagacga cgggcccggt gagcttgaac ctgaaagaga gttcgacaga 12600

atcaatttcg gtgtcgttga cggcggcctg gcgcaaaatc tcctgcacgt ctcctgagtt 12660

gtcttgatag gcgatctcgg ccatgaactg ctcgatctct tcctcctgga gatctccgcg 12720

tccggctcgc tccacggtgg cggcgaggtc gttggaaatg cgggccatga gctgcgagaa 12780

ggcgttgagg cctccctcgt tccagacgcg gctgtagacc acgccccctt cggcatcgcg 12840

ggcgcgcatg accacctgcg cgagattgag ctccacgtgc cgggcgaaga cggcgtagtt 12900

tcgcaggcgc tgaaagaggt agttgagggt ggtggcggtg tgttctgcca cgaagaagta 12960

cataacccag cgtcgcaacg tggattcgtt gatatccccc aaggcctcaa ggcgctccat 13020

ggcctcgtag aagtccacgg cgaagttgaa aaactgggag ttgcgcgccg acacggttaa 13080

ctcctcctcc agaagacgga tgagctcggc gacagtgtcg cgcacctcgc gctcaaaggc 13140

tacaggggcc tcttcttctt cttcaatctc ctcttccata agggcctccc cttcttcttc 13200

ttctggcggc ggtgggggag gggggacacg gcggcgacga cggcgcaccg ggaggcggtc 13260

gacaaagcgc tcgatcatct ccccgcggcg acggcgcatg gtctcggtga cggcgcggcc 13320

gttctcgcgg gggcgcagtt ggaagacgcc gcccgtcatg tcccggttat gggttggcgg 13380

ggggctgcca tgcggcaggg atacggcgct aacgatgcat ctcaacaatt gttgtgtagg 13440

tactccgccg ccgagggacc tgagcgagtc cgcatcgacc ggatcggaaa acctctcgag 13500

aaaggcgtct aaccagtcac agtcgcaagg taggctgagc accgtggcgg gcggcagcgg 13560

gcggcggtcg gggttgtttc tggcggaggt gctgctgatg atgtaattaa agtaggcggt 13620

cttgagacgg cggatggtcg acagaagcac catgtccttg ggtccggcct gctgaatgcg 13680

caggcggtcg gccatgcccc aggcttcgtt ttgacatcgg cgcaggtctt tgtagtagtc 13740

ttgcatgagc ctttctaccg gcacttcttc ttctccttcc tcttgtcctg catctcttgc 13800

atctatcgct gcggcggcgg cggagtttgg ccgtaggtgg cgccctcttc ctcccatgcg 13860

tgtgaccccg aagcccctca tcggctgaag cagggctagg tcggcgacaa cgcgctcggc 13920

taatatggcc tgctgcacct gcgtgagggt agactggaag tcatccatgt ccacaaagcg 13980

gtggtatgcg cccgtgttga tggtgtaagt gcagttggcc ataacggacc agttaacggt 14040

ctggtgaccc ggctgcgaga gctcggtgta cctgagacgc gagtaagccc tcgagtcaaa 14100

tacgtagtcg ttgcaagtcc gcaccaggta ctggtatccc accaaaaagt gcggcggcgg 14160

ctggcggtag aggggccagc gtagggtggc cggggctccg ggggcgagat cttccaacat 14220

aaggcgatga tatccgtaga tgtacctgga catccaggtg atgccggcgg cggtggtgga 14280

ggcgcgcgga aagtcgcgga cgcggttcca gatgttgcgc agcggcaaaa agtgctccat 14340

ggtcgggacg ctctggccgg tcaggcgcgc gcaatcgttg acgctctagc gtgcaaaagg 14400

agagcctgta agcgggcact cttccgtggt ctggtggata aattcgcaag ggtatcatgg 14460

cggacgaccg gggttcgagc cccgtatccg gccgtccgcc gtgatccatg cggttaccgc 14520

ccgcgtgtcg aacccaggtg tgcgacgtca gacaacgggg gagtgctcct tttggcttcc 14580

ttccaggcgc ggcggctgct gcgctagctt ttttggccac tggccgcgcg cagcgtaagc 14640

ggttaggctg gaaagcgaaa gcattaagtg gctcgctccc tgtagccgga gggttatttt 14700

ccaagggttg agtcgcggga cccccggttc gagtctcgga ccggccggac tgcggcgaac 14760

gggggtttgc ctccccgtca tgcaagaccc cgcttgcaaa ttcctccgga aacagggacg 14820

agccccтttt ttgcttttcc cagatgcatc cggtgctgcg gcagatgcgc ccccctcctc 14880

agcagcggca agagcaagag cagcggcaga catgcagggc accctcccct cctcctaccg 14940

cgtcaggagg ggcgacatcc gcggttgacg cggcagcaga tggtgattac gaacccccgc 15000

ggcgccgggc ccggcactac ctggacttgg aggagggcga gggcctggcg cggctaggag 15060

cgccctctcc tgagcggcac ccaagggtgc agctgaagcg tgatacgcgt gaggcgtacg 15120

tgccgcggca gaacctgttt cgcgaccgcg agggagagga gcccgaggag atgcgggatc 15180

gaaagttcca cgcagggcgc gagctgcggc atggcctgaa tcgcgagcgg ttgctgcgcg 15240

aggaggactt tgagcccgac gcgcgaaccg ggattagtcc cgcgcgcgca cacgtggcgg 15300

ccgccgacct ggtaaccgca tacgagcaga cggtgaacca ggagattaac tttcaaaaaa 15360

gctttaacaa ccacgtgcgt acgcttgtgg cgcgcgagga ggtggctata ggactgatgc 15420

atctgtggga ctttgtaagc gcgctggagc aaaacccaaa tagcaagccg ctcatggcgc 15480

agctgttcct tatagtgcag cacagcaggg acaacgaggc attcagggat gcgctgctaa 15540

acatagtaga gcccgagggc cgctggctgc tcgatttgat aaacatcctg cagagcatag 15600

tggtgcagga gcgcagcttg agcctggctg acaaggtggc cgccatcaac tattccatgc 15660

ttagcctggg caagttttac gcccgcaaga tataccatac cccttacgtt cccatagaca 15720

aggaggtaaa gatcgagggg ttctacatgc gcatggcgct gaaggtgctt accttgagcg 15780

acgacctggg cgtttatcgc aacgagcgca tccacaaggc cgtgagcgtg agccggcggc 15840

gcgagctcag cgaccgcgag ctgatgcaca gcctgcaaag ggccctggct ggcacgggca 15900

gcggcgatag agaggccgag tcctactttg acgcgggcgc tgacctgcgc tgggccccaa 15960

gccgacgcgc cctggaggca gctggggccg gacctgggct ggcggtggca cccgcgcgcg 16020

ctggcaacgt cggcggcgtg gaggaatatg acgaggacga tgagtacgag ccagaggacg 16080

gcgagtacta agcggtgatg tttctgatca gatgatgcaa gacgcaacgg acccggcggt 16140

gcgggcggcg ctgcagagcc agccgtccgg ccttaactcc acggacgact ggcgccaggt 16200

catggaccgc atcatgtcgc tgactgcgcg caatcctgac gcgttccggc agcagccgca 16260

ggccaaccgg ctctccgcaa ttctggaagc ggtggtcccg gcgcgcgcaa accccacgca 16320

cgagaaggtg ctggcgatcg taaacgcgct ggccgaaaac agggccatcc ggcccgacga 16380

ggccggcctg gtctacgacg cgctgcttca gcgcgtggct cgttacaaca gcggcaacgt 16440

gcagaccaac ctggaccggc tggtgggggа tgtgcgcgag gccgtggcgc agcgtgagcg 16500

cgcgcagcag cagggcaacc tgggctccat ggttgcacta aacgccttcc tgagtacaca 16560

gcccgccaac gtgccgcggg gacaggagga ctacaccaac tttgtgagcg cactgcggct 16620

aatggtgact gagacaccgc aaagtgaggt gtaccagtct gggccagact atttttcca 16680

gaccagtaga caaggcctgc agaccgtaaa cctgagccag gctttcaaaa acttgcaggg 16740

gctgtggggg gtgcgggctc ccacaggcga ccgcgcgacc gtgtctagct tgctgacgcc 16800

caactcgcgc ctgttgctgc tgctaatagc gcccttcacg gacagtggca gcgtgtcccg 16860

ggacacatac ctaggtcact tgctgacact gtaccgcgag gccataggtc aggcgcatgt 16920

ggacgagcat actttccagg agattacaag tgtcagccgc gcgctggggc aggaggacac 16980

gggcagcctg gaggcaaccc taaactacct gctgaccaac cggcggcaga agatcccctc 17040

gttgcacagt ttaaacagcg aggaggagcg cattttgcgc tacgtgcagc agagcgtgag 17100

ccttaacctg atgcgcgacg gggtaacgcc cagcgtggcg ctggacatga ccgcgcgcaa 17160

catggaaccg ggcatgtatg cctcaaaccg gccgtttatc aaccgcctaa tggactactt 17220

gcatcgcgcg gccgccgtga accccgagta tttcaccaat gccatcttga acccgcactg 17280

gctaccgccc cctggtttct acaccggggg attcgaggtg cccgagggta acgatggatt 17340

cctctgggac gacatagacg acagcgtgtt ttccccgcaa ccgcagaccc tgctagagtt 17400

gcaacagcgc gagcaggcag aggcggcgct gcgaaaggaa agcttccgca ggccaagcag 17460

cttgtccgat ctaggcgctg cggccccgcg gtcagatgct agtagcccat ttccaagctt 17520

gatagggtct cttaccagca ctcgcaccac ccgcccgcgc ctgctgggcg aggaggagta 17580

cctaaacaac tcgctgctgc agccgcagcg cgaaaaaaac ctgcctccgg catttcccaa 17640

caacgggata gagagcctag tggacaagat gagtagatgg aagacgtacg cgcaggagca 17700

cagggacgtg ccaggcccgc gcccgcccac ccgtcgtcaa aggcacgacc gtcagcgggg 17760

tctggtgtgg gaggacgatg actcggcaga cgacagcagc gtcctggatt tgggagggag 17820

tggcaacccg tttgcgcacc ttcgccccag gctggggaga atgttttaaa aaaaaaaaag 17880

catgatgcaa aataaaaaac tcaccaaggc catggcaccg agcgttggtt ttcttgtatt 17940

ccccttagta tgcggcgcgc ggcgatgtat gaggaaggtc ctcctccctc ctacgagagt 18000

gtggtgagcg cggcgccagt ggcggcggcg ctgggttctc ccttcgatgc tcccctggac 18060

ccgccgtttg tgcctccgcg gtacctgcgg cctaccgggg ggagaaacag catccgttac 18120

tctgagttgg cacccctatt cgacaccacc cgtgtgtacc tggtggacaa caagtcaacg 18180

gatgtggcat ccctgaacta ccagaacgac cacagcaact ttctgaccac ggtcattcaa 18240

aacaatgact acagcccggg ggaggcaagc acacagacca tcaatcttga cgaccggtcg 18300

cactggggcg gcgacctgaa aaccatcctg cataccaaca tgccaaatgt gaacgagttc 18360

atgtttacca ataagtttaa ggcgcgggtg atggtgtcgc gcttgcctac taaggacaat 18420

caggtggagc tgaaatacga gtgggtggag ttcacgctgc ccgagggcaa ctactccgag 18480

accatgacca tagaccttat gaacaacgcg atcgtggagc actacttgaa agtgggcaga 18540

cagaacgggg ttctggaaag cgacatcggg gtaaagtttg acacccgcaa cttcagactg 18600

gggtttgacc ccgtcactgg tcttgtcatg cctggggtat atacaaacga agccttccat 18660

ccagacatca ttttgctgcc aggatgcggg gtggacttca cccacagccg cctgagcaac 18720

ttgttgggca tccgcaagcg gcaacccttc caggagggct ttaggatcac ctacgatgat 18780

ctggagggtg gtaacattcc cgcactgttg gatgtggacg cctaccaggc gagcttgaaa 18840

gatgacaccg aacagggcgg gggtggcgca ggcggcagca acagcagtgg cagcggcgcg 18900

gaagagaact ccaacgcggc agccgcggca atgcagccgg tggaggacat gaacgatcat 18960

gccattcgcg gcgacacctt tgccacacgg gctgaggaga agcgcgctga ggccgaagca 19020

gcggccgaag ctgccgcccc cgctgcgcaa cccgaggtcg agaagcctca gaagaaaccg 19080

gtgatcaaac ccctgacaga ggacagcaag aaacgcagtt acaacctaat aagcaatgac 19140

agcaccttca cccagtaccg cagctggtac cttgcataca actacggcga ccctcagacc 19200

ggaatccgct catggaccct gctttgcact cctgacgtaa cctgcggctc ggagcaggtc 19260

tactggtcgt tgccagacat gatgcaagac cccgtgacct tccgctccac gcgccagatc 19320

agcaactttc cggtggtggg cgccgagctg ttgcccgtgc actccaagag cttctacaac 19380

gaccaggccg tctactccca actcatccgc cagtttacct ctctgaccca cgtgttcaat 19440

cgctttcccg agaaccagat tttggcgcgc ccgccagccc ccaccatcac caccgtcagt 19500

gaaaacgttc ctgctctcac agatcacggg acgctaccgc tgcgcaacag catcggagga 19560

gtccagcgag tgaccattac tgacgccaga cgccgcacct gcccctacgt ttacaaggcc 19620

ctgggcatag tctcgccgcg cgtcctatcg agccgcactt tttgagcaag catgtccatc 19680

cttatatcgc ccagcaataa cacaggctgg ggcctgcgct tcccaagcaa gatgtttggc 19740

ggggccaaga agcgctccga ccaacaccca gtgcgcgtgc gcgggcacta ccgcgcgccc 19800

tggggcgcgc acaaacgcgg ccgcactggg cgcaccaccg tcgatgacgc catcgacgcg 19860

gtggtggagg aggcgcgcaa ctacacgccc acgccgccac cagtgtccac agtggacgcg 19920

gccattcaga ccgtggtgcg cggagcccgg cgctatgcta aaatgaagag acggcggagg 19980

cgcgtagcac gtcgccaccg ccgccgaccc ggcactgccg cccaacgcgc ggcggcggcc 20040

ctgcttaacc gcgcacgtcg caccggccga cgggcggcca tgcgggccgc tcgaaggctg 20100

gccgcgggta ttgtcactgt gccccccagg tccaggcgac gagcggccgc cgcagcagcc 20160

gcggccatta gtgctatgac tcagggtcgc aggggcaacg tgtattgggt gcgcgactcg 20220

gttagcggcc tgcgcgtgcc cgtgcgcacc cgcccccgc gcaactagat tgcaagaaaa 20280

aactacttag actcgtactg ttgtatgtat ccagcggcgg cggcgcgcaa cgaagctatg 20340

tccaagcgca aaatcaaaga agagatgctc caggtcatcg cgccggagat ctatggcccc 20400

ccgaagaagg aagagcagga ttacaagccc cgaaagctaa agcgggtcaa aaagaaaaag 20460

aaagatgatg atgatgaact tgacgacgag gtggaactgc tgcacgctac cgcgcccagg 20520

cgacgggtac agtggaaagg tcgacgcgta aaacgtgttt tgcgacccgg caccaccgta 20580

gtctttacgc ccggtgagcg ctccacccgc acctacaagc gcgtgtatga tgaggtgtac 20640

ggcgacgagg acctgcttga gcaggccaac gagcgcctcg gggagtttgc ctacggaaag 20700

cggcataagg acatgctggc gttgccgctg gacgagggca acccaacacc tagcctaaag 20760

cccgtaacac tgcagcaggt gctgcccgcg cttgcaccgt ccgaagaaaa gcgcggccta 20820

aagcgcgagt ctggtgactt ggcacccacc gtgcagctga tggtacccaa gcgccagcga 20880

ctggaagatg tcttggaaaa aatgaccgtg gaacctgggc tggagcccga ggtccgcgtg 20940

cggccaatca agcaggtggc gccgggactg ggcgtgcaga ccgtggacgt tcagataccc 21000

actaccagta gcaccagtat tgccaccgcc acagagggca tggagacaca aacgtccccg 21060

gttgcctcag cggtggcgga tgccgcggtg caggcggtcg ctgcggccgc gtccaagacc 21120

tctacggagg tgcaaacgga cccgtggatg tttcgcgttt cagcccccg gcgcccgcgc 21180

cgttcgagga agtacggcgc cgccagcgcg ctactgcccg aatatgccct acatccttcc 21240

attgcgccta cccccggcta tcgtggctac acctaccgcc ccagaagacg agcaactacc 21300

cgacgccgaa ccaccactgg aacccgccgc cgccgtcgcc gtcgccagcc cgtgctggcc 21360

ccgatttccg tgcgcagggt ggctcgcgaa ggaggcagga ccctggtgct gccaacagcg 21420

cgctaccacc ccagcatcgt ttaaaagccg gtctttgtgg ttcttgcaga tatggccctc 21480

acctgccgcc tccgtttccc ggtgccggga ttccgaggaa gaatgcaccg taggaggggc 21540

atggccggcc acggcctgac gggcggcatg cgtcgtgcgc accaccggcg gcggcgcgcg 21600

tcgcaccgtc gcatgcgcgg cggtatcctg cccctcctta ttccactgat cgccgcggcg 21660

attggcgccg tgcccggaat tgcatccgtg gccttgcagg cgcagagaca ctgattaaaa 21720

acaagttgca tgtggaaaaa tcaaaataaa aagtctggac tctcacgctc gcttggtcct 21780

gtaactattt tgtagaatgg aagacatcaa ctttgcgtct ctggccccgc gacacggctc 21840

gcgcccgttc atgggaaact ggcaagatat cggcaccagc aatatgagcg gtggcgcctt 21900

cagctggggc tcgctgtgga gcggcattaa aaatttcggt tccaccgtta agaactatgg 21960

cagcaaggcc tggaacagca gcacaggcca gatgctgagg gataagttga aagagcaaaa 22020

tttccaacaa aaggtggtag atggcctggc ctctggcatt agcggggtgg tggacctggc 22080

caaccaggca gtgcaaaata agattaacag taagcttgat ccccgccctc ccgtagagga 22140

gcctccaccg gccgtggaga cagtgtctcc agaggggcgt ggcgaaaagc gtccgcgccc 22200

cgacagggaa gaaactctgg tgacgcaaat agacgagcct ccctcgtacg aggaggcact 22260

aaagcaaggc ctgcccacca cccgtcccat cgcgcccatg gctaccggag tgctgggcca 22320

gcacacaccc gtaacgctgg acctgcctcc ccccgccgac acccagcaga aacctgtgct 22380

gccaggcccg accgccgttg ttgtaacccg tcctagccgc gcgtccctgc gccgcgccgc 22440

cagcggtccg cgatcgttgc ggcccgtagc cagtggcaac tggcaaagca cactgaacag 22500

catcgtgggt ctgggggtgc aatccctgaa gcgccgacga tgcttctgat agctaacgtg 22560

tcgtatgtgt gtcatgtatg cgtccatgtc gccgccagag gagctgctga gccgccgcgc 22620

gcccgctttc caagatggct acccccttcga tgatgccgca gtggtcttac atgcacatct 22680

cgggccagga cgcctcggag tacctgagcc ccgggctggt gcagtttgcc cgcgccaccg 22740

agacgtactt cagcctgaat aacaagttta gaaaccccac ggtggcgcct acgcacgacg 22800

tgaccacaga ccggtcccag cgtttgacgc tgcggttcat ccctgtggac cgtgaggata 22860

ctgcgtactc gtacaaggcg cggttcaccc tagctgtggg tgataaccgt gtgctggaca 22920

tggcttccac gtactttgac atccgcggcg tgctggacag gggccctact tttaagccct 22980

actctggcac tgcctacaac gccctggctc ccaagggtgc cccaaatcct tgcgaatggg 23040

atgaagctgc tactgctctt gaaataaacc tagaagaaga ggacgatgac aacgaagacg 23100

aagtagacga gcaagctgag cagcaaaaaa ctcacgtatt tgggcaggcg ccttattctg 23160

gtataaatat tacaaaggag ggtattcaaa taggtgtcga aggtcaaaca cctaaatatg 23220

ccgataaaac atttcaacct gaacctcaaa taggagaatc tcagtggtac gaaacagaaa 23280

ttaatcatgc agctgggaga gtcctaaaaa agactacccc aatgaaacca tgttacggtt 23340

catatgcaaa acccacaaat gaaaatggag ggcaaggcat tcttgtaaag caacaaaatg 23400

gaaagctaga aagtcaagtg gaaatgcaat ttttctcaac tactgaggca gccgcaggca 23460

atggtgataa cttgactcct aaagtggtat tgtacagtga agatgtagat atagaaaccc 23520

cagacactca tatttcttac atgcccacta ttaaggaagg taactcacga gaactaatgg 23580

gccaacaatc tatgcccaac aggcctaatt acattgcttt tagggacaat tttattggtc 23640

taatgtatta caacagcacg ggtaatatgg gtgttctggc gggccaagca tcgcagttga 23700

atgctgttgt agatttgcaa gacagaaaca cagagctttc ataccagctt ttgcttgatt 23760

ccattggtga tagaaccagg tacttttcta tgtggaatca ggctgttgac agctatgatc 23820

cagatgttag aattattgaa aatcatggaa ctgaagatga acttccaaat tactgctttc 23880

cactgggagg tgtgattaat acagagactc ttaccaaggt aaaacctaaa acaggtcagg 23940

aaaatggatg ggaaaaagat gctacagaat tttcagataa aaatgaaata agagttggaa 24000

ataattttgc catggaaatc aatctaaatg ccaacctgtg gagaaatttc ctgtactcca 24060

acatagcgct gtatttgccc gacaagctaa agtacagtcc ttccaacgta aaaatttctg 24120

ataacccaaa cacctacgac tacatgaaca agcgagtggt ggctcccggg ctagtggact 24180

gctacattaa ccttggagca cgctggtccc ttgactatat ggacaacgtc aacccattta 24240

accaccaccg caatgctggc ctgcgctacc gctcaatgtt gctgggcaat ggtcgctatg 24300

tgcccttcca catccaggtg cctcagaagt tctttgccat taaaaacctc cttctcctgc 24360

cgggctcata cacctacgag tggaacttca ggaaggatgt taacatggtt ctgcagagct 24420

ccctaggaaa tgacctaagg gttgacggag ccagcattaa gtttgatagc atttgccttt 24480

acgccacctt cttccccatg gcccacaaca ccgcctccac gcttgaggcc atgcttagaa 24540

acgacaccaa cgaccagtcc tttaacgact atctctccgc cgccaacatg ctctacccta 24600

tacccgccaa cgctaccaac gtgcccatat ccatcccctc ccgcaactgg gcggctttcc 24660

gcggctgggc cttcacgcgc cttaagacta aggaaacccc atcactgggc tcgggctacg 24720

acccttatta cacctactct ggctctatac cctacctaga tggaaccttt tacctcaacc 24780

acacctttaa gaaggtggcc attacctttg actcttctgt cagctggcct ggcaatgacc 24840

gcctgcttac ccccaacgag tttgaaatta agcgctcagt tgacggggag ggttacaacg 24900

ttgcccagtg taacatgacc aaagactggt tcctggtaca aatgctagct aactataaca 24960

ttggctacca gggcttctat atcccagaga gctacaagga ccgcatgtac tccttcttta 25020

gaaacttcca gcccatgagc cgtcaggtgg tggatgatac taaatacaag gactaccaac 25080

aggtgggcat cctacaccaa cacaacaact ctggatttgt tggctacctt gcccccacca 25140

tgcgcgaagg acaggcctac cctgctaact tcccctatcc gcttataggc aagaccgcag 25200

ttgacagcat tacccagaaa aagtttcttt gcgatcgcac cctttggcgc atcccattct 25260

ccagtaactt tatgtccatg ggcgcactca cagacctggg ccaaaacctt ctctacgcca 25320

actccgccca cgcgctagac atgacttttg aggtggatcc catggacgag cccacccttc 25380

tttatgtttt gtttgaagtc tttgacgtgg tccgtgtgca ccagccgcac cgcggcgtca 25440

tcgaaaccgt gtacctgcgc acgcccttct cggccggcaa cgccacaaca taaagaagca 25500

agcaacatca acaacagctg ccgccatggg ctccagtgag caggaactga aagccattgt 25560

caaagatctt ggttgtgggc catatttttt gggcacctat gacaagcgct ttccaggctt 25620

tgtttctcca cacaagctcg cctgcgccat agtcaatacg gccggtcgcg agactggggg 25680

cgtacactgg atggcctttg cctggaaccc gcactcaaaa acatgctacc tctttgagcc 25740

ctttggcttt tctgaccagc gactcaagca ggtttaccag tttgagtacg agtcactcct 25800

gcgccgtagc gccattgctt cttcccccga ccgctgtata acgctggaaa agtccaccca 25860

aagcgtacag gggcccaact cggccgcctg tggactattc tgctgcatgt ttctccacgc 25920

ctttgccaac tggccccaaa ctcccatgga tcacaacccc accatgaacc ttattaccgg 25980

ggtacccaac tccatgctca acagtcccca ggtacagccc accctgcgtc gcaaccagga 26040

acagctctac agcttcctgg agcgccactc gccctacttc cgcagccaca gtgcgcagat 26100

taggagcgcc acttcttttt gtcacttgaa aaacatgtaa aaataatgta ctagagacac 26160

tttcaataaa ggcaaatgct tttatttgta cactctcggg tgattattta cccccaccct 26220

tgccgtctgc gccgtttaaa aatcaaaggg gttctgccgc gcatcgctat gcgccactgg 26280

cagggacacg ttgcgatact ggtgtttagt gctccactta aactcaggca caaccatccg 26340

cggcagctcg gtgaagtttt cactccacag gctgcgcacc atcaccaacg cgtttagcag 26400

gtcgggcgcc gatatcttga agtcgcagtt ggggcctccg ccctgcgcgc gcgagttgcg 26460

atacacaggg ttgcagcact ggaacactat cagcgccggg tggtgcacgc tggccagcac 26520

gctcttgtcg gagatcagat ccgcgtccag gtcctccgcg ttgctcaggg cgaacggagt 26580

caactttggt agctgccttc ccaaaaaggg cgcgtgccca ggctttgagt tgcactcgca 26640

ccgtagtggc atcaaaaggt gaccgtgccc ggtctgggcg ttaggataca gcgcctgcat 26700

aaaagccttg atctgcttaa aagccacctg agcctttgcg ccttcagaga agaacatgcc 26760

gcaagacttg ccggaaaact gattggccgg acaggccgcg tcgtgcacgc agcaccttgc 26820

gtcggtgttg gagatctgca ccacatttcg gccccaccgg ttcttcacga tcttggcctt 26880

gctagactgc tccttcagcg cgcgctgccc gttttcgctc gtcacatcca tttcaatcac 26940

gtgctcctta tttatcataa tgcttccgtg tagacactta agctcgcctt cgatctcagc 27000

gcagcggtgc agccacaacg cgcagcccgt gggctcgtga tgcttgtagg tcacctctgc 27060

aaacgactgc aggtacgcct gcaggaatcg ccccatcatc gtcacaaagg tcttgttgct 27120

ggtgaaggtc agctgcaacc cgcggtgctc ctcgttcagc caggtcttgc atacggccgc 27180

cagagcttcc acttggtcag gcagtagttt gaagttcgcc tttagatcgt tatccacgtg 27240

gtacttgtcc atcagcgcgc gcgcagcctc catgcccttc tcccacgcag acacgatcgg 27300

cacactcagc gggttcatca ccgtaatttc actttccgct tcgctgggct cttcctcttc 27360

ctcttgcgtc cgcataccac gcgccactgg gtcgtcttca ttcagccgcc gcactgtgcg 27420

cttacctcct ttgccatgct tgattagcac cggtgggttg ctgaaaccca ccatttgtag 27480

cgccacatct tctctttctt cctcgctgtc cacgattacc tctggtgatg gcgggcgctc 27540

gggcttggga gaagggcgct tctttttctt cttgggcgca atggccaaat ccgccgccga 27600

ggtcgatggc cgcgggctgg gtgtgcgcgg caccagcgcg tcttgtgatg agtcttcctc 27660

gtcctcggac tcgatacgcc gcctcatccg ctttttgggg ggcgcccggg gaggcggcgg 27720

cgacggggac ggggacgaca cgtcctccat ggttggggga cgtcgcgccg caccgcgtcc 27780

gcgctcgggg gtggtttcgc gctgctcctc ttcccgactg gccatttcct tctcctatag 27840

gcagaaaaag atcatggagt cagtcgagaa gaaggacagc ctaaccgccc cctctgagtt 27900

cgccaccacc gcctccaccg atgccgccaa cgcgcctacc accttccccg tcgaggcacc 27960

cccgcttgag gaggaggaag tgattatcga gcaggaccca ggttttgtaa gcgaagacga 28020

cgaggaccgc tcagtaccaa cagaggataa aaagcaagac caggacaacg cagaggcaaa 28080

cgaggaacaa gtcgggcggg gggacgaaag gcatggcgac tacctagatg tgggagacga 28140

cgtgctgttg aagcatctgc agcgccagtg cgccattatc tgcgacgcgt tgcaagagcg 28200

cagcgatgtg cccctcgcca tagcggatgt cagccttgcc tacgaacgcc acctattctc 28260

accgcgcgta ccccccaaac gccaagaaaa cggcacatgc gagcccaacc cgcgcctcaa 28320

cttctacccc gtatttgccg tgccagaggt gcttgccacc tatcacatct ttttccaaaa 28380

ctgcaagata cccctatcct gccgtgccaa ccgcagccga gcggacaagc agctggcctt 28440

gcggcagggc gctgtcatac ctgatatcgc ctcgctcaac gaagtgccaa aaatctttga 28500

gggtcttgga cgcgacgaga agcgcgcggc aaacgctctg caacaggaaa acagcgaaaa 28560

tgaaagtcac tctggagtgt tggtggaact cgagggtgac aacgcgcgcc tagccgtact 28620

aaaacgcagc atcgaggtca cccactttgc ctacccggca cttaacctac cccccaaggt 28680

catgagcaca gtcatgagtg agctgatcgt gcgccgtgcg cagcccctgg agagggatgc 28740

aaatttgcaa gaacaaacag aggagggcct acccgcagtt ggcgacgagc agctagcgcg 28800

ctggcttcaa acgcgcgagc ctgccgactt ggaggagcga cgcaaactaa tgatggccgc 28860

agtgctcgtt accgtggagc ttgagtgcat gcagcggttc tttgctgacc cggagatgca 28920

gcgcaagcta gaggaaacat tgcactacac ctttcgacag ggctacgtac gccaggcctg 28980

caagatctcc aacgtggagc tctgcaacct ggtctcctac cttggaattt tgcacgaaaa 29040

ccgccttggg caaaacgtgc ttcattccac gctcaagggc gaggcgcgcc gcgactacgt 29100

ccgcgactgc gtttacttat ttctatgcta cacctggcag acggccatgg gcgtttggca 29160

gcagtgcttg gaggagtgca acctcaagga gctgcagaaa ctgctaaagc aaaacttgaa 29220

ggacctatgg acggccttca acgagcgctc cgtggccgcg cacctggcgg acatcatttt 29280

ccccgaacgc ctgcttaaaa ccctgcaaca gggtctgcca gacttcacca gtcaaagcat 29340

gttgcagaac tttaggaact ttatcctaga gcgctcagga atcttgcccg ccacctgctg 29400

tgcacttcct agcgactttg tgcccattaa gtaccgcgaa tgccctccgc cgctttgggg 29460

ccactgctac cttctgcagc tagccaacta ccttgcctac cactctgaca taatggaaga 29520

cgtgagcggt gacggtctac tggagtgtca ctgtcgctgc aacctatgca ccccgcaccg 29580

ctccctggtt tgcaattcgc agctgcttaa cgaaagtcaa attatcggta cctttgagct 29640

gcagggtccc tcgcctgacg aaaagtccgc ggctccgggg ttgaaactca ctccggggct 29700

gtggacgtcg gcttaccttc gcaaatttgt acctgaggac taccacgccc acgagattag 29760

gttctacgaa gaccaatccc gcccgcctaa tgcggagctt accgcctgcg tcattaccca 29820

gggccacatt cttggccaat tgcaagccat caacaaagcc cgccaagagt ttctgctacg 29880

aaagggacgg ggggtttact tggaccccca gtccggcgag gagctcaacc caatcccccc 29940

gccgccgcag ccctatcagc agcagccgcg ggcccttgct tcccaggatg gcacccaaaa 30000

agaagctgca gctgccgccg ccacccacgg acgaggagga atactgggac agtcaggcag 30060

aggaggtttt ggacgaggag gaggaggaca tgatggaaga ctgggagagc ctagacgagg 30120

aagcttccga ggtcgaagag gtgtcagacg aaacaccgtc accctcggtc gcattcccct 30180

cgccggcgcc ccagaaatcg gcaaccggtt ccagcatggc tacaacctcc gctcctcagg 30240

cgccgccggc actgcccgtt cgccgaccca accgtagatg ggacaccact ggaaccaggg 30300

ccggtaagtc caagcagccg ccgccgttag cccaagagca acaacagcgc caaggctacc 30360

gctcatggcg cgggcacaag aacgccatag ttgcttgctt gcaagactgt gggggcaaca 30420

tctccttcgc ccgccgcttt cttctctacc atcacggcgt ggccttcccc cgtaacatcc 30480

tgcattacta ccgtcatctc tacagcccat actgcaccgg cggcagcggc agcaacagca 30540

gcggccacac agaagcaaag gcgaccggat agcaagactc tgacaaagcc caagaaatcc 30600

acagcggcgg cagcagcagg aggaggagcg ctgcgtctgg cgcccaacga acccgtatcg 30660

acccgcgagc ttagaaacag gatttttccc actctgtatg ctatatttca acagagcagg 30720

ggccaagaac aagagctgaa aataaaaaac aggtctctgc gatccctcac ccgcagctgc 30780

ctgtatcaca aaagcgaaga tcagcttcgg cgcacgctgg aagacgcgga ggctctcttc 30840

agtaaatact gcgcgctgac tcttaaggac tagtttcgcg ccctttctca aatttaagcg 30900

cgaaaactac gtcatctcca gcggccacac ccggcgccag cacctgttgt cagcgccatt 30960

atgagcaagg aaattcccac gccctacatg tggagttacc agccacaaat gggacttgcg 31020

gctggagctg cccaagacta ctcaacccga ataaactaca tgagcgcggg accccacatg 31080

atatcccggg tcaacggaat acgcgcccac cgaaaccgaa ttctcctgga acaggcggct 31140

attaccacca cacctcgtaa taaccttaat ccccgtagtt ggcccgctgc cctggtgtac 31200

caggaaagtc ccgctcccac cactgtggta cttcccagag acgcccaggc cgaagttcag 31260

atgactaact caggggcgca gcttgcgggc ggctttcgtc acagggtgcg gtcgcccggg 31320

cagggtataa ctcacctgac aatcagaggg cgaggtattc agctcaacga cgagtcggtg 31380

agctcctcgc ttggtctccg tccggacggg acatttcaga tcggcggcgc cggccgctct 31440

tcattcacgc ctcgtcaggc aatcctaact ctgcagacct cgtcctctga gccgcgctct 31500

ggaggcattg gaactctgca atttattgag gagtttgtgc catcggtcta ctttaacccc 31560

ttctcgggac ctcccggcca ctatccggat caatttattc ctaactttga cgcggtaaag 31620

gactcggcgg acggctacga ctgaatgtta agtggagagg cagagcaact gcgcctgaaa 31680

cacctggtcc actgtcgccg ccacaagtgc tttgcccgcg actccggtga gttttgctac 31740

tttgaattgc ccgaggatca tatcgagggc ccggcgcacg gcgtccggct taccgcccag 31800

ggagagcttg cccgtagcct gattcgggag tttacccagc gccccctgct agttgagcgg 31860

gacaggggac cctgtgttct cactgtgatt tgcaactgtc ctaaccctgg attacatcaa 31920

gatcctctag ttaatgtcag gtcgcctaag tcgattaact agagtacccg gggatcttat 31980

tccctttaac taataaaaaa aaataataaa gcatcactta cttaaaatca gttagcaaat 32040

ttctgtccag tttattcagc agcacctcct tgccctcctc ccagctctgg tattgcagct 32100

tcctcctggc tgcaaacttt ctccacaatc taaatggaat gtcagtttcc tcctgttcct 32160

gtccatccgc acccactatc ttcatgttgt tgcagatgaa gcgcgcaaga ccgtctgaag 32220

ataccttcaa ccccgtgtat ccatatgaca cggaaaccgg tcctccaact gtgccttttc 32280

ttactcctcc ctttgtatcc cccaatgggt ttcaagagag tccccctggg gtactctctt 32340

tgcgcctatc cgaacctcta gttacctcca atggcatgct tgcgctcaaa atgggcaacg 32400

gcctctctct ggacgaggcc ggcaacctta cctcccaaaa tgtaaccact gtgagcccac 32460

ctctcaaaaa aaccaagtca aacataaacc tggaaatatc tgcacccctc acagttacct 32520

cagaagccct aactgtggct gccgccgcac ctctaatggt cgcgggcaac acactcacca 32580

tgcaatcaca ggccccgcta accgtgcacg actccaaact tagcattgcc acccaaggac 32640

ccctcacagt gtcagaagga aagctagccc tgcaaacatc aggccccctc accaccaccg 32700

atagcagtac ccttactatc actgcctcac cccctctaac tactgccact ggtagcttgg 32760

gcattgactt gaaagagccc atttatacac aaaatggaaa actaggacta aagtacgggg 32820

ctcctttgca tgtaacagac gacctaaaca ctttgaccgt agcaactggt ccaggtgtga 32880

ctattaataa tacttccttg caaactaaag ttactggagc cttgggtttt gattcacaag 32940

gcaatatgca acttaatgta gcaggaggac taaggattga ttctcaaaac agacgcctta 33000

tacttgatgt tagttatccg tttgatgctc aaaaccaact aaatctaaga ctaggacagg 33060

gccctctttt tataaactca gcccacaact tggatattaa ctacaacaaa ggcctttact 33120

tgtttacagc ttcaaacaat tccaaaaagc ttgaggttaa cctaagcact gccaaggggt 33180

tgatgtttga cgctacagcc atagccatta atgcaggaga tgggcttgaa tttggttcac 33240

ctaatgcacc aaacacaaat cccctcaaaa caaaaattgg ccatggccta gaatttgatt 33300

caaacaaggc tatggttcct aaactaggaa ctggccttag ttttgacagc acaggtgcca 33360

ttacagtagg aaacaaaaat aatgataagc taactttgtg gaccggaata aaccctccac 33420

ctaactgtca aattgtggaa aacactaata caaatgatgg caaacttact ttagtattag 33480

taaaaaatgg agggcttgtt aatggctacg tgtctctagt tggtgtatca gacactgtga 33540

accaaatgtt cacacaaaag acagcaaaca tccaattaag attatatttt gactcttctg 33600

gaaatctatt aactgaggaa tcagacttaa aaattccact taaaaataaa tcttctacag 33660

cgaccagtga aactgtagcc agcagcaaag cctttatgcc aagtactaca gcttatccct 33720

tcaacaccac tactagggat agtgaaaact acattcatgg aatatgttac tacatgacta 33780

gttatgatag aagtctattt cccttgaaca tttctataat gctaaacagc cgtatgattt 33840

cttccaatgt tgcctatgcc atacaatttg aatggaatct aaatgcaagt gaatctccag 33900

aaagcaacat agctacgctg accacatccc cctttttctt ttcttacatt acagaagacg 33960

acaactaaag aatcgtttgt gttatgtttc aacgtgttta tttttcaatt gcagaaaatt 34020

tcaagtcatt tttcattcag tagtatagcc ccaccaccac atagcttata cagatcaccg 34080

taccttaatc aaacgttttt ttttttattc caaaagatta tccaaaacct caaaatgaag 34140

atctattaag tgaacgcgct cccctccggt ggcgtggtca aactctacag ccaaagaaca 34200

gataatggca tttgtaagat gttgcacaat ggcttccaaa aggcaaacgg ccctcacgtc 34260

caagtggacg taaaggctaa acccttcagg gtgaatctcc tctataaaca ttccagcacc 34320

ttcaaccatg cccaaataat tctcatctcg ccaccttctc aatatatctc taagcaaatc 34380

ccgaatatta agtccggcca ttgtaaaaat ctgctccaga gcgccctcca ccttcagcct 34440

caagcagcga atcatgattg caaaaattca ggttcctcac agacctgtat aagattcaaa 34500

agcggaacat taacaaaaat accgcgatcc cgtaggtccc ttcgcagggc cagctgaaca 34560

taatcgtgca ggtctgcacg gaccagcgcg gccacttccc cgccaggaac catgacaaaa 34620

gaacccacac tgattatgac acgcatactc ggagctatgc taaccagcgt agccccgatg 34680

taagcttgtt gcatgggcgg cgatataaaa tgcaaggtgc tgctcaaaaa atcaggcaaa 34740

gcctcgcgca aaaaagaaag cacatcgtag tcatgctcat gcagataaag gcaggtaagc 34800

tccggaacca ccacagaaaa agacaccatt tttctctcaa acatgtctgc gggtttctgc 34860

ataaacacaa aataaaataa caaaaaaaca tttaaacatt agaagcctgt cttacaacag 34920

gaaaaacaac ccttataagc ataagacgga ctacggccat gccggcgtga ccgtaaaaaa 34980

actggtcacc gtgattaaaa agcaccaccg acagctcctc ggtcatgtcc ggagtcataa 35040

tgtaagactc ggtaaacaca tcaggttgat tcacatcggt cagtgctaaa aagcgaccga 35100

aatagcccgg gggaatacat acccgcaggc gtagagacaa cattacagcc cccataggag 35160

gtataacaaa attaatagga gagaaaaaca cataaacacc tgaaaaaccc tcctgcctag 35220

gcaaaatagc accctcccgc tccagaacaa catacagcgc ttccacagcg gcagccataa 35280

cagtcagcct taccagtaaa aaagaaaacc tattaaaaaa acaccactcg acacggcacc 35340

agctcaatca gtcacagtgt aaaaaagggc caagtgcaga gcgagtatat ataggactaa 35400

aaaatgacgt aacggttaaa gtccacaaaa aacacccaga aaaccgcacg cgaacctacg 35460

cccagaaacg aaagccaaaa aacccacaac ttcctcaaat cgtcacttcc gttttcccac 35520

gttacgtcac ttcccatttt aagaaaacta caattcccaa cacatacaag ttactccgcc 35580

ctaaaaccta cgtcacccgc cccgttccca cgccccgcgc cacgtcacaa actccacccc 35640

ctcattatca tattggcttc aatccaaaat aaggtatatt attgatgatg 35690

<210> 13
<211> 35690
<212> DNA
<213> Artificial Sequence

<220>
<223> Adk35R2-E4orf6/Spike-E4dlO4-7(E4re#8)

<400> 13
ttaattaaca tcatcaataa tataccttat tttggattga agccaatatg ataatgaggg 60

ggtggagttt gtgacgtggc gcggggcgtg ggaacggggc gggtgacgta gtagtgtggc 120

ggaagtgtga tgttgcaagt gtggcggaac acatgtaagc gacggatgtg gcaaaagtga 180

cgtttttggt gtgcgccggt gtacacagga agtgacaatt ttcgcgcggt ttaggcgga 240

tgttgtagta aatttgggcg taaccgagta agatttggcc attttcgcgg gaaaactgaa 300

taagaggaag tgaaatctga ataattttgt gttactcata gcgcgtaata atttgatccg 360

cgttaagata cattgatgag tttggacaaa ccacaactag aatgcagtga aaaaaatgct 420

ttatttgtga aatttgtgat gctattgctt tatttgtaac cattataagc tgcaataaac 480

aagttaacaa caacaattgc attcatttta tgtttcaggt tcaggggggag gtgtgggagg 540

ttttttaaag caagtaaaac ctctacaaat gtggtatggc tgattatgat caattttcat 600

ggccacttga tgtattgttc atatttgccc agttcttgga ggtcaatcag ggactcattc 660

aggttcttag ccacctcatt cagtctgtca atctccttct ggatgttcac cacagaggca 720

ttgatgccag agatgtctcc caggtccaca tcagggctgg tgtggttctt gaagtatttg 780

tccagttcct ccttgaagga gtccagttca ggttggagtg ggtcatagac tgtgttgttc 840

acaatgccaa tcaccacatc acagttgcca gacacaaagg tgttgtctgt ggtgataatc 900

tgtggttcat agaagttcct ctgggtcaca aaccagtggg tgccattgct cacaaacact 960

ccctcccttg gaaagtgagc cttgccatca tggcagatgg caggggctgt ggtgaagttc 1020

ttctcctggg caggcacata ggtcacatgc aggaacacca ctccatgagg ggcagactgt 1080

ggaaaactca tcaggtggta gcccttgcca cagaagtcca ccctcttgct ttgtcccagc 1140

acacactcac tcatcttggt ggcagccagg ttggcagatg ccctaatctc agcagccctg 1200

ataagttgtt gggtcacata ggtttggagg gattggagtc tgcctgtaat cagtctgtca 1260

atctggacct cagcctccac cttgtccagt ctgctcagga tgtcattcag cacagaggag 1320

atggctccaa agttgctgga aagttgcttc accagggtgt tcagagcctg ggcattctgg 1380

ttcaccacat cttggagttt gcccagggca gaggctgtgc tggacaggga gtcctgaatc 1440

ttgccaatgg cagagttgaa ctggttggca atcagtttct ggttctcata gagcacattc 1500

tgggtcactc caatgccatt gaacctgtaa gccatctgca tagcaaatgg gatttggagg 1560

gctgctcctg ctccaaaggt ccagccagag gtgatggtgc cagccagcag ggcagaggtg 1620

tattgggcaa tcatctcatc tgtcagcagt ggaggcagca ctgtcagtcc attgaacttc 1680

tgggcacaaa tcaggtccct ggcagcaatg tctcccagac agtctccata ttgcttgatg 1740

aagccagcat cagccagggt caccttgttg aacagcaggt cctcaatgaa ggacctcttg 1800

cttggcttgc ttgggtcagg cagaatctgg ctgaagttga agcctccaaa gtccttgatt 1860

ggaggtgtct tgtaaatctg cttcacctgg gcaaacacct cctgggtgtt cttgtcctgt 1920

tccacagcaa tgcctgtcag agccctgtta agttgggtac agaaggagcc atattggagc 1980

agcaggttgc tacactctgt gctgtctcca cagatataca ttgtacagtc cacagaggtc 2040

ttggtcatac tcacaggcag aatctctgtg gtcacagaga tggtgaagtt ggttgggatg 2100

gcaatgctgt tgttgctgta agccacagag ttctctgctc ccagactcat tgtgtaggca 2160

atgatgctct ggcttgccac agacctcgac ccaccgccac cggtctgggt ctggtaggag 2220

gcacagatgc ctgctccaat tgggatgtca cactcatagg agttgttcac atgctctgct 2280

ccaatcagac agccagccct ggtctggaac acattgctgc ctgtgctgta gaccctccag 2340

gttggtgtaa gttggtcagc atggatagcc acaggcacct cagtacagtt cacatcctgg 2400

tagagcacag ccacctggtt gctggtgttg gtgccaggtg taatcacaga cactcctcca 2460

aaggaacatg gtgtgatgtc cagaatctcc aaggtctgtg ggtccctcac agcatctgtg 2520

gtgtcagcaa tgtccctgcc aaactgttgg aatggcagga acttcttgtt gctctctgtc 2580

agcactcctg tgcctgtcag tccattgaag ttgaagttca cacacttgtt cttcaccagg 2640

ttggtgctct tctttggtcc acacactgtg gcaggggcat ggagcagttc aaaggacagc 2700

accaccaccc tgtatggttg gtagcccact ccattggttg gttggaagcc ataggattgg 2760

agtggaaagt aacagttgaa gccctccact ccattacatg gtgtgctgcc agcctggtaa 2820

atctctgtgc tgatgtccct ctcaaatggt ttcaggttgc tcttcctgaa cagtctgtag 2880

aggtagttgt agttgcctcc caccttgctg tccaggttgt tgctgttcca ggcaatcaca 2940

cagcctgtga agtcatcagg cagtttgtag ttgtagtcag caatcttgcc tgtttgtcca 3000

ggggcaatct gtctcacctc atctccccta atcacaaagg agtcagcata gacattggtg 3060

aaacacaggt cattcagttt ggttgggctc actccataac acttgaaggt gctgaaggag 3120

gcagagttgt agagcacaga gtagtcagcc acacagttgc taatcctctt cctgttccag 3180

gcatagacag aggcaaacct ggtggcattg aacacctctc caaatggaca caggttggtg 3240

atgtttggaa acctcacaat gctctctgtt ggttggaccc tgaagttgct ggtctggtag 3300

atgcccttct ccactgtgaa ggatttcagg gtacacttgg tctcagacag tgggtccagg 3360

gcacagtcca cagcatctgt gatggtgcca ttctcattgt atttcagcag gaaggtcctt 3420

ggttggaggt agcccacata gtaggctgct gctcctgctg tccagccaga ggaggagtct 3480

ccaggtgtca ggtaggacct gtgcagagcc agcagggtct ggaacctggt gatgttgatg 3540

ccaattggca ggtccaccag tggttccaag gcagagaagc cctgtggcag gtccctcacc 3600

aggttgattg gtgtgtgttt gctgtaaatc ttgaagtagc catcaatgtt cttgaacaca 3660

aactccctca ggttcttgaa gttgccctgc ttgccctcca agtccatcag gaatggttgg 3720

ctcacatatt caaaggtaca gttgttggca gaggagtaga ccctgaactc agactccatc 3780

caggacttgt tgttcttgtg gtagtagact cccaggaatg ggtcattaca gaactggaac 3840

tcacacacct taatcaccac attggtggca ttgttcacaa tcagcaggga ctgggtcttg 3900

ctgtccaggg tggtgccaaa aatccagccc ctgatgatgt tgctcttctc tgtgctggca 3960

aagtagactc catcattgaa tggcagcaca gggttgtcaa acctcttggt gccattggtg 4020

ccagacacat ggatggcatg gaaccaggtc acattgctga agaatggcag gaacaggtcc 4080

tgggtgctgt gcagcacaga ggacctgaac accttgtcag ggtagtagac tcccctggtg 4140

aaggagttgg tgtaggcagg aggaagttgg gtcctggtgg tcaggttcac acactggctg 4200

gacaccagtg gcagcagcac caggaacaca aacatggtgg caaatcggag gctggatcgg 4260

tcccggtgtc ttctatggag gtcaaaacag cgtggatggc gtctccaggc gatctgacgg 4320

ttcactaaac gagctcgtcg acgatctcta tcactgatag ggagatctct atcactgata 4380

gggagagctc tgcttatata gacctcccac cgtacacgcc taccgcccat ttgcgtcaat 4440

ggggcggagt tgttacgaca ttttggaaag tcccgttgat tttggtgcca aaacaaactc 4500

ccattgacgt caatggggtg gagacttgga aatccccgtg agtcaaaccg ctatccacgc 4560

ccattgatgt actgccaaaa ccgcatcacc atggtaatag cgatgactaa tacgtagatg 4620

tactgccaag taggaaagtc ccataaggtc atgtactggg cataatgcca ggcgggccat 4680

ttaccgtcat tgacgtcaat agggggcgta cttggcatat gatacacttg atgtactgcc 4740

aagtgggcag tttaccgtaa atactccacc cattgacgtc aatggaaagt ccctattggc 4800

gttactatgg gaacatacgt cattattgac gtcaatgggc gggggtcgtt gggcggtcag 4860

ccaggcgggc catttaccgt aagttatgta acgcggaact ccatatatgg gctatgaact 4920

aatgaccccg taattgatta ctattacagc ctcagaagcc atagagccca ccgcatcccc 4980

agcatgcctg ctattgtctt cccaatcctc ccccttgctg tcctgcccca ccccaccccc 5040

cagaatagaa tgacacctac tcagacaatg cgatgcaatt tcctcatttt attaggaaag 5100

gacagtggga gtggcacctt ccagggtcaa ggaaggcacg ggggaggggc aaacaacaga 5160

tggctggcaa ctagaaggca cagtcgaggc tgatcagcga gctctagaga attgatcccc 5220

aagcttctac atgggggtag agtcataatc gtgcatcagg atagggcggt ggtgctgcag 5280

cagcgcgcga ataaactgct gccgccgccg ctccgtcctg caggaataca acatggcagt 5340

ggtctcctca gcgatgattc gcaccgcccg cagcataagg cgccttgtcc tccgggcaca 5400

gcagcgcacc ctgatctcac ttaaatcagc acagtaactg cagcacagca ccacaatatt 5460

gttcaaaatc ccacagtgca aggcgctgta tccaaagctc atggcgggga ccacagaacc 5520

cacgtggcca tcataccaca agcgcaggta gattaagtgg cgacccctca taaacacgct 5580

ggacataaac attacctctt ttggcatgtt gtaattcacc acctcccggt accatataaa 5640

cctctgatta aacatggcgc catccaccac catcctaaac cagctggcca aaacctgccc 5700

gccggctata cactgcaggg aaccgggact ggaacaatga cagtggagag cccaggactc 5760

gtaaccatgg atcatcatgc tcgtcatgat atcaatgttg gcacaacaca ggcacacgtg 5820

catacacttc ctcaggatta caagctcctc ccgcgttaga accatatccc agggaacaac 5880

ccattcctga atcagcgtaa atcccacact gcagggaaga cctcgcacgt aactcacgtt 5940

gtgcattgtc aaagtgttac attcgggcag cagcggatga tcctccagta tggtagcgcg 6000

ggtttctgtc tcaaaaggag gtagacgatc cctactgtac ggagtgcgcc gagacaaccg 6060

agatcgtgtt ggtcgtagtg tcatgccaaa tggaacgccg gacgtagtca tggtggccag 6120

cttggggtag ttttcacgac accttaaatg gaagaaaaaa actttgaacc actgtctgag 6180

gcttgagaat gaaccaagat ccaaactcaa aaagggcaaa ttccaaggag aattacatca 6240

agtgccaagc tggcctaact tcagtctcca cccactcagt atggggaaac tccatcgcat 6300

aaaacccctc cccccaacct aaagacgacg tactccaaaa gctcgagaac taatcgaggt 6360

gcctggacgg cgcccggtac tccgtggagt cacatgaagc gacggctgag gacggaaagg 6420

ccctttttcct ttgtgtgggt gactcacccg cccgctctcc cgagcgccgc gtcctccatt 6480

ttgagctccc tgcagcaggg ccgggaagcg gccatctttc cgctcacgca actggtgccg 6540

accgggccag ccttgccgcc cagggcgggg cgatacacgg cggcgcgagg ccaggcacca 6600

gagcaggccg gccagcttga gactaccccc gtccgattct cggtggccgc gctcgcaggc 6660

cccgcctcgc cgaacatgtg cgctgggacg cacgggcccc gtcgccgccc gcggccccaa 6720

aaaccgaaat accagtgtgc agatcttggc ccgcatttac aagactatct tgccagaaaa 6780

aaagcgtcgc agcaggtcat caaaaatttt aaatggctag agacttatcg aaagcagcga 6840

gacaggcgcg aaggtgccac cagattcgca cgcggcggcc ccagcgccca ggccaagcct 6900

caactcaagc acgaggcgaa ggggctcctt aagcgcaagg cctcgaactc tcccacccac 6960

ttccaacccg aagctcggga tcaagaatca cgtactgcag ccaggggcgt ggaagtaatt 7020

caaggcacgc aagggccata acccgtaaag aggccaggcc cgcgggaacc acacacggca 7080

cttacctgtg ttctggcggc aaacccgttg cgaaaaagaa cgttcacggc gactactgca 7140

cttatatacg gttctccccc accctcggga aaaaggcgga gccagtacac gacatcactt 7200

tcccagttta ccccgcgcca ccttctctag gcaccggttc aattgccgac ccctcccccc 7260

aacttctcgg ggactgtggg cgatgtgcgc tctgcccact gacgggcacc ggagcaaatt 7320

gggcgtggct taagggtggg aaagaatata taaggtgggg gtcttatgta gttttgtatc 7380

tgttttgcag cagccgccgc cgccatgagc accaactcgt ttgatggaag cattgtgagc 7440

tcatatttga caacgcgcat gcccccatgg gccggggtgc gtcagaatgt gatgggctcc 7500

agcattgatg gtcgccccgt cctgcccgca aactctacta ccttgaccta cgagaccgtg 7560

tctggaacgc cgttggagac tgcagcctcc gccgccgctt cagccgctgc agccaccgcc 7620

cgcgggattg tgactgactt tgctttcctg agcccgcttg caagcagtgc agcttcccgt 7680

tcatccgccc gcgatgacaa gttgacggct cttttggcac aattggattc tttgacccgg 7740

gaacttaatg tcgtttctca gcagctgttg gatctgcgcc agcaggtttc tgccctgaag 7800

gcttcctccc ctcccaatgc ggtttaaaac ataaataaaa aaccagactc tgtttggatt 7860

tggatcaagc aagtgtcttg ctgtctttat ttaggggttt tgcgcgcgcg gtaggcccgg 7920

gaccagcggt ctcggtcgtt gagggtcctg tgtatttttt ccaggacgtg gtaaaggtga 7980

ctctggatgt tcagatacat gggcataagc ccgtctctgg ggtggaggta gcaccactgc 8040

agagcttcat gctgcggggt ggtgttgtag atgatccagt cgtagcagga gcgctgggcg 8100

tggtgcctaa aaatgtcttt cagtagcaag ctgattgcca ggggcaggcc cttggtgtaa 8160

gtgtttacaa agcggttaag ctgggatggg tgcatacgtg gggatatgag atgcatcttg 8220

gactgtattt ttaggttggc tatgttccca gccatatccc tccggggatt catgttgtgc 8280

agaaccacca gcacagtgta tccggtgcac ttgggaaatt tgtcatgtag cttagaagga 8340

aatgcgtgga agaacttgga gacgcccttg tgacctccaa gattttccat gcattcgtcc 8400

ataatgatgg caatgggccc acgggcggcg gcctgggcga agatatttct gggatcacta 8460

acgtcatagt tgtgttccag gatgagatcg tcataggcca tttttacaaa gcgcgggcgg 8520

agggtgccag actgcggtat aatggttcca tccggcccag gggcgtagtt accctcacag 8580

atttgcattt cccacgcttt gagttcagat ggggggatca tgtctacctg cggggcgatg 8640

aagaaaacgg tttccggggt aggggagatc agctgggaag aaagcaggtt cctgagcagc 8700

tgcgacttac cgcagccggt gggcccgtaa atcacaccta ttaccgggtg caactggtag 8760

ttaagagagc tgcagctgcc gtcatccctg agcaggggggg ccacttcgtt aagcatgtcc 8820

ctgactcgca tgttttccct gaccaaatcc gccagaaggc gctcgccgcc cagcgatagc 8880

agttcttgca aggaagcaaa gtttttcaac ggtttgagac cgtccgccgt aggcatgctt 8940

ttgagcgttt gaccaagcag ttccaggcgg tcccacagct cggtcacctg ctctacggca 9000

tctcgatcca gcatatctcc tcgtttcgcg ggttggggcg gctttcgctg tacggcagta 9060

gtcggtgctc gtccagacgg gccagggtca tgtctttcca cgggcgcagg gtcctcgtca 9120

gcgtagtctg ggtcacggtg aaggggtgcg ctccgggctg cgcgctggcc agggtgcgct 9180

tgaggctggt cctgctggtg ctgaagcgct gccggtcttc gccctgcgcg tcggccaggt 9240

agcatttgac catggtgtca tagtccagcc cctccgcggc gtggcccttg gcgcgcagct 9300

tgcccttgga ggaggcgccg cacgaggggc agtgcagact tttgagggcg tagagcttgg 9360

gcgcgagaaa taccgattcc ggggagtagg catccgcgcc gcaggccccg cagacggtct 9420

cgcattccac gagccaggtg agctctggcc gttcggggtc aaaaaccagg tttcccccat 9480

gctttttgat gcgtttctta cctctggttt ccatgagccg gtgtccacgc tcggtgacga 9540

aaaggctgtc cgtgtccccg tatacagact tgagaggcct gtcctcgagc ggtgttccgc 9600

ggtcctcctc gtatagaaac tcggaccact ctgagacaaa ggctcgcgtc caggccagca 9660

cgaaggaggc taagtgggag gggtagcggt cgttgtccac taggggggtcc actcgctcca 9720

gggtgtgaag acacatgtcg ccctcttcgg catcaaggaa ggtgattggt ttgtaggtgt 9780

aggccacgtg accgggtgtt cctgaagggg ggctataaaa gggggtgggg gcgcgttcgt 9840

cctcactctc ttccgcatcg ctgtctgcga gggccagctg ttggggtgag tactccctct 9900

gaaaagcggg catgacttct gcgctaagat tgtcagtttc caaaaacgag gaggatttga 9960

tattcacctg gcccgcggtg atgcctttga gggtggccgc atccatctgg tcagaaaaga 10020

caatcttttt gttgtcaagc ttggtggcaa acgacccgta gagggcgttg gacagcaact 10080

tggcgatgga gcgcagggtt tggtttttgt cgcgatcggc gcgctccttg gccgcgatgt 10140

ttagctgcac gtattcgcgc gcaacgcacc gccattcggg aaagacggtg gtgcgctcgt 10200

cgggcaccag gtgcacgcgc caaccgcggt tgtgcagggt gacaaggtca acgctggtgg 10260

ctacctctcc gcgtaggcgc tcgttggtcc agcagaggcg gccgcccttg cgcgagcaga 10320

atggcggtag ggggtctagc tgcgtctcgt ccgggggggtc tgcgtccacg gtaaagaccc 10380

cgggcagcag gcgcgcgtcg aagtagtcta tcttgcatcc ttgcaagtct agcgcctgct 10440

gccatgcgcg ggcggcaagc gcgcgctcgt atgggttgag tgggggaccc catggcatgg 10500

ggtgggtgag cgcggaggcg tacatgccgc aaatgtcgta aacgtagagg ggctctctga 10560

gtattccaag atatgtaggg tagcatcttc caccgcggat gctggcgcgc acgtaatcgt 10620

atagttcgtg cgagggagcg aggaggtcgg gaccgaggtt gctacgggcg ggctgctctg 10680

ctcggaagac tatctgcctg aagatggcat gtgagttgga tgatatggtt ggacgctgga 10740

agacgttgaa gctggcgtct gtgagaccta ccgcgtcacg cacgaaggag gcgtaggagt 10800

cgcgcagctt gttgaccagc tcggcggtga cctgcacgtc tagggcgcag tagtccaggg 10860

tttccttgat gatgtcatac ttatcctgtc cctttttttt ccacagctcg cggttgagga 10920

caaactcttc gcggtctttc cagtactctt ggatcggaaa cccgtcggcc tccgaacggt 10980

aagagcctag catgtagaac tggttgacgg cctggtaggc gcagcatccc ttttctacgg 11040

gtagcgcgta tgcctgcgcg gccttccgga gcgaggtgtg ggtgagcgca aaggtgtccc 11100

tgaccatgac tttgaggtac tggtatttga agtcagtgtc gtcgcatccg ccctgctccc 11160

agagcaaaaa gtccgtgcgc tttttggaac gcggatttgg cagggcgaag gtgacatcgt 11220

tgaagagtat ctttcccgcg cgaggcataa agttgcgtgt gatgcggaag ggtcccggca 11280

cctcggaacg gttgttaatt acctgggcgg cgagcacgat ctcgtcaaag ccgttgatgt 11340

tgtggcccac aatgtaaagt tccaagaagc gcgggatgcc cttgatggaa ggcaattttt 11400

taagttcctc gtaggtgagc tcttcagggg agctgagccc gtgctctgaa agggcccagt 11460

ctgcaagatg agggttggaa gcgacgaatg agctccacag gtcacgggcc attagcattt 11520

gcaggtggtc gcgaaaggtc ctaaactggc gacctatggc catttttct ggggtgatgc 11580

agtagaaggt aagcgggtct tgttcccagc ggtcccatcc aaggttcgcg gctaggtctc 11640

gcgcggcagt cactagaggc tcatctccgc cgaacttcat gaccagcatg aagggcacga 11700

gctgcttccc aaaggccccc atccaagtat aggtctctac atcgtaggtg acaaagagac 11760

gctcggtgcg aggatgcgag ccgatcggga agaactggat ctcccgccac caattggagg 11820

agtggctatt gatgtggtga aagtagaagt ccctgcgacg ggccgaacac tcgtgctggc 11880

ttttgtaaaa acgtgcgcag tactggcagc ggtgcacggg ctgtacatcc tgcacgaggt 11940

tgacctgacg accgcgcaca aggaagcaga gtgggaattt gagcccctcg cctggcgggt 12000

ttggctggtg gtcttctact tcggctgctt gtccttgacc gtctggctgc tcgaggggag 12060

ttacggtgga tcggaccacc acgccgcgcg agcccaaagt ccagatgtcc gcgcgcggcg 12120

gtcggagctt gatgacaaca tcgcgcagat gggagctgtc catggtctgg agctcccgcg 12180

gcgtcaggtc aggcgggagc tcctgcaggt ttacctcgca tagacgggtc agggcgcggg 12240

ctagatccag gtgataccta atttccaggg gctggttggt ggcggcgtcg atggcttgca 12300

agaggccgca tccccgcggc gcgactacgg taccgcgcgg cgggcggtgg gccgcggggg 12360

tgtccttgga tgatgcatct aaaagcggtg acgcgggcga gcccccggag gtaggggggg 12420

ctccggaccc gccgggagag ggggcagggg cacgtcggcg ccgcgcgcgg gcaggagctg 12480

gtgctgcgcg cgtaggttgc tggcgaacgc gacgacgcgg cggttgatct cctgaatctg 12540

gcgcctctgc gtgaagacga cgggcccggt gagcttgaac ctgaaagaga gttcgacaga 12600

atcaatttcg gtgtcgttga cggcggcctg gcgcaaaatc tcctgcacgt ctcctgagtt 12660

gtcttgatag gcgatctcgg ccatgaactg ctcgatctct tcctcctgga gatctccgcg 12720

tccggctcgc tccacggtgg cggcgaggtc gttggaaatg cgggccatga gctgcgagaa 12780

ggcgttgagg cctccctcgt tccagacgcg gctgtagacc acgccccctt cggcatcgcg 12840

ggcgcgcatg accacctgcg cgagattgag ctccacgtgc cgggcgaaga cggcgtagtt 12900

tcgcaggcgc tgaaagaggt agttgagggt ggtggcggtg tgttctgcca cgaagaagta 12960

cataacccag cgtcgcaacg tggattcgtt gatatccccc aaggcctcaa ggcgctccat 13020

ggcctcgtag aagtccacgg cgaagttgaa aaactgggag ttgcgcgccg acacggttaa 13080

ctcctcctcc agaagacgga tgagctcggc gacagtgtcg cgcacctcgc gctcaaaggc 13140

tacaggggcc tcttcttctt cttcaatctc ctcttccata agggcctccc cttcttcttc 13200

ttctggcggc ggtgggggag gggggacacg gcggcgacga cggcgcaccg ggaggcggtc 13260

gacaaagcgc tcgatcatct ccccgcggcg acggcgcatg gtctcggtga cggcgcggcc 13320

gttctcgcgg gggcgcagtt ggaagacgcc gcccgtcatg tcccggttat gggttggcgg 13380

ggggctgcca tgcggcaggg atacggcgct aacgatgcat ctcaacaatt gttgtgtagg 13440

tactccgccg ccgagggacc tgagcgagtc cgcatcgacc ggatcggaaa acctctcgag 13500

aaaggcgtct aaccagtcac agtcgcaagg taggctgagc accgtggcgg gcggcagcgg 13560

gcggcggtcg gggttgtttc tggcggaggt gctgctgatg atgtaattaa agtaggcggt 13620

cttgagacgg cggatggtcg acagaagcac catgtccttg ggtccggcct gctgaatgcg 13680

caggcggtcg gccatgcccc aggcttcgtt ttgacatcgg cgcaggtctt tgtagtagtc 13740

ttgcatgagc ctttctaccg gcacttcttc ttctccttcc tcttgtcctg catctcttgc 13800

atctatcgct gcggcggcgg cggagtttgg ccgtaggtgg cgccctcttc ctcccatgcg 13860

tgtgaccccg aagcccctca tcggctgaag cagggctagg tcggcgacaa cgcgctcggc 13920

taatatggcc tgctgcacct gcgtgagggt agactggaag tcatccatgt ccacaaagcg 13980

gtggtatgcg cccgtgttga tggtgtaagt gcagttggcc ataacggacc agttaacggt 14040

ctggtgaccc ggctgcgaga gctcggtgta cctgagacgc gagtaagccc tcgagtcaaa 14100

tacgtagtcg ttgcaagtcc gcaccaggta ctggtatccc accaaaaagt gcggcggcgg 14160

ctggcggtag aggggccagc gtagggtggc cggggctccg ggggcgagat cttccaacat 14220

aaggcgatga tatccgtaga tgtacctgga catccaggtg atgccggcgg cggtggtgga 14280

ggcgcgcgga aagtcgcgga cgcggttcca gatgttgcgc agcggcaaaa agtgctccat 14340

ggtcgggacg ctctggccgg tcaggcgcgc gcaatcgttg acgctctagc gtgcaaaagg 14400

agagcctgta agcgggcact cttccgtggt ctggtggata aattcgcaag ggtatcatgg 14460

cggacgaccg gggttcgagc cccgtatccg gccgtccgcc gtgatccatg cggttaccgc 14520

ccgcgtgtcg aacccaggtg tgcgacgtca gacaacgggg gagtgctcct tttggcttcc 14580

ttccaggcgc ggcggctgct gcgctagctt ttttggccac tggccgcgcg cagcgtaagc 14640

ggttaggctg gaaagcgaaa gcattaagtg gctcgctccc tgtagccgga gggttatttt 14700

ccaagggttg agtcgcggga cccccggttc gagtctcgga ccggccggac tgcggcgaac 14760

gggggtttgc ctccccgtca tgcaagaccc cgcttgcaaa ttcctccgga aacagggacg 14820

agccccttt ttgcttttcc cagatgcatc cggtgctgcg gcagatgcgc ccccctcctc 14880

agcagcggca agagcaagag cagcggcaga catgcagggc accctcccct cctcctaccg 14940

cgtcaggagg ggcgacatcc gcggttgacg cggcagcaga tggtgattac gaaccccccgc 15000

ggcgccgggc ccggcactac ctggacttgg aggagggcga gggcctggcg cggctaggag 15060

cgccctctcc tgagcggcac ccaagggtgc agctgaagcg tgatacgcgt gaggcgtacg 15120

tgccgcggca gaacctgttt cgcgaccgcg agggagagga gcccgaggag atgcgggatc 15180

gaaagttcca cgcagggcgc gagctgcggc atggcctgaa tcgcgagcgg ttgctgcgcg 15240

aggaggactt tgagcccgac gcgcgaaccg ggattagtcc cgcgcgcgca cacgtggcgg 15300

ccgccgacct ggtaaccgca tacgagcaga cggtgaacca ggagattaac tttcaaaaaa 15360

gctttaacaa ccacgtgcgt acgcttgtgg cgcgcgagga ggtggctata ggactgatgc 15420

atctgtggga ctttgtaagc gcgctggagc aaaacccaaa tagcaagccg ctcatggcgc 15480

agctgttcct tatagtgcag cacagcaggg acaacgaggc attcagggat gcgctgctaa 15540

acatagtaga gcccgagggc cgctggctgc tcgatttgat aaacatcctg cagagcatag 15600

tggtgcagga gcgcagcttg agcctggctg acaaggtggc cgccatcaac tattccatgc 15660

ttagcctggg caagttttac gcccgcaaga tataccatac cccttacgtt cccatagaca 15720

aggaggtaaa gatcgagggg ttctacatgc gcatggcgct gaaggtgctt accttgagcg 15780

acgacctggg cgtttatcgc aacgagcgca tccacaaggc cgtgagcgtg agccggcggc 15840

gcgagctcag cgaccgcgag ctgatgcaca gcctgcaaag ggccctggct ggcacgggca 15900

gcggcgatag agaggccgag tcctactttg acgcgggcgc tgacctgcgc tgggccccaa 15960

gccgacgcgc cctggaggca gctggggccg gacctgggct ggcggtggca cccgcgcgcg 16020

ctggcaacgt cggcggcgtg gaggaatatg acgaggacga tgagtacgag ccagaggacg 16080

gcgagtacta agcggtgatg tttctgatca gatgatgcaa gacgcaacgg acccggcggt 16140

gcgggcggcg ctgcagagcc agccgtccgg ccttaactcc acggacgact ggcgccaggt 16200

catggaccgc atcatgtcgc tgactgcgcg caatcctgac gcgttccggc agcagccgca 16260

ggccaaccgg ctctccgcaa ttctggaagc ggtggtcccg gcgcgcgcaa accccacgca 16320

cgagaaggtg ctggcgatcg taaacgcgct ggccgaaaac agggccatcc ggcccgacga 16380

ggccggcctg gtctacgacg cgctgcttca gcgcgtggct cgttacaaca gcggcaacgt 16440

gcagaccaac ctggaccggc tggtggggga tgtgcgcgag gccgtggcgc agcgtgagcg 16500

cgcgcagcag cagggcaacc tgggctccat ggttgcacta aacgccttcc tgagtacaca 16560

gcccgccaac gtgccgcggg gacaggagga ctacaccaac tttgtgagcg cactgcggct 16620

aatggtgact gagacaccgc aaagtgaggt gtaccagtct gggccagact atttttcca 16680

gaccagtaga caaggcctgc agaccgtaaa cctgagccag gctttcaaaa acttgcaggg 16740

gctgtggggg gtgcgggctc ccacaggcga ccgcgcgacc gtgtctagct tgctgacgcc 16800

caactcgcgc ctgttgctgc tgctaatagc gcccttcacg gacagtggca gcgtgtcccg 16860

ggacacatac ctaggtcact tgctgacact gtaccgcgag gccataggtc aggcgcatgt 16920

ggacgagcat actttccagg agattacaag tgtcagccgc gcgctggggc aggaggacac 16980

gggcagcctg gaggcaaccc taaactacct gctgaccaac cggcggcaga agatcccctc 17040

gttgcacagt ttaaacagcg aggaggagcg cattttgcgc tacgtgcagc agagcgtgag 17100

ccttaacctg atgcgcgacg gggtaacgcc cagcgtggcg ctggacatga ccgcgcgcaa 17160

catggaaccg ggcatgtatg cctcaaaccg gccgtttatc aaccgcctaa tggactactt 17220

gcatcgcgcg gccgccgtga accccgagta tttcaccaat gccatcttga acccgcactg 17280

gctaccgccc cctggtttct acaccggggg attcgaggtg cccgagggta acgatggatt 17340

cctctgggac gacatagacg acagcgtgtt ttccccgcaa ccgcagaccc tgctagagtt 17400

gcaacagcgc gagcaggcag aggcggcgct gcgaaaggaa agcttccgca ggccaagcag 17460

cttgtccgat ctaggcgctg cggccccgcg gtcagatgct agtagcccat ttccaagctt 17520

gatagggtct cttaccagca ctcgcaccac ccgcccgcgc ctgctgggcg aggaggagta 17580

cctaaacaac tcgctgctgc agccgcagcg cgaaaaaaac ctgcctccgg catttcccaa 17640

caacgggata gagagcctag tggacaagat gagtagatgg aagacgtacg cgcaggagca 17700

cagggacgtg ccaggcccgc gcccgcccac ccgtcgtcaa aggcacgacc gtcagcgggg 17760

tctggtgtgg gaggacgatg actcggcaga cgacagcagc gtcctggatt tgggagggag 17820

tggcaacccg tttgcgcacc ttcgccccag gctggggaga atgttttaaa aaaaaaaaag 17880

catgatgcaa aataaaaaac tcaccaaggc catggcaccg agcgttggtt ttcttgtatt 17940

ccccttagta tgcggcgcgc ggcgatgtat gaggaaggtc ctcctccctc ctacgagagt 18000

gtggtgagcg cggcgccagt ggcggcggcg ctgggttctc ccttcgatgc tcccctggac 18060

ccgccgtttg tgcctccgcg gtacctgcgg cctaccgggg ggagaaacag catccgttac 18120

tctgagttgg cacccctatt cgacaccacc cgtgtgtacc tggtggacaa caagtcaacg 18180

gatgtggcat ccctgaacta ccagaacgac cacagcaact ttctgaccac ggtcattcaa 18240

aacaatgact acagcccggg ggaggcaagc acacagacca tcaatcttga cgaccggtcg 18300

cactggggcg gcgacctgaa aaccatcctg cataccaaca tgccaaatgt gaacgagttc 18360

atgtttacca ataagtttaa ggcgcgggtg atggtgtcgc gcttgcctac taaggacaat 18420

caggtggagc tgaaatacga gtgggtggag ttcacgctgc ccgagggcaa ctactccgag 18480

accatgacca tagaccttat gaacaacgcg atcgtggagc actacttgaa agtgggcaga 18540

cagaacgggg ttctggaaag cgacatcggg gtaaagtttg acacccgcaa cttcagactg 18600

gggtttgacc ccgtcactgg tcttgtcatg cctggggtat atacaaacga agccttccat 18660

ccagacatca ttttgctgcc aggatgcggg gtggacttca cccacagccg cctgagcaac 18720

ttgttgggca tccgcaagcg gcaacccttc caggagggct ttaggatcac ctacgatgat 18780

ctggagggtg gtaacattcc cgcactgttg gatgtggacg cctaccaggc gagcttgaaa 18840

gatgacaccg aacagggcgg gggtggcgca ggcggcagca acagcagtgg cagcggcgcg 18900

gaagagaact ccaacgcggc agccgcggca atgcagccgg tggaggacat gaacgatcat 18960

gccattcgcg gcgacacctt tgccacacgg gctgaggaga agcgcgctga ggccgaagca 19020

gcggccgaag ctgccgcccc cgctgcgcaa cccgaggtcg agaagcctca gaagaaaccg 19080

gtgatcaaac ccctgacaga ggacagcaag aaacgcagtt acaacctaat aagcaatgac 19140

agcaccttca cccagtaccg cagctggtac cttgcataca actacggcga ccctcagacc 19200

ggaatccgct catggaccct gctttgcact cctgacgtaa cctgcggctc ggagcaggtc 19260

tactggtcgt tgccagacat gatgcaagac cccgtgacct tccgctccac gcgccagatc 19320

agcaactttc cggtggtggg cgccgagctg ttgcccgtgc actccaagag cttctacaac 19380

gaccaggccg tctactccca actcatccgc cagtttacct ctctgaccca cgtgttcaat 19440

cgctttcccg agaaccagat tttggcgcgc ccgccagccc ccaccatcac caccgtcagt 19500

gaaaacgttc ctgctctcac agatcacggg acgctaccgc tgcgcaacag catcggagga 19560

gtccagcgag tgaccattac tgacgccaga cgccgcacct gcccctacgt ttacaaggcc 19620

ctgggcatag tctcgccgcg cgtcctatcg agccgcactt tttgagcaag catgtccatc 19680

cttatatcgc ccagcaataa cacaggctgg ggcctgcgct tcccaagcaa gatgtttggc 19740

ggggccaaga agcgctccga ccaacaccca gtgcgcgtgc gcgggcacta ccgcgcgccc 19800

tggggcgcgc acaaacgcgg ccgcactggg cgcaccaccg tcgatgacgc catcgacgcg 19860

gtggtggagg aggcgcgcaa ctacacgccc acgccgccac cagtgtccac agtggacgcg 19920

gccattcaga ccgtggtgcg cggagcccgg cgctatgcta aaatgaagag acggcggagg 19980

cgcgtagcac gtcgccaccg ccgccgaccc ggcactgccg cccaacgcgc ggcggcggcc 20040

ctgcttaacc gcgcacgtcg caccggccga cgggcggcca tgcgggccgc tcgaaggctg 20100

gccgcgggta ttgtcactgt gccccccagg tccaggcgac gagcggccgc cgcagcagcc 20160

gcggccatta gtgctatgac tcagggtcgc aggggcaacg tgtattgggt gcgcgactcg 20220

gttagcggcc tgcgcgtgcc cgtgcgcacc cgcccccgc gcaactagat tgcaagaaaa 20280

aactacttag actcgtactg ttgtatgtat ccagcggcgg cggcgcgcaa cgaagctatg 20340

tccaagcgca aaatcaaaga agagatgctc caggtcatcg cgccggagat ctatggcccc 20400

ccgaagaagg aagagcagga ttacaagccc cgaaagctaa agcgggtcaa aaagaaaaag 20460

aaagatgatg atgatgaact tgacgacgag gtggaactgc tgcacgctac cgcgcccagg 20520

cgacgggtac agtggaaagg tcgacgcgta aaacgtgttt tgcgacccgg caccaccgta 20580

gtctttacgc ccggtgagcg ctccacccgc acctacaagc gcgtgtatga tgaggtgtac 20640

ggcgacgagg acctgcttga gcaggccaac gagcgcctcg gggagtttgc ctacggaaag 20700

cggcataagg acatgctggc gttgccgctg gacgagggca acccaacacc tagcctaaag 20760

cccgtaacac tgcagcaggt gctgcccgcg cttgcaccgt ccgaagaaaa gcgcggccta 20820

aagcgcgagt ctggtgactt ggcacccacc gtgcagctga tggtacccaa gcgccagcga 20880

ctggaagatg tcttggaaaa aatgaccgtg gaacctgggc tggagcccga ggtccgcgtg 20940

cggccaatca agcaggtggc gccgggactg ggcgtgcaga ccgtggacgt tcagataccc 21000

actaccagta gcaccagtat tgccaccgcc acagagggca tggagacaca aacgtccccg 21060

gttgcctcag cggtggcgga tgccgcggtg caggcggtcg ctgcggccgc gtccaagacc 21120

tctacggagg tgcaaacgga cccgtggatg tttcgcgttt cagccccccg gcgcccgcgc 21180

cgttcgagga agtacggcgc cgccagcgcg ctactgcccg aatatgccct acatccttcc 21240

attgcgccta cccccggcta tcgtggctac acctaccgcc ccagaagacg agcaactacc 21300

cgacgccgaa ccaccactgg aacccgccgc cgccgtcgcc gtcgccagcc cgtgctggcc 21360

ccgatttccg tgcgcagggt ggctcgcgaa ggaggcagga ccctggtgct gccaacagcg 21420

cgctaccacc ccagcatcgt ttaaaagccg gtctttgtgg ttcttgcaga tatggccctc 21480

acctgccgcc tccgtttccc ggtgccggga ttccgaggaa gaatgcaccg taggaggggc 21540

atggccggcc acggcctgac gggcggcatg cgtcgtgcgc accaccggcg gcggcgcgcg 21600

tcgcaccgtc gcatgcgcgg cggtatcctg cccctcctta ttccactgat cgccgcggcg 21660

attggcgccg tgcccggaat tgcatccgtg gccttgcagg cgcagagaca ctgattaaaa 21720

acaagttgca tgtggaaaaa tcaaaataaa aagtctggac tctcacgctc gcttggtcct 21780

gtaactattt tgtagaatgg aagacatcaa ctttgcgtct ctggccccgc gacacggctc 21840

gcgcccgttc atgggaaact ggcaagatat cggcaccagc aatatgagcg gtggcgcctt 21900

cagctggggc tcgctgtgga gcggcattaa aaatttcggt tccaccgtta agaactatgg 21960

cagcaaggcc tggaacagca gcacaggcca gatgctgagg gataagttga aagagcaaaa 22020

tttccaacaa aaggtggtag atggcctggc ctctggcatt agcggggtgg tggacctggc 22080

caaccaggca gtgcaaaata agattaacag taagcttgat ccccgccctc ccgtagagga 22140

gcctccaccg gccgtggaga cagtgtctcc agaggggcgt ggcgaaaagc gtccgcgccc 22200

cgacagggaa gaaactctgg tgacgcaaat agacgagcct ccctcgtacg aggaggcact 22260

aaagcaaggc ctgcccacca cccgtcccat cgcgcccatg gctaccggag tgctgggcca 22320

gcacacaccc gtaacgctgg acctgcctcc ccccgccgac acccagcaga aacctgtgct 22380

gccaggcccg accgccgttg ttgtaacccg tcctagccgc gcgtccctgc gccgcgccgc 22440

cagcggtccg cgatcgttgc ggcccgtagc cagtggcaac tggcaaagca cactgaacag 22500

catcgtgggt ctgggggtgc aatccctgaa gcgccgacga tgcttctgat agctaacgtg 22560

tcgtatgtgt gtcatgtatg cgtccatgtc gccgccagag gagctgctga gccgccgcgc 22620

gcccgctttc caagatggct acccccttcga tgatgccgca gtggtcttac atgcacatct 22680

cgggccagga cgcctcggag tacctgagcc ccgggctggt gcagtttgcc cgcgccaccg 22740

agacgtactt cagcctgaat aacaagttta gaaaccccac ggtggcgcct acgcacgacg 22800

tgaccacaga ccggtcccag cgtttgacgc tgcggttcat ccctgtggac cgtgaggata 22860

ctgcgtactc gtacaaggcg cggttcaccc tagctgtggg tgataaccgt gtgctggaca 22920

tggcttccac gtactttgac atccgcggcg tgctggacag gggccctact tttaagccct 22980

actctggcac tgcctacaac gccctggctc ccaagggtgc cccaaatcct tgcgaatggg 23040

atgaagctgc tactgctctt gaaataaacc tagaagaaga ggacgatgac aacgaagacg 23100

aagtagacga gcaagctgag cagcaaaaaa ctcacgtatt tgggcaggcg ccttattctg 23160

gtataaatat tacaaaggag ggtattcaaa taggtgtcga aggtcaaaca cctaaatatg 23220

ccgataaaac atttcaacct gaacctcaaa taggagaatc tcagtggtac gaaacagaaa 23280

ttaatcatgc agctgggaga gtcctaaaaa agactacccc aatgaaacca tgttacggtt 23340

catatgcaaa acccacaaat gaaaatggag ggcaaggcat tcttgtaaag caacaaaatg 23400

gaaagctaga aagtcaagtg gaaatgcaat ttttctcaac tactgaggca gccgcaggca 23460

atggtgataa cttgactcct aaagtggtat tgtacagtga agatgtagat atagaaaccc 23520

cagacactca tatttcttac atgcccacta ttaaggaagg taactcacga gaactaatgg 23580

gccaacaatc tatgcccaac aggcctaatt acattgcttt tagggacaat tttattggtc 23640

taatgtatta caacagcacg ggtaatatgg gtgttctggc gggccaagca tcgcagttga 23700

atgctgttgt agatttgcaa gacagaaaca cagagctttc ataccagctt ttgcttgatt 23760

ccattggtga tagaaccagg tacttttcta tgtggaatca ggctgttgac agctatgatc 23820

cagatgttag aattattgaa aatcatggaa ctgaagatga acttccaaat tactgctttc 23880

cactgggagg tgtgattaat acagagactc ttaccaaggt aaaacctaaa acaggtcagg 23940

aaaatggatg ggaaaaagat gctacagaat tttcagataa aaatgaaata agagttggaa 24000

ataattttgc catggaaatc aatctaaatg ccaacctgtg gagaaatttc ctgtactcca 24060

acatagcgct gtatttgccc gacaagctaa agtacagtcc ttccaacgta aaaatttctg 24120

ataacccaaa cacctacgac tacatgaaca agcgagtggt ggctcccggg ctagtggact 24180

gctacattaa ccttggagca cgctggtccc ttgactatat ggacaacgtc aacccattta 24240

accaccaccg caatgctggc ctgcgctacc gctcaatgtt gctgggcaat ggtcgctatg 24300

tgcccttcca catccaggtg cctcagaagt tctttgccat taaaaacctc cttctcctgc 24360

cgggctcata cacctacgag tggaacttca ggaaggatgt taacatggtt ctgcagagct 24420

ccctaggaaa tgacctaagg gttgacggag ccagcattaa gtttgatagc atttgccttt 24480

acgccacctt cttccccatg gcccacaaca ccgcctccac gcttgaggcc atgcttagaa 24540

acgacaccaa cgaccagtcc tttaacgact atctctccgc cgccaacatg ctctacccta 24600

tacccgccaa cgctaccaac gtgcccatat ccatcccctc ccgcaactgg gcggctttcc 24660

gcggctgggc cttcacgcgc cttaagacta aggaaacccc atcactgggc tcgggctacg 24720

acccttatta cacctactct ggctctatac cctacctaga tggaaccttt tacctcaacc 24780

acacctttaa gaaggtggcc attacctttg actcttctgt cagctggcct ggcaatgacc 24840

gcctgcttac ccccaacgag tttgaaatta agcgctcagt tgacggggag ggttacaacg 24900

ttgcccagtg taacatgacc aaagactggt tcctggtaca aatgctagct aactataaca 24960

ttggctacca gggcttctat atcccagaga gctacaagga ccgcatgtac tccttcttta 25020

gaaacttcca gcccatgagc cgtcaggtgg tggatgatac taaatacaag gactaccaac 25080

aggtgggcat cctacaccaa cacaacaact ctggatttgt tggctacctt gcccccacca 25140

tgcgcgaagg acaggcctac cctgctaact tcccctatcc gcttataggc aagaccgcag 25200

ttgacagcat tacccagaaa aagtttcttt gcgatcgcac cctttggcgc atcccattct 25260

ccagtaactt tatgtccatg ggcgcactca cagacctggg ccaaaacctt ctctacgcca 25320

actccgccca cgcgctagac atgacttttg aggtggatcc catggacgag cccacccttc 25380

tttatgtttt gtttgaagtc tttgacgtgg tccgtgtgca ccagccgcac cgcggcgtca 25440

tcgaaaccgt gtacctgcgc acgcccttct cggccggcaa cgccacaaca taaagaagca 25500

agcaacatca acaacagctg ccgccatggg ctccagtgag caggaactga aagccattgt 25560

caaagatctt ggttgtgggc catatttttt gggcacctat gacaagcgct ttccaggctt 25620

tgtttctcca cacaagctcg cctgcgccat agtcaatacg gccggtcgcg agactggggg 25680

cgtacactgg atggcctttg cctggaaccc gcactcaaaa acatgctacc tctttgagcc 25740

ctttggcttt tctgaccagc gactcaagca ggtttaccag tttgagtacg agtcactcct 25800

gcgccgtagc gccattgctt cttcccccga ccgctgtata acgctggaaa agtccaccca 25860

aagcgtacag gggcccaact cggccgcctg tggactattc tgctgcatgt ttctccacgc 25920

ctttgccaac tggccccaaa ctcccatgga tcacaacccc accatgaacc ttattaccgg 25980

ggtacccaac tccatgctca acagtcccca ggtacagccc accctgcgtc gcaaccagga 26040

acagctctac agcttcctgg agcgccactc gccctacttc cgcagccaca gtgcgcagat 26100

taggagcgcc acttcttttt gtcacttgaa aaacatgtaa aaataatgta ctagagacac 26160

tttcaataaa ggcaaatgct tttatttgta cactctcggg tgattattta cccccaccct 26220

tgccgtctgc gccgtttaaa aatcaaaggg gttctgccgc gcatcgctat gcgccactgg 26280

cagggacacg ttgcgatact ggtgtttagt gctccactta aactcaggca caaccatccg 26340

cggcagctcg gtgaagtttt cactccacag gctgcgcacc atcaccaacg cgtttagcag 26400

gtcgggcgcc gatatcttga agtcgcagtt ggggcctccg ccctgcgcgc gcgagttgcg 26460

atacacaggg ttgcagcact ggaacactat cagcgccggg tggtgcacgc tggccagcac 26520

gctcttgtcg gagatcagat ccgcgtccag gtcctccgcg ttgctcaggg cgaacggagt 26580

caactttggt agctgccttc ccaaaaaggg cgcgtgccca ggctttgagt tgcactcgca 26640

ccgtagtggc atcaaaaggt gaccgtgccc ggtctgggcg ttaggataca gcgcctgcat 26700

aaaagccttg atctgcttaa aagccacctg agcctttgcg ccttcagaga agaacatgcc 26760

gcaagacttg ccggaaaact gattggccgg acaggccgcg tcgtgcacgc agcaccttgc 26820

gtcggtgttg gagatctgca ccacatttcg gccccaccgg ttcttcacga tcttggcctt 26880

gctagactgc tccttcagcg cgcgctgccc gttttcgctc gtcacatcca tttcaatcac 26940

gtgctcctta tttatcataa tgcttccgtg tagacactta agctcgcctt cgatctcagc 27000

gcagcggtgc agccacaacg cgcagcccgt gggctcgtga tgcttgtagg tcacctctgc 27060

aaacgactgc aggtacgcct gcaggaatcg ccccatcatc gtcacaaagg tcttgttgct 27120

ggtgaaggtc agctgcaacc cgcggtgctc ctcgttcagc caggtcttgc atacggccgc 27180

cagagcttcc acttggtcag gcagtagttt gaagttcgcc tttagatcgt tatccacgtg 27240

gtacttgtcc atcagcgcgc gcgcagcctc catgcccttc tcccacgcag acacgatcgg 27300

cacactcagc gggttcatca ccgtaatttc actttccgct tcgctgggct cttcctcttc 27360

ctcttgcgtc cgcataccac gcgccactgg gtcgtcttca ttcagccgcc gcactgtgcg 27420

cttacctcct ttgccatgct tgattagcac cggtgggttg ctgaaaccca ccatttgtag 27480

cgccacatct tctctttctt cctcgctgtc cacgattacc tctggtgatg gcgggcgctc 27540

gggcttggga gaagggcgct tctttttctt cttgggcgca atggccaaat ccgccgccga 27600

ggtcgatggc cgcgggctgg gtgtgcgcgg caccagcgcg tcttgtgatg agtcttcctc 27660

gtcctcggac tcgatacgcc gcctcatccg ctttttgggg ggcgcccggg gaggcggcgg 27720

cgacggggac ggggacgaca cgtcctccat ggttgggggа cgtcgcgccg caccgcgtcc 27780

gcgctcgggg gtggtttcgc gctgctcctc ttcccgactg gccatttcct tctcctatag 27840

gcagaaaaag atcatggagt cagtcgagaa gaaggacagc ctaaccgccc cctctgagtt 27900

cgccaccacc gcctccaccg atgccgccaa cgcgcctacc accttccccg tcgaggcacc 27960

cccgcttgag gaggaggaag tgattatcga gcaggaccca ggttttgtaa gcgaagacga 28020

cgaggaccgc tcagtaccaa cagaggataa aaagcaagac caggacaacg cagaggcaaa 28080

cgaggaacaa gtcgggcggg gggacgaaag gcatggcgac tacctagatg tgggagacga 28140

cgtgctgttg aagcatctgc agcgccagtg cgccattatc tgcgacgcgt tgcaagagcg 28200

cagcgatgtg cccctcgcca tagcggatgt cagccttgcc tacgaacgcc acctattctc 28260

accgcgcgta ccccccaaac gccaagaaaa cggcacatgc gagcccaacc cgcgcctcaa 28320

cttctacccc gtatttgccg tgccagaggt gcttgccacc tatcacatct ttttccaaaa 28380

ctgcaagata cccctatcct gccgtgccaa ccgcagccga gcggacaagc agctggcctt 28440

gcggcagggc gctgtcatac ctgatatcgc ctcgctcaac gaagtgccaa aaatctttga 28500

gggtcttgga cgcgacgaga agcgcgcggc aaacgctctg caacaggaaa acagcgaaaa 28560

tgaaagtcac tctggagtgt tggtggaact cgagggtgac aacgcgcgcc tagccgtact 28620

aaaacgcagc atcgaggtca cccactttgc ctacccggca cttaacctac cccccaaggt 28680

catgagcaca gtcatgagtg agctgatcgt gcgccgtgcg cagcccctgg agagggatgc 28740

aaatttgcaa gaacaaacag aggagggcct acccgcagtt ggcgacgagc agctagcgcg 28800

ctggcttcaa acgcgcgagc ctgccgactt ggaggagcga cgcaaactaa tgatggccgc 28860

agtgctcgtt accgtggagc ttgagtgcat gcagcggttc tttgctgacc cggagatgca 28920

gcgcaagcta gaggaaacat tgcactacac ctttcgacag ggctacgtac gccaggcctg 28980

caagatctcc aacgtggagc tctgcaacct ggtctcctac cttggaattt tgcacgaaaa 29040

ccgccttggg caaaacgtgc ttcattccac gctcaagggc gaggcgcgcc gcgactacgt 29100

ccgcgactgc gtttacttat ttctatgcta cacctggcag acggccatgg gcgtttggca 29160

gcagtgcttg gaggagtgca acctcaagga gctgcagaaa ctgctaaagc aaaacttgaa 29220

ggacctatgg acggccttca acgagcgctc cgtggccgcg cacctggcgg acatcatttt 29280

ccccgaacgc ctgcttaaaa ccctgcaaca gggtctgcca gacttcacca gtcaaagcat 29340

gttgcagaac tttaggaact ttatcctaga gcgctcagga atcttgcccg ccacctgctg 29400

tgcacttcct agcgactttg tgcccattaa gtaccgcgaa tgccctccgc cgctttgggg 29460

ccactgctac cttctgcagc tagccaacta ccttgcctac cactctgaca taatggaaga 29520

cgtgagcggt gacggtctac tggagtgtca ctgtcgctgc aacctatgca ccccgcaccg 29580

ctccctggtt tgcaattcgc agctgcttaa cgaaagtcaa attatcggta cctttgagct 29640

gcagggtccc tcgcctgacg aaaagtccgc ggctccgggg ttgaaactca ctccggggct 29700

gtggacgtcg gcttaccttc gcaaatttgt acctgaggac taccacgccc acgagattag 29760

gttctacgaa gaccaatccc gcccgcctaa tgcggagctt accgcctgcg tcattaccca 29820

gggccacatt cttggccaat tgcaagccat caacaaagcc cgccaagagt ttctgctacg 29880

aaagggacgg ggggtttact tggaccccca gtccggcgag gagctcaacc caatcccccc 29940

gccgccgcag ccctatcagc agcagccgcg ggcccttgct tcccaggatg gcacccaaaa 30000

agaagctgca gctgccgccg ccacccacgg acgaggagga atactgggac agtcaggcag 30060

aggaggtttt ggacgaggag gaggaggaca tgatggaaga ctgggagagc ctagacgagg 30120

aagcttccga ggtcgaagag gtgtcagacg aaacaccgtc accctcggtc gcattcccct 30180

cgccggcgcc ccagaaatcg gcaaccggtt ccagcatggc tacaacctcc gctcctcagg 30240

cgccgccggc actgcccgtt cgccgaccca accgtagatg ggacaccact ggaaccaggg 30300

ccggtaagtc caagcagccg ccgccgttag cccaagagca acaacagcgc caaggctacc 30360

gctcatggcg cgggcacaag aacgccatag ttgcttgctt gcaagactgt gggggcaaca 30420

tctccttcgc ccgccgcttt cttctctacc atcacggcgt ggccttcccc cgtaacatcc 30480

tgcattacta ccgtcatctc tacagcccat actgcaccgg cggcagcggc agcaacagca 30540

gcggccacac agaagcaaag gcgaccggat agcaagactc tgacaaagcc caagaaatcc 30600

acagcggcgg cagcagcagg aggaggagcg ctgcgtctgg cgcccaacga acccgtatcg 30660

acccgcgagc ttagaaacag gatttttccc actctgtatg ctatatttca acagagcagg 30720

ggccaagaac aagagctgaa aataaaaaac aggtctctgc gatccctcac ccgcagctgc 30780

ctgtatcaca aaagcgaaga tcagcttcgg cgcacgctgg aagacgcgga ggctctcttc 30840

agtaaatact gcgcgctgac tcttaaggac tagtttcgcg ccctttctca aatttaagcg 30900

cgaaaactac gtcatctcca gcggccacac ccggcgccag cacctgttgt cagcgccatt 30960

atgagcaagg aaattcccac gccctacatg tggagttacc agccacaaat gggacttgcg 31020

gctggagctg cccaagacta ctcaacccga ataaactaca tgagcgcggg accccacatg 31080

atatcccggg tcaacggaat acgcgcccac cgaaaccgaa ttctcctgga acaggcggct 31140

attaccacca cacctcgtaa taaccttaat ccccgtagtt ggcccgctgc cctggtgtac 31200

caggaaagtc ccgctcccac cactgtggta cttcccagag acgcccaggc cgaagttcag 31260

atgactaact caggggcgca gcttgcgggc ggctttcgtc acagggtgcg gtcgcccggg 31320

cagggtataa ctcacctgac aatcagaggg cgaggtattc agctcaacga cgagtcggtg 31380

agctcctcgc ttggtctccg tccggacggg acatttcaga tcggcggcgc cggccgctct 31440

tcattcacgc ctcgtcaggc aatcctaact ctgcagacct cgtcctctga gccgcgctct 31500

ggaggcattg gaactctgca atttattgag gagtttgtgc catcggtcta ctttaacccc 31560

ttctcgggac ctcccggcca ctatccggat caatttattc ctaactttga cgcggtaaag 31620

gactcggcgg acggctacga ctgaatgtta agtggagagg cagagcaact gcgcctgaaa 31680

cacctggtcc actgtcgccg ccacaagtgc tttgcccgcg actccggtga gttttgctac 31740

tttgaattgc ccgaggatca tatcgagggc ccggcgcacg gcgtccggct taccgcccag 31800

ggagagcttg cccgtagcct gattcgggag tttacccagc gccccctgct agttgagcgg 31860

gacaggggac cctgtgttct cactgtgatt tgcaactgtc ctaaccctgg attacatcaa 31920

gatcctctag ttaatgtcag gtcgcctaag tcgattaact agagtacccg gggatcttat 31980

tccctttaac taataaaaaa aaataataaa gcatcactta cttaaaatca gttagcaaat 32040

ttctgtccag tttattcagc agcacctcct tgccctcctc ccagctctgg tattgcagct 32100

tcctcctggc tgcaaacttt ctccacaatc taaatggaat gtcagtttcc tcctgttcct 32160

gtccatccgc acccactatc ttcatgttgt tgcagatgaa gcgcgcaaga ccgtctgaag 32220

ataccttcaa ccccgtgtat ccatatgaca cggaaaccgg tcctccaact gtgccttttc 32280

ttactcctcc ctttgtatcc cccaatgggt ttcaagagag tccccctggg gtactctctt 32340

tgcgcctatc cgaacctcta gttacctcca atggcatgct tgcgctcaaa atgggcaacg 32400

gcctctctct ggacgaggcc ggcaacctta cctcccaaaa tgtaaccact gtgagcccac 32460

ctctcaaaaa aaccaagtca aacataaacc tggaaatatc tgcacccctc acagttacct 32520

cagaagccct aactgtggct gccgccgcac ctctaatggt cgcgggcaac acactcacca 32580

tgcaatcaca ggccccgcta accgtgcacg actccaaact tagcattgcc acccaaggac 32640

ccctcacagt gtcagaagga aagctagccc tgcaaacatc aggccccctc accaccaccg 32700

atagcagtac ccttactatc actgcctcac cccctctaac tactgccact ggtagcttgg 32760

gcattgactt gaaagagccc atttatacac aaaatggaaa actaggacta aagtacgggg 32820

ctcctttgca tgtaacagac gacctaaaca ctttgaccgt agcaactggt ccaggtgtga 32880

ctattaataa tacttccttg caaactaaag ttactggagc cttgggtttt gattcacaag 32940

gcaatatgca acttaatgta gcaggaggac taaggattga ttctcaaaac agacgcctta 33000

tacttgatgt tagttatccg tttgatgctc aaaaccaact aaatctaaga ctaggacagg 33060

gccctctttt tataaactca gcccacaact tggatattaa ctacaacaaa ggcctttact 33120

tgtttacagc ttcaaacaat tccaaaaagc ttgaggttaa cctaagcact gccaaggggt 33180

tgatgtttga cgctacagcc atagccatta atgcaggaga tgggcttgaa tttggttcac 33240

ctaatgcacc aaacacaaat cccctcaaaa caaaaattgg ccatggccta gaatttgatt 33300

caaacaaggc tatggttcct aaactaggaa ctggccttag ttttgacagc acaggtgcca 33360

ttacagtagg aaacaaaaat aatgataagc taactttgtg gaccggaata aaccctccac 33420

ctaactgtca aattgtggaa aacactaata caaatgatgg caaacttact ttagtattag 33480

taaaaaatgg agggcttgtt aatggctacg tgtctctagt tggtgtatca gacactgtga 33540

accaaatgtt cacacaaaag acagcaaaca tccaattaag attatatttt gactcttctg 33600

gaaatctatt aactgaggaa tcagacttaa aaattccact taaaaataaa tcttctacag 33660

cgaccagtga aactgtagcc agcagcaaag cctttatgcc aagtactaca gcttatccct 33720

tcaacaccac tactagggat agtgaaaact acattcatgg aatatgttac tacatgacta 33780

gttatgatag aagtctattt cccttgaaca tttctataat gctaaacagc cgtatgattt 33840

cttccaatgt tgcctatgcc atacaatttg aatggaatct aaatgcaagt gaatctccag 33900

aaagcaacat agctacgctg accacatccc ccttttttctt ttcttacatt acagaagacg 33960

acaactaaag aatcgtttgt gttatgtttc aacgtgttta tttttcaatt gcagaaaatt 34020

tcaagtcatt tttcattcag tagtatagcc ccaccaccac atagcttata cagatcaccg 34080

taccttaatc aaacgttttt ttttttattc caaaagatta tccaaaacct caaaatgaag 34140

atctattaag tgaacgcgct cccctccggt ggcgtggtca aactctacag ccaaagaaca 34200

gataatggca tttgtaagat gttgcacaat ggcttccaaa aggcaaacgg ccctcacgtc 34260

caagtggacg taaaggctaa acccttcagg gtgaatctcc tctataaaca ttccagcacc 34320

ttcaaccatg cccaaataat tctcatctcg ccaccttctc aatatatctc taagcaaatc 34380

ccgaatatta agtccggcca ttgtaaaaat ctgctccaga gcgccctcca ccttcagcct 34440

caagcagcga atcatgattg caaaaattca ggttcctcac agacctgtat aagattcaaa 34500

agcggaacat taacaaaaat accgcgatcc cgtaggtccc ttcgcagggc cagctgaaca 34560

taatcgtgca ggtctgcacg gaccagcgcg gccacttccc cgccaggaac catgacaaaa 34620

gaacccacac tgattatgac acgcatactc ggagctatgc taaccagcgt agccccgatg 34680

taagcttgtt gcatgggcgg cgatataaaa tgcaaggtgc tgctcaaaaa atcaggcaaa 34740

gcctcgcgca aaaaagaaag cacatcgtag tcatgctcat gcagataaag gcaggtaagc 34800

tccggaacca ccacagaaaa agacaccatt tttctctcaa acatgtctgc gggtttctgc 34860

ataaacacaa aataaaataa caaaaaaaca tttaaacatt agaagcctgt cttacaacag 34920

gaaaaacaac ccttataagc ataagacgga ctacggccat gccggcgtga ccgtaaaaaa 34980

actggtcacc gtgattaaaa agcaccaccg acagctcctc ggtcatgtcc ggagtcataa 35040

tgtaagactc ggtaaacaca tcaggttgat tcacatcggt cagtgctaaa aagcgaccga 35100

aatagcccgg gggaatacat acccgcaggc gtagagacaa cattacagcc cccataggag 35160

gtataacaaa attaatagga gagaaaaaca cataaacacc tgaaaaaccc tcctgcctag 35220

gcaaaatagc accctcccgc tccagaacaa catacagcgc ttccacagcg gcagccataa 35280

cagtcagcct taccagtaaa aaagaaaacc tattaaaaaa acaccactcg acacggcacc 35340

agctcaatca gtcacagtgt aaaaaagggc caagtgcaga gcgagtatat ataggactaa 35400

aaaatgacgt aacggttaaa gtccacaaaa aacacccaga aaaccgcacg cgaacctacg 35460

cccagaaacg aaagccaaaa aacccacaac ttcctcaaat cgtcacttcc gttttcccac 35520

gttacgtcac ttcccatttt aagaaaacta caattcccaa cacatacaag ttactccgcc 35580

ctaaaaccta cgtcacccgc cccgttccca cgccccgcgc cacgtcacaa actccacccc 35640

ctcattatca tattggcttc aatccaaaat aaggtatatt attgatgatg 35690

<210> 14
<211> 37105
<212> DNA
<213> Artificial Sequence

<220>
<223> Adk35FR-Spike/E4orf6-E4dl355(E4re#9)

<400> 14
ttaattaaca tcatcaataa tataccttat tttggattga agccaatatg ataatgaggg 60

ggtggagttt gtgacgtggc gcggggcgtg ggaacggggc gggtgacgta gtagtgtggc 120

ggaagtgtga tgttgcaagt gtggcggaac acatgtaagc gacggatgtg gcaaaagtga 180

cgtttttggt gtgcgccggt gtacacagga agtgacaatt ttcgcgcggt tttaggcgga 240

tgttgtagta aatttgggcg taaccgagta agatttggcc attttcgcgg gaaaactgaa 300

taagaggaag tgaaatctga ataattttgt gttactcata gcgcgtaata atttctgtaa 360

tagtaatcaa ttacggggtc attagttcat agcccatata tggagttccg cgttacataa 420

cttacggtaa atggcccgcc tggctgaccg cccaacgacc cccgcccatt gacgtcaata 480

atgacgtatg ttcccatagt aacgccaata gggactttcc attgacgtca atgggtggag 540

tatttacggt aaactgccca cttggcagta catcaagtgt atcatatgcc aagtacgccc 600

cctattgacg tcaatgacgg taaatggccc gcctggcatt atgcccagta catgacctta 660

tgggactttc ctacttggca gtacatctac gtattagtca tcgctattac catggtgatg 720

cggttttggc agtacatcaa tgggcgtgga tagcggtttg actcacgggg atttccaagt 780

ctccacccca ttgacgtcaa tgggagtttg ttttggcacc aaaatcaacg ggactttcca 840

aaatgtcgta acaactccgc cccattgacg caaatgggcg gtaggcgtgt acggtgggag 900

gtctatataa gcagagctct ccctatcagt gatagagatc tccctatcag tgatagagat 960

cgtcgacgag ctcgtttagt gaaccgtcag atcgcctgga gacgccatcc acgctgtttt 1020

gacctccata gaagacaccg ggaccgatcc agcctccgat ttgccaccat gtttgtgttc 1080

ctggtgctgc tgccactggt gtccagccag tgtgtgaacc tgaccaccag gacccaactt 1140

cctcctgcct acaccaactc cttcaccagg ggagtctact accctgacaa ggtgttcagg 1200

tcctctgtgc tgcacagcac ccaggacctg ttcctgccat tcttcagcaa tgtgacctgg 1260

ttccatgcca tccatgtgtc tggcaccaat ggcaccaaga ggtttgacaa ccctgtgctg 1320

ccattcaatg atggagtcta ctttgccagc acagagaaga gcaacatcat caggggctgg 1380

atttttggca ccaccctgga cagcaagacc cagtccctgc tgattgtgaa caatgccacc 1440

aatgtggtga ttaaggtgtg tgagttccag ttctgtaatg acccattcct gggagtctac 1500

taccacaaga acaacaagtc ctggatggag tctgagttca gggtctactc ctctgccaac 1560

aactgtacct ttgaatatgt gagccaacca ttcctgatgg acttggaggg caagcagggc 1620

aacttcaaga acctgaggga gtttgtgttc aagaacattg atggctactt caagatttac 1680

agcaaacaca caccaatcaa cctggtgagg gacctgccac agggcttctc tgccttggaa 1740

ccactggtgg acctgccaat tggcatcaac atcaccaggt tccagaccct gctggctctg 1800

cacaggtcct acctgacacc tggagactcc tcctctggct ggacagcagg agcagcagcc 1860

tactatgtgg gctacctcca accaaggacc ttcctgctga aatacaatga gaatggcacc 1920

atcacagatg ctgtggactg tgccctggac ccactgtctg agaccaagtg taccctgaaa 1980

tccttcacag tggagaaggg catctaccag accagcaact tcagggtcca accaacagag 2040

agcattgtga ggtttccaaa catcaccaac ctgtgtccat ttggagaggt gttcaatgcc 2100

accaggtttg cctctgtcta tgcctggaac aggaagagga ttagcaactg tgtggctgac 2160

tactctgtgc tctacaactc tgcctccttc agcaccttca agtgttatgg agtgagccca 2220

accaaactga atgacctgtg tttcaccaat gtctatgctg actcctttgt gattagggga 2280

gatgaggtga gacagattgc ccctggacaa acaggcaaga ttgctgacta caactacaaa 2340

ctgcctgatg acttcacagg ctgtgtgatt gcctggaaca gcaacaacct ggacagcaag 2400

gtgggaggca actacaacta cctctacaga ctgttcagga agagcaacct gaaaccattt 2460

gagagggaca tcagcacaga gatttaccag gctggcagca caccatgtaa tggagtggag 2520

ggcttcaact gttactttcc actccaatcc tatggcttcc aaccaaccaa tggagtgggc 2580

taccaaccat acagggtggt ggtgctgtcc tttgaactgc tccatgcccc tgccacagtg 2640

tgtggaccaa agaagagcac caacctggtg aagaacaagt gtgtgaactt caacttcaat 2700

ggactgacag gcacaggagt gctgacagag agcaacaaga agttcctgcc attccaacag 2760

tttggcaggg acattgctga caccacagat gctgtgaggg acccacagac cttggagatt 2820

ctggacatca caccatgttc ctttggagga gtgtctgtga ttacacctgg caccaacacc 2880

agcaaccagg tggctgtgct ctaccaggat gtgaactgta ctgaggtgcc tgtggctatc 2940

catgctgacc aacttacacc aacctggagg gtctacagca caggcagcaa tgtgttccag 3000

accagggctg gctgtctgat tggagcagag catgtgaaca actcctatga gtgtgacatc 3060

ccaattggag caggcatctg tgcctcctac cagacccaga ccggtggcgg tgggtcgagg 3120

tctgtggcaa gccagagcat cattgcctac acaatgagtc tgggagcaga gaactctgtg 3180

gcttacagca acaacagcat tgccatccca accaacttca ccatctctgt gaccacagag 3240

attctgcctg tgagtatgac caagacctct gtggactgta caatgtatat ctgtggagac 3300

agcacagagt gtagcaacct gctgctccaa tatggctcct tctgtaccca acttaacagg 3360

gctctgacag gcattgctgt ggaacaggac aagaacaccc aggaggtgtt tgcccaggtg 3420

aagcagattt acaagacacc tccaatcaag gactttggag gcttcaactt cagccagatt 3480

ctgcctgacc caagcaagcc aagcaagagg tccttcattg aggacctgct gttcaacaag 3540

gtgaccctgg ctgatgctgg cttcatcaag caatatggag actgtctggg agacattgct 3600

gccagggacc tgatttgtgc ccagaagttc aatggactga cagtgctgcc tccactgctg 3660

acagatgaga tgattgccca atacacctct gccctgctgg ctggcaccat cacctctggc 3720

tggacctttg gagcaggagc agccctccaa atcccatttg ctatgcagat ggcttacagg 3780

ttcaatggca ttggagtgac ccagaatgtg ctctatgaga accagaaact gattgccaac 3840

cagttcaact ctgccattgg caagattcag gactccctgt ccagcacagc ctctgccctg 3900

ggcaaactcc aagatgtggt gaaccagaat gcccaggctc tgaacaccct ggtgaagcaa 3960

ctttccagca actttggagc catctcctct gtgctgaatg acatcctgag cagactggac 4020

aaggtggagg ctgaggtcca gattgacaga ctgattacag gcagactcca atccctccaa 4080

acctatgtga cccaacaact tatcagggct gctgagatta gggcatctgc caacctggct 4140

gccaccaaga tgagtgagtg tgtgctggga caaagcaaga gggtggactt ctgtggcaag 4200

ggctaccacc tgatgagttt tccacagtct gcccctcatg gagtggtgtt cctgcatgtg 4260

acctatgtgc ctgcccagga gaagaacttc accacagccc ctgccatctg ccatgatggc 4320

aaggctcact ttccaaggga gggagtgttt gtgagcaatg gcacccactg gtttgtgacc 4380

cagaggaact tctatgaacc acagattatc accacagaca acacctttgt gtctggcaac 4440

tgtgatgtgg tgattggcat tgtgaacaac acagtctatg acccactcca acctgaactg 4500

gactccttca aggaggaact ggacaaatac ttcaagaacc acaccagccc tgatgtggac 4560

ctgggagaca tctctggcat caatgcctct gtggtgaaca tccagaagga gattgacaga 4620

ctgaatgagg tggctaagaa cctgaatgag tccctgattg acctccaaga actgggcaaa 4680

tatgaacaat acatcaagtg gccatgaaaa ttgatcataa tcagccatac cacatttgta 4740

gaggttttac ttgctttaaa aaacctccca cacctccccc tgaacctgaa acataaaatg 4800

aatgcaattg ttgttgttaa cttgtttatt gcagcttata atggttacaa ataaagcaat 4860

agcatcacaa atttcacaaa taaagcattt ttttcactgc attctagttg tggtttgtcc 4920

aaactcatca atgtatctta acgcggatcc ctcagaagcc atagagccca ccgcatcccc 4980

agcatgcctg ctattgtctt cccaatcctc ccccttgctg tcctgcccca ccccaccccc 5040

cagaatagaa tgacacctac tcagacaatg cgatgcaatt tcctcatttt attaggaaag 5100

gacagtggga gtggcacctt ccagggtcaa ggaaggcacg ggggaggggc aaacaacaga 5160

tggctggcaa ctagaaggca cagtcgaggc tgatcagcga gctctagaga attgatcccc 5220

aagcttctac atgggggtag agtcataatc gtgcatcagg atagggcggt ggtgctgcag 5280

cagcgcgcga ataaactgct gccgccgccg ctccgtcctg caggaataca acatggcagt 5340

ggtctcctca gcgatgattc gcaccgcccg cagcataagg cgccttgtcc tccgggcaca 5400

gcagcgcacc ctgatctcac ttaaatcagc acagtaactg cagcacagca ccacaatatt 5460

gttcaaaatc ccacagtgca aggcgctgta tccaaagctc atggcgggga ccacagaacc 5520

cacgtggcca tcataccaca agcgcaggta gattaagtgg cgacccctca taaacacgct 5580

ggacataaac attacctctt ttggcatgtt gtaattcacc acctcccggt accatataaa 5640

cctctgatta aacatggcgc catccaccac catcctaaac cagctggcca aaacctgccc 5700

gccggctata cactgcaggg aaccgggact ggaacaatga cagtggagag cccaggactc 5760

gtaaccatgg atcatcatgc tcgtcatgat atcaatgttg gcacaacaca ggcacacgtg 5820

catacacttc ctcaggatta caagctcctc ccgcgttaga accatatccc agggaacaac 5880

ccattcctga atcagcgtaa atcccacact gcagggaaga cctcgcacgt aactcacgtt 5940

gtgcattgtc aaagtgttac attcgggcag cagcggatga tcctccagta tggtagcgcg 6000

ggtttctgtc tcaaaaggag gtagacgatc cctactgtac ggagtgcgcc gagacaaccg 6060

agatcgtgtt ggtcgtagtg tcatgccaaa tggaacgccg gacgtagtca tggtggccag 6120

cttggggtag ttttcacgac accttaaatg gaagaaaaaa actttgaacc actgtctgag 6180

gcttgagaat gaaccaagat ccaaactcaa aaagggcaaa ttccaaggag aattacatca 6240

agtgccaagc tggcctaact tcagtctcca cccactcagt atggggaaac tccatcgcat 6300

aaaacccctc cccccaacct aaagacgacg tactccaaaa gctcgagaac taatcgaggt 6360

gcctggacgg cgcccggtac tccgtggagt cacatgaagc gacggctgag gacggaaagg 6420

ccctttttcct ttgtgtgggt gactcacccg cccgctctcc cgagcgccgc gtcctccatt 6480

ttgagctccc tgcagcaggg ccgggaagcg gccatctttc cgctcacgca actggtgccg 6540

accgggccag ccttgccgcc cagggcgggg cgatacacgg cggcgcgagg ccaggcacca 6600

gagcaggccg gccagcttga gactaccccc gtccgattct cggtggccgc gctcgcaggc 6660

cccgcctcgc cgaacatgtg cgctgggacg cacgggcccc gtcgccgccc gcggccccaa 6720

aaaccgaaat accagtgtgc agatcttggc ccgcatttac aagactatct tgccagaaaa 6780

aaagcgtcgc agcaggtcat caaaaatttt aaatggctag agacttatcg aaagcagcga 6840

gacaggcgcg aaggtgccac cagattcgca cgcggcggcc ccagcgccca ggccaagcct 6900

caactcaagc acgaggcgaa ggggctcctt aagcgcaagg cctcgaactc tcccacccac 6960

ttccaacccg aagctcggga tcaagaatca cgtactgcag ccaggggcgt ggaagtaatt 7020

caaggcacgc aagggccata acccgtaaag aggccaggcc cgcgggaacc acacacggca 7080

cttacctgtg ttctggcggc aaacccgttg cgaaaaagaa cgttcacggc gactactgca 7140

cttatatacg gttctccccc accctcggga aaaaggcgga gccagtacac gacatcactt 7200

tcccagttta ccccgcgcca ccttctctag gcaccggttc aattgccgac ccctcccccc 7260

aacttctcgg ggactgtggg cgatgtgcgc tctgcccact gacgggcacc ggagcaaatt 7320

gggcgtggct taagggtggg aaagaatata taaggtgggg gtcttatgta gttttgtatc 7380

tgttttgcag cagccgccgc cgccatgagc accaactcgt ttgatggaag cattgtgagc 7440

tcatatttga caacgcgcat gcccccatgg gccggggtgc gtcagaatgt gatgggctcc 7500

agcattgatg gtcgccccgt cctgcccgca aactctacta ccttgaccta cgagaccgtg 7560

tctggaacgc cgttggagac tgcagcctcc gccgccgctt cagccgctgc agccaccgcc 7620

cgcgggattg tgactgactt tgctttcctg agcccgcttg caagcagtgc agcttcccgt 7680

tcatccgccc gcgatgacaa gttgacggct cttttggcac aattggattc tttgacccgg 7740

gaacttaatg tcgtttctca gcagctgttg gatctgcgcc agcaggtttc tgccctgaag 7800

gcttcctccc ctcccaatgc ggtttaaaac ataaataaaa aaccagactc tgtttggatt 7860

tggatcaagc aagtgtcttg ctgtctttat ttaggggttt tgcgcgcgcg gtaggcccgg 7920

gaccagcggt ctcggtcgtt gagggtcctg tgtatttttt ccaggacgtg gtaaaggtga 7980

ctctggatgt tcagatacat gggcataagc ccgtctctgg ggtggaggta gcaccactgc 8040

agagcttcat gctgcggggt ggtgttgtag atgatccagt cgtagcagga gcgctgggcg 8100

tggtgcctaa aaatgtcttt cagtagcaag ctgattgcca ggggcaggcc cttggtgtaa 8160

gtgtttacaa agcggttaag ctgggatggg tgcatacgtg gggatatgag atgcatcttg 8220

gactgtattt ttaggttggc tatgttccca gccatatccc tccggggatt catgttgtgc 8280

agaaccacca gcacagtgta tccggtgcac ttgggaaatt tgtcatgtag cttagaagga 8340

aatgcgtgga agaacttgga gacgcccttg tgacctccaa gattttccat gcattcgtcc 8400

ataatgatgg caatgggccc acgggcggcg gcctgggcga agatatttct gggatcacta 8460

acgtcatagt tgtgttccag gatgagatcg tcataggcca tttttacaaa gcgcgggcgg 8520

agggtgccag actgcggtat aatggttcca tccggcccag gggcgtagtt accctcacag 8580

atttgcattt cccacgcttt gagttcagat ggggggatca tgtctacctg cggggcgatg 8640

aagaaaacgg tttccggggt aggggagatc agctgggaag aaagcaggtt cctgagcagc 8700

tgcgacttac cgcagccggt gggcccgtaa atcacaccta ttaccgggtg caactggtag 8760

ttaagagagc tgcagctgcc gtcatccctg agcaggggggg ccacttcgtt aagcatgtcc 8820

ctgactcgca tgttttccct gaccaaatcc gccagaaggc gctcgccgcc cagcgatagc 8880

agttcttgca aggaagcaaa gtttttcaac ggtttgagac cgtccgccgt aggcatgctt 8940

ttgagcgttt gaccaagcag ttccaggcgg tcccacagct cggtcacctg ctctacggca 9000

tctcgatcca gcatatctcc tcgtttcgcg ggttggggcg gctttcgctg tacggcagta 9060

gtcggtgctc gtccagacgg gccagggtca tgtctttcca cgggcgcagg gtcctcgtca 9120

gcgtagtctg ggtcacggtg aaggggtgcg ctccgggctg cgcgctggcc agggtgcgct 9180

tgaggctggt cctgctggtg ctgaagcgct gccggtcttc gccctgcgcg tcggccaggt 9240

agcatttgac catggtgtca tagtccagcc cctccgcggc gtggcccttg gcgcgcagct 9300

tgcccttgga ggaggcgccg cacgaggggc agtgcagact tttgagggcg tagagcttgg 9360

gcgcgagaaa taccgattcc ggggagtagg catccgcgcc gcaggccccg cagacggtct 9420

cgcattccac gagccaggtg agctctggcc gttcggggtc aaaaaccagg tttcccccat 9480

gctttttgat gcgtttctta cctctggttt ccatgagccg gtgtccacgc tcggtgacga 9540

aaaggctgtc cgtgtccccg tatacagact tgagaggcct gtcctcgagc ggtgttccgc 9600

ggtcctcctc gtatagaaac tcggaccact ctgagacaaa ggctcgcgtc caggccagca 9660

cgaaggaggc taagtgggag gggtagcggt cgttgtccac tagggggtcc actcgctcca 9720

gggtgtgaag acacatgtcg ccctcttcgg catcaaggaa ggtgattggt ttgtaggtgt 9780

aggccacgtg accgggtgtt cctgaagggg ggctataaaa gggggtgggg gcgcgttcgt 9840

cctcactctc ttccgcatcg ctgtctgcga gggccagctg ttggggtgag tactccctct 9900

gaaaagcggg catgacttct gcgctaagat tgtcagtttc caaaaacgag gaggatttga 9960

tattcacctg gcccgcggtg atgcctttga gggtggccgc atccatctgg tcagaaaaga 10020

caatcttttt gttgtcaagc ttggtggcaa acgacccgta gagggcgttg gacagcaact 10080

tggcgatgga gcgcagggtt tggtttttgt cgcgatcggc gcgctccttg gccgcgatgt 10140

ttagctgcac gtattcgcgc gcaacgcacc gccattcggg aaagacggtg gtgcgctcgt 10200

cgggcaccag gtgcacgcgc caaccgcggt tgtgcagggt gacaaggtca acgctggtgg 10260

ctacctctcc gcgtaggcgc tcgttggtcc agcagaggcg gccgcccttg cgcgagcaga 10320

atggcggtag ggggtctagc tgcgtctcgt ccgggggggtc tgcgtccacg gtaaagaccc 10380

cgggcagcag gcgcgcgtcg aagtagtcta tcttgcatcc ttgcaagtct agcgcctgct 10440

gccatgcgcg ggcggcaagc gcgcgctcgt atgggttgag tgggggaccc catggcatgg 10500

ggtgggtgag cgcggaggcg tacatgccgc aaatgtcgta aacgtagagg ggctctctga 10560

gtattccaag atatgtaggg tagcatcttc caccgcggat gctggcgcgc acgtaatcgt 10620

atagttcgtg cgagggagcg aggaggtcgg gaccgaggtt gctacgggcg ggctgctctg 10680

ctcggaagac tatctgcctg aagatggcat gtgagttgga tgatatggtt ggacgctgga 10740

agacgttgaa gctggcgtct gtgagaccta ccgcgtcacg cacgaaggag gcgtaggagt 10800

cgcgcagctt gttgaccagc tcggcggtga cctgcacgtc tagggcgcag tagtccaggg 10860

tttccttgat gatgtcatac ttatcctgtc ccttttttt ccacagctcg cggttgagga 10920

caaactcttc gcggtctttc cagtactctt ggatcggaaa cccgtcggcc tccgaacggt 10980

aagagcctag catgtagaac tggttgacgg cctggtaggc gcagcatccc ttttctacgg 11040

gtagcgcgta tgcctgcgcg gccttccgga gcgaggtgtg ggtgagcgca aaggtgtccc 11100

tgaccatgac tttgaggtac tggtatttga agtcagtgtc gtcgcatccg ccctgctccc 11160

agagcaaaaa gtccgtgcgc tttttggaac gcggatttgg cagggcgaag gtgacatcgt 11220

tgaagagtat ctttcccgcg cgaggcataa agttgcgtgt gatgcggaag ggtcccggca 11280

cctcggaacg gttgttaatt acctgggcgg cgagcacgat ctcgtcaaag ccgttgatgt 11340

tgtggcccac aatgtaaagt tccaagaagc gcgggatgcc cttgatggaa ggcaattttt 11400

taagttcctc gtaggtgagc tcttcagggg agctgagccc gtgctctgaa agggcccagt 11460

ctgcaagatg agggttggaa gcgacgaatg agctccacag gtcacgggcc attagcattt 11520

gcaggtggtc gcgaaaggtc ctaaactggc gacctatggc catttttct ggggtgatgc 11580

agtagaaggt aagcgggtct tgttcccagc ggtcccatcc aaggttcgcg gctaggtctc 11640

gcgcggcagt cactagaggc tcatctccgc cgaacttcat gaccagcatg aagggcacga 11700

gctgcttccc aaaggccccc atccaagtat aggtctctac atcgtaggtg acaaagagac 11760

gctcggtgcg aggatgcgag ccgatcggga agaactggat ctcccgccac caattggagg 11820

agtggctatt gatgtggtga aagtagaagt ccctgcgacg ggccgaacac tcgtgctggc 11880

ttttgtaaaa acgtgcgcag tactggcagc ggtgcacggg ctgtacatcc tgcacgaggt 11940

tgacctgacg accgcgcaca aggaagcaga gtgggaattt gagcccctcg cctggcgggt 12000

ttggctggtg gtcttctact tcggctgctt gtccttgacc gtctggctgc tcgaggggag 12060

ttacggtgga tcggaccacc acgccgcgcg agcccaaagt ccagatgtcc gcgcgcggcg 12120

gtcggagctt gatgacaaca tcgcgcagat gggagctgtc catggtctgg agctcccgcg 12180

gcgtcaggtc aggcgggagc tcctgcaggt ttacctcgca tagacgggtc agggcgcggg 12240

ctagatccag gtgataccta atttccaggg gctggttggt ggcggcgtcg atggcttgca 12300

agaggccgca tccccgcggc gcgactacgg taccgcgcgg cgggcggtgg gccgcggggg 12360

tgtccttgga tgatgcatct aaaagcggtg acgcgggcga gcccccggag gtaggggggg 12420

ctccggaccc gccgggagag ggggcagggg cacgtcggcg ccgcgcgcgg gcaggagctg 12480

gtgctgcgcg cgtaggttgc tggcgaacgc gacgacgcgg cggttgatct cctgaatctg 12540

gcgcctctgc gtgaagacga cgggcccggt gagcttgaac ctgaaagaga gttcgacaga 12600

atcaatttcg gtgtcgttga cggcggcctg gcgcaaaatc tcctgcacgt ctcctgagtt 12660

gtcttgatag gcgatctcgg ccatgaactg ctcgatctct tcctcctgga gatctccgcg 12720

tccggctcgc tccacggtgg cggcgaggtc gttggaaatg cgggccatga gctgcgagaa 12780

ggcgttgagg cctccctcgt tccagacgcg gctgtagacc acgccccctt cggcatcgcg 12840

ggcgcgcatg accacctgcg cgagattgag ctccacgtgc cgggcgaaga cggcgtagtt 12900

tcgcaggcgc tgaaagaggt agttgagggt ggtggcggtg tgttctgcca cgaagaagta 12960

cataacccag cgtcgcaacg tggattcgtt gatatccccc aaggcctcaa ggcgctccat 13020

ggcctcgtag aagtccacgg cgaagttgaa aaactgggag ttgcgcgccg acacggttaa 13080

ctcctcctcc agaagacgga tgagctcggc gacagtgtcg cgcacctcgc gctcaaaggc 13140

tacaggggcc tcttcttctt cttcaatctc ctcttccata agggcctccc cttcttcttc 13200

ttctggcggc ggtgggggag gggggacacg gcggcgacga cggcgcaccg ggaggcggtc 13260

gacaaagcgc tcgatcatct ccccgcggcg acggcgcatg gtctcggtga cggcgcggcc 13320

gttctcgcgg gggcgcagtt ggaagacgcc gcccgtcatg tcccggttat gggttggcgg 13380

ggggctgcca tgcggcaggg atacggcgct aacgatgcat ctcaacaatt gttgtgtagg 13440

tactccgccg ccgagggacc tgagcgagtc cgcatcgacc ggatcggaaa acctctcgag 13500

aaaggcgtct aaccagtcac agtcgcaagg taggctgagc accgtggcgg gcggcagcgg 13560

gcggcggtcg gggttgtttc tggcggaggt gctgctgatg atgtaattaa agtaggcggt 13620

cttgagacgg cggatggtcg acagaagcac catgtccttg ggtccggcct gctgaatgcg 13680

caggcggtcg gccatgcccc aggcttcgtt ttgacatcgg cgcaggtctt tgtagtagtc 13740

ttgcatgagc ctttctaccg gcacttcttc ttctccttcc tcttgtcctg catctcttgc 13800

atctatcgct gcggcggcgg cggagtttgg ccgtaggtgg cgccctcttc ctcccatgcg 13860

tgtgaccccg aagcccctca tcggctgaag cagggctagg tcggcgacaa cgcgctcggc 13920

taatatggcc tgctgcacct gcgtgagggt agactggaag tcatccatgt ccacaaagcg 13980

gtggtatgcg cccgtgttga tggtgtaagt gcagttggcc ataacggacc agttaacggt 14040

ctggtgaccc ggctgcgaga gctcggtgta cctgagacgc gagtaagccc tcgagtcaaa 14100

tacgtagtcg ttgcaagtcc gcaccaggta ctggtatccc accaaaaagt gcggcggcgg 14160

ctggcggtag aggggccagc gtagggtggc cggggctccg ggggcgagat cttccaacat 14220

aaggcgatga tatccgtaga tgtacctgga catccaggtg atgccggcgg cggtggtgga 14280

ggcgcgcgga aagtcgcgga cgcggttcca gatgttgcgc agcggcaaaa agtgctccat 14340

ggtcgggacg ctctggccgg tcaggcgcgc gcaatcgttg acgctctagc gtgcaaaagg 14400

agagcctgta agcgggcact cttccgtggt ctggtggata aattcgcaag ggtatcatgg 14460

cggacgaccg gggttcgagc cccgtatccg gccgtccgcc gtgatccatg cggttaccgc 14520

ccgcgtgtcg aacccaggtg tgcgacgtca gacaacgggg gagtgctcct tttggcttcc 14580

ttccaggcgc ggcggctgct gcgctagctt ttttggccac tggccgcgcg cagcgtaagc 14640

ggttaggctg gaaagcgaaa gcattaagtg gctcgctccc tgtagccgga gggttatttt 14700

ccaagggttg agtcgcggga cccccggttc gagtctcgga ccggccggac tgcggcgaac 14760

gggggtttgc ctccccgtca tgcaagaccc cgcttgcaaa ttcctccgga aacagggacg 14820

agccccttt ttgcttttcc cagatgcatc cggtgctgcg gcagatgcgc ccccctcctc 14880

agcagcggca agagcaagag cagcggcaga catgcagggc accctcccct cctcctaccg 14940

cgtcaggagg ggcgacatcc gcggttgacg cggcagcaga tggtgattac gaacccccgc 15000

ggcgccgggc ccggcactac ctggacttgg aggagggcga gggcctggcg cggctaggag 15060

cgccctctcc tgagcggcac ccaagggtgc agctgaagcg tgatacgcgt gaggcgtacg 15120

tgccgcggca gaacctgttt cgcgaccgcg agggagagga gcccgaggag atgcgggatc 15180

gaaagttcca cgcagggcgc gagctgcggc atggcctgaa tcgcgagcgg ttgctgcgcg 15240

aggaggactt tgagcccgac gcgcgaaccg ggattagtcc cgcgcgcgca cacgtggcgg 15300

ccgccgacct ggtaaccgca tacgagcaga cggtgaacca ggagattaac tttcaaaaaa 15360

gctttaacaa ccacgtgcgt acgcttgtgg cgcgcgagga ggtggctata ggactgatgc 15420

atctgtggga ctttgtaagc gcgctggagc aaaacccaaa tagcaagccg ctcatggcgc 15480

agctgttcct tatagtgcag cacagcaggg acaacgaggc attcagggat gcgctgctaa 15540

acatagtaga gcccgagggc cgctggctgc tcgatttgat aaacatcctg cagagcatag 15600

tggtgcagga gcgcagcttg agcctggctg acaaggtggc cgccatcaac tattccatgc 15660

ttagcctggg caagttttac gcccgcaaga tataccatac cccttacgtt cccatagaca 15720

aggaggtaaa gatcgagggg ttctacatgc gcatggcgct gaaggtgctt accttgagcg 15780

acgacctggg cgtttatcgc aacgagcgca tccacaaggc cgtgagcgtg agccggcggc 15840

gcgagctcag cgaccgcgag ctgatgcaca gcctgcaaag ggccctggct ggcacgggca 15900

gcggcgatag agaggccgag tcctactttg acgcgggcgc tgacctgcgc tgggccccaa 15960

gccgacgcgc cctggaggca gctggggccg gacctgggct ggcggtggca cccgcgcgcg 16020

ctggcaacgt cggcggcgtg gaggaatatg acgaggacga tgagtacgag ccagaggacg 16080

gcgagtacta agcggtgatg tttctgatca gatgatgcaa gacgcaacgg acccggcggt 16140

gcgggcggcg ctgcagagcc agccgtccgg ccttaactcc acggacgact ggcgccaggt 16200

catggaccgc atcatgtcgc tgactgcgcg caatcctgac gcgttccggc agcagccgca 16260

ggccaaccgg ctctccgcaa ttctggaagc ggtggtcccg gcgcgcgcaa accccacgca 16320

cgagaaggtg ctggcgatcg taaacgcgct ggccgaaaac agggccatcc ggcccgacga 16380

ggccggcctg gtctacgacg cgctgcttca gcgcgtggct cgttacaaca gcggcaacgt 16440

gcagaccaac ctggaccggc tggtggggga tgtgcgcgag gccgtggcgc agcgtgagcg 16500

cgcgcagcag cagggcaacc tgggctccat ggttgcacta aacgccttcc tgagtacaca 16560

gcccgccaac gtgccgcggg gacaggagga ctacaccaac tttgtgagcg cactgcggct 16620

aatggtgact gagacaccgc aaagtgaggt gtaccagtct gggccagact atttttcca 16680

gaccagtaga caaggcctgc agaccgtaaa cctgagccag gctttcaaaa acttgcaggg 16740

gctgtggggg gtgcgggctc ccacaggcga ccgcgcgacc gtgtctagct tgctgacgcc 16800

caactcgcgc ctgttgctgc tgctaatagc gcccttcacg gacagtggca gcgtgtcccg 16860

ggacacatac ctaggtcact tgctgacact gtaccgcgag gccataggtc aggcgcatgt 16920

ggacgagcat actttccagg agattacaag tgtcagccgc gcgctggggc aggaggacac 16980

gggcagcctg gaggcaaccc taaactacct gctgaccaac cggcggcaga agatcccctc 17040

gttgcacagt ttaaacagcg aggaggagcg cattttgcgc tacgtgcagc agagcgtgag 17100

ccttaacctg atgcgcgacg gggtaacgcc cagcgtggcg ctggacatga ccgcgcgcaa 17160

catggaaccg ggcatgtatg cctcaaaccg gccgtttatc aaccgcctaa tggactactt 17220

gcatcgcgcg gccgccgtga accccgagta tttcaccaat gccatcttga acccgcactg 17280

gctaccgccc cctggtttct acaccggggg attcgaggtg cccgagggta acgatggatt 17340

cctctgggac gacatagacg acagcgtgtt ttccccgcaa ccgcagaccc tgctagagtt 17400

gcaacagcgc gagcaggcag aggcggcgct gcgaaaggaa agcttccgca ggccaagcag 17460

cttgtccgat ctaggcgctg cggccccgcg gtcagatgct agtagcccat ttccaagctt 17520

gatagggtct cttaccagca ctcgcaccac ccgcccgcgc ctgctgggcg aggaggagta 17580

cctaaacaac tcgctgctgc agccgcagcg cgaaaaaaac ctgcctccgg catttcccaa 17640

caacgggata gagagcctag tggacaagat gagtagatgg aagacgtacg cgcaggagca 17700

cagggacgtg ccaggcccgc gcccgcccac ccgtcgtcaa aggcacgacc gtcagcgggg 17760

tctggtgtgg gaggacgatg actcggcaga cgacagcagc gtcctggatt tgggagggag 17820

tggcaacccg tttgcgcacc ttcgccccag gctggggaga atgttttaaa aaaaaaaaag 17880

catgatgcaa aataaaaaac tcaccaaggc catggcaccg agcgttggtt ttcttgtatt 17940

ccccttagta tgcggcgcgc ggcgatgtat gaggaaggtc ctcctccctc ctacgagagt 18000

gtggtgagcg cggcgccagt ggcggcggcg ctgggttctc ccttcgatgc tcccctggac 18060

ccgccgtttg tgcctccgcg gtacctgcgg cctaccgggg ggagaaacag catccgttac 18120

tctgagttgg cacccctatt cgacaccacc cgtgtgtacc tggtggacaa caagtcaacg 18180

gatgtggcat ccctgaacta ccagaacgac cacagcaact ttctgaccac ggtcattcaa 18240

aacaatgact acagcccggg ggaggcaagc acacagacca tcaatcttga cgaccggtcg 18300

cactggggcg gcgacctgaa aaccatcctg cataccaaca tgccaaatgt gaacgagttc 18360

atgtttacca ataagtttaa ggcgcgggtg atggtgtcgc gcttgcctac taaggacaat 18420

caggtggagc tgaaatacga gtgggtggag ttcacgctgc ccgagggcaa ctactccgag 18480

accatgacca tagaccttat gaacaacgcg atcgtggagc actacttgaa agtgggcaga 18540

cagaacgggg ttctggaaag cgacatcggg gtaaagtttg acacccgcaa cttcagactg 18600

gggtttgacc ccgtcactgg tcttgtcatg cctggggtat atacaaacga agccttccat 18660

ccagacatca ttttgctgcc aggatgcggg gtggacttca cccacagccg cctgagcaac 18720

ttgttgggca tccgcaagcg gcaacccttc caggagggct ttaggatcac ctacgatgat 18780

ctggagggtg gtaacattcc cgcactgttg gatgtggacg cctaccaggc gagcttgaaa 18840

gatgacaccg aacagggcgg gggtggcgca ggcggcagca acagcagtgg cagcggcgcg 18900

gaagagaact ccaacgcggc agccgcggca atgcagccgg tggaggacat gaacgatcat 18960

gccattcgcg gcgacacctt tgccacacgg gctgaggaga agcgcgctga ggccgaagca 19020

gcggccgaag ctgccgcccc cgctgcgcaa cccgaggtcg agaagcctca gaagaaaccg 19080

gtgatcaaac ccctgacaga ggacagcaag aaacgcagtt acaacctaat aagcaatgac 19140

agcaccttca cccagtaccg cagctggtac cttgcataca actacggcga ccctcagacc 19200

ggaatccgct catggaccct gctttgcact cctgacgtaa cctgcggctc ggagcaggtc 19260

tactggtcgt tgccagacat gatgcaagac cccgtgacct tccgctccac gcgccagatc 19320

agcaactttc cggtggtggg cgccgagctg ttgcccgtgc actccaagag cttctacaac 19380

gaccaggccg tctactccca actcatccgc cagtttacct ctctgaccca cgtgttcaat 19440

cgctttcccg agaaccagat tttggcgcgc ccgccagccc ccaccatcac caccgtcagt 19500

gaaaacgttc ctgctctcac agatcacggg acgctaccgc tgcgcaacag catcggagga 19560

gtccagcgag tgaccattac tgacgccaga cgccgcacct gcccctacgt ttacaaggcc 19620

ctgggcatag tctcgccgcg cgtcctatcg agccgcactt tttgagcaag catgtccatc 19680

cttatatcgc ccagcaataa cacaggctgg ggcctgcgct tcccaagcaa gatgtttggc 19740

ggggccaaga agcgctccga ccaacaccca gtgcgcgtgc gcgggcacta ccgcgcgccc 19800

tggggcgcgc acaaacgcgg ccgcactggg cgcaccaccg tcgatgacgc catcgacgcg 19860

gtggtggagg aggcgcgcaa ctacacgccc acgccgccac cagtgtccac agtggacgcg 19920

gccattcaga ccgtggtgcg cggagcccgg cgctatgcta aaatgaagag acggcggagg 19980

cgcgtagcac gtcgccaccg ccgccgaccc ggcactgccg cccaacgcgc ggcggcggcc 20040

ctgcttaacc gcgcacgtcg caccggccga cgggcggcca tgcgggccgc tcgaaggctg 20100

gccgcgggta ttgtcactgt gccccccagg tccaggcgac gagcggccgc cgcagcagcc 20160

gcggccatta gtgctatgac tcagggtcgc aggggcaacg tgtattgggt gcgcgactcg 20220

gttagcggcc tgcgcgtgcc cgtgcgcacc cgcccccgc gcaactagat tgcaagaaaa 20280

aactacttag actcgtactg ttgtatgtat ccagcggcgg cggcgcgcaa cgaagctatg 20340

tccaagcgca aaatcaaaga agagatgctc caggtcatcg cgccggagat ctatggcccc 20400

ccgaagaagg aagagcagga ttacaagccc cgaaagctaa agcgggtcaa aaagaaaaag 20460

aaagatgatg atgatgaact tgacgacgag gtggaactgc tgcacgctac cgcgcccagg 20520

cgacgggtac agtggaaagg tcgacgcgta aaacgtgttt tgcgacccgg caccaccgta 20580

gtctttacgc ccggtgagcg ctccacccgc acctacaagc gcgtgtatga tgaggtgtac 20640

ggcgacgagg acctgcttga gcaggccaac gagcgcctcg gggagtttgc ctacggaaag 20700

cggcataagg acatgctggc gttgccgctg gacgagggca acccaacacc tagcctaaag 20760

cccgtaacac tgcagcaggt gctgcccgcg cttgcaccgt ccgaagaaaa gcgcggccta 20820

aagcgcgagt ctggtgactt ggcacccacc gtgcagctga tggtacccaa gcgccagcga 20880

ctggaagatg tcttggaaaa aatgaccgtg gaacctgggc tggagcccga ggtccgcgtg 20940

cggccaatca agcaggtggc gccgggactg ggcgtgcaga ccgtggacgt tcagataccc 21000

actaccagta gcaccagtat tgccaccgcc acagagggca tggagacaca aacgtccccg 21060

gttgcctcag cggtggcgga tgccgcggtg caggcggtcg ctgcggccgc gtccaagacc 21120

tctacggagg tgcaaacgga cccgtggatg tttcgcgttt cagccccccg gcgcccgcgc 21180

cgttcgagga agtacggcgc cgccagcgcg ctactgcccg aatatgccct acatccttcc 21240

attgcgccta cccccggcta tcgtggctac acctaccgcc ccagaagacg agcaactacc 21300

cgacgccgaa ccaccactgg aacccgccgc cgccgtcgcc gtcgccagcc cgtgctggcc 21360

ccgatttccg tgcgcagggt ggctcgcgaa ggaggcagga ccctggtgct gccaacagcg 21420

cgctaccacc ccagcatcgt ttaaaagccg gtctttgtgg ttcttgcaga tatggccctc 21480

acctgccgcc tccgtttccc ggtgccggga ttccgaggaa gaatgcaccg taggaggggc 21540

atggccggcc acggcctgac gggcggcatg cgtcgtgcgc accaccggcg gcggcgcgcg 21600

tcgcaccgtc gcatgcgcgg cggtatcctg cccctcctta ttccactgat cgccgcggcg 21660

attggcgccg tgcccggaat tgcatccgtg gccttgcagg cgcagagaca ctgattaaaa 21720

acaagttgca tgtggaaaaa tcaaaataaa aagtctggac tctcacgctc gcttggtcct 21780

gtaactattt tgtagaatgg aagacatcaa ctttgcgtct ctggccccgc gacacggctc 21840

gcgcccgttc atgggaaact ggcaagatat cggcaccagc aatatgagcg gtggcgcctt 21900

cagctggggc tcgctgtgga gcggcattaa aaatttcggt tccaccgtta agaactatgg 21960

cagcaaggcc tggaacagca gcacaggcca gatgctgagg gataagttga aagagcaaaa 22020

tttccaacaa aaggtggtag atggcctggc ctctggcatt agcggggtgg tggacctggc 22080

caaccaggca gtgcaaaata agattaacag taagcttgat ccccgccctc ccgtagagga 22140

gcctccaccg gccgtggaga cagtgtctcc agaggggcgt ggcgaaaagc gtccgcgccc 22200

cgacagggaa gaaactctgg tgacgcaaat agacgagcct ccctcgtacg aggaggcact 22260

aaagcaaggc ctgcccacca cccgtcccat cgcgcccatg gctaccggag tgctgggcca 22320

gcacacaccc gtaacgctgg acctgcctcc ccccgccgac acccagcaga aacctgtgct 22380

gccaggcccg accgccgttg ttgtaacccg tcctagccgc gcgtccctgc gccgcgccgc 22440

cagcggtccg cgatcgttgc ggcccgtagc cagtggcaac tggcaaagca cactgaacag 22500

catcgtgggt ctgggggtgc aatccctgaa gcgccgacga tgcttctgat agctaacgtg 22560

tcgtatgtgt gtcatgtatg cgtccatgtc gccgccagag gagctgctga gccgccgcgc 22620

gcccgctttc caagatggct acccccttcga tgatgccgca gtggtcttac atgcacatct 22680

cgggccagga cgcctcggag tacctgagcc ccgggctggt gcagtttgcc cgcgccaccg 22740

agacgtactt cagcctgaat aacaagttta gaaaccccac ggtggcgcct acgcacgacg 22800

tgaccacaga ccggtcccag cgtttgacgc tgcggttcat ccctgtggac cgtgaggata 22860

ctgcgtactc gtacaaggcg cggttcaccc tagctgtggg tgataaccgt gtgctggaca 22920

tggcttccac gtactttgac atccgcggcg tgctggacag gggccctact tttaagccct 22980

actctggcac tgcctacaac gccctggctc ccaagggtgc cccaaatcct tgcgaatggg 23040

atgaagctgc tactgctctt gaaataaacc tagaagaaga ggacgatgac aacgaagacg 23100

aagtagacga gcaagctgag cagcaaaaaa ctcacgtatt tgggcaggcg ccttattctg 23160

gtataaatat tacaaaggag ggtattcaaa taggtgtcga aggtcaaaca cctaaatatg 23220

ccgataaaac atttcaacct gaacctcaaa taggagaatc tcagtggtac gaaacagaaa 23280

ttaatcatgc agctgggaga gtcctaaaaa agactacccc aatgaaacca tgttacggtt 23340

catatgcaaa acccacaaat gaaaatggag ggcaaggcat tcttgtaaag caacaaaatg 23400

gaaagctaga aagtcaagtg gaaatgcaat ttttctcaac tactgaggca gccgcaggca 23460

atggtgataa cttgactcct aaagtggtat tgtacagtga agatgtagat atagaaaccc 23520

cagacactca tatttcttac atgcccacta ttaaggaagg taactcacga gaactaatgg 23580

gccaacaatc tatgcccaac aggcctaatt acattgcttt tagggacaat tttattggtc 23640

taatgtatta caacagcacg ggtaatatgg gtgttctggc gggccaagca tcgcagttga 23700

atgctgttgt agatttgcaa gacagaaaca cagagctttc ataccagctt ttgcttgatt 23760

ccattggtga tagaaccagg tacttttcta tgtggaatca ggctgttgac agctatgatc 23820

cagatgttag aattattgaa aatcatggaa ctgaagatga acttccaaat tactgctttc 23880

cactgggagg tgtgattaat acagagactc ttaccaaggt aaaacctaaa acaggtcagg 23940

aaaatggatg ggaaaaagat gctacagaat tttcagataa aaatgaaata agagttggaa 24000

ataattttgc catggaaatc aatctaaatg ccaacctgtg gagaaatttc ctgtactcca 24060

acatagcgct gtatttgccc gacaagctaa agtacagtcc ttccaacgta aaaatttctg 24120

ataacccaaa cacctacgac tacatgaaca agcgagtggt ggctcccggg ctagtggact 24180

gctacattaa ccttggagca cgctggtccc ttgactatat ggacaacgtc aacccattta 24240

accaccaccg caatgctggc ctgcgctacc gctcaatgtt gctgggcaat ggtcgctatg 24300

tgcccttcca catccaggtg cctcagaagt tctttgccat taaaaacctc cttctcctgc 24360

cgggctcata cacctacgag tggaacttca ggaaggatgt taacatggtt ctgcagagct 24420

ccctaggaaa tgacctaagg gttgacggag ccagcattaa gtttgatagc atttgccttt 24480

acgccacctt cttccccatg gcccacaaca ccgcctccac gcttgaggcc atgcttagaa 24540

acgacaccaa cgaccagtcc tttaacgact atctctccgc cgccaacatg ctctacccta 24600

tacccgccaa cgctaccaac gtgcccatat ccatcccctc ccgcaactgg gcggctttcc 24660

gcggctgggc cttcacgcgc cttaagacta aggaaacccc atcactgggc tcgggctacg 24720

acccttatta cacctactct ggctctatac cctacctaga tggaaccttt tacctcaacc 24780

acacctttaa gaaggtggcc attacctttg actcttctgt cagctggcct ggcaatgacc 24840

gcctgcttac ccccaacgag tttgaaatta agcgctcagt tgacggggag ggttacaacg 24900

ttgcccagtg taacatgacc aaagactggt tcctggtaca aatgctagct aactataaca 24960

ttggctacca gggcttctat atcccagaga gctacaagga ccgcatgtac tccttcttta 25020

gaaacttcca gcccatgagc cgtcaggtgg tggatgatac taaatacaag gactaccaac 25080

aggtgggcat cctacaccaa cacaacaact ctggatttgt tggctacctt gcccccacca 25140

tgcgcgaagg acaggcctac cctgctaact tcccctatcc gcttataggc aagaccgcag 25200

ttgacagcat tacccagaaa aagtttcttt gcgatcgcac cctttggcgc atcccattct 25260

ccagtaactt tatgtccatg ggcgcactca cagacctggg ccaaaacctt ctctacgcca 25320

actccgccca cgcgctagac atgacttttg aggtggatcc catggacgag cccacccttc 25380

tttatgtttt gtttgaagtc tttgacgtgg tccgtgtgca ccagccgcac cgcggcgtca 25440

tcgaaaccgt gtacctgcgc acgcccttct cggccggcaa cgccacaaca taaagaagca 25500

agcaacatca acaacagctg ccgccatggg ctccagtgag caggaactga aagccattgt 25560

caaagatctt ggttgtgggc catatttttt gggcacctat gacaagcgct ttccaggctt 25620

tgtttctcca cacaagctcg cctgcgccat agtcaatacg gccggtcgcg agactggggg 25680

cgtacactgg atggcctttg cctggaaccc gcactcaaaa acatgctacc tctttgagcc 25740

ctttggcttt tctgaccagc gactcaagca ggtttaccag tttgagtacg agtcactcct 25800

gcgccgtagc gccattgctt cttcccccga ccgctgtata acgctggaaa agtccaccca 25860

aagcgtacag gggcccaact cggccgcctg tggactattc tgctgcatgt ttctccacgc 25920

ctttgccaac tggccccaaa ctcccatgga tcacaacccc accatgaacc ttattaccgg 25980

ggtacccaac tccatgctca acagtcccca ggtacagccc accctgcgtc gcaaccagga 26040

acagctctac agcttcctgg agcgccactc gccctacttc cgcagccaca gtgcgcagat 26100

taggagcgcc acttcttttt gtcacttgaa aaacatgtaa aaataatgta ctagagacac 26160

tttcaataaa ggcaaatgct tttatttgta cactctcggg tgattattta cccccaccct 26220

tgccgtctgc gccgtttaaa aatcaaaggg gttctgccgc gcatcgctat gcgccactgg 26280

cagggacacg ttgcgatact ggtgtttagt gctccactta aactcaggca caaccatccg 26340

cggcagctcg gtgaagtttt cactccacag gctgcgcacc atcaccaacg cgtttagcag 26400

gtcgggcgcc gatatcttga agtcgcagtt ggggcctccg ccctgcgcgc gcgagttgcg 26460

atacacaggg ttgcagcact ggaacactat cagcgccggg tggtgcacgc tggccagcac 26520

gctcttgtcg gagatcagat ccgcgtccag gtcctccgcg ttgctcaggg cgaacggagt 26580

caactttggt agctgccttc ccaaaaaggg cgcgtgccca ggctttgagt tgcactcgca 26640

ccgtagtggc atcaaaaggt gaccgtgccc ggtctgggcg ttaggataca gcgcctgcat 26700

aaaagccttg atctgcttaa aagccacctg agcctttgcg ccttcagaga agaacatgcc 26760

gcaagacttg ccggaaaact gattggccgg acaggccgcg tcgtgcacgc agcaccttgc 26820

gtcggtgttg gagatctgca ccacatttcg gccccaccgg ttcttcacga tcttggcctt 26880

gctagactgc tccttcagcg cgcgctgccc gttttcgctc gtcacatcca tttcaatcac 26940

gtgctcctta tttatcataa tgcttccgtg tagacactta agctcgcctt cgatctcagc 27000

gcagcggtgc agccacaacg cgcagcccgt gggctcgtga tgcttgtagg tcacctctgc 27060

aaacgactgc aggtacgcct gcaggaatcg ccccatcatc gtcacaaagg tcttgttgct 27120

ggtgaaggtc agctgcaacc cgcggtgctc ctcgttcagc caggtcttgc atacggccgc 27180

cagagcttcc acttggtcag gcagtagttt gaagttcgcc tttagatcgt tatccacgtg 27240

gtacttgtcc atcagcgcgc gcgcagcctc catgcccttc tcccacgcag acacgatcgg 27300

cacactcagc gggttcatca ccgtaatttc actttccgct tcgctgggct cttcctcttc 27360

ctcttgcgtc cgcataccac gcgccactgg gtcgtcttca ttcagccgcc gcactgtgcg 27420

cttacctcct ttgccatgct tgattagcac cggtgggttg ctgaaaccca ccatttgtag 27480

cgccacatct tctctttctt cctcgctgtc cacgattacc tctggtgatg gcgggcgctc 27540

gggcttggga gaagggcgct tctttttctt cttgggcgca atggccaaat ccgccgccga 27600

ggtcgatggc cgcgggctgg gtgtgcgcgg caccagcgcg tcttgtgatg agtcttcctc 27660

gtcctcggac tcgatacgcc gcctcatccg ctttttgggg ggcgcccggg gaggcggcgg 27720

cgacggggac ggggacgaca cgtcctccat ggttggggga cgtcgcgccg caccgcgtcc 27780

gcgctcgggg gtggtttcgc gctgctcctc ttcccgactg gccatttcct tctcctatag 27840

gcagaaaaag atcatggagt cagtcgagaa gaaggacagc ctaaccgccc cctctgagtt 27900

cgccaccacc gcctccaccg atgccgccaa cgcgcctacc accttccccg tcgaggcacc 27960

cccgcttgag gaggaggaag tgattatcga gcaggaccca ggttttgtaa gcgaagacga 28020

cgaggaccgc tcagtaccaa cagaggataa aaagcaagac caggacaacg cagaggcaaa 28080

cgaggaacaa gtcgggcggg gggacgaaag gcatggcgac tacctagatg tgggagacga 28140

cgtgctgttg aagcatctgc agcgccagtg cgccattatc tgcgacgcgt tgcaagagcg 28200

cagcgatgtg cccctcgcca tagcggatgt cagccttgcc tacgaacgcc acctattctc 28260

accgcgcgta ccccccaaac gccaagaaaa cggcacatgc gagcccaacc cgcgcctcaa 28320

cttctacccc gtatttgccg tgccagaggt gcttgccacc tatcacatct ttttccaaaa 28380

ctgcaagata cccctatcct gccgtgccaa ccgcagccga gcggacaagc agctggcctt 28440

gcggcagggc gctgtcatac ctgatatcgc ctcgctcaac gaagtgccaa aaatctttga 28500

gggtcttgga cgcgacgaga agcgcgcggc aaacgctctg caacaggaaa acagcgaaaa 28560

tgaaagtcac tctggagtgt tggtggaact cgagggtgac aacgcgcgcc tagccgtact 28620

aaaacgcagc atcgaggtca cccactttgc ctacccggca cttaacctac cccccaaggt 28680

catgagcaca gtcatgagtg agctgatcgt gcgccgtgcg cagcccctgg agagggatgc 28740

aaatttgcaa gaacaaacag aggagggcct acccgcagtt ggcgacgagc agctagcgcg 28800

ctggcttcaa acgcgcgagc ctgccgactt ggaggagcga cgcaaactaa tgatggccgc 28860

agtgctcgtt accgtggagc ttgagtgcat gcagcggttc tttgctgacc cggagatgca 28920

gcgcaagcta gaggaaacat tgcactacac ctttcgacag ggctacgtac gccaggcctg 28980

caagatctcc aacgtggagc tctgcaacct ggtctcctac cttggaattt tgcacgaaaa 29040

ccgccttggg caaaacgtgc ttcattccac gctcaagggc gaggcgcgcc gcgactacgt 29100

ccgcgactgc gtttacttat ttctatgcta cacctggcag acggccatgg gcgtttggca 29160

gcagtgcttg gaggagtgca acctcaagga gctgcagaaa ctgctaaagc aaaacttgaa 29220

ggacctatgg acggccttca acgagcgctc cgtggccgcg cacctggcgg acatcatttt 29280

ccccgaacgc ctgcttaaaa ccctgcaaca gggtctgcca gacttcacca gtcaaagcat 29340

gttgcagaac tttaggaact ttatcctaga gcgctcagga atcttgcccg ccacctgctg 29400

tgcacttcct agcgactttg tgcccattaa gtaccgcgaa tgccctccgc cgctttgggg 29460

ccactgctac cttctgcagc tagccaacta ccttgcctac cactctgaca taatggaaga 29520

cgtgagcggt gacggtctac tggagtgtca ctgtcgctgc aacctatgca ccccgcaccg 29580

ctccctggtt tgcaattcgc agctgcttaa cgaaagtcaa attatcggta cctttgagct 29640

gcagggtccc tcgcctgacg aaaagtccgc ggctccgggg ttgaaactca ctccggggct 29700

gtggacgtcg gcttaccttc gcaaatttgt acctgaggac taccacgccc acgagattag 29760

gttctacgaa gaccaatccc gcccgcctaa tgcggagctt accgcctgcg tcattaccca 29820

gggccacatt cttggccaat tgcaagccat caacaaagcc cgccaagagt ttctgctacg 29880

aaagggacgg ggggtttact tggaccccca gtccggcgag gagctcaacc caatcccccc 29940

gccgccgcag ccctatcagc agcagccgcg ggcccttgct tcccaggatg gcacccaaaa 30000

agaagctgca gctgccgccg ccacccacgg acgaggagga atactgggac agtcaggcag 30060

aggaggtttt ggacgaggag gaggaggaca tgatggaaga ctgggagagc ctagacgagg 30120

aagcttccga ggtcgaagag gtgtcagacg aaacaccgtc accctcggtc gcattcccct 30180

cgccggcgcc ccagaaatcg gcaaccggtt ccagcatggc tacaacctcc gctcctcagg 30240

cgccgccggc actgcccgtt cgccgaccca accgtagatg ggacaccact ggaaccaggg 30300

ccggtaagtc caagcagccg ccgccgttag cccaagagca acaacagcgc caaggctacc 30360

gctcatggcg cgggcacaag aacgccatag ttgcttgctt gcaagactgt gggggcaaca 30420

tctccttcgc ccgccgcttt cttctctacc atcacggcgt ggccttcccc cgtaacatcc 30480

tgcattacta ccgtcatctc tacagcccat actgcaccgg cggcagcggc agcaacagca 30540

gcggccacac agaagcaaag gcgaccggat agcaagactc tgacaaagcc caagaaatcc 30600

acagcggcgg cagcagcagg aggaggagcg ctgcgtctgg cgcccaacga acccgtatcg 30660

acccgcgagc ttagaaacag gatttttccc actctgtatg ctatatttca acagagcagg 30720

ggccaagaac aagagctgaa aataaaaaac aggtctctgc gatccctcac ccgcagctgc 30780

ctgtatcaca aaagcgaaga tcagcttcgg cgcacgctgg aagacgcgga ggctctcttc 30840

agtaaatact gcgcgctgac tcttaaggac tagtttcgcg ccctttctca aatttaagcg 30900

cgaaaactac gtcatctcca gcggccacac ccggcgccag cacctgttgt cagcgccatt 30960

atgagcaagg aaattcccac gccctacatg tggagttacc agccacaaat gggacttgcg 31020

gctggagctg cccaagacta ctcaacccga ataaactaca tgagcgcggg accccacatg 31080

atatcccggg tcaacggaat acgcgcccac cgaaaccgaa ttctcctgga acaggcggct 31140

attaccacca cacctcgtaa taaccttaat ccccgtagtt ggcccgctgc cctggtgtac 31200

caggaaagtc ccgctcccac cactgtggta cttcccagag acgcccaggc cgaagttcag 31260

atgactaact caggggcgca gcttgcgggc ggctttcgtc acagggtgcg gtcgcccggg 31320

cagggtataa ctcacctgac aatcagaggg cgaggtattc agctcaacga cgagtcggtg 31380

agctcctcgc ttggtctccg tccggacggg acatttcaga tcggcggcgc cggccgctct 31440

tcattcacgc ctcgtcaggc aatcctaact ctgcagacct cgtcctctga gccgcgctct 31500

ggaggcattg gaactctgca atttattgag gagtttgtgc catcggtcta ctttaacccc 31560

ttctcgggac ctcccggcca ctatccggat caatttattc ctaactttga cgcggtaaag 31620

gactcggcgg acggctacga ctgaatgtta agtggagagg cagagcaact gcgcctgaaa 31680

cacctggtcc actgtcgccg ccacaagtgc tttgcccgcg actccggtga gttttgctac 31740

tttgaattgc ccgaggatca tatcgagggc ccggcgcacg gcgtccggct taccgcccag 31800

ggagagcttg cccgtagcct gattcgggag tttacccagc gccccctgct agttgagcgg 31860

gacaggggac cctgtgttct cactgtgatt tgcaactgtc ctaaccctgg attacatcaa 31920

gatcctctag ttaatgtcag gtcgcctaag tcgattaact agagtacccg gggatcttat 31980

tccctttaac taataaaaaa aaataataaa gcatcactta cttaaaatca gttagcaaat 32040

ttctgtccag tttattcagc agcacctcct tgccctcctc ccagctctgg tattgcagct 32100

tcctcctggc tgcaaacttt ctccacaatc taaatggaat gtcagtttcc tcctgttcct 32160

gtccatccgc acccactatc ttcatgttgt tgcagatgaa gcgcgcaaga ccgtctgaag 32220

ataccttcaa ccccgtgtat ccatatgaca cggaaaccgg tcctccaact gtgccttttc 32280

ttactcctcc ctttgtatcc cccaatgggt ttcaagagag tccccctggg gtactctctt 32340

tgcgcctatc cgaacctcta gttacctcca atggcatgct tgcgctcaaa atgggcaacg 32400

gcctctctct ggacgaggcc ggcaacctta cctcccaaaa tgtaaccact gtgagcccac 32460

ctctcaaaaa aaccaagtca aacataaacc tggaaatatc tgcacccctc acagttacct 32520

cagaagccct aactgtggct gccgccgcac ctctaatggt cgcgggcaac acactcacca 32580

tgcaatcaca ggccccgcta accgtgcacg actccaaact tagcattgcc acccaaggac 32640

ccctcacagt gtcagaagga aagctagccc tgcaaacatc aggccccctc accaccaccg 32700

atagcagtac ccttactatc actgcctcac cccctctaac tactgccact ggtagcttgg 32760

gcattgactt gaaagagccc atttatacac aaaatggaaa actaggacta aagtacgggg 32820

ctcctttgca tgtaacagac gacctaaaca ctttgaccgt agcaactggt ccaggtgtga 32880

ctattaataa tacttccttg caaactaaag ttactggagc cttgggtttt gattcacaag 32940

gcaatatgca acttaatgta gcaggaggac taaggattga ttctcaaaac agacgcctta 33000

tacttgatgt tagttatccg tttgatgctc aaaaccaact aaatctaaga ctaggacagg 33060

gccctctttt tataaactca gcccacaact tggatattaa ctacaacaaa ggcctttact 33120

tgtttacagc ttcaaacaat tccaaaaagc ttgaggttaa cctaagcact gccaaggggt 33180

tgatgtttga cgctacagcc atagccatta atgcaggaga tgggcttgaa tttggttcac 33240

ctaatgcacc aaacacaaat cccctcaaaa caaaaattgg ccatggccta gaatttgatt 33300

caaacaaggc tatggttcct aaactaggaa ctggccttag ttttgacagc acaggtgcca 33360

ttacagtagg aaacaaaaat aatgataagc taactttgtg gaccggaata aaccctccac 33420

ctaactgtca aattgtggaa aacactaata caaatgatgg caaacttact ttagtattag 33480

taaaaaatgg agggcttgtt aatggctacg tgtctctagt tggtgtatca gacactgtga 33540

accaaatgtt cacacaaaag acagcaaaca tccaattaag attatatttt gactcttctg 33600

gaaatctatt aactgaggaa tcagacttaa aaattccact taaaaataaa tcttctacag 33660

cgaccagtga aactgtagcc agcagcaaag cctttatgcc aagtactaca gcttatccct 33720

tcaacaccac tactagggat agtgaaaact acattcatgg aatatgttac tacatgacta 33780

gttatgatag aagtctattt cccttgaaca tttctataat gctaaacagc cgtatgattt 33840

cttccaatgt tgcctatgcc atacaatttg aatggaatct aaatgcaagt gaatctccag 33900

aaagcaacat agctacgctg accacatccc cctttttctt ttcttacatt acagaagacg 33960

acaactaaag aatcgtttgt gttatgtttc aacgtgttta tttttcaatt gcagaaaatt 34020

tcaagtcatt tttcattcag tagtatagcc ccaccaccac atagcttata cagatcaccg 34080

taccttaatc aaactcacag aaccctagta ttcaacctgc cacctccctc ccaacacaca 34140

gagtacacag tcctttctcc ccggctggcc ttaaaaagca tcatatcatg ggtaacagac 34200

atattcttag gtgttatatt ccacacggtt tcctgtcgag ccaaacgctc atcagtgata 34260

ttaataaact ccccgggcag ctcacttaag ttcatgtcgc tgtccagctg ctgagccaca 34320

ggctgctgtc caacttgcgg ttgcttaacg ggcggcgaag gagaagtcca cgcctacatg 34380

ggggtagagt cataatcgtg catcaggata gggcggtggt gctgcagcag cgcgcgaata 34440

aactgctgcc gccgccgctc cgtcctgcag gaatacaaca tggcagtggt ctcctcagcg 34500

atgattcgca ccgcccgcag cataaggcgc cttgtcctcc gggcacagca gcgcaccctg 34560

atctcactta aatcagcaca gtaactgcag cacagcacca caatattgtt caaaatccca 34620

cagtgcaagg cgctgtatcc aaagctcatg gcggggacca cagaacccac gtggccatca 34680

taccacaagc gcaggtagat taagtggcga cccctcataa acacgctgga cataaacatt 34740

acctcttttg gcatgttgta attcaccacc tcccctctga ttaaacatgg cgccatccac 34800

caccatccta aaccagctgg ccaaaacctg cccgccggct atacactgca gggaaccggg 34860

actggaacaa tgacagtgga gagcccagga ctcgtaacca tggatcatca tgctcgtcat 34920

gatatcaatg ttggcacaac acaggcacac gtgcatacac ttcctcagga ttacaagctc 34980

ctcccgcgtt agaaccatat cccagggaac aacccattcc tgaatcagcg taaatcccac 35040

actgcaggga agacctcgca cgtaactcac gttgtgcatt gtcaaagtgt tacattcggg 35100

cagcagcgga tgatcctcca gtatggtagc gcgggtttct gtctcaaaag gaggtagacg 35160

atccctactg tacggagtgc gccgagacaa ccgagatcgt gttggtcgta gtgtcatgcc 35220

aaatggaacg ccggacgtag tcatatttcc tgaagcaaaa ccaggtgcgg gcgtgacaaa 35280

cagatctgcg tctccggtct cgccgcttag atcgctctgt gtagtagttg tagtatatcc 35340

actctctcaa agcatccagg cgccccctgg cttcgggttc tatgtaaact ccttcatgcg 35400

ccgctgccct gataacatcc accaccgcag aataagccac acccagccaa cctacacatt 35460

cgttctgcga gtcacacacg ggaggagcgg gaagagctgg aagaaccatg ttttttttt 35520

tattccaaaa gattatccaa aacctcaaaa tgaagatcta ttaagtgaac gcgctcccct 35580

ccggtggcgt ggtcaaactc tacagccaaa gaacagataa tggcatttgt aagatgttgc 35640

acaatggctt ccaaaaggca aacggccctc acgtccaagt ggacgtaaag gctaaaccct 35700

tcagggtgaa tctcctctat aaacattcca gcaccttcaa ccatgcccaa ataattctca 35760

tctcgccacc ttctcaatat atctctaagc aaatcccgaa tattaagtcc ggccattgta 35820

aaaatctgct ccagagcgcc ctccaccttc agcctcaagc agcgaatcat gattgcaaaa 35880

attcaggttc ctcacagacc tgtataagat tcaaaagcgg aacattaaca aaaataccgc 35940

gatcccgtag gtcccttcgc agggccagct gaacataatc gtgcaggtct gcacggacca 36000

gcgcggccac ttccccgcca ggaaccatga caaaagaacc cacactgatt atgacacgca 36060

tactcggagc tatgctaacc agcgtagccc cgatgtaagc ttgttgcatg ggcggcgata 36120

taaaatgcaa ggtgctgctc aaaaaatcag gcaaagcctc gcgcaaaaaa gaaagcacat 36180

cgtagtcatg ctcatgcaga taaaggcagg taagctccgg aaccaccaca gaaaaagaca 36240

ccatttttct ctcaaacatg tctgcgggtt tctgcataaa cacaaaataa aataacaaaa 36300

aaacatttaa acattagaag cctgtcttac aacaggaaaa acaaccctta taagcataag 36360

acggactacg gccatgccgg cgtgaccgta aaaaaactgg tcaccgtgat taaaaagcac 36420

caccgacagc tcctcggtca tgtccggagt cataatgtaa gactcggtaa acacatcagg 36480

ttgattcaca tcggtcagtg ctaaaaagcg accgaaatag cccgggggaa tacatacccg 36540

caggcgtaga gacaacatta cagcccccat aggaggtata acaaaattaa taggagagaa 36600

aaacacataa acacctgaaa aaccctcctg cctaggcaaa atagcaccct cccgctccag 36660

aacaacatac agcgcttcca cagcggcagc cataacagtc agccttacca gtaaaaaaga 36720

aaacctatta aaaaaacacc actcgacacg gcaccagctc aatcagtcac agtgtaaaaa 36780

agggccaagt gcagagcgag tatatatagg actaaaaaat gacgtaacgg ttaaagtcca 36840

caaaaaacac ccagaaaacc gcacgcgaac ctacgcccag aaacgaaagc caaaaaaccc 36900

acaacttcct caaatcgtca cttccgtttt cccacgttac gtcacttccc attttaagaa 36960

aactacaatt cccaacacat acaagttact ccgccctaaa acctacgtca cccgccccgt 37020

tcccacgccc cgcgccacgt cacaaactcc acccctcat tatcatattg gcttcaatcc 37080

aaaataaggt atattattga tgatg 37105

<210> 15
<211> 37105
<212> DNA
<213> Artificial Sequence

<220>
<223> Adk35FR-E4orf6/Spike-E4dl355(E4re#10)

<400> 15
ttaattaaca tcatcaataa tataccttat tttggattga agccaatatg ataatgaggg 60

ggtggagttt gtgacgtggc gcggggcgtg ggaacggggc gggtgacgta gtagtgtggc 120

ggaagtgtga tgttgcaagt gtggcggaac acatgtaagc gacggatgtg gcaaaagtga 180

cgtttttggt gtgcgccggt gtacacagga agtgacaatt ttcgcgcggt ttaggcgga 240

tgttgtagta aatttgggcg taaccgagta agatttggcc attttcgcgg gaaaactgaa 300

taagaggaag tgaaatctga ataattttgt gttactcata gcgcgtaata atttgctccg 360

gtgcccgtca gtgggcagag cgcacatcgc ccacagtccc cgagaagttg gggggagggg 420

tcggcaattg aaccggtgcc tagagaaggt ggcgcggggt aaactgggaa agtgatgtcg 480

tgtactggct ccgccttttt cccgagggtg ggggagaacc gtatataagt gcagtagtcg 540

ccgtgaacgt tctttttcgc aacgggtttg ccgccagaac acaggtaagt gccgtgtgtg 600

gttcccgcgg gcctggcctc tttacgggtt atggcccttg cgtgccttga attacttcca 660

cgcccctggc tgcagtacgt gattcttgat cccgagcttc gggttggaag tgggtgggag 720

agttcgaggc cttgcgctta aggagcccct tcgcctcgtg cttgagttga ggcttggcct 780

gggcgctggg gccgccgcgt gcgaatctgg tggcaccttc gcgcctgtct cgctgctttc 840

gataagtctc tagccattta aaatttttga tgacctgctg cgacgctttt tttctggcaa 900

gatagtcttg taaatgcggg ccaagatctg cacactggta tttcggtttt tggggccgcg 960

ggcggcgacg gggcccgtgc gtcccagcgc acatgttcgg cgaggcgggg cctgcgagcg 1020

cggccaccga gaatcggacg ggggtagtct caagctggcc ggcctgctct ggtgcctggc 1080

ctcgcgccgc cgtgtatcgc cccgccctgg gcggcaaggc tggcccggtc ggcaccagtt 1140

gcgtgagcgg aaagatggcc gcttcccggc cctgctgcag ggagctcaaa atggaggacg 1200

cggcgctcgg gagagcgggc gggtgagtca cccacacaaa ggaaaagggc ctttccgtcc 1260

tcagccgtcg cttcatgtga ctccacggag taccgggcgc cgtccaggca cctcgattag 1320

ttctcgagct tttggagtac gtcgtcttta ggttgggggg aggggtttta tgcgatggag 1380

tttccccata ctgagtgggt ggagactgaa gttaggccag cttggcactt gatgtaattc 1440

tccttggaat ttgccctttt tgagtttgga tcttggttca ttctcaagcc tcagacagtg 1500

gttcaaagtt tttttcttcc atttaaggtg tcgtgaaaac taccccaagc tggccaccat 1560

gactacgtcc ggcgttccat ttggcatgac actacgacca acacgatctc ggttgtctcg 1620

gcgcactccg tacagtaggg atcgtctacc tccttttgag acagaaaccc gcgctaccat 1680

actggaggat catccgctgc tgcccgaatg taacactttg acaatgcaca acgtgagtta 1740

cgtgcgaggt cttccctgca gtgtgggatt tacgctgatt caggaatggg ttgttccctg 1800

ggatatggtt ctaacgcggg aggagcttgt aatcctgagg aagtgtatgc acgtgtgcct 1860

gtgttgtgcc aacattgata tcatgacgag catgatgatc catggttacg agtcctgggc 1920

tctccactgt cattgttcca gtcccggttc cctgcagtgt atagccggcg ggcaggtttt 1980

ggccagctgg tttaggatgg tggtggatgg cgccatgttt aatcagaggt ttatatggta 2040

ccgggaggtg gtgaattaca acatgccaaa agaggtaatg tttatgtcca gcgtgtttat 2100

gaggggtcgc cacttaatct acctgcgctt gtggtatgat ggccacgtgg gttctgtggt 2160

ccccgccatg agctttggat acagcgcctt gcactgtggg attttgaaca atattgtggt 2220

gctgtgctgc agttactgtg ctgatttaag tgagatcagg gtgcgctgct gtgcccggag 2280

gacaaggcgc cttatgctgc gggcggtgcg aatcatcgct gaggagacca ctgccatgtt 2340

gtattcctgc aggacggagc ggcggcggca gcagtttatt cgcgcgctgc tgcagcacca 2400

ccgccctatc ctgatgcacg attatgactc tacccccatg tagaagcttg gggatcaatt 2460

ctctagagct cgctgatcag cctcgactgt gccttctagt tgccagccat ctgttgtttg 2520

cccctccccc gtgccttcct tgaccctgga aggtgccact cccactgtcc tttcctaata 2580

aaatgaggaa attgcatcgc attgtctgag taggtgtcat tctattctgg ggggtggggt 2640

ggggcaggac agcaaggggg aggattggga agacaatagc aggcatgctg gggatgcggt 2700

gggctctatg gcttctgagg gatccgcgtt aagatacatt gatgagtttg gacaaaccac 2760

aactagaatg cagtgaaaaa aatgctttat ttgtgaaatt tgtgatgcta ttgctttatt 2820

tgtaaccatt ataagctgca ataaacaagt taacaacaac aattgcattc attttatgtt 2880

tcaggttcag ggggaggtgt gggaggtttt ttaaagcaag taaaacctct acaaatgtgg 2940

tatggctgat tatgatcaat tttcatggcc acttgatgta ttgttcatat ttgcccagtt 3000

cttggaggtc aatcagggac tcattcaggt tcttagccac ctcattcagt ctgtcaatct 3060

ccttctggat gttcaccaca gaggcattga tgccagagat gtctcccagg tccacatcag 3120

ggctggtgtg gttcttgaag tatttgtcca gttcctcctt gaaggagtcc agttcaggtt 3180

ggagtgggtc atagactgtg ttgttcacaa tgccaatcac cacatcacag ttgccagaca 3240

caaaggtgtt gtctgtggtg ataatctgtg gttcatagaa gttcctctgg gtcacaaacc 3300

agtgggtgcc attgctcaca aacactccct cccttggaaa gtgagccttg ccatcatggc 3360

agatggcagg ggctgtggtg aagttcttct cctgggcagg cacataggtc acatgcagga 3420

acaccactcc atgaggggca gactgtggaa aactcatcag gtggtagccc ttgccacaga 3480

agtccaccct cttgctttgt cccagcacac actcactcat cttggtggca gccaggttgg 3540

cagatgccct aatctcagca gccctgataa gttgttgggt cacataggtt tggagggatt 3600

ggagtctgcc tgtaatcagt ctgtcaatct ggacctcagc ctccaccttg tccagtctgc 3660

tcaggatgtc attcagcaca gaggagatgg ctccaaagtt gctggaaagt tgcttcacca 3720

gggtgttcag agcctgggca ttctggttca ccacatcttg gagtttgccc agggcagagg 3780

ctgtgctgga cagggagtcc tgaatcttgc caatggcaga gttgaactgg ttggcaatca 3840

gtttctggtt ctcatagagc acattctggg tcactccaat gccattgaac ctgtaagcca 3900

tctgcatagc aaatgggatt tggagggctg ctcctgctcc aaaggtccag ccagaggtga 3960

tggtgccagc cagcagggca gaggtgtatt gggcaatcat ctcatctgtc agcagtggag 4020

gcagcactgt cagtccattg aacttctggg cacaaatcag gtccctggca gcaatgtctc 4080

ccagacagtc tccatattgc ttgatgaagc cagcatcagc cagggtcacc ttgttgaaca 4140

gcaggtcctc aatgaaggac ctcttgcttg gcttgcttgg gtcaggcaga atctggctga 4200

agttgaagcc tccaaagtcc ttgattggag gtgtcttgta aatctgcttc acctgggcaa 4260

acacctcctg ggtgttcttg tcctgttcca cagcaatgcc tgtcagagcc ctgttaagtt 4320

gggtacagaa ggagccatat tggagcagca ggttgctaca ctctgtgctg tctccacaga 4380

tatacattgt acagtccaca gaggtcttgg tcatactcac aggcagaatc tctgtggtca 4440

cagagatggt gaagttggtt gggatggcaa tgctgttgtt gctgtaagcc acagagttct 4500

ctgctcccag actcattgtg taggcaatga tgctctggct tgccacagac ctcgacccac 4560

cgccaccggt ctgggtctgg taggaggcac agatgcctgc tccaattggg atgtcacact 4620

cataggagtt gttcacatgc tctgctccaa tcagacagcc agccctggtc tggaacacat 4680

tgctgcctgt gctgtagacc ctccaggttg gtgtaagttg gtcagcatgg atagccacag 4740

gcacctcagt acagttcaca tcctggtaga gcacagccac ctggttgctg gtgttggtgc 4800

caggtgtaat cacagacact cctccaaagg aacatggtgt gatgtccaga atctccaagg 4860

tctgtgggtc cctcacagca tctgtggtgt cagcaatgtc cctgccaaac tgttggaatg 4920

gcaggaactt cttgttgctc tctgtcagca ctcctgtgcc tgtcagtcca ttgaagttga 4980

agttcacaca cttgttcttc accaggttgg tgctcttctt tggtccacac actgtggcag 5040

gggcatggag cagttcaaag gacagcacca ccaccctgta tggttggtag cccactccat 5100

tggttggttg gaagccatag gattggagtg gaaagtaaca gttgaagccc tccactccat 5160

tacatggtgt gctgccagcc tggtaaatct ctgtgctgat gtccctctca aatggtttca 5220

ggttgctctt cctgaacagt ctgtagaggt agttgtagtt gcctcccacc ttgctgtcca 5280

ggttgttgct gttccaggca atcacacagc ctgtgaagtc atcaggcagt ttgtagttgt 5340

agtcagcaat cttgcctgtt tgtccagggg caatctgtct cacctcatct cccctaatca 5400

caaaggagtc agcatagaca ttggtgaaac acaggtcatt cagtttggtt gggctcactc 5460

cataacactt gaaggtgctg aaggaggcag agttgtagag cacagagtag tcagccacac 5520

agttgctaat cctcttcctg ttccaggcat agacagaggc aaacctggtg gcattgaaca 5580

cctctccaaa tggacacagg ttggtgatgt ttggaaacct cacaatgctc tctgttggtt 5640

ggaccctgaa gttgctggtc tggtagatgc ccttctccac tgtgaaggat ttcagggtac 5700

acttggtctc agacagtggg tccagggcac agtccacagc atctgtgatg gtgccattct 5760

cattgtattt cagcaggaag gtccttggtt ggaggtagcc cacatagtag gctgctgctc 5820

ctgctgtcca gccagaggag gagtctccag gtgtcaggta ggacctgtgc agagccagca 5880

gggtctggaa cctggtgatg ttgatgccaa ttggcaggtc caccagtggt tccaaggcag 5940

agaagccctg tggcaggtcc ctcaccaggt tgattggtgt gtgtttgctg taaatcttga 6000

agtagccatc aatgttcttg aacacaaact ccctcaggtt cttgaagttg ccctgcttgc 6060

cctccaagtc catcaggaat ggttggctca catattcaaa ggtacagttg ttggcagagg 6120

agtagaccct gaactcagac tccatccagg acttgttgtt cttgtggtag tagactccca 6180

ggaatgggtc attacagaac tggaactcac acaccttaat caccacattg gtggcattgt 6240

tcacaatcag cagggactgg gtcttgctgt ccagggtggt gccaaaaatc cagcccctga 6300

tgatgttgct cttctctgtg ctggcaaagt agactccatc attgaatggc agcacagggt 6360

tgtcaaacct cttggtgcca ttggtgccag acacatggat ggcatggaac caggtcacat 6420

tgctgaagaa tggcaggaac aggtcctggg tgctgtgcag cacagaggac ctgaacacct 6480

tgtcagggta gtagactccc ctggtgaagg agttggtgta ggcaggagga agttgggtcc 6540

tggtggtcag gttcacacac tggctggaca ccagtggcag cagcaccagg aacacaaaca 6600

tggtggcaaa tcggaggctg gatcggtccc ggtgtcttct atggaggtca aaacagcgtg 6660

gatggcgtct ccaggcgatc tgacggttca ctaaacgagc tcgtcgacga tctctatcac 6720

tgatagggag atctctatca ctgataggga gagctctgct tatatagacc tcccaccgta 6780

cacgcctacc gcccatttgc gtcaatgggg cggagttgtt acgacatttt ggaaagtccc 6840

gttgattttg gtgccaaaac aaactcccat tgacgtcaat ggggtggaga cttggaaatc 6900

cccgtgagtc aaaccgctat ccacgcccat tgatgtactg ccaaaaccgc atcaccatgg 6960

taatagcgat gactaatacg tagatgtact gccaagtagg aaagtcccat aaggtcatgt 7020

actgggcata atgccaggcg ggccatttac cgtcattgac gtcaataggg ggcgtacttg 7080

gcatatgata cacttgatgt actgccaagt gggcagttta ccgtaaatac tccacccatt 7140

gacgtcaatg gaaagtccct attggcgtta ctatgggaac atacgtcatt attgacgtca 7200

atgggcgggg gtcgttgggc ggtcagccag gcgggccatt taccgtaagt tatgtaacgc 7260

ggaactccat atatgggcta tgaactaatg accccgtaat tgattactat tacagaaatt 7320

gggcgtggct taagggtggg aaagaatata taaggtgggg gtcttatgta gttttgtatc 7380

tgttttgcag cagccgccgc cgccatgagc accaactcgt ttgatggaag cattgtgagc 7440

tcatatttga caacgcgcat gcccccatgg gccggggtgc gtcagaatgt gatgggctcc 7500

agcattgatg gtcgccccgt cctgcccgca aactctacta ccttgaccta cgagaccgtg 7560

tctggaacgc cgttggagac tgcagcctcc gccgccgctt cagccgctgc agccaccgcc 7620

cgcgggattg tgactgactt tgctttcctg agcccgcttg caagcagtgc agcttcccgt 7680

tcatccgccc gcgatgacaa gttgacggct cttttggcac aattggattc tttgacccgg 7740

gaacttaatg tcgtttctca gcagctgttg gatctgcgcc agcaggtttc tgccctgaag 7800

gcttcctccc ctcccaatgc ggtttaaaac ataaataaaa aaccagactc tgtttggatt 7860

tggatcaagc aagtgtcttg ctgtctttat ttaggggttt tgcgcgcgcg gtaggcccgg 7920

gaccagcggt ctcggtcgtt gagggtcctg tgtatttttt ccaggacgtg gtaaaggtga 7980

ctctggatgt tcagatacat gggcataagc ccgtctctgg ggtggaggta gcaccactgc 8040

agagcttcat gctgcggggt ggtgttgtag atgatccagt cgtagcagga gcgctgggcg 8100

tggtgcctaa aaatgtcttt cagtagcaag ctgattgcca ggggcaggcc cttggtgtaa 8160

gtgtttacaa agcggttaag ctgggatggg tgcatacgtg gggatatgag atgcatcttg 8220

gactgtattt ttaggttggc tatgttccca gccatatccc tccggggatt catgttgtgc 8280

agaaccacca gcacagtgta tccggtgcac ttgggaaatt tgtcatgtag cttagaagga 8340

aatgcgtgga agaacttgga gacgcccttg tgacctccaa gattttccat gcattcgtcc 8400

ataatgatgg caatgggccc acgggcggcg gcctgggcga agatatttct gggatcacta 8460

acgtcatagt tgtgttccag gatgagatcg tcataggcca tttttacaaa gcgcgggcgg 8520

agggtgccag actgcggtat aatggttcca tccggcccag gggcgtagtt accctcacag 8580

atttgcattt cccacgcttt gagttcagat ggggggatca tgtctacctg cggggcgatg 8640

aagaaaacgg tttccggggt aggggagatc agctgggaag aaagcaggtt cctgagcagc 8700

tgcgacttac cgcagccggt gggcccgtaa atcacaccta ttaccgggtg caactggtag 8760

ttaagagagc tgcagctgcc gtcatccctg agcaggggggg ccacttcgtt aagcatgtcc 8820

ctgactcgca tgttttccct gaccaaatcc gccagaaggc gctcgccgcc cagcgatagc 8880

agttcttgca aggaagcaaa gtttttcaac ggtttgagac cgtccgccgt aggcatgctt 8940

ttgagcgttt gaccaagcag ttccaggcgg tcccacagct cggtcacctg ctctacggca 9000

tctcgatcca gcatatctcc tcgtttcgcg ggttggggcg gctttcgctg tacggcagta 9060

gtcggtgctc gtccagacgg gccagggtca tgtctttcca cgggcgcagg gtcctcgtca 9120

gcgtagtctg ggtcacggtg aaggggtgcg ctccgggctg cgcgctggcc agggtgcgct 9180

tgaggctggt cctgctggtg ctgaagcgct gccggtcttc gccctgcgcg tcggccaggt 9240

agcatttgac catggtgtca tagtccagcc cctccgcggc gtggcccttg gcgcgcagct 9300

tgcccttgga ggaggcgccg cacgaggggc agtgcagact tttgagggcg tagagcttgg 9360

gcgcgagaaa taccgattcc ggggagtagg catccgcgcc gcaggccccg cagacggtct 9420

cgcattccac gagccaggtg agctctggcc gttcggggtc aaaaaccagg tttcccccat 9480

gctttttgat gcgtttctta cctctggttt ccatgagccg gtgtccacgc tcggtgacga 9540

aaaggctgtc cgtgtccccg tatacagact tgagaggcct gtcctcgagc ggtgttccgc 9600

ggtcctcctc gtatagaaac tcggaccact ctgagacaaa ggctcgcgtc caggccagca 9660

cgaaggaggc taagtgggag gggtagcggt cgttgtccac taggggggtcc actcgctcca 9720

gggtgtgaag acacatgtcg ccctcttcgg catcaaggaa ggtgattggt ttgtaggtgt 9780

aggccacgtg accgggtgtt cctgaagggg ggctataaaa gggggtgggg gcgcgttcgt 9840

cctcactctc ttccgcatcg ctgtctgcga gggccagctg ttggggtgag tactccctct 9900

gaaaagcggg catgacttct gcgctaagat tgtcagtttc caaaaacgag gaggatttga 9960

tattcacctg gcccgcggtg atgcctttga gggtggccgc atccatctgg tcagaaaaga 10020

caatcttttt gttgtcaagc ttggtggcaa acgacccgta gagggcgttg gacagcaact 10080

tggcgatgga gcgcagggtt tggtttttgt cgcgatcggc gcgctccttg gccgcgatgt 10140

ttagctgcac gtattcgcgc gcaacgcacc gccattcggg aaagacggtg gtgcgctcgt 10200

cgggcaccag gtgcacgcgc caaccgcggt tgtgcagggt gacaaggtca acgctggtgg 10260

ctacctctcc gcgtaggcgc tcgttggtcc agcagaggcg gccgcccttg cgcgagcaga 10320

atggcggtag ggggtctagc tgcgtctcgt ccgggggggtc tgcgtccacg gtaaagaccc 10380

cgggcagcag gcgcgcgtcg aagtagtcta tcttgcatcc ttgcaagtct agcgcctgct 10440

gccatgcgcg ggcggcaagc gcgcgctcgt atgggttgag tgggggaccc catggcatgg 10500

ggtgggtgag cgcggaggcg tacatgccgc aaatgtcgta aacgtagagg ggctctctga 10560

gtattccaag atatgtaggg tagcatcttc caccgcggat gctggcgcgc acgtaatcgt 10620

atagttcgtg cgagggagcg aggaggtcgg gaccgaggtt gctacgggcg ggctgctctg 10680

ctcggaagac tatctgcctg aagatggcat gtgagttgga tgatatggtt ggacgctgga 10740

agacgttgaa gctggcgtct gtgagaccta ccgcgtcacg cacgaaggag gcgtaggagt 10800

cgcgcagctt gttgaccagc tcggcggtga cctgcacgtc tagggcgcag tagtccaggg 10860

tttccttgat gatgtcatac ttatcctgtc cctttttttt ccacagctcg cggttgagga 10920

caaactcttc gcggtctttc cagtactctt ggatcggaaa cccgtcggcc tccgaacggt 10980

aagagcctag catgtagaac tggttgacgg cctggtaggc gcagcatccc ttttctacgg 11040

gtagcgcgta tgcctgcgcg gccttccgga gcgaggtgtg ggtgagcgca aaggtgtccc 11100

tgaccatgac tttgaggtac tggtatttga agtcagtgtc gtcgcatccg ccctgctccc 11160

agagcaaaaa gtccgtgcgc tttttggaac gcggatttgg cagggcgaag gtgacatcgt 11220

tgaagagtat ctttcccgcg cgaggcataa agttgcgtgt gatgcggaag ggtcccggca 11280

cctcggaacg gttgttaatt acctgggcgg cgagcacgat ctcgtcaaag ccgttgatgt 11340

tgtggcccac aatgtaaagt tccaagaagc gcgggatgcc cttgatggaa ggcaattttt 11400

taagttcctc gtaggtgagc tcttcagggg agctgagccc gtgctctgaa agggcccagt 11460

ctgcaagatg agggttggaa gcgacgaatg agctccacag gtcacgggcc attagcattt 11520

gcaggtggtc gcgaaaggtc ctaaactggc gacctatggc catttttct ggggtgatgc 11580

agtagaaggt aagcgggtct tgttcccagc ggtcccatcc aaggttcgcg gctaggtctc 11640

gcgcggcagt cactagaggc tcatctccgc cgaacttcat gaccagcatg aagggcacga 11700

gctgcttccc aaaggccccc atccaagtat aggtctctac atcgtaggtg acaaagagac 11760

gctcggtgcg aggatgcgag ccgatcggga agaactggat ctcccgccac caattggagg 11820

agtggctatt gatgtggtga aagtagaagt ccctgcgacg ggccgaacac tcgtgctggc 11880

ttttgtaaaa acgtgcgcag tactggcagc ggtgcacggg ctgtacatcc tgcacgaggt 11940

tgacctgacg accgcgcaca aggaagcaga gtgggaattt gagcccctcg cctggcgggt 12000

ttggctggtg gtcttctact tcggctgctt gtccttgacc gtctggctgc tcgaggggag 12060

ttacggtgga tcggaccacc acgccgcgcg agcccaaagt ccagatgtcc gcgcgcggcg 12120

gtcggagctt gatgacaaca tcgcgcagat gggagctgtc catggtctgg agctcccgcg 12180

gcgtcaggtc aggcgggagc tcctgcaggt ttacctcgca tagacgggtc agggcgcggg 12240

ctagatccag gtgataccta atttccaggg gctggttggt ggcggcgtcg atggcttgca 12300

agaggccgca tccccgcggc gcgactacgg taccgcgcgg cgggcggtgg gccgcggggg 12360

tgtccttgga tgatgcatct aaaagcggtg acgcgggcga gcccccggag gtaggggggg 12420

ctccggaccc gccgggagag ggggcagggg cacgtcggcg ccgcgcgcgg gcaggagctg 12480

gtgctgcgcg cgtaggttgc tggcgaacgc gacgacgcgg cggttgatct cctgaatctg 12540

gcgcctctgc gtgaagacga cgggcccggt gagcttgaac ctgaaagaga gttcgacaga 12600

atcaatttcg gtgtcgttga cggcggcctg gcgcaaaatc tcctgcacgt ctcctgagtt 12660

gtcttgatag gcgatctcgg ccatgaactg ctcgatctct tcctcctgga gatctccgcg 12720

tccggctcgc tccacggtgg cggcgaggtc gttggaaatg cgggccatga gctgcgagaa 12780

ggcgttgagg cctccctcgt tccagacgcg gctgtagacc acgccccctt cggcatcgcg 12840

ggcgcgcatg accacctgcg cgagattgag ctccacgtgc cgggcgaaga cggcgtagtt 12900

tcgcaggcgc tgaaagaggt agttgagggt ggtggcggtg tgttctgcca cgaagaagta 12960

cataacccag cgtcgcaacg tggattcgtt gatatccccc aaggcctcaa ggcgctccat 13020

ggcctcgtag aagtccacgg cgaagttgaa aaactgggag ttgcgcgccg acacggttaa 13080

ctcctcctcc agaagacgga tgagctcggc gacagtgtcg cgcacctcgc gctcaaaggc 13140

tacaggggcc tcttcttctt cttcaatctc ctcttccata agggcctccc cttcttcttc 13200

ttctggcggc ggtgggggag gggggacacg gcggcgacga cggcgcaccg ggaggcggtc 13260

gacaaagcgc tcgatcatct ccccgcggcg acggcgcatg gtctcggtga cggcgcggcc 13320

gttctcgcgg gggcgcagtt ggaagacgcc gcccgtcatg tcccggttat gggttggcgg 13380

ggggctgcca tgcggcaggg atacggcgct aacgatgcat ctcaacaatt gttgtgtagg 13440

tactccgccg ccgagggacc tgagcgagtc cgcatcgacc ggatcggaaa acctctcgag 13500

aaaggcgtct aaccagtcac agtcgcaagg taggctgagc accgtggcgg gcggcagcgg 13560

gcggcggtcg gggttgtttc tggcggaggt gctgctgatg atgtaattaa agtaggcggt 13620

cttgagacgg cggatggtcg acagaagcac catgtccttg ggtccggcct gctgaatgcg 13680

caggcggtcg gccatgcccc aggcttcgtt ttgacatcgg cgcaggtctt tgtagtagtc 13740

ttgcatgagc ctttctaccg gcacttcttc ttctccttcc tcttgtcctg catctcttgc 13800

atctatcgct gcggcggcgg cggagtttgg ccgtaggtgg cgccctcttc ctcccatgcg 13860

tgtgaccccg aagcccctca tcggctgaag cagggctagg tcggcgacaa cgcgctcggc 13920

taatatggcc tgctgcacct gcgtgagggt agactggaag tcatccatgt ccacaaagcg 13980

gtggtatgcg cccgtgttga tggtgtaagt gcagttggcc ataacggacc agttaacggt 14040

ctggtgaccc ggctgcgaga gctcggtgta cctgagacgc gagtaagccc tcgagtcaaa 14100

tacgtagtcg ttgcaagtcc gcaccaggta ctggtatccc accaaaaagt gcggcggcgg 14160

ctggcggtag aggggccagc gtagggtggc cggggctccg ggggcgagat cttccaacat 14220

aaggcgatga tatccgtaga tgtacctgga catccaggtg atgccggcgg cggtggtgga 14280

ggcgcgcgga aagtcgcgga cgcggttcca gatgttgcgc agcggcaaaa agtgctccat 14340

ggtcgggacg ctctggccgg tcaggcgcgc gcaatcgttg acgctctagc gtgcaaaagg 14400

agagcctgta agcgggcact cttccgtggt ctggtggata aattcgcaag ggtatcatgg 14460

cggacgaccg gggttcgagc cccgtatccg gccgtccgcc gtgatccatg cggttaccgc 14520

ccgcgtgtcg aacccaggtg tgcgacgtca gacaacgggg gagtgctcct tttggcttcc 14580

ttccaggcgc ggcggctgct gcgctagctt ttttggccac tggccgcgcg cagcgtaagc 14640

ggttaggctg gaaagcgaaa gcattaagtg gctcgctccc tgtagccgga gggttatttt 14700

ccaagggttg agtcgcggga cccccggttc gagtctcgga ccggccggac tgcggcgaac 14760

gggggtttgc ctccccgtca tgcaagaccc cgcttgcaaa ttcctccgga aacagggacg 14820

agccccttt ttgcttttcc cagatgcatc cggtgctgcg gcagatgcgc ccccctcctc 14880

agcagcggca agagcaagag cagcggcaga catgcagggc accctcccct cctcctaccg 14940

cgtcaggagg ggcgacatcc gcggttgacg cggcagcaga tggtgattac gaaccccgc 15000

ggcgccgggc ccggcactac ctggacttgg aggagggcga gggcctggcg cggctaggag 15060

cgccctctcc tgagcggcac ccaagggtgc agctgaagcg tgatacgcgt gaggcgtacg 15120

tgccgcggca gaacctgttt cgcgaccgcg agggagagga gcccgaggag atgcgggatc 15180

gaaagttcca cgcagggcgc gagctgcggc atggcctgaa tcgcgagcgg ttgctgcgcg 15240

aggaggactt tgagcccgac gcgcgaaccg ggattagtcc cgcgcgcgca cacgtggcgg 15300

ccgccgacct ggtaaccgca tacgagcaga cggtgaacca ggagattaac tttcaaaaaa 15360

gctttaacaa ccacgtgcgt acgcttgtgg cgcgcgagga ggtggctata ggactgatgc 15420

atctgtggga ctttgtaagc gcgctggagc aaaacccaaa tagcaagccg ctcatggcgc 15480

agctgttcct tatagtgcag cacagcaggg acaacgaggc attcagggat gcgctgctaa 15540

acatagtaga gcccgagggc cgctggctgc tcgatttgat aaacatcctg cagagcatag 15600

tggtgcagga gcgcagcttg agcctggctg acaaggtggc cgccatcaac tattccatgc 15660

ttagcctggg caagttttac gcccgcaaga tataccatac cccttacgtt cccatagaca 15720

aggaggtaaa gatcgagggg ttctacatgc gcatggcgct gaaggtgctt accttgagcg 15780

acgacctggg cgtttatcgc aacgagcgca tccacaaggc cgtgagcgtg agccggcggc 15840

gcgagctcag cgaccgcgag ctgatgcaca gcctgcaaag ggccctggct ggcacgggca 15900

gcggcgatag agaggccgag tcctactttg acgcgggcgc tgacctgcgc tgggccccaa 15960

gccgacgcgc cctggaggca gctggggccg gacctgggct ggcggtggca cccgcgcgcg 16020

ctggcaacgt cggcggcgtg gaggaatatg acgaggacga tgagtacgag ccagaggacg 16080

gcgagtacta agcggtgatg tttctgatca gatgatgcaa gacgcaacgg acccggcggt 16140

gcgggcggcg ctgcagagcc agccgtccgg ccttaactcc acggacgact ggcgccaggt 16200

catggaccgc atcatgtcgc tgactgcgcg caatcctgac gcgttccggc agcagccgca 16260

ggccaaccgg ctctccgcaa ttctggaagc ggtggtcccg gcgcgcgcaa accccacgca 16320

cgagaaggtg ctggcgatcg taaacgcgct ggccgaaaac agggccatcc ggcccgacga 16380

ggccggcctg gtctacgacg cgctgcttca gcgcgtggct cgttacaaca gcggcaacgt 16440

gcagaccaac ctggaccggc tggtggggga tgtgcgcgag gccgtggcgc agcgtgagcg 16500

cgcgcagcag cagggcaacc tgggctccat ggttgcacta aacgccttcc tgagtacaca 16560

gcccgccaac gtgccgcggg gacaggagga ctacaccaac tttgtgagcg cactgcggct 16620

aatggtgact gagacaccgc aaagtgaggt gtaccagtct gggccagact atttttcca 16680

gaccagtaga caaggcctgc agaccgtaaa cctgagccag gctttcaaaa acttgcaggg 16740

gctgtggggg gtgcgggctc ccacaggcga ccgcgcgacc gtgtctagct tgctgacgcc 16800

caactcgcgc ctgttgctgc tgctaatagc gcccttcacg gacagtggca gcgtgtcccg 16860

ggacacatac ctaggtcact tgctgacact gtaccgcgag gccataggtc aggcgcatgt 16920

ggacgagcat actttccagg agattacaag tgtcagccgc gcgctggggc aggaggacac 16980

gggcagcctg gaggcaaccc taaactacct gctgaccaac cggcggcaga agatcccctc 17040

gttgcacagt ttaaacagcg aggaggagcg cattttgcgc tacgtgcagc agagcgtgag 17100

ccttaacctg atgcgcgacg gggtaacgcc cagcgtggcg ctggacatga ccgcgcgcaa 17160

catggaaccg ggcatgtatg cctcaaaccg gccgtttatc aaccgcctaa tggactactt 17220

gcatcgcgcg gccgccgtga accccgagta tttcaccaat gccatcttga acccgcactg 17280

gctaccgccc cctggtttct acaccggggg attcgaggtg cccgagggta acgatggatt 17340

cctctgggac gacatagacg acagcgtgtt ttccccgcaa ccgcagaccc tgctagagtt 17400

gcaacagcgc gagcaggcag aggcggcgct gcgaaaggaa agcttccgca ggccaagcag 17460

cttgtccgat ctaggcgctg cggccccgcg gtcagatgct agtagcccat ttccaagctt 17520

gatagggtct cttaccagca ctcgcaccac ccgcccgcgc ctgctgggcg aggaggagta 17580

cctaaacaac tcgctgctgc agccgcagcg cgaaaaaaac ctgcctccgg catttcccaa 17640

caacgggata gagagcctag tggacaagat gagtagatgg aagacgtacg cgcaggagca 17700

cagggacgtg ccaggcccgc gcccgcccac ccgtcgtcaa aggcacgacc gtcagcgggg 17760

tctggtgtgg gaggacgatg actcggcaga cgacagcagc gtcctggatt tgggagggag 17820

tggcaacccg tttgcgcacc ttcgccccag gctggggaga atgttttaaa aaaaaaaaag 17880

catgatgcaa aataaaaaac tcaccaaggc catggcaccg agcgttggtt ttcttgtatt 17940

ccccttagta tgcggcgcgc ggcgatgtat gaggaaggtc ctcctccctc ctacgagagt 18000

gtggtgagcg cggcgccagt ggcggcggcg ctgggttctc ccttcgatgc tcccctggac 18060

ccgccgtttg tgcctccgcg gtacctgcgg cctaccgggg ggagaaacag catccgttac 18120

tctgagttgg caccctatt cgacaccacc cgtgtgtacc tggtggacaa caagtcaacg 18180

gatgtggcat ccctgaacta ccagaacgac cacagcaact ttctgaccac ggtcattcaa 18240

aacaatgact acagcccggg ggaggcaagc acacagacca tcaatcttga cgaccggtcg 18300

cactggggcg gcgacctgaa aaccatcctg cataccaaca tgccaaatgt gaacgagttc 18360

atgtttacca ataagtttaa ggcgcgggtg atggtgtcgc gcttgcctac taaggacaat 18420

caggtggagc tgaaatacga gtgggtggag ttcacgctgc ccgagggcaa ctactccgag 18480

accatgacca tagaccttat gaacaacgcg atcgtggagc actacttgaa agtgggcaga 18540

cagaacgggg ttctggaaag cgacatcggg gtaaagtttg acacccgcaa cttcagactg 18600

gggtttgacc ccgtcactgg tcttgtcatg cctggggtat atacaaacga agccttccat 18660

ccagacatca ttttgctgcc aggatgcggg gtggacttca cccacagccg cctgagcaac 18720

ttgttgggca tccgcaagcg gcaacccttc caggagggct ttaggatcac ctacgatgat 18780

ctggagggtg gtaacattcc cgcactgttg gatgtggacg cctaccaggc gagcttgaaa 18840

gatgacaccg aacagggcgg gggtggcgca ggcggcagca acagcagtgg cagcggcgcg 18900

gaagagaact ccaacgcggc agccgcggca atgcagccgg tggaggacat gaacgatcat 18960

gccattcgcg gcgacacctt tgccacacgg gctgaggaga agcgcgctga ggccgaagca 19020

gcggccgaag ctgccgcccc cgctgcgcaa cccgaggtcg agaagcctca gaagaaaccg 19080

gtgatcaaac ccctgacaga ggacagcaag aaacgcagtt acaacctaat aagcaatgac 19140

agcaccttca cccagtaccg cagctggtac cttgcataca actacggcga ccctcagacc 19200

ggaatccgct catggaccct gctttgcact cctgacgtaa cctgcggctc ggagcaggtc 19260

tactggtcgt tgccagacat gatgcaagac cccgtgacct tccgctccac gcgccagatc 19320

agcaactttc cggtggtggg cgccgagctg ttgcccgtgc actccaagag cttctacaac 19380

gaccaggccg tctactccca actcatccgc cagtttacct ctctgaccca cgtgttcaat 19440

cgctttcccg agaaccagat tttggcgcgc ccgccagccc ccaccatcac caccgtcagt 19500

gaaaacgttc ctgctctcac agatcacggg acgctaccgc tgcgcaacag catcggagga 19560

gtccagcgag tgaccattac tgacgccaga cgccgcacct gcccctacgt ttacaaggcc 19620

ctgggcatag tctcgccgcg cgtcctatcg agccgcactt tttgagcaag catgtccatc 19680

cttatatcgc ccagcaataa cacaggctgg ggcctgcgct tcccaagcaa gatgtttggc 19740

ggggccaaga agcgctccga ccaacaccca gtgcgcgtgc gcgggcacta ccgcgcgccc 19800

tggggcgcgc acaaacgcgg ccgcactggg cgcaccaccg tcgatgacgc catcgacgcg 19860

gtggtggagg aggcgcgcaa ctacacgccc acgccgccac cagtgtccac agtggacgcg 19920

gccattcaga ccgtggtgcg cggagcccgg cgctatgcta aaatgaagag acggcggagg 19980

cgcgtagcac gtcgccaccg ccgccgaccc ggcactgccg cccaacgcgc ggcggcggcc 20040

ctgcttaacc gcgcacgtcg caccggccga cgggcggcca tgcgggccgc tcgaaggctg 20100

gccgcgggta ttgtcactgt gccccccagg tccaggcgac gagcggccgc cgcagcagcc 20160

gcggccatta gtgctatgac tcagggtcgc aggggcaacg tgtattgggt gcgcgactcg 20220

gttagcggcc tgcgcgtgcc cgtgcgcacc cgcccccgc gcaactagat tgcaagaaaa 20280

aactacttag actcgtactg ttgtatgtat ccagcggcgg cggcgcgcaa cgaagctatg 20340

tccaagcgca aaatcaaaga agagatgctc caggtcatcg cgccggagat ctatggcccc 20400

ccgaagaagg aagagcagga ttacaagccc cgaaagctaa agcgggtcaa aaagaaaaag 20460

aaagatgatg atgatgaact tgacgacgag gtggaactgc tgcacgctac cgcgcccagg 20520

cgacgggtac agtggaaagg tcgacgcgta aaacgtgttt tgcgacccgg caccaccgta 20580

gtctttacgc ccggtgagcg ctccacccgc acctacaagc gcgtgtatga tgaggtgtac 20640

ggcgacgagg acctgcttga gcaggccaac gagcgcctcg gggagtttgc ctacggaaag 20700

cggcataagg acatgctggc gttgccgctg gacgagggca acccaacacc tagcctaaag 20760

cccgtaacac tgcagcaggt gctgcccgcg cttgcaccgt ccgaagaaaa gcgcggccta 20820

aagcgcgagt ctggtgactt ggcacccacc gtgcagctga tggtacccaa gcgccagcga 20880

ctggaagatg tcttggaaaa aatgaccgtg gaacctgggc tggagcccga ggtccgcgtg 20940

cggccaatca agcaggtggc gccgggactg ggcgtgcaga ccgtggacgt tcagataccc 21000

actaccagta gcaccagtat tgccaccgcc acagagggca tggagacaca aacgtccccg 21060

gttgcctcag cggtggcgga tgccgcggtg caggcggtcg ctgcggccgc gtccaagacc 21120

tctacggagg tgcaaacgga cccgtggatg tttcgcgttt cagccccccg gcgcccgcgc 21180

cgttcgagga agtacggcgc cgccagcgcg ctactgcccg aatatgccct acatccttcc 21240

attgcgccta cccccggcta tcgtggctac acctaccgcc ccagaagacg agcaactacc 21300

cgacgccgaa ccaccactgg aacccgccgc cgccgtcgcc gtcgccagcc cgtgctggcc 21360

ccgatttccg tgcgcagggt ggctcgcgaa ggaggcagga ccctggtgct gccaacagcg 21420

cgctaccacc ccagcatcgt ttaaaagccg gtctttgtgg ttcttgcaga tatggccctc 21480

acctgccgcc tccgtttccc ggtgccggga ttccgaggaa gaatgcaccg taggaggggc 21540

atggccggcc acggcctgac gggcggcatg cgtcgtgcgc accaccggcg gcggcgcgcg 21600

tcgcaccgtc gcatgcgcgg cggtatcctg cccctcctta ttccactgat cgccgcggcg 21660

attggcgccg tgcccggaat tgcatccgtg gccttgcagg cgcagagaca ctgattaaaa 21720

acaagttgca tgtggaaaaa tcaaaataaa aagtctggac tctcacgctc gcttggtcct 21780

gtaactattt tgtagaatgg aagacatcaa ctttgcgtct ctggccccgc gacacggctc 21840

gcgcccgttc atgggaaact ggcaagatat cggcaccagc aatatgagcg gtggcgcctt 21900

cagctggggc tcgctgtgga gcggcattaa aaatttcggt tccaccgtta agaactatgg 21960

cagcaaggcc tggaacagca gcacaggcca gatgctgagg gataagttga aagagcaaaa 22020

tttccaacaa aaggtggtag atggcctggc ctctggcatt agcggggtgg tggacctggc 22080

caaccaggca gtgcaaaata agattaacag taagcttgat ccccgccctc ccgtagagga 22140

gcctccaccg gccgtggaga cagtgtctcc agaggggcgt ggcgaaaagc gtccgcgccc 22200

cgacagggaa gaaactctgg tgacgcaaat agacgagcct ccctcgtacg aggaggcact 22260

aaagcaaggc ctgcccacca cccgtcccat cgcgcccatg gctaccggag tgctgggcca 22320

gcacacaccc gtaacgctgg acctgcctcc ccccgccgac acccagcaga aacctgtgct 22380

gccaggcccg accgccgttg ttgtaacccg tcctagccgc gcgtccctgc gccgcgccgc 22440

cagcggtccg cgatcgttgc ggcccgtagc cagtggcaac tggcaaagca cactgaacag 22500

catcgtgggt ctgggggtgc aatccctgaa gcgccgacga tgcttctgat agctaacgtg 22560

tcgtatgtgt gtcatgtatg cgtccatgtc gccgccagag gagctgctga gccgccgcgc 22620

gcccgctttc caagatggct acccccttcga tgatgccgca gtggtcttac atgcacatct 22680

cgggccagga cgcctcggag tacctgagcc ccgggctggt gcagtttgcc cgcgccaccg 22740

agacgtactt cagcctgaat aacaagttta gaaaccccac ggtggcgcct acgcacgacg 22800

tgaccacaga ccggtcccag cgtttgacgc tgcggttcat ccctgtggac cgtgaggata 22860

ctgcgtactc gtacaaggcg cggttcaccc tagctgtggg tgataaccgt gtgctggaca 22920

tggcttccac gtactttgac atccgcggcg tgctggacag gggccctact tttaagccct 22980

actctggcac tgcctacaac gccctggctc ccaagggtgc cccaaatcct tgcgaatggg 23040

atgaagctgc tactgctctt gaaataaacc tagaagaaga ggacgatgac aacgaagacg 23100

aagtagacga gcaagctgag cagcaaaaaa ctcacgtatt tgggcaggcg ccttattctg 23160

gtataaatat tacaaaggag ggtattcaaa taggtgtcga aggtcaaaca cctaaatatg 23220

ccgataaaac atttcaacct gaacctcaaa taggagaatc tcagtggtac gaaacagaaa 23280

ttaatcatgc agctgggaga gtcctaaaaa agactacccc aatgaaacca tgttacggtt 23340

catatgcaaa acccacaaat gaaaatggag ggcaaggcat tcttgtaaag caacaaaatg 23400

gaaagctaga aagtcaagtg gaaatgcaat ttttctcaac tactgaggca gccgcaggca 23460

atggtgataa cttgactcct aaagtggtat tgtacagtga agatgtagat atagaaaccc 23520

cagacactca tatttcttac atgcccacta ttaaggaagg taactcacga gaactaatgg 23580

gccaacaatc tatgcccaac aggcctaatt acattgcttt tagggacaat tttattggtc 23640

taatgtatta caacagcacg ggtaatatgg gtgttctggc gggccaagca tcgcagttga 23700

atgctgttgt agatttgcaa gacagaaaca cagagctttc ataccagctt ttgcttgatt 23760

ccattggtga tagaaccagg tacttttcta tgtggaatca ggctgttgac agctatgatc 23820

cagatgttag aattattgaa aatcatggaa ctgaagatga acttccaaat tactgctttc 23880

cactgggagg tgtgattaat acagagactc ttaccaaggt aaaacctaaa acaggtcagg 23940

aaaatggatg ggaaaaagat gctacagaat tttcagataa aaatgaaata agagttggaa 24000

ataattttgc catggaaatc aatctaaatg ccaacctgtg gagaaatttc ctgtactcca 24060

acatagcgct gtatttgccc gacaagctaa agtacagtcc ttccaacgta aaaatttctg 24120

ataacccaaa cacctacgac tacatgaaca agcgagtggt ggctcccggg ctagtggact 24180

gctacattaa ccttggagca cgctggtccc ttgactatat ggacaacgtc aacccattta 24240

accaccaccg caatgctggc ctgcgctacc gctcaatgtt gctgggcaat ggtcgctatg 24300

tgcccttcca catccaggtg cctcagaagt tctttgccat taaaaacctc cttctcctgc 24360

cgggctcata cacctacgag tggaacttca ggaaggatgt taacatggtt ctgcagagct 24420

ccctaggaaa tgacctaagg gttgacggag ccagcattaa gtttgatagc atttgccttt 24480

acgccacctt cttccccatg gcccacaaca ccgcctccac gcttgaggcc atgcttagaa 24540

acgacaccaa cgaccagtcc tttaacgact atctctccgc cgccaacatg ctctacccta 24600

tacccgccaa cgctaccaac gtgcccatat ccatcccctc ccgcaactgg gcggctttcc 24660

gcggctgggc cttcacgcgc cttaagacta aggaaacccc atcactgggc tcgggctacg 24720

acccttatta cacctactct ggctctatac cctacctaga tggaaccttt tacctcaacc 24780

acacctttaa gaaggtggcc attacctttg actcttctgt cagctggcct ggcaatgacc 24840

gcctgcttac ccccaacgag tttgaaatta agcgctcagt tgacggggag ggttacaacg 24900

ttgcccagtg taacatgacc aaagactggt tcctggtaca aatgctagct aactataaca 24960

ttggctacca gggcttctat atcccagaga gctacaagga ccgcatgtac tccttcttta 25020

gaaacttcca gcccatgagc cgtcaggtgg tggatgatac taaatacaag gactaccaac 25080

aggtgggcat cctacaccaa cacaacaact ctggatttgt tggctacctt gcccccacca 25140

tgcgcgaagg acaggcctac cctgctaact tcccctatcc gcttataggc aagaccgcag 25200

ttgacagcat tacccagaaa aagtttcttt gcgatcgcac cctttggcgc atcccattct 25260

ccagtaactt tatgtccatg ggcgcactca cagacctggg ccaaaacctt ctctacgcca 25320

actccgccca cgcgctagac atgacttttg aggtggatcc catggacgag cccacccttc 25380

tttatgtttt gtttgaagtc tttgacgtgg tccgtgtgca ccagccgcac cgcggcgtca 25440

tcgaaaccgt gtacctgcgc acgcccttct cggccggcaa cgccacaaca taaagaagca 25500

agcaacatca acaacagctg ccgccatggg ctccagtgag caggaactga aagccattgt 25560

caaagatctt ggttgtgggc catatttttt gggcacctat gacaagcgct ttccaggctt 25620

tgtttctcca cacaagctcg cctgcgccat agtcaatacg gccggtcgcg agactggggg 25680

cgtacactgg atggcctttg cctggaaccc gcactcaaaa acatgctacc tctttgagcc 25740

ctttggcttt tctgaccagc gactcaagca ggtttaccag tttgagtacg agtcactcct 25800

gcgccgtagc gccattgctt cttcccccga ccgctgtata acgctggaaa agtccaccca 25860

aagcgtacag gggcccaact cggccgcctg tggactattc tgctgcatgt ttctccacgc 25920

ctttgccaac tggccccaaa ctcccatgga tcacaacccc accatgaacc ttattaccgg 25980

ggtacccaac tccatgctca acagtcccca ggtacagccc accctgcgtc gcaaccagga 26040

acagctctac agcttcctgg agcgccactc gccctacttc cgcagccaca gtgcgcagat 26100

taggagcgcc acttcttttt gtcacttgaa aaacatgtaa aaataatgta ctagagacac 26160

tttcaataaa ggcaaatgct tttatttgta cactctcggg tgattattta cccccaccct 26220

tgccgtctgc gccgtttaaa aatcaaaggg gttctgccgc gcatcgctat gcgccactgg 26280

cagggacacg ttgcgatact ggtgtttagt gctccactta aactcaggca caaccatccg 26340

cggcagctcg gtgaagtttt cactccacag gctgcgcacc atcaccaacg cgtttagcag 26400

gtcgggcgcc gatatcttga agtcgcagtt ggggcctccg ccctgcgcgc gcgagttgcg 26460

atacacaggg ttgcagcact ggaacactat cagcgccggg tggtgcacgc tggccagcac 26520

gctcttgtcg gagatcagat ccgcgtccag gtcctccgcg ttgctcaggg cgaacggagt 26580

caactttggt agctgccttc ccaaaaaggg cgcgtgccca ggctttgagt tgcactcgca 26640

ccgtagtggc atcaaaaggt gaccgtgccc ggtctgggcg ttaggataca gcgcctgcat 26700

aaaagccttg atctgcttaa aagccacctg agcctttgcg ccttcagaga agaacatgcc 26760

gcaagacttg ccggaaaact gattggccgg acaggccgcg tcgtgcacgc agcaccttgc 26820

gtcggtgttg gagatctgca ccacatttcg gccccaccgg ttcttcacga tcttggcctt 26880

gctagactgc tccttcagcg cgcgctgccc gttttcgctc gtcacatcca tttcaatcac 26940

gtgctcctta tttatcataa tgcttccgtg tagacactta agctcgcctt cgatctcagc 27000

gcagcggtgc agccacaacg cgcagcccgt gggctcgtga tgcttgtagg tcacctctgc 27060

aaacgactgc aggtacgcct gcaggaatcg ccccatcatc gtcacaaagg tcttgttgct 27120

ggtgaaggtc agctgcaacc cgcggtgctc ctcgttcagc caggtcttgc atacggccgc 27180

cagagcttcc acttggtcag gcagtagttt gaagttcgcc tttagatcgt tatccacgtg 27240

gtacttgtcc atcagcgcgc gcgcagcctc catgcccttc tcccacgcag acacgatcgg 27300

cacactcagc gggttcatca ccgtaatttc actttccgct tcgctgggct cttcctcttc 27360

ctcttgcgtc cgcataccac gcgccactgg gtcgtcttca ttcagccgcc gcactgtgcg 27420

cttacctcct ttgccatgct tgattagcac cggtgggttg ctgaaaccca ccatttgtag 27480

cgccacatct tctctttctt cctcgctgtc cacgattacc tctggtgatg gcgggcgctc 27540

gggcttggga gaagggcgct tctttttctt cttgggcgca atggccaaat ccgccgccga 27600

ggtcgatggc cgcgggctgg gtgtgcgcgg caccagcgcg tcttgtgatg agtcttcctc 27660

gtcctcggac tcgatacgcc gcctcatccg ctttttgggg ggcgcccggg gaggcggcgg 27720

cgacggggac ggggacgaca cgtcctccat ggttgggggа cgtcgcgccg caccgcgtcc 27780

gcgctcgggg gtggtttcgc gctgctcctc ttcccgactg gccatttcct tctcctatag 27840

gcagaaaaag atcatggagt cagtcgagaa gaaggacagc ctaaccgccc cctctgagtt 27900

cgccaccacc gcctccaccg atgccgccaa cgcgcctacc accttccccg tcgaggcacc 27960

cccgcttgag gaggaggaag tgattatcga gcaggaccca ggttttgtaa gcgaagacga 28020

cgaggaccgc tcagtaccaa cagaggataa aaagcaagac caggacaacg cagaggcaaa 28080

cgaggaacaa gtcgggcggg gggacgaaag gcatggcgac tacctagatg tgggagacga 28140

cgtgctgttg aagcatctgc agcgccagtg cgccattatc tgcgacgcgt tgcaagagcg 28200

cagcgatgtg cccctcgcca tagcggatgt cagccttgcc tacgaacgcc acctattctc 28260

accgcgcgta ccccccaaac gccaagaaaa cggcacatgc gagcccaacc cgcgcctcaa 28320

cttctacccc gtatttgccg tgccagaggt gcttgccacc tatcacatct ttttccaaaa 28380

ctgcaagata cccctatcct gccgtgccaa ccgcagccga gcggacaagc agctggcctt 28440

gcggcagggc gctgtcatac ctgatatcgc ctcgctcaac gaagtgccaa aaatctttga 28500

gggtcttgga cgcgacgaga agcgcgcggc aaacgctctg caacaggaaa acagcgaaaa 28560

tgaaagtcac tctggagtgt tggtggaact cgagggtgac aacgcgcgcc tagccgtact 28620

aaaacgcagc atcgaggtca cccactttgc ctacccggca cttaacctac cccccaaggt 28680

catgagcaca gtcatgagtg agctgatcgt gcgccgtgcg cagcccctgg agagggatgc 28740

aaatttgcaa gaacaaacag aggagggcct acccgcagtt ggcgacgagc agctagcgcg 28800

ctggcttcaa acgcgcgagc ctgccgactt ggaggagcga cgcaaactaa tgatggccgc 28860

agtgctcgtt accgtggagc ttgagtgcat gcagcggttc tttgctgacc cggagatgca 28920

gcgcaagcta gaggaaacat tgcactacac ctttcgacag ggctacgtac gccaggcctg 28980

caagatctcc aacgtggagc tctgcaacct ggtctcctac cttggaattt tgcacgaaaa 29040

ccgccttggg caaaacgtgc ttcattccac gctcaagggc gaggcgcgcc gcgactacgt 29100

ccgcgactgc gtttacttat ttctatgcta cacctggcag acggccatgg gcgtttggca 29160

gcagtgcttg gaggagtgca acctcaagga gctgcagaaa ctgctaaagc aaaacttgaa 29220

ggacctatgg acggccttca acgagcgctc cgtggccgcg cacctggcgg acatcatttt 29280

ccccgaacgc ctgcttaaaa ccctgcaaca gggtctgcca gacttcacca gtcaaagcat 29340

gttgcagaac tttaggaact ttatcctaga gcgctcagga atcttgcccg ccacctgctg 29400

tgcacttcct agcgactttg tgcccattaa gtaccgcgaa tgccctccgc cgctttgggg 29460

ccactgctac cttctgcagc tagccaacta ccttgcctac cactctgaca taatggaaga 29520

cgtgagcggt gacggtctac tggagtgtca ctgtcgctgc aacctatgca ccccgcaccg 29580

ctccctggtt tgcaattcgc agctgcttaa cgaaagtcaa attatcggta cctttgagct 29640

gcagggtccc tcgcctgacg aaaagtccgc ggctccgggg ttgaaactca ctccggggct 29700

gtggacgtcg gcttaccttc gcaaatttgt acctgaggac taccacgccc acgagattag 29760

gttctacgaa gaccaatccc gcccgcctaa tgcggagctt accgcctgcg tcattaccca 29820

gggccacatt cttggccaat tgcaagccat caacaaagcc cgccaagagt ttctgctacg 29880

aaagggacgg ggggtttact tggaccccca gtccggcgag gagctcaacc caatcccccc 29940

gccgccgcag ccctatcagc agcagccgcg ggcccttgct tcccaggatg gcacccaaaa 30000

agaagctgca gctgccgccg ccacccacgg acgaggagga atactgggac agtcaggcag 30060

aggaggtttt ggacgaggag gaggaggaca tgatggaaga ctgggagagc ctagacgagg 30120

aagcttccga ggtcgaagag gtgtcagacg aaacaccgtc accctcggtc gcattcccct 30180

cgccggcgcc ccagaaatcg gcaaccggtt ccagcatggc tacaacctcc gctcctcagg 30240

cgccgccggc actgcccgtt cgccgaccca accgtagatg ggacaccact ggaaccaggg 30300

ccggtaagtc caagcagccg ccgccgttag cccaagagca acaacagcgc caaggctacc 30360

gctcatggcg cgggcacaag aacgccatag ttgcttgctt gcaagactgt gggggcaaca 30420

tctccttcgc ccgccgcttt cttctctacc atcacggcgt ggccttcccc cgtaacatcc 30480

tgcattacta ccgtcatctc tacagcccat actgcaccgg cggcagcggc agcaacagca 30540

gcggccacac agaagcaaag gcgaccggat agcaagactc tgacaaagcc caagaaatcc 30600

acagcggcgg cagcagcagg aggaggagcg ctgcgtctgg cgcccaacga acccgtatcg 30660

acccgcgagc ttagaaacag gatttttccc actctgtatg ctatatttca acagagcagg 30720

ggccaagaac aagagctgaa aataaaaaac aggtctctgc gatccctcac ccgcagctgc 30780

ctgtatcaca aaagcgaaga tcagcttcgg cgcacgctgg aagacgcgga ggctctcttc 30840

agtaaatact gcgcgctgac tcttaaggac tagtttcgcg ccctttctca aatttaagcg 30900

cgaaaactac gtcatctcca gcggccacac ccggcgccag cacctgttgt cagcgccatt 30960

atgagcaagg aaattcccac gccctacatg tggagttacc agccacaaat gggacttgcg 31020

gctggagctg cccaagacta ctcaacccga ataaactaca tgagcgcggg accccacatg 31080

atatcccggg tcaacggaat acgcgcccac cgaaaccgaa ttctcctgga acaggcggct 31140

attaccacca cacctcgtaa taaccttaat ccccgtagtt ggcccgctgc cctggtgtac 31200

caggaaagtc ccgctcccac cactgtggta cttcccagag acgcccaggc cgaagttcag 31260

atgactaact caggggcgca gcttgcgggc ggctttcgtc acagggtgcg gtcgcccggg 31320

cagggtataa ctcacctgac aatcagaggg cgaggtattc agctcaacga cgagtcggtg 31380

agctcctcgc ttggtctccg tccggacggg acatttcaga tcggcggcgc cggccgctct 31440

tcattcacgc ctcgtcaggc aatcctaact ctgcagacct cgtcctctga gccgcgctct 31500

ggaggcattg gaactctgca atttattgag gagtttgtgc catcggtcta ctttaacccc 31560

ttctcgggac ctcccggcca ctatccggat caatttattc ctaactttga cgcggtaaag 31620

gactcggcgg acggctacga ctgaatgtta agtggagagg cagagcaact gcgcctgaaa 31680

cacctggtcc actgtcgccg ccacaagtgc tttgcccgcg actccggtga gttttgctac 31740

tttgaattgc ccgaggatca tatcgagggc ccggcgcacg gcgtccggct taccgcccag 31800

ggagagcttg cccgtagcct gattcgggag tttacccagc gccccctgct agttgagcgg 31860

gacaggggac cctgtgttct cactgtgatt tgcaactgtc ctaaccctgg attacatcaa 31920

gatcctctag ttaatgtcag gtcgcctaag tcgattaact agagtacccg gggatcttat 31980

tccctttaac taataaaaaa aaataataaa gcatcactta cttaaaatca gttagcaaat 32040

ttctgtccag tttattcagc agcacctcct tgccctcctc ccagctctgg tattgcagct 32100

tcctcctggc tgcaaacttt ctccacaatc taaatggaat gtcagtttcc tcctgttcct 32160

gtccatccgc acccactatc ttcatgttgt tgcagatgaa gcgcgcaaga ccgtctgaag 32220

ataccttcaa ccccgtgtat ccatatgaca cggaaaccgg tcctccaact gtgccttttc 32280

ttactcctcc ctttgtatcc cccaatgggt ttcaagagag tccccctggg gtactctctt 32340

tgcgcctatc cgaacctcta gttacctcca atggcatgct tgcgctcaaa atgggcaacg 32400

gcctctctct ggacgaggcc ggcaacctta cctcccaaaa tgtaaccact gtgagcccac 32460

ctctcaaaaa aaccaagtca aacataaacc tggaaatatc tgcacccctc acagttacct 32520

cagaagccct aactgtggct gccgccgcac ctctaatggt cgcgggcaac acactcacca 32580

tgcaatcaca ggccccgcta accgtgcacg actccaaact tagcattgcc acccaaggac 32640

ccctcacagt gtcagaagga aagctagccc tgcaaacatc aggccccctc accaccaccg 32700

atagcagtac ccttactatc actgcctcac cccctctaac tactgccact ggtagcttgg 32760

gcattgactt gaaagagccc atttatacac aaaatggaaa actaggacta aagtacgggg 32820

ctcctttgca tgtaacagac gacctaaaca ctttgaccgt agcaactggt ccaggtgtga 32880

ctattaataa tacttccttg caaactaaag ttactggagc cttgggtttt gattcacaag 32940

gcaatatgca acttaatgta gcaggaggac taaggattga ttctcaaaac agacgcctta 33000

tacttgatgt tagttatccg tttgatgctc aaaaccaact aaatctaaga ctaggacagg 33060

gccctctttt tataaactca gcccacaact tggatattaa ctacaacaaa ggcctttact 33120

tgtttacagc ttcaaacaat tccaaaaagc ttgaggttaa cctaagcact gccaaggggt 33180

tgatgtttga cgctacagcc atagccatta atgcaggaga tgggcttgaa tttggttcac 33240

ctaatgcacc aaacacaaat cccctcaaaa caaaaattgg ccatggccta gaatttgatt 33300

caaacaaggc tatggttcct aaactaggaa ctggccttag ttttgacagc acaggtgcca 33360

ttacagtagg aaacaaaaat aatgataagc taactttgtg gaccggaata aaccctccac 33420

ctaactgtca aattgtggaa aacactaata caaatgatgg caaacttact ttagtattag 33480

taaaaaatgg agggcttgtt aatggctacg tgtctctagt tggtgtatca gacactgtga 33540

accaaatgtt cacacaaaag acagcaaaca tccaattaag attatatttt gactcttctg 33600

gaaatctatt aactgaggaa tcagacttaa aaattccact taaaaataaa tcttctacag 33660

cgaccagtga aactgtagcc agcagcaaag cctttatgcc aagtactaca gcttatccct 33720

tcaacaccac tactagggat agtgaaaact acattcatgg aatatgttac tacatgacta 33780

gttatgatag aagtctattt cccttgaaca tttctataat gctaaacagc cgtatgattt 33840

cttccaatgt tgcctatgcc atacaatttg aatggaatct aaatgcaagt gaatctccag 33900

aaagcaacat agctacgctg accacatccc ccttttttctt ttcttacatt acagaagacg 33960

acaactaaag aatcgtttgt gttatgtttc aacgtgttta tttttcaatt gcagaaaatt 34020

tcaagtcatt tttcattcag tagtatagcc ccaccaccac atagcttata cagatcaccg 34080

taccttaatc aaactcacag aaccctagta ttcaacctgc cacctccctc ccaacacaca 34140

gagtacacag tcctttctcc ccggctggcc ttaaaaagca tcatatcatg ggtaacagac 34200

atattcttag gtgttatatt ccacacggtt tcctgtcgag ccaaacgctc atcagtgata 34260

ttaataaact ccccgggcag ctcacttaag ttcatgtcgc tgtccagctg ctgagccaca 34320

ggctgctgtc caacttgcgg ttgcttaacg ggcggcgaag gagaagtcca cgcctacatg 34380

ggggtagagt cataatcgtg catcaggata gggcggtggt gctgcagcag cgcgcgaata 34440

aactgctgcc gccgccgctc cgtcctgcag gaatacaaca tggcagtggt ctcctcagcg 34500

atgattcgca ccgcccgcag cataaggcgc cttgtcctcc gggcacagca gcgcaccctg 34560

atctcactta aatcagcaca gtaactgcag cacagcacca caatattgtt caaaatccca 34620

cagtgcaagg cgctgtatcc aaagctcatg gcggggacca cagaacccac gtggccatca 34680

taccacaagc gcaggtagat taagtggcga cccctcataa acacgctgga cataaacatt 34740

acctcttttg gcatgttgta attcaccacc tcccctctga ttaaacatgg cgccatccac 34800

caccatccta aaccagctgg ccaaaacctg cccgccggct atacactgca gggaaccggg 34860

actggaacaa tgacagtgga gagcccagga ctcgtaacca tggatcatca tgctcgtcat 34920

gatatcaatg ttggcacaac acaggcacac gtgcatacac ttcctcagga ttacaagctc 34980

ctcccgcgtt agaaccatat cccagggaac aacccattcc tgaatcagcg taaatcccac 35040

actgcaggga agacctcgca cgtaactcac gttgtgcatt gtcaaagtgt tacattcggg 35100

cagcagcgga tgatcctcca gtatggtagc gcgggtttct gtctcaaaag gaggtagacg 35160

atccctactg tacggagtgc gccgagacaa ccgagatcgt gttggtcgta gtgtcatgcc 35220

aaatggaacg ccggacgtag tcatatttcc tgaagcaaaa ccaggtgcgg gcgtgacaaa 35280

cagatctgcg tctccggtct cgccgcttag atcgctctgt gtagtagttg tagtatatcc 35340

actctctcaa agcatccagg cgccccctgg cttcgggttc tatgtaaact ccttcatgcg 35400

ccgctgccct gataacatcc accaccgcag aataagccac acccagccaa cctacacatt 35460

cgttctgcga gtcacacacg ggaggagcgg gaagagctgg aagaaccatg ttttttttt 35520

tattccaaaa gattatccaa aacctcaaaa tgaagatcta ttaagtgaac gcgctcccct 35580

ccggtggcgt ggtcaaactc tacagccaaa gaacagataa tggcatttgt aagatgttgc 35640

acaatggctt ccaaaaggca aacggccctc acgtccaagt ggacgtaaag gctaaaccct 35700

tcagggtgaa tctcctctat aaacattcca gcaccttcaa ccatgcccaa ataattctca 35760

tctcgccacc ttctcaatat atctctaagc aaatcccgaa tattaagtcc ggccattgta 35820

aaaatctgct ccagagcgcc ctccaccttc agcctcaagc agcgaatcat gattgcaaaa 35880

attcaggttc ctcacagacc tgtataagat tcaaaagcgg aacattaaca aaaataccgc 35940

gatcccgtag gtcccttcgc agggccagct gaacataatc gtgcaggtct gcacggacca 36000

gcgcggccac ttccccgcca ggaaccatga caaaagaacc cacactgatt atgacacgca 36060

tactcggagc tatgctaacc agcgtagccc cgatgtaagc ttgttgcatg ggcggcgata 36120

taaaatgcaa ggtgctgctc aaaaaatcag gcaaagcctc gcgcaaaaaa gaaagcacat 36180

cgtagtcatg ctcatgcaga taaaggcagg taagctccgg aaccaccaca gaaaaagaca 36240

ccatttttct ctcaaacatg tctgcgggtt tctgcataaa cacaaaataa aataacaaaa 36300

aaacatttaa acattagaag cctgtcttac aacaggaaaa acaaccctta taagcataag 36360

acggactacg gccatgccgg cgtgaccgta aaaaaactgg tcaccgtgat taaaaagcac 36420

caccgacagc tcctcggtca tgtccggagt cataatgtaa gactcggtaa acacatcagg 36480

ttgattcaca tcggtcagtg ctaaaaagcg accgaaatag cccgggggaa tacatacccg 36540

caggcgtaga gacaacatta cagcccccat aggaggtata acaaaattaa taggagagaa 36600

aaacacataa acacctgaaa aaccctcctg cctaggcaaa atagcaccct cccgctccag 36660

aacaacatac agcgcttcca cagcggcagc cataacagtc agccttacca gtaaaaaaga 36720

aaacctatta aaaaaacacc actcgacacg gcaccagctc aatcagtcac agtgtaaaaa 36780

agggccaagt gcagagcgag tatatatagg actaaaaaat gacgtaacgg ttaaagtcca 36840

caaaaaacac ccagaaaacc gcacgcgaac ctacgcccag aaacgaaagc caaaaaaccc 36900

acaacttcct caaatcgtca cttccgtttt cccacgttac gtcacttccc attttaagaa 36960

aactacaatt cccaacacat acaagttact ccgccctaaa acctacgtca cccgccccgt 37020

tcccacgccc cgcgccacgt cacaaactcc acccccctcat tatcatattg gcttcaatcc 37080

aaaataaggt atattattga tgatg 37105

<210> 16
<211> 37105
<212> DNA
<213> Artificial Sequence

<220>
<223> Adk35RF-Spike/E4orf6-E4dl355(E4re#11)

<400> 16
ttaattaaca tcatcaataa tataccttat tttggattga agccaatatg ataatgaggg 60

ggtggagttt gtgacgtggc gcggggcgtg ggaacggggc gggtgacgta gtagtgtggc 120

ggaagtgtga tgttgcaagt gtggcggaac acatgtaagc gacggatgtg gcaaaagtga 180

cgtttttggt gtgcgccggt gtacacagga agtgacaatt ttcgcgcggt tttaggcgga 240

tgttgtagta aatttgggcg taaccgagta agatttggcc attttcgcgg gaaaactgaa 300

taagaggaag tgaaatctga ataattttgt gttactcata gcgcgtaata atttgatccg 360

cgttaagata cattgatgag tttggacaaa ccacaactag aatgcagtga aaaaaatgct 420

ttatttgtga aatttgtgat gctattgctt tatttgtaac cattataagc tgcaataaac 480

aagttaacaa caacaattgc attcatttta tgtttcaggt tcaggggggag gtgtgggagg 540

ttttttaaag caagtaaaac ctctacaaat gtggtatggc tgattatgat caattttcat 600

ggccacttga tgtattgttc atatttgccc agttcttgga ggtcaatcag ggactcattc 660

aggttcttag ccacctcatt cagtctgtca atctccttct ggatgttcac cacagaggca 720

ttgatgccag agatgtctcc caggtccaca tcagggctgg tgtggttctt gaagtatttg 780

tccagttcct ccttgaagga gtccagttca ggttggagtg ggtcatagac tgtgttgttc 840

acaatgccaa tcaccacatc acagttgcca gacacaaagg tgttgtctgt ggtgataatc 900

tgtggttcat agaagttcct ctgggtcaca aaccagtggg tgccattgct cacaaacact 960

ccctcccttg gaaagtgagc cttgccatca tggcagatgg caggggctgt ggtgaagttc 1020

ttctcctggg caggcacata ggtcacatgc aggaacacca ctccatgagg ggcagactgt 1080

ggaaaactca tcaggtggta gcccttgcca cagaagtcca ccctcttgct ttgtcccagc 1140

acacactcac tcatcttggt ggcagccagg ttggcagatg ccctaatctc agcagccctg 1200

ataagttgtt gggtcacata ggtttggagg gattggagtc tgcctgtaat cagtctgtca 1260

atctggacct cagcctccac cttgtccagt ctgctcagga tgtcattcag cacagaggag 1320

atggctccaa agttgctgga aagttgcttc accagggtgt tcagagcctg ggcattctgg 1380

ttcaccacat cttggagttt gcccagggca gaggctgtgc tggacaggga gtcctgaatc 1440

ttgccaatgg cagagttgaa ctggttggca atcagtttct ggttctcata gagcacattc 1500

tgggtcactc caatgccatt gaacctgtaa gccatctgca tagcaaatgg gatttggagg 1560

gctgctcctg ctccaaaggt ccagccagag gtgatggtgc cagccagcag ggcagaggtg 1620

tattgggcaa tcatctcatc tgtcagcagt ggaggcagca ctgtcagtcc attgaacttc 1680

tgggcacaaa tcaggtccct ggcagcaatg tctcccagac agtctccata ttgcttgatg 1740

aagccagcat cagccagggt caccttgttg aacagcaggt cctcaatgaa ggacctcttg 1800

cttggcttgc ttgggtcagg cagaatctgg ctgaagttga agcctccaaa gtccttgatt 1860

ggaggtgtct tgtaaatctg cttcacctgg gcaaacacct cctgggtgtt cttgtcctgt 1920

tccacagcaa tgcctgtcag agccctgtta agttgggtac agaaggagcc atattggagc 1980

agcaggttgc tacactctgt gctgtctcca cagatataca ttgtacagtc cacagaggtc 2040

ttggtcatac tcacaggcag aatctctgtg gtcacagaga tggtgaagtt ggttgggatg 2100

gcaatgctgt tgttgctgta agccacagag ttctctgctc ccagactcat tgtgtaggca 2160

atgatgctct ggcttgccac agacctcgac ccaccgccac cggtctgggt ctggtaggag 2220

gcacagatgc ctgctccaat tgggatgtca cactcatagg agttgttcac atgctctgct 2280

ccaatcagac agccagccct ggtctggaac acattgctgc ctgtgctgta gaccctccag 2340

gttggtgtaa gttggtcagc atggatagcc acaggcacct cagtacagtt cacatcctgg 2400

tagagcacag ccacctggtt gctggtgttg gtgccaggtg taatcacaga cactcctcca 2460

aaggaacatg gtgtgatgtc cagaatctcc aaggtctgtg ggtccctcac agcatctgtg 2520

gtgtcagcaa tgtccctgcc aaactgttgg aatggcagga acttcttgtt gctctctgtc 2580

agcactcctg tgcctgtcag tccattgaag ttgaagttca cacacttgtt cttcaccagg 2640

ttggtgctct tctttggtcc acacactgtg gcaggggcat ggagcagttc aaaggacagc 2700

accaccaccc tgtatggttg gtagcccact ccattggttg gttggaagcc ataggattgg 2760

agtggaaagt aacagttgaa gccctccact ccattacatg gtgtgctgcc agcctggtaa 2820

atctctgtgc tgatgtccct ctcaaatggt ttcaggttgc tcttcctgaa cagtctgtag 2880

aggtagttgt agttgcctcc caccttgctg tccaggttgt tgctgttcca ggcaatcaca 2940

cagcctgtga agtcatcagg cagtttgtag ttgtagtcag caatcttgcc tgtttgtcca 3000

ggggcaatct gtctcacctc atctccccta atcacaaagg agtcagcata gacattggtg 3060

aaacacaggt cattcagttt ggttgggctc actccataac acttgaaggt gctgaaggag 3120

gcagagttgt agagcacaga gtagtcagcc acacagttgc taatcctctt cctgttccag 3180

gcatagacag aggcaaacct ggtggcattg aacacctctc caaatggaca caggttggtg 3240

atgtttggaa acctcacaat gctctctgtt ggttggaccc tgaagttgct ggtctggtag 3300

atgcccttct ccactgtgaa ggatttcagg gtacacttgg tctcagacag tgggtccagg 3360

gcacagtcca cagcatctgt gatggtgcca ttctcattgt atttcagcag gaaggtcctt 3420

ggttggaggt agcccacata gtaggctgct gctcctgctg tccagccaga ggaggagtct 3480

ccaggtgtca ggtaggacct gtgcagagcc agcagggtct ggaacctggt gatgttgatg 3540

ccaattggca ggtccaccag tggttccaag gcagagaagc cctgtggcag gtccctcacc 3600

aggttgattg gtgtgtgttt gctgtaaatc ttgaagtagc catcaatgtt cttgaacaca 3660

aactccctca ggttcttgaa gttgccctgc ttgccctcca agtccatcag gaatggttgg 3720

ctcacatatt caaaggtaca gttgttggca gaggagtaga ccctgaactc agactccatc 3780

caggacttgt tgttcttgtg gtagtagact cccaggaatg ggtcattaca gaactggaac 3840

tcacacacct taatcaccac attggtggca ttgttcacaa tcagcaggga ctgggtcttg 3900

ctgtccaggg tggtgccaaa aatccagccc ctgatgatgt tgctcttctc tgtgctggca 3960

aagtagactc catcattgaa tggcagcaca gggttgtcaa acctcttggt gccattggtg 4020

ccagacacat ggatggcatg gaaccaggtc acattgctga agaatggcag gaacaggtcc 4080

tgggtgctgt gcagcacaga ggacctgaac accttgtcag ggtagtagac tcccctggtg 4140

aaggagttgg tgtaggcagg aggaagttgg gtcctggtgg tcaggttcac acactggctg 4200

gacaccagtg gcagcagcac caggaacaca aacatggtgg caaatcggag gctggatcgg 4260

tcccggtgtc ttctatggag gtcaaaacag cgtggatggc gtctccaggc gatctgacgg 4320

ttcactaaac gagctcgtcg acgatctcta tcactgatag ggagatctct atcactgata 4380

gggagagctc tgcttatata gacctcccac cgtacacgcc taccgcccat ttgcgtcaat 4440

ggggcggagt tgttacgaca ttttggaaag tcccgttgat tttggtgcca aaacaaactc 4500

ccattgacgt caatggggtg gagacttgga aatccccgtg agtcaaaccg ctatccacgc 4560

ccattgatgt actgccaaaa ccgcatcacc atggtaatag cgatgactaa tacgtagatg 4620

tactgccaag taggaaagtc ccataaggtc atgtactggg cataatgcca ggcgggccat 4680

ttaccgtcat tgacgtcaat agggggcgta cttggcatat gatacacttg atgtactgcc 4740

aagtgggcag tttaccgtaa atactccacc cattgacgtc aatggaaagt ccctattggc 4800

gttactatgg gaacatacgt cattattgac gtcaatgggc gggggtcgtt gggcggtcag 4860

ccaggcgggc catttaccgt aagttatgta acgcggaact ccatatatgg gctatgaact 4920

aatgaccccg taattgatta ctattacagg ctccggtgcc cgtcagtggg cagagcgcac 4980

atcgcccaca gtccccgaga agttgggggg aggggtcggc aattgaaccg gtgcctagag 5040

aaggtggcgc ggggtaaact gggaaagtga tgtcgtgtac tggctccgcc tttttcccga 5100

gggtggggga gaaccgtata taagtgcagt agtcgccgtg aacgttcttt ttcgcaacgg 5160

gtttgccgcc agaacacagg taagtgccgt gtgtggttcc cgcgggcctg gcctctttac 5220

gggttatggc ccttgcgtgc cttgaattac ttccacgccc ctggctgcag tacgtgattc 5280

ttgatcccga gcttcgggtt ggaagtgggt gggagagttc gaggccttgc gcttaaggag 5340

ccccttcgcc tcgtgcttga gttgaggctt ggcctgggcg ctggggccgc cgcgtgcgaa 5400

tctggtggca ccttcgcgcc tgtctcgctg ctttcgataa gtctctagcc atttaaaatt 5460

tttgatgacc tgctgcgacg ctttttttct ggcaagatag tcttgtaaat gcgggccaag 5520

atctgcacac tggtatttcg gtttttgggg ccgcgggcgg cgacggggcc cgtgcgtccc 5580

agcgcacatg ttcggcgagg cggggcctgc gagcgcggcc accgagaatc ggacgggggt 5640

agtctcaagc tggccggcct gctctggtgc ctggcctcgc gccgccgtgt atcgccccgc 5700

cctgggcggc aaggctggcc cggtcggcac cagttgcgtg agcggaaaga tggccgcttc 5760

ccggccctgc tgcagggagc tcaaaatgga ggacgcggcg ctcgggagag cgggcgggtg 5820

agtcacccac acaaaggaaa agggcctttc cgtcctcagc cgtcgcttca tgtgactcca 5880

cggagtaccg ggcgccgtcc aggcacctcg attagttctc gagcttttgg agtacgtcgt 5940

ctttaggttg gggggagggg ttttatgcga tggagtttcc ccatactgag tgggtggaga 6000

ctgaagttag gccagcttgg cacttgatgt aattctcctt ggaatttgcc ctttttgagt 6060

ttggatcttg gttcattctc aagcctcaga cagtggttca aagtttttt cttccattta 6120

aggtgtcgtg aaaactaccc caagctggcc accatgacta cgtccggcgt tccatttggc 6180

atgacactac gaccaacacg atctcggttg tctcggcgca ctccgtacag tagggatcgt 6240

ctacctcctt ttgagacaga aacccgcgct accatactgg aggatcatcc gctgctgccc 6300

gaatgtaaca ctttgacaat gcacaacgtg agttacgtgc gaggtcttcc ctgcagtgtg 6360

ggatttacgc tgattcagga atgggttgtt ccctgggata tggttctaac gcgggaggag 6420

cttgtaatcc tgaggaagtg tatgcacgtg tgcctgtgtt gtgccaacat tgatatcatg 6480

acgagcatga tgatccatgg ttacgagtcc tgggctctcc actgtcattg ttccagtccc 6540

ggttccctgc agtgtatagc cggcgggcag gttttggcca gctggtttag gatggtggtg 6600

gatggcgcca tgtttaatca gaggtttata tggtaccggg aggtggtgaa ttacaacatg 6660

ccaaaagagg taatgtttat gtccagcgtg tttatgaggg gtcgccactt aatctacctg 6720

cgcttgtggt atgatggcca cgtgggttct gtggtccccg ccatgagctt tggatacagc 6780

gccttgcact gtgggatttt gaacaatatt gtggtgctgt gctgcagtta ctgtgctgat 6840

ttaagtgaga tcagggtgcg ctgctgtgcc cggaggacaa ggcgccttat gctgcgggcg 6900

gtgcgaatca tcgctgagga gaccactgcc atgttgtatt cctgcaggac ggagcggcgg 6960

cggcagcagt ttattcgcgc gctgctgcag caccaccgcc ctatcctgat gcacgattat 7020

gactctaccc ccatgtagaa gcttggggat caattctcta gagctcgctg atcagcctcg 7080

actgtgcctt ctagttgcca gccatctgtt gtttgcccct cccccgtgcc ttccttgacc 7140

ctggaaggtg ccactcccac tgtcctttcc taataaaatg aggaaattgc atcgcattgt 7200

ctgagtaggt gtcattctat tctgggggggt ggggtggggc aggacagcaa gggggaggat 7260

tgggaagaca atagcaggca tgctggggat gcggtgggct ctatggcttc tgaggaaatt 7320

gggcgtggct taagggtggg aaagaatata taaggtgggg gtcttatgta gttttgtatc 7380

tgttttgcag cagccgccgc cgccatgagc accaactcgt ttgatggaag cattgtgagc 7440

tcatatttga caacgcgcat gcccccatgg gccggggtgc gtcagaatgt gatgggctcc 7500

agcattgatg gtcgccccgt cctgcccgca aactctacta ccttgaccta cgagaccgtg 7560

tctggaacgc cgttggagac tgcagcctcc gccgccgctt cagccgctgc agccaccgcc 7620

cgcgggattg tgactgactt tgctttcctg agcccgcttg caagcagtgc agcttcccgt 7680

tcatccgccc gcgatgacaa gttgacggct cttttggcac aattggattc tttgacccgg 7740

gaacttaatg tcgtttctca gcagctgttg gatctgcgcc agcaggtttc tgccctgaag 7800

gcttcctccc ctcccaatgc ggtttaaaac ataaataaaa aaccagactc tgtttggatt 7860

tggatcaagc aagtgtcttg ctgtctttat ttaggggttt tgcgcgcgcg gtaggcccgg 7920

gaccagcggt ctcggtcgtt gagggtcctg tgtatttttt ccaggacgtg gtaaaggtga 7980

ctctggatgt tcagatacat gggcataagc ccgtctctgg ggtggaggta gcaccactgc 8040

agagcttcat gctgcggggt ggtgttgtag atgatccagt cgtagcagga gcgctgggcg 8100

tggtgcctaa aaatgtcttt cagtagcaag ctgattgcca ggggcaggcc cttggtgtaa 8160

gtgtttacaa agcggttaag ctgggatggg tgcatacgtg gggatatgag atgcatcttg 8220

gactgtattt ttaggttggc tatgttccca gccatatccc tccggggatt catgttgtgc 8280

agaaccacca gcacagtgta tccggtgcac ttgggaaatt tgtcatgtag cttagaagga 8340

aatgcgtgga agaacttgga gacgcccttg tgacctccaa gattttccat gcattcgtcc 8400

ataatgatgg caatgggccc acgggcggcg gcctgggcga agatatttct gggatcacta 8460

acgtcatagt tgtgttccag gatgagatcg tcataggcca tttttacaaa gcgcgggcgg 8520

agggtgccag actgcggtat aatggttcca tccggcccag gggcgtagtt accctcacag 8580

atttgcattt cccacgcttt gagttcagat ggggggatca tgtctacctg cggggcgatg 8640

aagaaaacgg tttccggggt aggggagatc agctgggaag aaagcaggtt cctgagcagc 8700

tgcgacttac cgcagccggt gggcccgtaa atcacaccta ttaccgggtg caactggtag 8760

ttaagagagc tgcagctgcc gtcatccctg agcaggggggg ccacttcgtt aagcatgtcc 8820

ctgactcgca tgttttccct gaccaaatcc gccagaaggc gctcgccgcc cagcgatagc 8880

agttcttgca aggaagcaaa gtttttcaac ggtttgagac cgtccgccgt aggcatgctt 8940

ttgagcgttt gaccaagcag ttccaggcgg tcccacagct cggtcacctg ctctacggca 9000

tctcgatcca gcatatctcc tcgtttcgcg ggttggggcg gctttcgctg tacggcagta 9060

gtcggtgctc gtccagacgg gccagggtca tgtctttcca cgggcgcagg gtcctcgtca 9120

gcgtagtctg ggtcacggtg aaggggtgcg ctccgggctg cgcgctggcc agggtgcgct 9180

tgaggctggt cctgctggtg ctgaagcgct gccggtcttc gccctgcgcg tcggccaggt 9240

agcatttgac catggtgtca tagtccagcc cctccgcggc gtggcccttg gcgcgcagct 9300

tgcccttgga ggaggcgccg cacgaggggc agtgcagact tttgagggcg tagagcttgg 9360

gcgcgagaaa taccgattcc ggggagtagg catccgcgcc gcaggccccg cagacggtct 9420

cgcattccac gagccaggtg agctctggcc gttcggggtc aaaaaccagg tttcccccat 9480

gctttttgat gcgtttctta cctctggttt ccatgagccg gtgtccacgc tcggtgacga 9540

aaaggctgtc cgtgtccccg tatacagact tgagaggcct gtcctcgagc ggtgttccgc 9600

ggtcctcctc gtatagaaac tcggaccact ctgagacaaa ggctcgcgtc caggccagca 9660

cgaaggaggc taagtgggag gggtagcggt cgttgtccac tagggggtcc actcgctcca 9720

gggtgtgaag acacatgtcg ccctcttcgg catcaaggaa ggtgattggt ttgtaggtgt 9780

aggccacgtg accgggtgtt cctgaagggg ggctataaaa gggggtgggg gcgcgttcgt 9840

cctcactctc ttccgcatcg ctgtctgcga gggccagctg ttggggtgag tactccctct 9900

gaaaagcggg catgacttct gcgctaagat tgtcagtttc caaaaacgag gaggatttga 9960

tattcacctg gcccgcggtg atgcctttga gggtggccgc atccatctgg tcagaaaaga 10020

caatcttttt gttgtcaagc ttggtggcaa acgacccgta gagggcgttg gacagcaact 10080

tggcgatgga gcgcagggtt tggtttttgt cgcgatcggc gcgctccttg gccgcgatgt 10140

ttagctgcac gtattcgcgc gcaacgcacc gccattcggg aaagacggtg gtgcgctcgt 10200

cgggcaccag gtgcacgcgc caaccgcggt tgtgcagggt gacaaggtca acgctggtgg 10260

ctacctctcc gcgtaggcgc tcgttggtcc agcagaggcg gccgcccttg cgcgagcaga 10320

atggcggtag ggggtctagc tgcgtctcgt ccgggggggtc tgcgtccacg gtaaagaccc 10380

cgggcagcag gcgcgcgtcg aagtagtcta tcttgcatcc ttgcaagtct agcgcctgct 10440

gccatgcgcg ggcggcaagc gcgcgctcgt atgggttgag tgggggaccc catggcatgg 10500

ggtgggtgag cgcggaggcg tacatgccgc aaatgtcgta aacgtagagg ggctctctga 10560

gtattccaag atatgtaggg tagcatcttc caccgcggat gctggcgcgc acgtaatcgt 10620

atagttcgtg cgagggagcg aggaggtcgg gaccgaggtt gctacgggcg ggctgctctg 10680

ctcggaagac tatctgcctg aagatggcat gtgagttgga tgatatggtt ggacgctgga 10740

agacgttgaa gctggcgtct gtgagaccta ccgcgtcacg cacgaaggag gcgtaggagt 10800

cgcgcagctt gttgaccagc tcggcggtga cctgcacgtc tagggcgcag tagtccaggg 10860

tttccttgat gatgtcatac ttatcctgtc ccttttttt ccacagctcg cggttgagga 10920

caaactcttc gcggtctttc cagtactctt ggatcggaaa cccgtcggcc tccgaacggt 10980

aagagcctag catgtagaac tggttgacgg cctggtaggc gcagcatccc ttttctacgg 11040

gtagcgcgta tgcctgcgcg gccttccgga gcgaggtgtg ggtgagcgca aaggtgtccc 11100

tgaccatgac tttgaggtac tggtatttga agtcagtgtc gtcgcatccg ccctgctccc 11160

agagcaaaaa gtccgtgcgc tttttggaac gcggatttgg cagggcgaag gtgacatcgt 11220

tgaagagtat ctttcccgcg cgaggcataa agttgcgtgt gatgcggaag ggtcccggca 11280

cctcggaacg gttgttaatt acctgggcgg cgagcacgat ctcgtcaaag ccgttgatgt 11340

tgtggcccac aatgtaaagt tccaagaagc gcgggatgcc cttgatggaa ggcaattttt 11400

taagttcctc gtaggtgagc tcttcagggg agctgagccc gtgctctgaa agggcccagt 11460

ctgcaagatg agggttggaa gcgacgaatg agctccacag gtcacgggcc attagcattt 11520

gcaggtggtc gcgaaaggtc ctaaactggc gacctatggc catttttct ggggtgatgc 11580

agtagaaggt aagcgggtct tgttcccagc ggtcccatcc aaggttcgcg gctaggtctc 11640

gcgcggcagt cactagaggc tcatctccgc cgaacttcat gaccagcatg aagggcacga 11700

gctgcttccc aaaggccccc atccaagtat aggtctctac atcgtaggtg acaaagagac 11760

gctcggtgcg aggatgcgag ccgatcggga agaactggat ctcccgccac caattggagg 11820

agtggctatt gatgtggtga aagtagaagt ccctgcgacg ggccgaacac tcgtgctggc 11880

ttttgtaaaa acgtgcgcag tactggcagc ggtgcacggg ctgtacatcc tgcacgaggt 11940

tgacctgacg accgcgcaca aggaagcaga gtgggaattt gagcccctcg cctggcgggt 12000

ttggctggtg gtcttctact tcggctgctt gtccttgacc gtctggctgc tcgaggggag 12060

ttacggtgga tcggaccacc acgccgcgcg agcccaaagt ccagatgtcc gcgcgcggcg 12120

gtcggagctt gatgacaaca tcgcgcagat gggagctgtc catggtctgg agctcccgcg 12180

gcgtcaggtc aggcgggagc tcctgcaggt ttacctcgca tagacgggtc agggcgcggg 12240

ctagatccag gtgataccta atttccaggg gctggttggt ggcggcgtcg atggcttgca 12300

agaggccgca tccccgcggc gcgactacgg taccgcgcgg cgggcggtgg gccgcggggg 12360

tgtccttgga tgatgcatct aaaagcggtg acgcgggcga gcccccggag gtaggggggg 12420

ctccggaccc gccgggagag ggggcagggg cacgtcggcg ccgcgcgcgg gcaggagctg 12480

gtgctgcgcg cgtaggttgc tggcgaacgc gacgacgcgg cggttgatct cctgaatctg 12540

gcgcctctgc gtgaagacga cgggcccggt gagcttgaac ctgaaagaga gttcgacaga 12600

atcaatttcg gtgtcgttga cggcggcctg gcgcaaaatc tcctgcacgt ctcctgagtt 12660

gtcttgatag gcgatctcgg ccatgaactg ctcgatctct tcctcctgga gatctccgcg 12720

tccggctcgc tccacggtgg cggcgaggtc gttggaaatg cgggccatga gctgcgagaa 12780

ggcgttgagg cctccctcgt tccagacgcg gctgtagacc acgccccctt cggcatcgcg 12840

ggcgcgcatg accacctgcg cgagattgag ctccacgtgc cgggcgaaga cggcgtagtt 12900

tcgcaggcgc tgaaagaggt agttgagggt ggtggcggtg tgttctgcca cgaagaagta 12960

cataacccag cgtcgcaacg tggattcgtt gatatccccc aaggcctcaa ggcgctccat 13020

ggcctcgtag aagtccacgg cgaagttgaa aaactgggag ttgcgcgccg acacggttaa 13080

ctcctcctcc agaagacgga tgagctcggc gacagtgtcg cgcacctcgc gctcaaaggc 13140

tacaggggcc tcttcttctt cttcaatctc ctcttccata agggcctccc cttcttcttc 13200

ttctggcggc ggtgggggag gggggacacg gcggcgacga cggcgcaccg ggaggcggtc 13260

gacaaagcgc tcgatcatct ccccgcggcg acggcgcatg gtctcggtga cggcgcggcc 13320

gttctcgcgg gggcgcagtt ggaagacgcc gcccgtcatg tcccggttat gggttggcgg 13380

ggggctgcca tgcggcaggg atacggcgct aacgatgcat ctcaacaatt gttgtgtagg 13440

tactccgccg ccgagggacc tgagcgagtc cgcatcgacc ggatcggaaa acctctcgag 13500

aaaggcgtct aaccagtcac agtcgcaagg taggctgagc accgtggcgg gcggcagcgg 13560

gcggcggtcg gggttgtttc tggcggaggt gctgctgatg atgtaattaa agtaggcggt 13620

cttgagacgg cggatggtcg acagaagcac catgtccttg ggtccggcct gctgaatgcg 13680

caggcggtcg gccatgcccc aggcttcgtt ttgacatcgg cgcaggtctt tgtagtagtc 13740

ttgcatgagc ctttctaccg gcacttcttc ttctccttcc tcttgtcctg catctcttgc 13800

atctatcgct gcggcggcgg cggagtttgg ccgtaggtgg cgccctcttc ctcccatgcg 13860

tgtgaccccg aagcccctca tcggctgaag cagggctagg tcggcgacaa cgcgctcggc 13920

taatatggcc tgctgcacct gcgtgagggt agactggaag tcatccatgt ccacaaagcg 13980

gtggtatgcg cccgtgttga tggtgtaagt gcagttggcc ataacggacc agttaacggt 14040

ctggtgaccc ggctgcgaga gctcggtgta cctgagacgc gagtaagccc tcgagtcaaa 14100

tacgtagtcg ttgcaagtcc gcaccaggta ctggtatccc accaaaaagt gcggcggcgg 14160

ctggcggtag aggggccagc gtagggtggc cggggctccg ggggcgagat cttccaacat 14220

aaggcgatga tatccgtaga tgtacctgga catccaggtg atgccggcgg cggtggtgga 14280

ggcgcgcgga aagtcgcgga cgcggttcca gatgttgcgc agcggcaaaa agtgctccat 14340

ggtcgggacg ctctggccgg tcaggcgcgc gcaatcgttg acgctctagc gtgcaaaagg 14400

agagcctgta agcgggcact cttccgtggt ctggtggata aattcgcaag ggtatcatgg 14460

cggacgaccg gggttcgagc cccgtatccg gccgtccgcc gtgatccatg cggttaccgc 14520

ccgcgtgtcg aacccaggtg tgcgacgtca gacaacgggg gagtgctcct tttggcttcc 14580

ttccaggcgc ggcggctgct gcgctagctt ttttggccac tggccgcgcg cagcgtaagc 14640

ggttaggctg gaaagcgaaa gcattaagtg gctcgctccc tgtagccgga gggttatttt 14700

ccaagggttg agtcgcggga cccccggttc gagtctcgga ccggccggac tgcggcgaac 14760

gggggtttgc ctccccgtca tgcaagaccc cgcttgcaaa ttcctccgga aacagggacg 14820

agccccтttt ttgcttttcc cagatgcatc cggtgctgcg gcagatgcgc ccccctcctc 14880

agcagcggca agagcaagag cagcggcaga catgcagggc accctcccct cctcctaccg 14940

cgtcaggagg ggcgacatcc gcggttgacg cggcagcaga tggtgattac gaacccccgc 15000

ggcgccgggc ccggcactac ctggacttgg aggagggcga gggcctggcg cggctaggag 15060

cgccctctcc tgagcggcac ccaagggtgc agctgaagcg tgatacgcgt gaggcgtacg 15120

tgccgcggca gaacctgttt cgcgaccgcg agggagagga gcccgaggag atgcgggatc 15180

gaaagttcca cgcagggcgc gagctgcggc atggcctgaa tcgcgagcgg ttgctgcgcg 15240

aggaggactt tgagcccgac gcgcgaaccg ggattagtcc cgcgcgcgca cacgtggcgg 15300

ccgccgacct ggtaaccgca tacgagcaga cggtgaacca ggagattaac tttcaaaaaa 15360

gctttaacaa ccacgtgcgt acgcttgtgg cgcgcgagga ggtggctata ggactgatgc 15420

atctgtggga ctttgtaagc gcgctggagc aaaacccaaa tagcaagccg ctcatggcgc 15480

agctgttcct tatagtgcag cacagcaggg acaacgaggc attcagggat gcgctgctaa 15540

acatagtaga gcccgagggc cgctggctgc tcgatttgat aaacatcctg cagagcatag 15600

tggtgcagga gcgcagcttg agcctggctg acaaggtggc cgccatcaac tattccatgc 15660

ttagcctggg caagttttac gcccgcaaga tataccatac cccttacgtt cccatagaca 15720

aggaggtaaa gatcgagggg ttctacatgc gcatggcgct gaaggtgctt accttgagcg 15780

acgacctggg cgtttatcgc aacgagcgca tccacaaggc cgtgagcgtg agccggcggc 15840

gcgagctcag cgaccgcgag ctgatgcaca gcctgcaaag ggccctggct ggcacgggca 15900

gcggcgatag agaggccgag tcctactttg acgcgggcgc tgacctgcgc tgggccccaa 15960

gccgacgcgc cctggaggca gctggggccg gacctgggct ggcggtggca cccgcgcgcg 16020

ctggcaacgt cggcggcgtg gaggaatatg acgaggacga tgagtacgag ccagaggacg 16080

gcgagtacta agcggtgatg tttctgatca gatgatgcaa gacgcaacgg acccggcggt 16140

gcgggcggcg ctgcagagcc agccgtccgg ccttaactcc acggacgact ggcgccaggt 16200

catggaccgc atcatgtcgc tgactgcgcg caatcctgac gcgttccggc agcagccgca 16260

ggccaaccgg ctctccgcaa ttctggaagc ggtggtcccg gcgcgcgcaa accccacgca 16320

cgagaaggtg ctggcgatcg taaacgcgct ggccgaaaac agggccatcc ggcccgacga 16380

ggccggcctg gtctacgacg cgctgcttca gcgcgtggct cgttacaaca gcggcaacgt 16440

gcagaccaac ctggaccggc tggtgggggа tgtgcgcgag gccgtggcgc agcgtgagcg 16500

cgcgcagcag cagggcaacc tgggctccat ggttgcacta aacgccttcc tgagtacaca 16560

gcccgccaac gtgccgcggg gacaggagga ctacaccaac tttgtgagcg cactgcggct 16620

aatggtgact gagacaccgc aaagtgaggt gtaccagtct gggccagact atttttcca 16680

gaccagtaga caaggcctgc agaccgtaaa cctgagccag gctttcaaaa acttgcaggg 16740

gctgtggggg gtgcgggctc ccacaggcga ccgcgcgacc gtgtctagct tgctgacgcc 16800

caactcgcgc ctgttgctgc tgctaatagc gcccttcacg gacagtggca gcgtgtcccg 16860

ggacacatac ctaggtcact tgctgacact gtaccgcgag gccataggtc aggcgcatgt 16920

ggacgagcat actttccagg agattacaag tgtcagccgc gcgctggggc aggaggacac 16980

gggcagcctg gaggcaaccc taaactacct gctgaccaac cggcggcaga agatcccctc 17040

gttgcacagt ttaaacagcg aggaggagcg cattttgcgc tacgtgcagc agagcgtgag 17100

ccttaacctg atgcgcgacg gggtaacgcc cagcgtggcg ctggacatga ccgcgcgcaa 17160

catggaaccg ggcatgtatg cctcaaaccg gccgtttatc aaccgcctaa tggactactt 17220

gcatcgcgcg gccgccgtga accccgagta tttcaccaat gccatcttga acccgcactg 17280

gctaccgccc cctggtttct acaccggggg attcgaggtg cccgagggta acgatggatt 17340

cctctgggac gacatagacg acagcgtgtt ttccccgcaa ccgcagaccc tgctagagtt 17400

gcaacagcgc gagcaggcag aggcggcgct gcgaaaggaa agcttccgca ggccaagcag 17460

cttgtccgat ctaggcgctg cggccccgcg gtcagatgct agtagcccat ttccaagctt 17520

gatagggtct cttaccagca ctcgcaccac ccgcccgcgc ctgctgggcg aggaggagta 17580

cctaaacaac tcgctgctgc agccgcagcg cgaaaaaaac ctgcctccgg catttcccaa 17640

caacgggata gagagcctag tggacaagat gagtagatgg aagacgtacg cgcaggagca 17700

cagggacgtg ccaggcccgc gcccgcccac ccgtcgtcaa aggcacgacc gtcagcgggg 17760

tctggtgtgg gaggacgatg actcggcaga cgacagcagc gtcctggatt tgggagggag 17820

tggcaacccg tttgcgcacc ttcgccccag gctggggaga atgttttaaa aaaaaaaaag 17880

catgatgcaa aataaaaaac tcaccaaggc catggcaccg agcgttggtt ttcttgtatt 17940

ccccttagta tgcggcgcgc ggcgatgtat gaggaaggtc ctcctccctc ctacgagagt 18000

gtggtgagcg cggcgccagt ggcggcggcg ctgggttctc ccttcgatgc tcccctggac 18060

ccgccgtttg tgcctccgcg gtacctgcgg cctaccgggg ggagaaacag catccgttac 18120

tctgagttgg cacccctatt cgacaccacc cgtgtgtacc tggtggacaa caagtcaacg 18180

gatgtggcat ccctgaacta ccagaacgac cacagcaact ttctgaccac ggtcattcaa 18240

aacaatgact acagcccggg ggaggcaagc acacagacca tcaatcttga cgaccggtcg 18300

cactggggcg gcgacctgaa aaccatcctg cataccaaca tgccaaatgt gaacgagttc 18360

atgtttacca ataagtttaa ggcgcgggtg atggtgtcgc gcttgcctac taaggacaat 18420

caggtggagc tgaaatacga gtgggtggag ttcacgctgc ccgagggcaa ctactccgag 18480

accatgacca tagaccttat gaacaacgcg atcgtggagc actacttgaa agtgggcaga 18540

cagaacgggg ttctggaaag cgacatcggg gtaaagtttg acacccgcaa cttcagactg 18600

gggtttgacc ccgtcactgg tcttgtcatg cctggggtat atacaaacga agccttccat 18660

ccagacatca ttttgctgcc aggatgcggg gtggacttca cccacagccg cctgagcaac 18720

ttgttgggca tccgcaagcg gcaacccttc caggagggct ttaggatcac ctacgatgat 18780

ctggagggtg gtaacattcc cgcactgttg gatgtggacg cctaccaggc gagcttgaaa 18840

gatgacaccg aacagggcgg gggtggcgca ggcggcagca acagcagtgg cagcggcgcg 18900

gaagagaact ccaacgcggc agccgcggca atgcagccgg tggaggacat gaacgatcat 18960

gccattcgcg gcgacacctt tgccacacgg gctgaggaga agcgcgctga ggccgaagca 19020

gcggccgaag ctgccgcccc cgctgcgcaa cccgaggtcg agaagcctca gaagaaaccg 19080

gtgatcaaac ccctgacaga ggacagcaag aaacgcagtt acaacctaat aagcaatgac 19140

agcaccttca cccagtaccg cagctggtac cttgcataca actacggcga ccctcagacc 19200

ggaatccgct catggaccct gctttgcact cctgacgtaa cctgcggctc ggagcaggtc 19260

tactggtcgt tgccagacat gatgcaagac cccgtgacct tccgctccac gcgccagatc 19320

agcaactttc cggtggtggg cgccgagctg ttgcccgtgc actccaagag cttctacaac 19380

gaccaggccg tctactccca actcatccgc cagtttacct ctctgaccca cgtgttcaat 19440

cgctttcccg agaaccagat tttggcgcgc ccgccagccc ccaccatcac caccgtcagt 19500

gaaaacgttc ctgctctcac agatcacggg acgctaccgc tgcgcaacag catcggagga 19560

gtccagcgag tgaccattac tgacgccaga cgccgcacct gcccctacgt ttacaaggcc 19620

ctgggcatag tctcgccgcg cgtcctatcg agccgcactt tttgagcaag catgtccatc 19680

cttatatcgc ccagcaataa cacaggctgg ggcctgcgct tcccaagcaa gatgtttggc 19740

ggggccaaga agcgctccga ccaacaccca gtgcgcgtgc gcgggcacta ccgcgcgccc 19800

tggggcgcgc acaaacgcgg ccgcactggg cgcaccaccg tcgatgacgc catcgacgcg 19860

gtggtggagg aggcgcgcaa ctacacgccc acgccgccac cagtgtccac agtggacgcg 19920

gccattcaga ccgtggtgcg cggagcccgg cgctatgcta aaatgaagag acggcggagg 19980

cgcgtagcac gtcgccaccg ccgccgaccc ggcactgccg cccaacgcgc ggcggcggcc 20040

ctgcttaacc gcgcacgtcg caccggccga cgggcggcca tgcgggccgc tcgaaggctg 20100

gccgcgggta ttgtcactgt gccccccagg tccaggcgac gagcggccgc cgcagcagcc 20160

gcggccatta gtgctatgac tcagggtcgc aggggcaacg tgtattgggt gcgcgactcg 20220

gttagcggcc tgcgcgtgcc cgtgcgcacc cgcccccgc gcaactagat tgcaagaaaa 20280

aactacttag actcgtactg ttgtatgtat ccagcggcgg cggcgcgcaa cgaagctatg 20340

tccaagcgca aaatcaaaga agagatgctc caggtcatcg cgccggagat ctatggcccc 20400

ccgaagaagg aagagcagga ttacaagccc cgaaagctaa agcgggtcaa aaagaaaaag 20460

aaagatgatg atgatgaact tgacgacgag gtggaactgc tgcacgctac cgcgcccagg 20520

cgacgggtac agtggaaagg tcgacgcgta aaacgtgttt tgcgacccgg caccaccgta 20580

gtctttacgc ccggtgagcg ctccacccgc acctacaagc gcgtgtatga tgaggtgtac 20640

ggcgacgagg acctgcttga gcaggccaac gagcgcctcg gggagtttgc ctacggaaag 20700

cggcataagg acatgctggc gttgccgctg gacgagggca acccaacacc tagcctaaag 20760

cccgtaacac tgcagcaggt gctgcccgcg cttgcaccgt ccgaagaaaa gcgcggccta 20820

aagcgcgagt ctggtgactt ggcacccacc gtgcagctga tggtacccaa gcgccagcga 20880

ctggaagatg tcttggaaaa aatgaccgtg gaacctgggc tggagcccga ggtccgcgtg 20940

cggccaatca agcaggtggc gccgggactg ggcgtgcaga ccgtggacgt tcagataccc 21000

actaccagta gcaccagtat tgccaccgcc acagagggca tggagacaca aacgtccccg 21060

gttgcctcag cggtggcgga tgccgcggtg caggcggtcg ctgcggccgc gtccaagacc 21120

tctacggagg tgcaaacgga cccgtggatg tttcgcgttt cagccccccg gcgcccgcgc 21180

cgttcgagga agtacggcgc cgccagcgcg ctactgcccg aatatgccct acatccttcc 21240

attgcgccta cccccggcta tcgtggctac acctaccgcc ccagaagacg agcaactacc 21300

cgacgccgaa ccaccactgg aacccgccgc cgccgtcgcc gtcgccagcc cgtgctggcc 21360

ccgatttccg tgcgcagggt ggctcgcgaa ggaggcagga ccctggtgct gccaacagcg 21420

cgctaccacc ccagcatcgt ttaaaagccg gtctttgtgg ttcttgcaga tatggccctc 21480

acctgccgcc tccgtttccc ggtgccggga ttccgaggaa gaatgcaccg taggaggggc 21540

atggccggcc acggcctgac gggcggcatg cgtcgtgcgc accaccggcg gcggcgcgcg 21600

tcgcaccgtc gcatgcgcgg cggtatcctg cccctcctta ttccactgat cgccgcggcg 21660

attggcgccg tgcccggaat tgcatccgtg gccttgcagg cgcagagaca ctgattaaaa 21720

acaagttgca tgtggaaaaa tcaaaataaa aagtctggac tctcacgctc gcttggtcct 21780

gtaactattt tgtagaatgg aagacatcaa ctttgcgtct ctggccccgc gacacggctc 21840

gcgcccgttc atgggaaact ggcaagatat cggcaccagc aatatgagcg gtggcgcctt 21900

cagctggggc tcgctgtgga gcggcattaa aaatttcggt tccaccgtta agaactatgg 21960

cagcaaggcc tggaacagca gcacaggcca gatgctgagg gataagttga aagagcaaaa 22020

tttccaacaa aaggtggtag atggcctggc ctctggcatt agcggggtgg tggacctggc 22080

caaccaggca gtgcaaaata agattaacag taagcttgat ccccgccctc ccgtagagga 22140

gcctccaccg gccgtggaga cagtgtctcc agaggggcgt ggcgaaaagc gtccgcgccc 22200

cgacagggaa gaaactctgg tgacgcaaat agacgagcct ccctcgtacg aggaggcact 22260

aaagcaaggc ctgcccacca cccgtcccat cgcgcccatg gctaccggag tgctgggcca 22320

gcacacaccc gtaacgctgg acctgcctcc ccccgccgac acccagcaga aacctgtgct 22380

gccaggcccg accgccgttg ttgtaacccg tcctagccgc gcgtccctgc gccgcgccgc 22440

cagcggtccg cgatcgttgc ggcccgtagc cagtggcaac tggcaaagca cactgaacag 22500

catcgtgggt ctgggggtgc aatccctgaa gcgccgacga tgcttctgat agctaacgtg 22560

tcgtatgtgt gtcatgtatg cgtccatgtc gccgccagag gagctgctga gccgccgcgc 22620

gcccgctttc caagatggct acccccttcga tgatgccgca gtggtcttac atgcacatct 22680

cgggccagga cgcctcggag tacctgagcc ccgggctggt gcagtttgcc cgcgccaccg 22740

agacgtactt cagcctgaat aacaagttta gaaaccccac ggtggcgcct acgcacgacg 22800

tgaccacaga ccggtcccag cgtttgacgc tgcggttcat ccctgtggac cgtgaggata 22860

ctgcgtactc gtacaaggcg cggttcaccc tagctgtggg tgataaccgt gtgctggaca 22920

tggcttccac gtactttgac atccgcggcg tgctggacag gggccctact tttaagccct 22980

actctggcac tgcctacaac gccctggctc ccaagggtgc cccaaatcct tgcgaatggg 23040

atgaagctgc tactgctctt gaaataaacc tagaagaaga ggacgatgac aacgaagacg 23100

aagtagacga gcaagctgag cagcaaaaaa ctcacgtatt tgggcaggcg ccttattctg 23160

gtataaatat tacaaaggag ggtattcaaa taggtgtcga aggtcaaaca cctaaatatg 23220

ccgataaaac atttcaacct gaacctcaaa taggagaatc tcagtggtac gaaacagaaa 23280

ttaatcatgc agctgggaga gtcctaaaaa agactacccc aatgaaacca tgttacggtt 23340

catatgcaaa acccacaaat gaaaatggag ggcaaggcat tcttgtaaag caacaaaatg 23400

gaaagctaga aagtcaagtg gaaatgcaat ttttctcaac tactgaggca gccgcaggca 23460

atggtgataa cttgactcct aaagtggtat tgtacagtga agatgtagat atagaaaccc 23520

cagacactca tatttcttac atgcccacta ttaaggaagg taactcacga gaactaatgg 23580

gccaacaatc tatgcccaac aggcctaatt acattgcttt tagggacaat tttattggtc 23640

taatgtatta caacagcacg ggtaatatgg gtgttctggc gggccaagca tcgcagttga 23700

atgctgttgt agatttgcaa gacagaaaca cagagctttc ataccagctt ttgcttgatt 23760

ccattggtga tagaaccagg tacttttcta tgtggaatca ggctgttgac agctatgatc 23820

cagatgttag aattattgaa aatcatggaa ctgaagatga acttccaaat tactgctttc 23880

cactgggagg tgtgattaat acagagactc ttaccaaggt aaaacctaaa acaggtcagg 23940

aaaatggatg ggaaaaagat gctacagaat tttcagataa aaatgaaata agagttggaa 24000

ataattttgc catggaaatc aatctaaatg ccaacctgtg gagaaatttc ctgtactcca 24060

acatagcgct gtatttgccc gacaagctaa agtacagtcc ttccaacgta aaaatttctg 24120

ataacccaaa cacctacgac tacatgaaca agcgagtggt ggctcccggg ctagtggact 24180

gctacattaa ccttggagca cgctggtccc ttgactatat ggacaacgtc aacccattta 24240

accaccaccg caatgctggc ctgcgctacc gctcaatgtt gctgggcaat ggtcgctatg 24300

tgcccttcca catccaggtg cctcagaagt tctttgccat taaaaacctc cttctcctgc 24360

cgggctcata cacctacgag tggaacttca ggaaggatgt taacatggtt ctgcagagct 24420

ccctaggaaa tgacctaagg gttgacggag ccagcattaa gtttgatagc atttgccttt 24480

acgccacctt cttccccatg gcccacaaca ccgcctccac gcttgaggcc atgcttagaa 24540

acgacaccaa cgaccagtcc tttaacgact atctctccgc cgccaacatg ctctacccta 24600

tacccgccaa cgctaccaac gtgcccatat ccatcccctc ccgcaactgg gcggctttcc 24660

gcggctgggc cttcacgcgc cttaagacta aggaaacccc atcactgggc tcgggctacg 24720

acccttatta cacctactct ggctctatac cctacctaga tggaaccttt tacctcaacc 24780

acacctttaa gaaggtggcc attacctttg actcttctgt cagctggcct ggcaatgacc 24840

gcctgcttac ccccaacgag tttgaaatta agcgctcagt tgacggggag ggttacaacg 24900

ttgcccagtg taacatgacc aaagactggt tcctggtaca aatgctagct aactataaca 24960

ttggctacca gggcttctat atcccagaga gctacaagga ccgcatgtac tccttcttta 25020

gaaacttcca gcccatgagc cgtcaggtgg tggatgatac taaatacaag gactaccaac 25080

aggtgggcat cctacaccaa cacaacaact ctggatttgt tggctacctt gcccccacca 25140

tgcgcgaagg acaggcctac cctgctaact tcccctatcc gcttataggc aagaccgcag 25200

ttgacagcat tacccagaaa aagtttcttt gcgatcgcac cctttggcgc atcccattct 25260

ccagtaactt tatgtccatg ggcgcactca cagacctggg ccaaaacctt ctctacgcca 25320

actccgccca cgcgctagac atgacttttg aggtggatcc catggacgag cccacccttc 25380

tttatgtttt gtttgaagtc tttgacgtgg tccgtgtgca ccagccgcac cgcggcgtca 25440

tcgaaaccgt gtacctgcgc acgcccttct cggccggcaa cgccacaaca taaagaagca 25500

agcaacatca acaacagctg ccgccatggg ctccagtgag caggaactga aagccattgt 25560

caaagatctt ggttgtgggc catatttttt gggcacctat gacaagcgct ttccaggctt 25620

tgtttctcca cacaagctcg cctgcgccat agtcaatacg gccggtcgcg agactggggg 25680

cgtacactgg atggcctttg cctggaaccc gcactcaaaa acatgctacc tctttgagcc 25740

ctttggcttt tctgaccagc gactcaagca ggtttaccag tttgagtacg agtcactcct 25800

gcgccgtagc gccattgctt cttcccccga ccgctgtata acgctggaaa agtccaccca 25860

aagcgtacag gggcccaact cggccgcctg tggactattc tgctgcatgt ttctccacgc 25920

ctttgccaac tggccccaaa ctcccatgga tcacaacccc accatgaacc ttattaccgg 25980

ggtacccaac tccatgctca acagtcccca ggtacagccc accctgcgtc gcaaccagga 26040

acagctctac agcttcctgg agcgccactc gccctacttc cgcagccaca gtgcgcagat 26100

taggagcgcc acttcttttt gtcacttgaa aaacatgtaa aaataatgta ctagagacac 26160

tttcaataaa ggcaaatgct tttatttgta cactctcggg tgattattta cccccaccct 26220

tgccgtctgc gccgtttaaa aatcaaaggg gttctgccgc gcatcgctat gcgccactgg 26280

cagggacacg ttgcgatact ggtgtttagt gctccactta aactcaggca caaccatccg 26340

cggcagctcg gtgaagtttt cactccacag gctgcgcacc atcaccaacg cgtttagcag 26400

gtcgggcgcc gatatcttga agtcgcagtt ggggcctccg ccctgcgcgc gcgagttgcg 26460

atacacaggg ttgcagcact ggaacactat cagcgccggg tggtgcacgc tggccagcac 26520

gctcttgtcg gagatcagat ccgcgtccag gtcctccgcg ttgctcaggg cgaacggagt 26580

caactttggt agctgccttc ccaaaaaggg cgcgtgccca ggctttgagt tgcactcgca 26640

ccgtagtggc atcaaaaggt gaccgtgccc ggtctgggcg ttaggataca gcgcctgcat 26700

aaaagccttg atctgcttaa aagccacctg agcctttgcg ccttcagaga agaacatgcc 26760

gcaagacttg ccggaaaact gattggccgg acaggccgcg tcgtgcacgc agcaccttgc 26820

gtcggtgttg gagatctgca ccacatttcg gccccaccgg ttcttcacga tcttggcctt 26880

gctagactgc tccttcagcg cgcgctgccc gttttcgctc gtcacatcca tttcaatcac 26940

gtgctcctta tttatcataa tgcttccgtg tagacactta agctcgcctt cgatctcagc 27000

gcagcggtgc agccacaacg cgcagcccgt gggctcgtga tgcttgtagg tcacctctgc 27060

aaacgactgc aggtacgcct gcaggaatcg ccccatcatc gtcacaaagg tcttgttgct 27120

ggtgaaggtc agctgcaacc cgcggtgctc ctcgttcagc caggtcttgc atacggccgc 27180

cagagcttcc acttggtcag gcagtagttt gaagttcgcc tttagatcgt tatccacgtg 27240

gtacttgtcc atcagcgcgc gcgcagcctc catgcccttc tcccacgcag acacgatcgg 27300

cacactcagc gggttcatca ccgtaatttc actttccgct tcgctgggct cttcctcttc 27360

ctcttgcgtc cgcataccac gcgccactgg gtcgtcttca ttcagccgcc gcactgtgcg 27420

cttacctcct ttgccatgct tgattagcac cggtgggttg ctgaaaccca ccatttgtag 27480

cgccacatct tctctttctt cctcgctgtc cacgattacc tctggtgatg gcgggcgctc 27540

gggcttggga gaagggcgct tctttttctt cttgggcgca atggccaaat ccgccgccga 27600

ggtcgatggc cgcgggctgg gtgtgcgcgg caccagcgcg tcttgtgatg agtcttcctc 27660

gtcctcggac tcgatacgcc gcctcatccg ctttttgggg ggcgcccggg gaggcggcgg 27720

cgacggggac ggggacgaca cgtcctccat ggttggggga cgtcgcgccg caccgcgtcc 27780

gcgctcgggg gtggtttcgc gctgctcctc ttcccgactg gccatttcct tctcctatag 27840

gcagaaaaag atcatggagt cagtcgagaa gaaggacagc ctaaccgccc cctctgagtt 27900

cgccaccacc gcctccaccg atgccgccaa cgcgcctacc accttccccg tcgaggcacc 27960

cccgcttgag gaggaggaag tgattatcga gcaggaccca ggttttgtaa gcgaagacga 28020

cgaggaccgc tcagtaccaa cagaggataa aaagcaagac caggacaacg cagaggcaaa 28080

cgaggaacaa gtcgggcggg gggacgaaag gcatggcgac tacctagatg tgggagacga 28140

cgtgctgttg aagcatctgc agcgccagtg cgccattatc tgcgacgcgt tgcaagagcg 28200

cagcgatgtg cccctcgcca tagcggatgt cagccttgcc tacgaacgcc acctattctc 28260

accgcgcgta ccccccaaac gccaagaaaa cggcacatgc gagcccaacc cgcgcctcaa 28320

cttctacccc gtatttgccg tgccagaggt gcttgccacc tatcacatct ttttccaaaa 28380

ctgcaagata cccctatcct gccgtgccaa ccgcagccga gcggacaagc agctggcctt 28440

gcggcagggc gctgtcatac ctgatatcgc ctcgctcaac gaagtgccaa aaatctttga 28500

gggtcttgga cgcgacgaga agcgcgcggc aaacgctctg caacaggaaa acagcgaaaa 28560

tgaaagtcac tctggagtgt tggtggaact cgagggtgac aacgcgcgcc tagccgtact 28620

aaaacgcagc atcgaggtca cccactttgc ctacccggca cttaacctac cccccaaggt 28680

catgagcaca gtcatgagtg agctgatcgt gcgccgtgcg cagcccctgg agagggatgc 28740

aaatttgcaa gaacaaacag aggagggcct acccgcagtt ggcgacgagc agctagcgcg 28800

ctggcttcaa acgcgcgagc ctgccgactt ggaggagcga cgcaaactaa tgatggccgc 28860

agtgctcgtt accgtggagc ttgagtgcat gcagcggttc tttgctgacc cggagatgca 28920

gcgcaagcta gaggaaacat tgcactacac ctttcgacag ggctacgtac gccaggcctg 28980

caagatctcc aacgtggagc tctgcaacct ggtctcctac cttggaattt tgcacgaaaa 29040

ccgccttggg caaaacgtgc ttcattccac gctcaagggc gaggcgcgcc gcgactacgt 29100

ccgcgactgc gtttacttat ttctatgcta cacctggcag acggccatgg gcgtttggca 29160

gcagtgcttg gaggagtgca acctcaagga gctgcagaaa ctgctaaagc aaaacttgaa 29220

ggacctatgg acggccttca acgagcgctc cgtggccgcg cacctggcgg acatcatttt 29280

ccccgaacgc ctgcttaaaa ccctgcaaca gggtctgcca gacttcacca gtcaaagcat 29340

gttgcagaac tttaggaact ttatcctaga gcgctcagga atcttgcccg ccacctgctg 29400

tgcacttcct agcgactttg tgcccattaa gtaccgcgaa tgccctccgc cgctttgggg 29460

ccactgctac cttctgcagc tagccaacta ccttgcctac cactctgaca taatggaaga 29520

cgtgagcggt gacggtctac tggagtgtca ctgtcgctgc aacctatgca ccccgcaccg 29580

ctccctggtt tgcaattcgc agctgcttaa cgaaagtcaa attatcggta cctttgagct 29640

gcagggtccc tcgcctgacg aaaagtccgc ggctccgggg ttgaaactca ctccggggct 29700

gtggacgtcg gcttaccttc gcaaatttgt acctgaggac taccacgccc acgagattag 29760

gttctacgaa gaccaatccc gcccgcctaa tgcggagctt accgcctgcg tcattaccca 29820

gggccacatt cttggccaat tgcaagccat caacaaagcc cgccaagagt ttctgctacg 29880

aaagggacgg ggggtttact tggaccccca gtccggcgag gagctcaacc caatcccccc 29940

gccgccgcag ccctatcagc agcagccgcg ggcccttgct tcccaggatg gcacccaaaa 30000

agaagctgca gctgccgccg ccacccacgg acgaggagga atactgggac agtcaggcag 30060

aggaggtttt ggacgaggag gaggaggaca tgatggaaga ctgggagagc ctagacgagg 30120

aagcttccga ggtcgaagag gtgtcagacg aaacaccgtc accctcggtc gcattcccct 30180

cgccggcgcc ccagaaatcg gcaaccggtt ccagcatggc tacaacctcc gctcctcagg 30240

cgccgccggc actgcccgtt cgccgaccca accgtagatg ggacaccact ggaaccaggg 30300

ccggtaagtc caagcagccg ccgccgttag cccaagagca acaacagcgc caaggctacc 30360

gctcatggcg cgggcacaag aacgccatag ttgcttgctt gcaagactgt gggggcaaca 30420

tctccttcgc ccgccgcttt cttctctacc atcacggcgt ggccttcccc cgtaacatcc 30480

tgcattacta ccgtcatctc tacagcccat actgcaccgg cggcagcggc agcaacagca 30540

gcggccacac agaagcaaag gcgaccggat agcaagactc tgacaaagcc caagaaatcc 30600

acagcggcgg cagcagcagg aggaggagcg ctgcgtctgg cgcccaacga acccgtatcg 30660

acccgcgagc ttagaaacag gatttttccc actctgtatg ctatatttca acagagcagg 30720

ggccaagaac aagagctgaa aataaaaaac aggtctctgc gatccctcac ccgcagctgc 30780

ctgtatcaca aaagcgaaga tcagcttcgg cgcacgctgg aagacgcgga ggctctcttc 30840

agtaaatact gcgcgctgac tcttaaggac tagtttcgcg ccctttctca aatttaagcg 30900

cgaaaactac gtcatctcca gcggccacac ccggcgccag cacctgttgt cagcgccatt 30960

atgagcaagg aaattcccac gccctacatg tggagttacc agccacaaat gggacttgcg 31020

gctggagctg cccaagacta ctcaacccga ataaactaca tgagcgcggg accccacatg 31080

atatcccggg tcaacggaat acgcgcccac cgaaaccgaa ttctcctgga acaggcggct 31140

attaccacca cacctcgtaa taaccttaat ccccgtagtt ggcccgctgc cctggtgtac 31200

caggaaagtc ccgctcccac cactgtggta cttcccagag acgcccaggc cgaagttcag 31260

atgactaact caggggcgca gcttgcgggc ggctttcgtc acagggtgcg gtcgcccggg 31320

cagggtataa ctcacctgac aatcagaggg cgaggtattc agctcaacga cgagtcggtg 31380

agctcctcgc ttggtctccg tccggacggg acatttcaga tcggcggcgc cggccgctct 31440

tcattcacgc ctcgtcaggc aatcctaact ctgcagacct cgtcctctga gccgcgctct 31500

ggaggcattg gaactctgca atttattgag gagtttgtgc catcggtcta ctttaacccc 31560

ttctcgggac ctcccggcca ctatccggat caatttattc ctaactttga cgcggtaaag 31620

gactcggcgg acggctacga ctgaatgtta agtggagagg cagagcaact gcgcctgaaa 31680

cacctggtcc actgtcgccg ccacaagtgc tttgcccgcg actccggtga gttttgctac 31740

tttgaattgc ccgaggatca tatcgagggc ccggcgcacg gcgtccggct taccgcccag 31800

ggagagcttg cccgtagcct gattcgggag tttacccagc gccccctgct agttgagcgg 31860

gacaggggac cctgtgttct cactgtgatt tgcaactgtc ctaaccctgg attacatcaa 31920

gatcctctag ttaatgtcag gtcgcctaag tcgattaact agagtacccg gggatcttat 31980

tccctttaac taataaaaaa aaataataaa gcatcactta cttaaaatca gttagcaaat 32040

ttctgtccag tttattcagc agcacctcct tgccctcctc ccagctctgg tattgcagct 32100

tcctcctggc tgcaaacttt ctccacaatc taaatggaat gtcagtttcc tcctgttcct 32160

gtccatccgc acccactatc ttcatgttgt tgcagatgaa gcgcgcaaga ccgtctgaag 32220

ataccttcaa ccccgtgtat ccatatgaca cggaaaccgg tcctccaact gtgccttttc 32280

ttactcctcc ctttgtatcc cccaatgggt ttcaagagag tccccctggg gtactctctt 32340

tgcgcctatc cgaacctcta gttacctcca atggcatgct tgcgctcaaa atgggcaacg 32400

gcctctctct ggacgaggcc ggcaacctta cctcccaaaa tgtaaccact gtgagcccac 32460

ctctcaaaaa aaccaagtca aacataaacc tggaaatatc tgcacccctc acagttacct 32520

cagaagccct aactgtggct gccgccgcac ctctaatggt cgcgggcaac acactcacca 32580

tgcaatcaca ggccccgcta accgtgcacg actccaaact tagcattgcc acccaaggac 32640

ccctcacagt gtcagaagga aagctagccc tgcaaacatc aggccccctc accaccaccg 32700

atagcagtac ccttactatc actgcctcac cccctctaac tactgccact ggtagcttgg 32760

gcattgactt gaaagagccc atttatacac aaaatggaaa actaggacta aagtacgggg 32820

ctcctttgca tgtaacagac gacctaaaca ctttgaccgt agcaactggt ccaggtgtga 32880

ctattaataa tacttccttg caaactaaag ttactggagc cttgggtttt gattcacaag 32940

gcaatatgca acttaatgta gcaggaggac taaggattga ttctcaaaac agacgcctta 33000

tacttgatgt tagttatccg tttgatgctc aaaaccaact aaatctaaga ctaggacagg 33060

gccctctttt tataaactca gcccacaact tggatattaa ctacaacaaa ggcctttact 33120

tgtttacagc ttcaaacaat tccaaaaagc ttgaggttaa cctaagcact gccaaggggt 33180

tgatgtttga cgctacagcc atagccatta atgcaggaga tgggcttgaa tttggttcac 33240

ctaatgcacc aaacacaaat cccctcaaaa caaaaattgg ccatggccta gaatttgatt 33300

caaacaaggc tatggttcct aaactaggaa ctggccttag ttttgacagc acaggtgcca 33360

ttacagtagg aaacaaaaat aatgataagc taactttgtg gaccggaata aaccctccac 33420

ctaactgtca aattgtggaa aacactaata caaatgatgg caaacttact ttagtattag 33480

taaaaaatgg agggcttgtt aatggctacg tgtctctagt tggtgtatca gacactgtga 33540

accaaatgtt cacacaaaag acagcaaaca tccaattaag attatatttt gactcttctg 33600

gaaatctatt aactgaggaa tcagacttaa aaattccact taaaaataaa tcttctacag 33660

cgaccagtga aactgtagcc agcagcaaag cctttatgcc aagtactaca gcttatccct 33720

tcaacaccac tactagggat agtgaaaact acattcatgg aatatgttac tacatgacta 33780

gttatgatag aagtctattt cccttgaaca tttctataat gctaaacagc cgtatgattt 33840

cttccaatgt tgcctatgcc atacaatttg aatggaatct aaatgcaagt gaatctccag 33900

aaagcaacat agctacgctg accacatccc ccttttttctt ttcttacatt acagaagacg 33960

acaactaaag aatcgtttgt gttatgtttc aacgtgttta tttttcaatt gcagaaaatt 34020

tcaagtcatt tttcattcag tagtatagcc ccaccaccac atagcttata cagatcaccg 34080

taccttaatc aaactcacag aaccctagta ttcaacctgc cacctccctc ccaacacaca 34140

gagtacacag tcctttctcc ccggctggcc ttaaaaagca tcatatcatg ggtaacagac 34200

atattcttag gtgttatatt ccacacggtt tcctgtcgag ccaaacgctc atcagtgata 34260

ttaataaact ccccgggcag ctcacttaag ttcatgtcgc tgtccagctg ctgagccaca 34320

ggctgctgtc caacttgcgg ttgcttaacg ggcggcgaag gagaagtcca cgcctacatg 34380

ggggtagagt cataatcgtg catcaggata gggcggtggt gctgcagcag cgcgcgaata 34440

aactgctgcc gccgccgctc cgtcctgcag gaatacaaca tggcagtggt ctcctcagcg 34500

atgattcgca ccgcccgcag cataaggcgc cttgtcctcc gggcacagca gcgcaccctg 34560

atctcactta aatcagcaca gtaactgcag cacagcacca caatattgtt caaaatccca 34620

cagtgcaagg cgctgtatcc aaagctcatg gcgggggacca cagaacccac gtggccatca 34680

taccacaagc gcaggtagat taagtggcga cccctcataa acacgctgga cataaacatt 34740

acctcttttg gcatgttgta attcaccacc tcccctctga ttaaacatgg cgccatccac 34800

caccatccta aaccagctgg ccaaaacctg cccgccggct atacactgca gggaaccggg 34860

actggaacaa tgacagtgga gagcccagga ctcgtaacca tggatcatca tgctcgtcat 34920

gatatcaatg ttggcacaac acaggcacac gtgcatacac ttcctcagga ttacaagctc 34980

ctcccgcgtt agaaccatat cccagggaac aacccattcc tgaatcagcg taaatcccac 35040

actgcaggga agacctcgca cgtaactcac gttgtgcatt gtcaaagtgt tacattcggg 35100

cagcagcgga tgatcctcca gtatggtagc gcgggtttct gtctcaaaag gaggtagacg 35160

atccctactg tacggagtgc gccgagacaa ccgagatcgt gttggtcgta gtgtcatgcc 35220

aaatggaacg ccggacgtag tcatatttcc tgaagcaaaa ccaggtgcgg gcgtgacaaa 35280

cagatctgcg tctccggtct cgccgcttag atcgctctgt gtagtagttg tagtatatcc 35340

actctctcaa agcatccagg cgccccctgg cttcgggttc tatgtaaact ccttcatgcg 35400

ccgctgccct gataacatcc accaccgcag aataagccac acccagccaa cctacacatt 35460

cgttctgcga gtcacacacg ggaggagcgg gaagagctgg aagaaccatg ttttttttt 35520

tattccaaaa gattatccaa aacctcaaaa tgaagatcta ttaagtgaac gcgctcccct 35580

ccggtggcgt ggtcaaactc tacagccaaa gaacagataa tggcatttgt aagatgttgc 35640

acaatggctt ccaaaaggca aacggccctc acgtccaagt ggacgtaaag gctaaaccct 35700

tcagggtgaa tctcctctat aaacattcca gcaccttcaa ccatgcccaa ataattctca 35760

tctcgccacc ttctcaatat atctctaagc aaatcccgaa tattaagtcc ggccattgta 35820

aaaatctgct ccagagcgcc ctccaccttc agcctcaagc agcgaatcat gattgcaaaa 35880

attcaggttc ctcacagacc tgtataagat tcaaaagcgg aacattaaca aaaataccgc 35940

gatcccgtag gtcccttcgc agggccagct gaacataatc gtgcaggtct gcacggacca 36000

gcgcggccac ttccccgcca ggaaccatga caaaagaacc cacactgatt atgacacgca 36060

tactcggagc tatgctaacc agcgtagccc cgatgtaagc ttgttgcatg ggcggcgata 36120

taaaatgcaa ggtgctgctc aaaaaatcag gcaaagcctc gcgcaaaaaa gaaagcacat 36180

cgtagtcatg ctcatgcaga taaaggcagg taagctccgg aaccaccaca gaaaaagaca 36240

ccatttttct ctcaaacatg tctgcgggtt tctgcataaa cacaaaataa aataacaaaa 36300

aaacatttaa acattagaag cctgtcttac aacaggaaaa acaaccctta taagcataag 36360

acggactacg gccatgccgg cgtgaccgta aaaaaactgg tcaccgtgat taaaaagcac 36420

caccgacagc tcctcggtca tgtccggagt cataatgtaa gactcggtaa acacatcagg 36480

ttgattcaca tcggtcagtg ctaaaaagcg accgaaatag cccgggggaa tacatacccg 36540

caggcgtaga gacaacatta cagcccccat aggaggtata acaaaattaa taggagagaa 36600

aaacacataa acacctgaaa aaccctcctg cctaggcaaa atagcaccct cccgctccag 36660

aacaacatac agcgcttcca cagcggcagc cataacagtc agccttacca gtaaaaaaga 36720

aaacctatta aaaaaacacc actcgacacg gcaccagctc aatcagtcac agtgtaaaaa 36780

agggccaagt gcagagcgag tatatatagg actaaaaaat gacgtaacgg ttaaagtcca 36840

caaaaaacac ccagaaaacc gcacgcgaac ctacgcccag aaacgaaagc caaaaaaccc 36900

acaacttcct caaatcgtca cttccgtttt cccacgttac gtcacttccc attttaagaa 36960

aactacaatt cccaacacat acaagttact ccgccctaaa acctacgtca cccgccccgt 37020

tcccacgccc cgcgccacgt cacaaactcc acccccctcat tatcatattg gcttcaatcc 37080

aaaataaggt atattattga tgatg 37105

<210> 17
<211> 37105
<212> DNA
<213> Artificial Sequence

<220>
<223> Adk35RF-E4orf6/Spike-E4dl355(E4re#12)

<400> 17
ttaattaaca tcatcaataa tataccttat tttggattga agccaatatg ataatgaggg 60

ggtggagttt gtgacgtggc gcggggcgtg ggaacggggc gggtgacgta gtagtgtggc 120

ggaagtgtga tgttgcaagt gtggcggaac acatgtaagc gacggatgtg gcaaaagtga 180

cgtttttggt gtgcgccggt gtacacagga agtgacaatt ttcgcgcggt tttaggcgga 240

tgttgtagta aatttgggcg taaccgagta agatttggcc attttcgcgg gaaaactgaa 300

taagaggaag tgaaatctga ataattttgt gttactcata gcgcgtaata atttcctcag 360

aagccataga gcccaccgca tccccagcat gcctgctatt gtcttcccaa tcctcccccc 420

tgctgtcctg ccccacccca ccccccagaa tagaatgaca cctactcaga caatgcgatg 480

caatttcctc attttattag gaaaggacag tgggagtggc accttccagg gtcaaggaag 540

gcacgggggа ggggcaaaca acagatggct ggcaactaga aggcacagtc gaggctgatc 600

agcgagctct agagaattga tccccaagct tctacatggg ggtagagtca taatcgtgca 660

tcaggatagg gcggtggtgc tgcagcagcg cgcgaataaa ctgctgccgc cgccgctccg 720

tcctgcagga atacaacatg gcagtggtct cctcagcgat gattcgcacc gcccgcagca 780

taaggcgcct tgtcctccgg gcacagcagc gcaccctgat ctcacttaaa tcagcacagt 840

aactgcagca cagcaccaca atattgttca aaatcccaca gtgcaaggcg ctgtatccaa 900

agctcatggc ggggaccaca gaacccacgt ggccatcata ccacaagcgc aggtagatta 960

agtggcgacc cctcataaac acgctggaca taaacattac ctcttttggc atgttgtaat 1020

tcaccacctc ccggtaccat ataaacctct gattaaacat ggcgccatcc accaccatcc 1080

taaaccagct ggccaaaacc tgcccgccgg ctatacactg cagggaaccg ggactggaac 1140

aatgacagtg gagagcccag gactcgtaac catggatcat catgctcgtc atgatatcaa 1200

tgttggcaca acacaggcac acgtgcatac acttcctcag gattacaagc tcctcccgcg 1260

ttagaaccat atcccaggga acaacccatt cctgaatcag cgtaaatccc acactgcagg 1320

gaagacctcg cacgtaactc acgttgtgca ttgtcaaagt gttacattcg ggcagcagcg 1380

gatgatcctc cagtatggta gcgcgggttt ctgtctcaaa aggaggtaga cgatccctac 1440

tgtacggagt gcgccgagac aaccgagatc gtgttggtcg tagtgtcatg ccaaatggaa 1500

cgccggacgt agtcatggtg gccagcttgg ggtagttttc acgacacctt aaatggaaga 1560

aaaaaacttt gaaccactgt ctgaggcttg agaatgaacc aagatccaaa ctcaaaaagg 1620

gcaaattcca aggagaatta catcaagtgc caagctggcc taacttcagt ctccacccac 1680

tcagtatggg gaaactccat cgcataaaac ccctcccccc aacctaaaga cgacgtactc 1740

caaaagctcg agaactaatc gaggtgcctg gacggcgccc ggtactccgt ggagtcacat 1800

gaagcgacgg ctgaggacgg aaaggccctt ttcctttgtg tgggtgactc acccgcccgc 1860

tctcccgagc gccgcgtcct ccattttgag ctccctgcag cagggccggg aagcggccat 1920

ctttccgctc acgcaactgg tgccgaccgg gccagccttg ccgcccaggg cggggcgata 1980

cacggcggcg cgaggccagg caccagagca ggccggccag cttgagacta cccccgtccg 2040

attctcggtg gccgcgctcg caggccccgc ctcgccgaac atgtgcgctg ggacgcacgg 2100

gccccgtcgc cgcccgcggc cccaaaaacc gaaataccag tgtgcagatc ttggcccgca 2160

tttacaagac tatcttgcca gaaaaaaagc gtcgcagcag gtcatcaaaa attttaaatg 2220

gctagagact tatcgaaagc agcgagacag gcgcgaaggt gccaccagat tcgcacgcgg 2280

cggccccagc gcccaggcca agcctcaact caagcacgag gcgaaggggc tccttaagcg 2340

caaggcctcg aactctccca cccacttcca acccgaagct cgggatcaag aatcacgtac 2400

tgcagccagg ggcgtggaag taattcaagg cacgcaaggg ccataacccg taaagaggcc 2460

aggcccgcgg gaaccacaca cggcacttac ctgtgttctg gcggcaaacc cgttgcgaaa 2520

aagaacgttc acggcgacta ctgcacttat atacggttct cccccaccct cgggaaaaag 2580

gcggagccag tacacgacat cactttccca gtttaccccg cgccaccttc tctaggcacc 2640

ggttcaattg ccgacccctc cccccaactt ctcggggact gtgggcgatg tgcgctctgc 2700

ccactgacgg gcaccggagc ctgtaatagt aatcaattac ggggtcatta gttcatagcc 2760

catatatgga gttccgcgtt acataactta cggtaaatgg cccgcctggc tgaccgccca 2820

acgacccccg cccattgacg tcaataatga cgtatgttcc catagtaacg ccaatagggа 2880

ctttccattg acgtcaatgg gtggagtatt tacggtaaac tgcccacttg gcagtacatc 2940

aagtgtatca tatgccaagt acgcccccta ttgacgtcaa tgacggtaaa tggcccgcct 3000

ggcattatgc ccagtacatg accttatggg actttcctac ttggcagtac atctacgtat 3060

tagtcatcgc tattaccatg gtgatgcggt tttggcagta catcaatggg cgtggatagc 3120

ggtttgactc acggggattt ccaagtctcc accccattga cgtcaatggg agtttgtttt 3180

ggcaccaaaa tcaacgggac tttccaaaat gtcgtaacaa ctccgcccca ttgacgcaaa 3240

tgggcggtag gcgtgtacgg tgggaggtct atataagcag agctctccct atcagtgata 3300

gagatctccc tatcagtgat agagatcgtc gacgagctcg tttagtgaac cgtcagatcg 3360

cctggagacg ccatccacgc tgttttgacc tccatagaag acaccgggac cgatccagcc 3420

tccgatttgc caccatgttt gtgttcctgg tgctgctgcc actggtgtcc agccagtgtg 3480

tgaacctgac caccaggacc caacttcctc ctgcctacac caactccttc accaggggag 3540

tctactaccc tgacaaggtg ttcaggtcct ctgtgctgca cagcacccag gacctgttcc 3600

tgccattctt cagcaatgtg acctggttcc atgccatcca tgtgtctggc accaatggca 3660

ccaagaggtt tgacaaccct gtgctgccat tcaatgatgg agtctacttt gccagcacag 3720

agaagagcaa catcatcagg ggctggattt ttggcaccac cctggacagc aagacccagt 3780

ccctgctgat tgtgaacaat gccaccaatg tggtgattaa ggtgtgtgag ttccagttct 3840

gtaatgaccc attcctggga gtctactacc acaagaacaa caagtcctgg atggagtctg 3900

agttcagggt ctactcctct gccaacaact gtacctttga atatgtgagc caaccattcc 3960

tgatggactt ggagggcaag cagggcaact tcaagaacct gagggagttt gtgttcaaga 4020

acattgatgg ctacttcaag atttacagca aacacacacc aatcaacctg gtgagggacc 4080

tgccacaggg cttctctgcc ttggaaccac tggtggacct gccaattggc atcaacatca 4140

ccaggttcca gaccctgctg gctctgcaca ggtcctacct gacacctgga gactcctcct 4200

ctggctggac agcaggagca gcagcctact atgtgggcta cctccaacca aggaccttcc 4260

tgctgaaata caatgagaat ggcaccatca cagatgctgt ggactgtgcc ctggacccac 4320

tgtctgagac caagtgtacc ctgaaatcct tcacagtgga gaagggcatc taccagacca 4380

gcaacttcag ggtccaacca acagagagca ttgtgaggtt tccaaacatc accaacctgt 4440

gtccatttgg agaggtgttc aatgccacca ggtttgcctc tgtctatgcc tggaacagga 4500

agaggattag caactgtgtg gctgactact ctgtgctcta caactctgcc tccttcagca 4560

ccttcaagtg ttatggagtg agcccaacca aactgaatga cctgtgtttc accaatgtct 4620

atgctgactc ctttgtgatt aggggagatg aggtgagaca gattgcccct ggacaaacag 4680

gcaagattgc tgactacaac tacaaactgc ctgatgactt cacaggctgt gtgattgcct 4740

ggaacagcaa caacctggac agcaaggtgg gaggcaacta caactacctc tacagactgt 4800

tcaggaagag caacctgaaa ccatttgaga gggacatcag cacagagatt taccaggctg 4860

gcagcacacc atgtaatgga gtggagggct tcaactgtta ctttccactc caatcctatg 4920

gcttccaacc aaccaatgga gtgggctacc aaccatacag ggtggtggtg ctgtcctttg 4980

aactgctcca tgcccctgcc acagtgtgtg gaccaaagaa gagcaccaac ctggtgaaga 5040

acaagtgtgt gaacttcaac ttcaatggac tgacaggcac aggagtgctg acagagagca 5100

acaagaagtt cctgccattc caacagtttg gcagggacat tgctgacacc acagatgctg 5160

tgagggaccc acagaccttg gagattctgg acatcacacc atgttccttt ggaggagtgt 5220

ctgtgattac acctggcacc aacaccagca accaggtggc tgtgctctac caggatgtga 5280

actgtactga ggtgcctgtg gctatccatg ctgaccaact tacaccaacc tggagggtct 5340

acagcacagg cagcaatgtg ttccagacca gggctggctg tctgattgga gcagagcatg 5400

tgaacaactc ctatgagtgt gacatcccaa ttggagcagg catctgtgcc tcctaccaga 5460

cccagaccgg tggcggtggg tcgaggtctg tggcaagcca gagcatcatt gcctacacaa 5520

tgagtctggg agcagagaac tctgtggctt acagcaacaa cagcattgcc atcccaacca 5580

acttcaccat ctctgtgacc acagagattc tgcctgtgag tatgaccaag acctctgtgg 5640

actgtacaat gtatatctgt ggagacagca cagagtgtag caacctgctg ctccaatatg 5700

gctccttctg tacccaactt aacagggctc tgacaggcat tgctgtggaa caggacaaga 5760

acacccagga ggtgtttgcc caggtgaagc agatttacaa gacacctcca atcaaggact 5820

ttggaggctt caacttcagc cagattctgc ctgacccaag caagccaagc aagaggtcct 5880

tcattgagga cctgctgttc aacaaggtga ccctggctga tgctggcttc atcaagcaat 5940

atggagactg tctgggagac attgctgcca gggacctgat ttgtgcccag aagttcaatg 6000

gactgacagt gctgcctcca ctgctgacag atgagatgat tgcccaatac acctctgccc 6060

tgctggctgg caccatcacc tctggctgga cctttggagc aggagcagcc ctccaaatcc 6120

catttgctat gcagatggct tacaggttca atggcattgg agtgacccag aatgtgctct 6180

atgagaacca gaaactgatt gccaaccagt tcaactctgc cattggcaag attcaggact 6240

ccctgtccag cacagcctct gccctgggca aactccaaga tgtggtgaac cagaatgccc 6300

aggctctgaa caccctggtg aagcaacttt ccagcaactt tggagccatc tcctctgtgc 6360

tgaatgacat cctgagcaga ctggacaagg tggaggctga ggtccagatt gacagactga 6420

ttacaggcag actccaatcc ctccaaacct atgtgaccca acaacttatc agggctgctg 6480

agattagggc atctgccaac ctggctgcca ccaagatgag tgagtgtgtg ctgggacaaa 6540

gcaagagggt ggacttctgt ggcaagggct accacctgat gagttttcca cagtctgccc 6600

ctcatggagt ggtgttcctg catgtgacct atgtgcctgc ccaggagaag aacttcacca 6660

cagcccctgc catctgccat gatggcaagg ctcactttcc aagggaggga gtgtttgtga 6720

gcaatggcac ccactggttt gtgacccaga ggaacttcta tgaaccacag attatcacca 6780

cagacaacac ctttgtgtct ggcaactgtg atgtggtgat tggcattgtg aacaacacag 6840

tctatgaccc actccaacct gaactggact ccttcaagga ggaactggac aaatacttca 6900

agaaccacac cagccctgat gtggacctgg gagacatctc tggcatcaat gcctctgtgg 6960

tgaacatcca gaaggagatt gacagactga atgaggtggc taagaacctg aatgagtccc 7020

tgattgacct ccaagaactg ggcaaatatg aacaatacat caagtggcca tgaaaattga 7080

tcataatcag ccataccaca tttgtagagg ttttacttgc tttaaaaaac ctcccacacc 7140

tccccctgaa cctgaaacat aaaatgaatg caattgttgt tgttaacttg tttattgcag 7200

cttataatgg ttacaaataa agcaatagca tcacaaattt cacaaataaa gcatttttt 7260

cactgcattc tagttgtggt ttgtccaaac tcatcaatgt atcttaacgc ggatcaaatt 7320

gggcgtggct taagggtggg aaagaatata taaggtgggg gtcttatgta gttttgtatc 7380

tgttttgcag cagccgccgc cgccatgagc accaactcgt ttgatggaag cattgtgagc 7440

tcatatttga caacgcgcat gcccccatgg gccggggtgc gtcagaatgt gatgggctcc 7500

agcattgatg gtcgccccgt cctgcccgca aactctacta ccttgaccta cgagaccgtg 7560

tctggaacgc cgttggagac tgcagcctcc gccgccgctt cagccgctgc agccaccgcc 7620

cgcgggattg tgactgactt tgctttcctg agcccgcttg caagcagtgc agcttcccgt 7680

tcatccgccc gcgatgacaa gttgacggct cttttggcac aattggattc tttgacccgg 7740

gaacttaatg tcgtttctca gcagctgttg gatctgcgcc agcaggtttc tgccctgaag 7800

gcttcctccc ctcccaatgc ggtttaaaac ataaataaaa aaccagactc tgtttggatt 7860

tggatcaagc aagtgtcttg ctgtctttat ttaggggttt tgcgcgcgcg gtaggcccgg 7920

gaccagcggt ctcggtcgtt gagggtcctg tgtatttttt ccaggacgtg gtaaaggtga 7980

ctctggatgt tcagatacat gggcataagc ccgtctctgg ggtggaggta gcaccactgc 8040

agagcttcat gctgcggggt ggtgttgtag atgatccagt cgtagcagga gcgctgggcg 8100

tggtgcctaa aaatgtcttt cagtagcaag ctgattgcca ggggcaggcc cttggtgtaa 8160

gtgtttacaa agcggttaag ctgggatggg tgcatacgtg gggatatgag atgcatcttg 8220

gactgtattt ttaggttggc tatgttccca gccatatccc tccggggatt catgttgtgc 8280

agaaccacca gcacagtgta tccggtgcac ttgggaaatt tgtcatgtag cttagaagga 8340

aatgcgtgga agaacttgga gacgcccttg tgacctccaa gattttccat gcattcgtcc 8400

ataatgatgg caatgggccc acgggcggcg gcctgggcga agatatttct gggatcacta 8460

acgtcatagt tgtgttccag gatgagatcg tcataggcca tttttacaaa gcgcgggcgg 8520

agggtgccag actgcggtat aatggttcca tccggcccag gggcgtagtt accctcacag 8580

atttgcattt cccacgcttt gagttcagat ggggggatca tgtctacctg cggggcgatg 8640

aagaaaacgg tttccggggt aggggagatc agctgggaag aaagcaggtt cctgagcagc 8700

tgcgacttac cgcagccggt gggcccgtaa atcacaccta ttaccgggtg caactggtag 8760

ttaagagagc tgcagctgcc gtcatccctg agcaggggggg ccacttcgtt aagcatgtcc 8820

ctgactcgca tgttttccct gaccaaatcc gccagaaggc gctcgccgcc cagcgatagc 8880

agttcttgca aggaagcaaa gtttttcaac ggtttgagac cgtccgccgt aggcatgctt 8940

ttgagcgttt gaccaagcag ttccaggcgg tcccacagct cggtcacctg ctctacggca 9000

tctcgatcca gcatatctcc tcgtttcgcg ggttggggcg gctttcgctg tacggcagta 9060

gtcggtgctc gtccagacgg gccagggtca tgtctttcca cgggcgcagg gtcctcgtca 9120

gcgtagtctg ggtcacggtg aaggggtgcg ctccgggctg cgcgctggcc agggtgcgct 9180

tgaggctggt cctgctggtg ctgaagcgct gccggtcttc gccctgcgcg tcggccaggt 9240

agcatttgac catggtgtca tagtccagcc cctccgcggc gtggcccttg gcgcgcagct 9300

tgcccttgga ggaggcgccg cacgaggggc agtgcagact tttgagggcg tagagcttgg 9360

gcgcgagaaa taccgattcc ggggagtagg catccgcgcc gcaggccccg cagacggtct 9420

cgcattccac gagccaggtg agctctggcc gttcggggtc aaaaaccagg tttcccccat 9480

gctttttgat gcgtttctta cctctggttt ccatgagccg gtgtccacgc tcggtgacga 9540

aaaggctgtc cgtgtccccg tatacagact tgagaggcct gtcctcgagc ggtgttccgc 9600

ggtcctcctc gtatagaaac tcggaccact ctgagacaaa ggctcgcgtc caggccagca 9660

cgaaggaggc taagtgggag gggtagcggt cgttgtccac tagggggtcc actcgctcca 9720

gggtgtgaag acacatgtcg ccctcttcgg catcaaggaa ggtgattggt ttgtaggtgt 9780

aggccacgtg accgggtgtt cctgaagggg ggctataaaa gggggtgggg gcgcgttcgt 9840

cctcactctc ttccgcatcg ctgtctgcga gggccagctg ttggggtgag tactccctct 9900

gaaaagcggg catgacttct gcgctaagat tgtcagtttc caaaaacgag gaggatttga 9960

tattcacctg gcccgcggtg atgcctttga gggtggccgc atccatctgg tcagaaaaga 10020

caatcttttt gttgtcaagc ttggtggcaa acgacccgta gagggcgttg gacagcaact 10080

tggcgatgga gcgcagggtt tggtttttgt cgcgatcggc gcgctccttg gccgcgatgt 10140

ttagctgcac gtattcgcgc gcaacgcacc gccattcggg aaagacggtg gtgcgctcgt 10200

cgggcaccag gtgcacgcgc caaccgcggt tgtgcagggt gacaaggtca acgctggtgg 10260

ctacctctcc gcgtaggcgc tcgttggtcc agcagaggcg gccgcccttg cgcgagcaga 10320

atggcggtag ggggtctagc tgcgtctcgt ccgggggggtc tgcgtccacg gtaaagaccc 10380

cgggcagcag gcgcgcgtcg aagtagtcta tcttgcatcc ttgcaagtct agcgcctgct 10440

gccatgcgcg ggcggcaagc gcgcgctcgt atgggttgag tgggggaccc catggcatgg 10500

ggtgggtgag cgcggaggcg tacatgccgc aaatgtcgta aacgtagagg ggctctctga 10560

gtattccaag atatgtaggg tagcatcttc caccgcggat gctggcgcgc acgtaatcgt 10620

atagttcgtg cgagggagcg aggaggtcgg gaccgaggtt gctacgggcg ggctgctctg 10680

ctcggaagac tatctgcctg aagatggcat gtgagttgga tgatatggtt ggacgctgga 10740

agacgttgaa gctggcgtct gtgagaccta ccgcgtcacg cacgaaggag gcgtaggagt 10800

cgcgcagctt gttgaccagc tcggcggtga cctgcacgtc tagggcgcag tagtccaggg 10860

tttccttgat gatgtcatac ttatcctgtc cctttttttt ccacagctcg cggttgagga 10920

caaactcttc gcggtctttc cagtactctt ggatcggaaa cccgtcggcc tccgaacggt 10980

aagagcctag catgtagaac tggttgacgg cctggtaggc gcagcatccc ttttctacgg 11040

gtagcgcgta tgcctgcgcg gccttccgga gcgaggtgtg ggtgagcgca aaggtgtccc 11100

tgaccatgac tttgaggtac tggtatttga agtcagtgtc gtcgcatccg ccctgctccc 11160

agagcaaaaa gtccgtgcgc tttttggaac gcggatttgg cagggcgaag gtgacatcgt 11220

tgaagagtat ctttcccgcg cgaggcataa agttgcgtgt gatgcggaag ggtcccggca 11280

cctcggaacg gttgttaatt acctgggcgg cgagcacgat ctcgtcaaag ccgttgatgt 11340

tgtggcccac aatgtaaagt tccaagaagc gcgggatgcc cttgatggaa ggcaattttt 11400

taagttcctc gtaggtgagc tcttcagggg agctgagccc gtgctctgaa agggcccagt 11460

ctgcaagatg agggttggaa gcgacgaatg agctccacag gtcacgggcc attagcattt 11520

gcaggtggtc gcgaaaggtc ctaaactggc gacctatggc catttttct ggggtgatgc 11580

agtagaaggt aagcgggtct tgttcccagc ggtcccatcc aaggttcgcg gctaggtctc 11640

gcgcggcagt cactagaggc tcatctccgc cgaacttcat gaccagcatg aagggcacga 11700

gctgcttccc aaaggccccc atccaagtat aggtctctac atcgtaggtg acaaagagac 11760

gctcggtgcg aggatgcgag ccgatcggga agaactggat ctcccgccac caattggagg 11820

agtggctatt gatgtggtga aagtagaagt ccctgcgacg ggccgaacac tcgtgctggc 11880

ttttgtaaaa acgtgcgcag tactggcagc ggtgcacggg ctgtacatcc tgcacgaggt 11940

tgacctgacg accgcgcaca aggaagcaga gtgggaattt gagcccctcg cctggcgggt 12000

ttggctggtg gtcttctact tcggctgctt gtccttgacc gtctggctgc tcgaggggag 12060

ttacggtgga tcggaccacc acgccgcgcg agcccaaagt ccagatgtcc gcgcgcggcg 12120

gtcggagctt gatgacaaca tcgcgcagat gggagctgtc catggtctgg agctcccgcg 12180

gcgtcaggtc aggcgggagc tcctgcaggt ttacctcgca tagacgggtc agggcgcggg 12240

ctagatccag gtgataccta atttccaggg gctggttggt ggcggcgtcg atggcttgca 12300

agaggccgca tccccgcggc gcgactacgg taccgcgcgg cgggcggtgg gccgcggggg 12360

tgtccttgga tgatgcatct aaaagcggtg acgcgggcga gcccccggag gtaggggggg 12420

ctccggaccc gccgggagag ggggcagggg cacgtcggcg ccgcgcgcgg gcaggagctg 12480

gtgctgcgcg cgtaggttgc tggcgaacgc gacgacgcgg cggttgatct cctgaatctg 12540

gcgcctctgc gtgaagacga cgggcccggt gagcttgaac ctgaaagaga gttcgacaga 12600

atcaatttcg gtgtcgttga cggcggcctg gcgcaaaatc tcctgcacgt ctcctgagtt 12660

gtcttgatag gcgatctcgg ccatgaactg ctcgatctct tcctcctgga gatctccgcg 12720

tccggctcgc tccacggtgg cggcgaggtc gttggaaatg cgggccatga gctgcgagaa 12780

ggcgttgagg cctccctcgt tccagacgcg gctgtagacc acgccccctt cggcatcgcg 12840

ggcgcgcatg accacctgcg cgagattgag ctccacgtgc cgggcgaaga cggcgtagtt 12900

tcgcaggcgc tgaaagaggt agttgagggt ggtggcggtg tgttctgcca cgaagaagta 12960

cataacccag cgtcgcaacg tggattcgtt gatatccccc aaggcctcaa ggcgctccat 13020

ggcctcgtag aagtccacgg cgaagttgaa aaactgggag ttgcgcgccg acacggttaa 13080

ctcctcctcc agaagacgga tgagctcggc gacagtgtcg cgcacctcgc gctcaaaggc 13140

tacaggggcc tcttcttctt cttcaatctc ctcttccata agggcctccc cttcttcttc 13200

ttctggcggc ggtgggggag gggggacacg gcggcgacga cggcgcaccg ggaggcggtc 13260

gacaaagcgc tcgatcatct ccccgcggcg acggcgcatg gtctcggtga cggcgcggcc 13320

gttctcgcgg gggcgcagtt ggaagacgcc gcccgtcatg tcccggttat gggttggcgg 13380

ggggctgcca tgcggcaggg atacggcgct aacgatgcat ctcaacaatt gttgtgtagg 13440

tactccgccg ccgagggacc tgagcgagtc cgcatcgacc ggatcggaaa acctctcgag 13500

aaaggcgtct aaccagtcac agtcgcaagg taggctgagc accgtggcgg gcggcagcgg 13560

gcggcggtcg gggttgtttc tggcggaggt gctgctgatg atgtaattaa agtaggcggt 13620

cttgagacgg cggatggtcg acagaagcac catgtccttg ggtccggcct gctgaatgcg 13680

caggcggtcg gccatgcccc aggcttcgtt ttgacatcgg cgcaggtctt tgtagtagtc 13740

ttgcatgagc ctttctaccg gcacttcttc ttctccttcc tcttgtcctg catctcttgc 13800

atctatcgct gcggcggcgg cggagtttgg ccgtaggtgg cgccctcttc ctcccatgcg 13860

tgtgaccccg aagcccctca tcggctgaag cagggctagg tcggcgacaa cgcgctcggc 13920

taatatggcc tgctgcacct gcgtgagggt agactggaag tcatccatgt ccacaaagcg 13980

gtggtatgcg cccgtgttga tggtgtaagt gcagttggcc ataacggacc agttaacggt 14040

ctggtgaccc ggctgcgaga gctcggtgta cctgagacgc gagtaagccc tcgagtcaaa 14100

tacgtagtcg ttgcaagtcc gcaccaggta ctggtatccc accaaaaagt gcggcggcgg 14160

ctggcggtag aggggccagc gtagggtggc cggggctccg ggggcgagat cttccaacat 14220

aaggcgatga tatccgtaga tgtacctgga catccaggtg atgccggcgg cggtggtgga 14280

ggcgcgcgga aagtcgcgga cgcggttcca gatgttgcgc agcggcaaaa agtgctccat 14340

ggtcgggacg ctctggccgg tcaggcgcgc gcaatcgttg acgctctagc gtgcaaaagg 14400

agagcctgta agcgggcact cttccgtggt ctggtggata aattcgcaag ggtatcatgg 14460

cggacgaccg gggttcgagc cccgtatccg gccgtccgcc gtgatccatg cggttaccgc 14520

ccgcgtgtcg aacccaggtg tgcgacgtca gacaacgggg gagtgctcct tttggcttcc 14580

ttccaggcgc ggcggctgct gcgctagctt ttttggccac tggccgcgcg cagcgtaagc 14640

ggttaggctg gaaagcgaaa gcattaagtg gctcgctccc tgtagccgga gggttatttt 14700

ccaagggttg agtcgcggga cccccggttc gagtctcgga ccggccggac tgcggcgaac 14760

gggggtttgc ctccccgtca tgcaagaccc cgcttgcaaa ttcctccgga aacagggacg 14820

agccccttt ttgcttttcc cagatgcatc cggtgctgcg gcagatgcgc ccccctcctc 14880

agcagcggca agagcaagag cagcggcaga catgcagggc accctcccct cctcctaccg 14940

cgtcaggagg ggcgacatcc gcggttgacg cggcagcaga tggtgattac gaacccccgc 15000

ggcgccgggc ccggcactac ctggacttgg aggagggcga gggcctggcg cggctaggag 15060

cgccctctcc tgagcggcac ccaagggtgc agctgaagcg tgatacgcgt gaggcgtacg 15120

tgccgcggca gaacctgttt cgcgaccgcg agggagagga gcccgaggag atgcgggatc 15180

gaaagttcca cgcagggcgc gagctgcggc atggcctgaa tcgcgagcgg ttgctgcgcg 15240

aggaggactt tgagcccgac gcgcgaaccg ggattagtcc cgcgcgcgca cacgtggcgg 15300

ccgccgacct ggtaaccgca tacgagcaga cggtgaacca ggagattaac tttcaaaaaa 15360

gctttaacaa ccacgtgcgt acgcttgtgg cgcgcgagga ggtggctata ggactgatgc 15420

atctgtggga ctttgtaagc gcgctggagc aaaacccaaa tagcaagccg ctcatggcgc 15480

agctgttcct tatagtgcag cacagcaggg acaacgaggc attcagggat gcgctgctaa 15540

acatagtaga gcccgagggc cgctggctgc tcgatttgat aaacatcctg cagagcatag 15600

tggtgcagga gcgcagcttg agcctggctg acaaggtggc cgccatcaac tattccatgc 15660

ttagcctggg caagttttac gcccgcaaga tataccatac cccttacgtt cccatagaca 15720

aggaggtaaa gatcgagggg ttctacatgc gcatggcgct gaaggtgctt accttgagcg 15780

acgacctggg cgtttatcgc aacgagcgca tccacaaggc cgtgagcgtg agccggcggc 15840

gcgagctcag cgaccgcgag ctgatgcaca gcctgcaaag ggccctggct ggcacgggca 15900

gcggcgatag agaggccgag tcctactttg acgcgggcgc tgacctgcgc tgggccccaa 15960

gccgacgcgc cctggaggca gctggggccg gacctgggct ggcggtggca cccgcgcgcg 16020

ctggcaacgt cggcggcgtg gaggaatatg acgaggacga tgagtacgag ccagaggacg 16080

gcgagtacta agcggtgatg tttctgatca gatgatgcaa gacgcaacgg acccggcggt 16140

gcgggcggcg ctgcagagcc agccgtccgg ccttaactcc acggacgact ggcgccaggt 16200

catggaccgc atcatgtcgc tgactgcgcg caatcctgac gcgttccggc agcagccgca 16260

ggccaaccgg ctctccgcaa ttctggaagc ggtggtcccg gcgcgcgcaa accccacgca 16320

cgagaaggtg ctggcgatcg taaacgcgct ggccgaaaac agggccatcc ggcccgacga 16380

ggccggcctg gtctacgacg cgctgcttca gcgcgtggct cgttacaaca gcggcaacgt 16440

gcagaccaac ctggaccggc tggtggggga tgtgcgcgag gccgtggcgc agcgtgagcg 16500

cgcgcagcag cagggcaacc tgggctccat ggttgcacta aacgccttcc tgagtacaca 16560

gcccgccaac gtgccgcggg gacaggagga ctacaccaac tttgtgagcg cactgcggct 16620

aatggtgact gagacaccgc aaagtgaggt gtaccagtct gggccagact atttttcca 16680

gaccagtaga caaggcctgc agaccgtaaa cctgagccag gctttcaaaa acttgcaggg 16740

gctgtggggg gtgcgggctc ccacaggcga ccgcgcgacc gtgtctagct tgctgacgcc 16800

caactcgcgc ctgttgctgc tgctaatagc gcccttcacg gacagtggca gcgtgtcccg 16860

ggacacatac ctaggtcact tgctgacact gtaccgcgag gccataggtc aggcgcatgt 16920

ggacgagcat actttccagg agattacaag tgtcagccgc gcgctggggc aggaggacac 16980

gggcagcctg gaggcaaccc taaactacct gctgaccaac cggcggcaga agatcccctc 17040

gttgcacagt ttaaacagcg aggaggagcg cattttgcgc tacgtgcagc agagcgtgag 17100

ccttaacctg atgcgcgacg gggtaacgcc cagcgtggcg ctggacatga ccgcgcgcaa 17160

catggaaccg ggcatgtatg cctcaaaccg gccgtttatc aaccgcctaa tggactactt 17220

gcatcgcgcg gccgccgtga accccgagta tttcaccaat gccatcttga acccgcactg 17280

gctaccgccc cctggtttct acaccggggg attcgaggtg cccgagggta acgatggatt 17340

cctctgggac gacatagacg acagcgtgtt ttccccgcaa ccgcagaccc tgctagagtt 17400

gcaacagcgc gagcaggcag aggcggcgct gcgaaaggaa agcttccgca ggccaagcag 17460

cttgtccgat ctaggcgctg cggccccgcg gtcagatgct agtagcccat ttccaagctt 17520

gatagggtct cttaccagca ctcgcaccac ccgcccgcgc ctgctgggcg aggaggagta 17580

cctaaacaac tcgctgctgc agccgcagcg cgaaaaaaac ctgcctccgg catttcccaa 17640

caacgggata gagagcctag tggacaagat gagtagatgg aagacgtacg cgcaggagca 17700

cagggacgtg ccaggcccgc gcccgcccac ccgtcgtcaa aggcacgacc gtcagcgggg 17760

tctggtgtgg gaggacgatg actcggcaga cgacagcagc gtcctggatt tgggagggag 17820

tggcaacccg tttgcgcacc ttcgccccag gctggggaga atgttttaaa aaaaaaaaag 17880

catgatgcaa aataaaaaac tcaccaaggc catggcaccg agcgttggtt ttcttgtatt 17940

ccccttagta tgcggcgcgc ggcgatgtat gaggaaggtc ctcctccctc ctacgagagt 18000

gtggtgagcg cggcgccagt ggcggcggcg ctgggttctc ccttcgatgc tcccctggac 18060

ccgccgtttg tgcctccgcg gtacctgcgg cctaccgggg ggagaaacag catccgttac 18120

tctgagttgg cacccctatt cgacaccacc cgtgtgtacc tggtggacaa caagtcaacg 18180

gatgtggcat ccctgaacta ccagaacgac cacagcaact ttctgaccac ggtcattcaa 18240

aacaatgact acagcccggg ggaggcaagc acacagacca tcaatcttga cgaccggtcg 18300

cactggggcg gcgacctgaa aaccatcctg cataccaaca tgccaaatgt gaacgagttc 18360

atgtttacca ataagtttaa ggcgcgggtg atggtgtcgc gcttgcctac taaggacaat 18420

caggtggagc tgaaatacga gtgggtggag ttcacgctgc ccgagggcaa ctactccgag 18480

accatgacca tagaccttat gaacaacgcg atcgtggagc actacttgaa agtgggcaga 18540

cagaacgggg ttctggaaag cgacatcggg gtaaagtttg acacccgcaa cttcagactg 18600

gggtttgacc ccgtcactgg tcttgtcatg cctggggtat atacaaacga agccttccat 18660

ccagacatca ttttgctgcc aggatgcggg gtggacttca cccacagccg cctgagcaac 18720

ttgttgggca tccgcaagcg gcaacccttc caggagggct ttaggatcac ctacgatgat 18780

ctggagggtg gtaacattcc cgcactgttg gatgtggacg cctaccaggc gagcttgaaa 18840

gatgacaccg aacagggcgg gggtggcgca ggcggcagca acagcagtgg cagcggcgcg 18900

gaagagaact ccaacgcggc agccgcggca atgcagccgg tggaggacat gaacgatcat 18960

gccattcgcg gcgacacctt tgccacacgg gctgaggaga agcgcgctga ggccgaagca 19020

gcggccgaag ctgccgcccc cgctgcgcaa cccgaggtcg agaagcctca gaagaaaccg 19080

gtgatcaaac ccctgacaga ggacagcaag aaacgcagtt acaacctaat aagcaatgac 19140

agcaccttca cccagtaccg cagctggtac cttgcataca actacggcga ccctcagacc 19200

ggaatccgct catggaccct gctttgcact cctgacgtaa cctgcggctc ggagcaggtc 19260

tactggtcgt tgccagacat gatgcaagac cccgtgacct tccgctccac gcgccagatc 19320

agcaactttc cggtggtggg cgccgagctg ttgcccgtgc actccaagag cttctacaac 19380

gaccaggccg tctactccca actcatccgc cagtttacct ctctgaccca cgtgttcaat 19440

cgctttcccg agaaccagat tttggcgcgc ccgccagccc ccaccatcac caccgtcagt 19500

gaaaacgttc ctgctctcac agatcacggg acgctaccgc tgcgcaacag catcggagga 19560

gtccagcgag tgaccattac tgacgccaga cgccgcacct gcccctacgt ttacaaggcc 19620

ctgggcatag tctcgccgcg cgtcctatcg agccgcactt tttgagcaag catgtccatc 19680

cttatatcgc ccagcaataa cacaggctgg ggcctgcgct tcccaagcaa gatgtttggc 19740

ggggccaaga agcgctccga ccaacaccca gtgcgcgtgc gcgggcacta ccgcgcgccc 19800

tggggcgcgc acaaacgcgg ccgcactggg cgcaccaccg tcgatgacgc catcgacgcg 19860

gtggtggagg aggcgcgcaa ctacacgccc acgccgccac cagtgtccac agtggacgcg 19920

gccattcaga ccgtggtgcg cggagcccgg cgctatgcta aaatgaagag acggcggagg 19980

cgcgtagcac gtcgccaccg ccgccgaccc ggcactgccg cccaacgcgc ggcggcggcc 20040

ctgcttaacc gcgcacgtcg caccggccga cgggcggcca tgcgggccgc tcgaaggctg 20100

gccgcgggta ttgtcactgt gccccccagg tccaggcgac gagcggccgc cgcagcagcc 20160

gcggccatta gtgctatgac tcagggtcgc aggggcaacg tgtattgggt gcgcgactcg 20220

gttagcggcc tgcgcgtgcc cgtgcgcacc cgccccccgc gcaactagat tgcaagaaaa 20280

aactacttag actcgtactg ttgtatgtat ccagcggcgg cggcgcgcaa cgaagctatg 20340

tccaagcgca aaatcaaaga agagatgctc caggtcatcg cgccggagat ctatggcccc 20400

ccgaagaagg aagagcagga ttacaagccc cgaaagctaa agcgggtcaa aaagaaaaag 20460

aaagatgatg atgatgaact tgacgacgag gtggaactgc tgcacgctac cgcgcccagg 20520

cgacgggtac agtggaaagg tcgacgcgta aaacgtgttt tgcgacccgg caccaccgta 20580

gtctttacgc ccggtgagcg ctccacccgc acctacaagc gcgtgtatga tgaggtgtac 20640

ggcgacgagg acctgcttga gcaggccaac gagcgcctcg gggagtttgc ctacggaaag 20700

cggcataagg acatgctggc gttgccgctg gacgagggca acccaacacc tagcctaaag 20760

cccgtaacac tgcagcaggt gctgcccgcg cttgcaccgt ccgaagaaaa gcgcggccta 20820

aagcgcgagt ctggtgactt ggcacccacc gtgcagctga tggtacccaa gcgccagcga 20880

ctggaagatg tcttggaaaa aatgaccgtg gaacctgggc tggagcccga ggtccgcgtg 20940

cggccaatca agcaggtggc gccgggactg ggcgtgcaga ccgtggacgt tcagataccc 21000

actaccagta gcaccagtat tgccaccgcc acagagggca tggagacaca aacgtccccg 21060

gttgcctcag cggtggcgga tgccgcggtg caggcggtcg ctgcggccgc gtccaagacc 21120

tctacggagg tgcaaacgga cccgtggatg tttcgcgttt cagccccccg gcgcccgcgc 21180

cgttcgagga agtacggcgc cgccagcgcg ctactgcccg aatatgccct acatccttcc 21240

attgcgccta cccccggcta tcgtggctac acctaccgcc ccagaagacg agcaactacc 21300

cgacgccgaa ccaccactgg aacccgccgc cgccgtcgcc gtcgccagcc cgtgctggcc 21360

ccgatttccg tgcgcagggt ggctcgcgaa ggaggcagga ccctggtgct gccaacagcg 21420

cgctaccacc ccagcatcgt ttaaaagccg gtctttgtgg ttcttgcaga tatggccctc 21480

acctgccgcc tccgtttccc ggtgccggga ttccgaggaa gaatgcaccg taggaggggc 21540

atggccggcc acggcctgac gggcggcatg cgtcgtgcgc accaccggcg gcggcgcgcg 21600

tcgcaccgtc gcatgcgcgg cggtatcctg cccctcctta ttccactgat cgccgcggcg 21660

attggcgccg tgcccggaat tgcatccgtg gccttgcagg cgcagagaca ctgattaaaa 21720

acaagttgca tgtggaaaaa tcaaaataaa aagtctggac tctcacgctc gcttggtcct 21780

gtaactattt tgtagaatgg aagacatcaa ctttgcgtct ctggccccgc gacacggctc 21840

gcgcccgttc atgggaaact ggcaagatat cggcaccagc aatatgagcg gtggcgcctt 21900

cagctggggc tcgctgtgga gcggcattaa aaatttcggt tccaccgtta agaactatgg 21960

cagcaaggcc tggaacagca gcacaggcca gatgctgagg gataagttga aagagcaaaa 22020

tttccaacaa aaggtggtag atggcctggc ctctggcatt agcggggtgg tggacctggc 22080

caaccaggca gtgcaaaata agattaacag taagcttgat ccccgccctc ccgtagagga 22140

gcctccaccg gccgtggaga cagtgtctcc agaggggcgt ggcgaaaagc gtccgcgccc 22200

cgacagggaa gaaactctgg tgacgcaaat agacgagcct ccctcgtacg aggaggcact 22260

aaagcaaggc ctgcccacca cccgtcccat cgcgcccatg gctaccggag tgctgggcca 22320

gcacacaccc gtaacgctgg acctgcctcc ccccgccgac acccagcaga aacctgtgct 22380

gccaggcccg accgccgttg ttgtaacccg tcctagccgc gcgtccctgc gccgcgccgc 22440

cagcggtccg cgatcgttgc ggcccgtagc cagtggcaac tggcaaagca cactgaacag 22500

catcgtgggt ctgggggtgc aatccctgaa gcgccgacga tgcttctgat agctaacgtg 22560

tcgtatgtgt gtcatgtatg cgtccatgtc gccgccagag gagctgctga gccgccgcgc 22620

gcccgctttc caagatggct acccccttcga tgatgccgca gtggtcttac atgcacatct 22680

cgggccagga cgcctcggag tacctgagcc ccgggctggt gcagtttgcc cgcgccaccg 22740

agacgtactt cagcctgaat aacaagttta gaaaccccac ggtggcgcct acgcacgacg 22800

tgaccacaga ccggtcccag cgtttgacgc tgcggttcat ccctgtggac cgtgaggata 22860

ctgcgtactc gtacaaggcg cggttcaccc tagctgtggg tgataaccgt gtgctggaca 22920

tggcttccac gtactttgac atccgcggcg tgctggacag gggccctact tttaagccct 22980

actctggcac tgcctacaac gccctggctc ccaagggtgc cccaaatcct tgcgaatggg 23040

atgaagctgc tactgctctt gaaataaacc tagaagaaga ggacgatgac aacgaagacg 23100

aagtagacga gcaagctgag cagcaaaaaa ctcacgtatt tgggcaggcg ccttattctg 23160

gtataaatat tacaaaggag ggtattcaaa taggtgtcga aggtcaaaca cctaaatatg 23220

ccgataaaac atttcaacct gaacctcaaa taggagaatc tcagtggtac gaaacagaaa 23280

ttaatcatgc agctgggaga gtcctaaaaa agactacccc aatgaaacca tgttacggtt 23340

catatgcaaa acccacaaat gaaaatggag ggcaaggcat tcttgtaaag caacaaaatg 23400

gaaagctaga aagtcaagtg gaaatgcaat ttttctcaac tactgaggca gccgcaggca 23460

atggtgataa cttgactcct aaagtggtat tgtacagtga agatgtagat atagaaaccc 23520

cagacactca tatttcttac atgcccacta ttaaggaagg taactcacga gaactaatgg 23580

gccaacaatc tatgcccaac aggcctaatt acattgcttt tagggacaat tttattggtc 23640

taatgtatta caacagcacg ggtaatatgg gtgttctggc gggccaagca tcgcagttga 23700

atgctgttgt agatttgcaa gacagaaaca cagagctttc ataccagctt ttgcttgatt 23760

ccattggtga tagaaccagg tacttttcta tgtggaatca ggctgttgac agctatgatc 23820

cagatgttag aattattgaa aatcatggaa ctgaagatga acttccaaat tactgctttc 23880

cactgggagg tgtgattaat acagagactc ttaccaaggt aaaacctaaa acaggtcagg 23940

aaaatggatg ggaaaaagat gctacagaat tttcagataa aaatgaaata agagttggaa 24000

ataattttgc catggaaatc aatctaaatg ccaacctgtg gagaaatttc ctgtactcca 24060

acatagcgct gtatttgccc gacaagctaa agtacagtcc ttccaacgta aaaatttctg 24120

ataacccaaa cacctacgac tacatgaaca agcgagtggt ggctcccggg ctagtggact 24180

gctacattaa ccttggagca cgctggtccc ttgactatat ggacaacgtc aacccattta 24240

accaccaccg caatgctggc ctgcgctacc gctcaatgtt gctgggcaat ggtcgctatg 24300

tgcccttcca catccaggtg cctcagaagt tctttgccat taaaaacctc cttctcctgc 24360

cgggctcata cacctacgag tggaacttca ggaaggatgt taacatggtt ctgcagagct 24420

ccctaggaaa tgacctaagg gttgacggag ccagcattaa gtttgatagc atttgccttt 24480

acgccacctt cttccccatg gcccacaaca ccgcctccac gcttgaggcc atgcttagaa 24540

acgacaccaa cgaccagtcc tttaacgact atctctccgc cgccaacatg ctctacccta 24600

tacccgccaa cgctaccaac gtgcccatat ccatcccctc ccgcaactgg gcggctttcc 24660

gcggctgggc cttcacgcgc cttaagacta aggaaacccc atcactgggc tcgggctacg 24720

acccttatta cacctactct ggctctatac cctacctaga tggaaccttt tacctcaacc 24780

acacctttaa gaaggtggcc attacctttg actcttctgt cagctggcct ggcaatgacc 24840

gcctgcttac ccccaacgag tttgaaatta agcgctcagt tgacggggag ggttacaacg 24900

ttgcccagtg taacatgacc aaagactggt tcctggtaca aatgctagct aactataaca 24960

ttggctacca gggcttctat atcccagaga gctacaagga ccgcatgtac tccttcttta 25020

gaaacttcca gcccatgagc cgtcaggtgg tggatgatac taaatacaag gactaccaac 25080

aggtgggcat cctacaccaa cacaacaact ctggatttgt tggctacctt gcccccacca 25140

tgcgcgaagg acaggcctac cctgctaact tcccctatcc gcttataggc aagaccgcag 25200

ttgacagcat tacccagaaa aagtttcttt gcgatcgcac cctttggcgc atcccattct 25260

ccagtaactt tatgtccatg ggcgcactca cagacctggg ccaaaacctt ctctacgcca 25320

actccgccca cgcgctagac atgacttttg aggtggatcc catggacgag cccacccttc 25380

tttatgtttt gtttgaagtc tttgacgtgg tccgtgtgca ccagccgcac cgcggcgtca 25440

tcgaaaccgt gtacctgcgc acgcccttct cggccggcaa cgccacaaca taaagaagca 25500

agcaacatca acaacagctg ccgccatggg ctccagtgag caggaactga aagccattgt 25560

caaagatctt ggttgtgggc catatttttt gggcacctat gacaagcgct ttccaggctt 25620

tgtttctcca cacaagctcg cctgcgccat agtcaatacg gccggtcgcg agactggggg 25680

cgtacactgg atggcctttg cctggaaccc gcactcaaaa acatgctacc tctttgagcc 25740

ctttggcttt tctgaccagc gactcaagca ggtttaccag tttgagtacg agtcactcct 25800

gcgccgtagc gccattgctt cttcccccga ccgctgtata acgctggaaa agtccaccca 25860

aagcgtacag gggcccaact cggccgcctg tggactattc tgctgcatgt ttctccacgc 25920

ctttgccaac tggccccaaa ctcccatgga tcacaacccc accatgaacc ttattaccgg 25980

ggtacccaac tccatgctca acagtcccca ggtacagccc accctgcgtc gcaaccagga 26040

acagctctac agcttcctgg agcgccactc gccctacttc cgcagccaca gtgcgcagat 26100

taggagcgcc acttcttttt gtcacttgaa aaacatgtaa aaataatgta ctagagacac 26160

tttcaataaa ggcaaatgct tttatttgta cactctcggg tgattattta cccccaccct 26220

tgccgtctgc gccgtttaaa aatcaaaggg gttctgccgc gcatcgctat gcgccactgg 26280

cagggacacg ttgcgatact ggtgtttagt gctccactta aactcaggca caaccatccg 26340

cggcagctcg gtgaagtttt cactccacag gctgcgcacc atcaccaacg cgtttagcag 26400

gtcgggcgcc gatatcttga agtcgcagtt ggggcctccg ccctgcgcgc gcgagttgcg 26460

atacacaggg ttgcagcact ggaacactat cagcgccggg tggtgcacgc tggccagcac 26520

gctcttgtcg gagatcagat ccgcgtccag gtcctccgcg ttgctcaggg cgaacggagt 26580

caactttggt agctgccttc ccaaaaaggg cgcgtgccca ggctttgagt tgcactcgca 26640

ccgtagtggc atcaaaaggt gaccgtgccc ggtctgggcg ttaggataca gcgcctgcat 26700

aaaagccttg atctgcttaa aagccacctg agcctttgcg ccttcagaga agaacatgcc 26760

gcaagacttg ccggaaaact gattggccgg acaggccgcg tcgtgcacgc agcaccttgc 26820

gtcggtgttg gagatctgca ccacatttcg gccccaccgg ttcttcacga tcttggcctt 26880

gctagactgc tccttcagcg cgcgctgccc gttttcgctc gtcacatcca tttcaatcac 26940

gtgctcctta tttatcataa tgcttccgtg tagacactta agctcgcctt cgatctcagc 27000

gcagcggtgc agccacaacg cgcagcccgt gggctcgtga tgcttgtagg tcacctctgc 27060

aaacgactgc aggtacgcct gcaggaatcg ccccatcatc gtcacaaagg tcttgttgct 27120

ggtgaaggtc agctgcaacc cgcggtgctc ctcgttcagc caggtcttgc atacggccgc 27180

cagagcttcc acttggtcag gcagtagttt gaagttcgcc tttagatcgt tatccacgtg 27240

gtacttgtcc atcagcgcgc gcgcagcctc catgcccttc tcccacgcag acacgatcgg 27300

cacactcagc gggttcatca ccgtaatttc actttccgct tcgctgggct cttcctcttc 27360

ctcttgcgtc cgcataccac gcgccactgg gtcgtcttca ttcagccgcc gcactgtgcg 27420

cttacctcct ttgccatgct tgattagcac cggtgggttg ctgaaaccca ccatttgtag 27480

cgccacatct tctctttctt cctcgctgtc cacgattacc tctggtgatg gcgggcgctc 27540

gggcttggga gaagggcgct tctttttctt cttgggcgca atggccaaat ccgccgccga 27600

ggtcgatggc cgcgggctgg gtgtgcgcgg caccagcgcg tcttgtgatg agtcttcctc 27660

gtcctcggac tcgatacgcc gcctcatccg ctttttgggg ggcgcccggg gaggcggcgg 27720

cgacggggac ggggacgaca cgtcctccat ggttgggggа cgtcgcgccg caccgcgtcc 27780

gcgctcgggg gtggtttcgc gctgctcctc ttcccgactg gccatttcct tctcctatag 27840

gcagaaaaag atcatggagt cagtcgagaa gaaggacagc ctaaccgccc cctctgagtt 27900

cgccaccacc gcctccaccg atgccgccaa cgcgcctacc accttccccg tcgaggcacc 27960

cccgcttgag gaggaggaag tgattatcga gcaggaccca ggttttgtaa gcgaagacga 28020

cgaggaccgc tcagtaccaa cagaggataa aaagcaagac caggacaacg cagaggcaaa 28080

cgaggaacaa gtcgggcggg gggacgaaag gcatggcgac tacctagatg tgggagacga 28140

cgtgctgttg aagcatctgc agcgccagtg cgccattatc tgcgacgcgt tgcaagagcg 28200

cagcgatgtg cccctcgcca tagcggatgt cagccttgcc tacgaacgcc acctattctc 28260

accgcgcgta ccccccaaac gccaagaaaa cggcacatgc gagcccaacc cgcgcctcaa 28320

cttctacccc gtatttgccg tgccagaggt gcttgccacc tatcacatct ttttccaaaa 28380

ctgcaagata cccctatcct gccgtgccaa ccgcagccga gcggacaagc agctggcctt 28440

gcggcagggc gctgtcatac ctgatatcgc ctcgctcaac gaagtgccaa aaatctttga 28500

gggtcttgga cgcgacgaga agcgcgcggc aaacgctctg caacaggaaa acagcgaaaa 28560

tgaaagtcac tctggagtgt tggtggaact cgagggtgac aacgcgcgcc tagccgtact 28620

aaaacgcagc atcgaggtca cccactttgc ctacccggca cttaacctac cccccaaggt 28680

catgagcaca gtcatgagtg agctgatcgt gcgccgtgcg cagcccctgg agagggatgc 28740

aaatttgcaa gaacaaacag aggagggcct acccgcagtt ggcgacgagc agctagcgcg 28800

ctggcttcaa acgcgcgagc ctgccgactt ggaggagcga cgcaaactaa tgatggccgc 28860

agtgctcgtt accgtggagc ttgagtgcat gcagcggttc tttgctgacc cggagatgca 28920

gcgcaagcta gaggaaacat tgcactacac ctttcgacag ggctacgtac gccaggcctg 28980

caagatctcc aacgtggagc tctgcaacct ggtctcctac cttggaattt tgcacgaaaa 29040

ccgccttggg caaaacgtgc ttcattccac gctcaagggc gaggcgcgcc gcgactacgt 29100

ccgcgactgc gtttacttat ttctatgcta cacctggcag acggccatgg gcgtttggca 29160

gcagtgcttg gaggagtgca acctcaagga gctgcagaaa ctgctaaagc aaaacttgaa 29220

ggacctatgg acggccttca acgagcgctc cgtggccgcg cacctggcgg acatcatttt 29280

ccccgaacgc ctgcttaaaa ccctgcaaca gggtctgcca gacttcacca gtcaaagcat 29340

gttgcagaac tttaggaact ttatcctaga gcgctcagga atcttgcccg ccacctgctg 29400

tgcacttcct agcgactttg tgcccattaa gtaccgcgaa tgccctccgc cgctttgggg 29460

ccactgctac cttctgcagc tagccaacta ccttgcctac cactctgaca taatggaaga 29520

cgtgagcggt gacggtctac tggagtgtca ctgtcgctgc aacctatgca ccccgcaccg 29580

ctccctggtt tgcaattcgc agctgcttaa cgaaagtcaa attatcggta cctttgagct 29640

gcagggtccc tcgcctgacg aaaagtccgc ggctccgggg ttgaaactca ctccggggct 29700

gtggacgtcg gcttaccttc gcaaatttgt acctgaggac taccacgccc acgagattag 29760

gttctacgaa gaccaatccc gcccgcctaa tgcggagctt accgcctgcg tcattaccca 29820

gggccacatt cttggccaat tgcaagccat caacaaagcc cgccaagagt ttctgctacg 29880

aaagggacgg ggggtttact tggaccccca gtccggcgag gagctcaacc caatcccccc 29940

gccgccgcag ccctatcagc agcagccgcg ggcccttgct tcccaggatg gcacccaaaa 30000

agaagctgca gctgccgccg ccacccacgg acgaggagga atactgggac agtcaggcag 30060

aggaggtttt ggacgaggag gaggaggaca tgatggaaga ctgggagagc ctagacgagg 30120

aagcttccga ggtcgaagag gtgtcagacg aaacaccgtc accctcggtc gcattcccct 30180

cgccggcgcc ccagaaatcg gcaaccggtt ccagcatggc tacaacctcc gctcctcagg 30240

cgccgccggc actgcccgtt cgccgaccca accgtagatg ggacaccact ggaaccaggg 30300

ccggtaagtc caagcagccg ccgccgttag cccaagagca acaacagcgc caaggctacc 30360

gctcatggcg cgggcacaag aacgccatag ttgcttgctt gcaagactgt gggggcaaca 30420

tctccttcgc ccgccgcttt cttctctacc atcacggcgt ggccttcccc cgtaacatcc 30480

tgcattacta ccgtcatctc tacagcccat actgcaccgg cggcagcggc agcaacagca 30540

gcggccacac agaagcaaag gcgaccggat agcaagactc tgacaaagcc caagaaatcc 30600

acagcggcgg cagcagcagg aggaggagcg ctgcgtctgg cgcccaacga acccgtatcg 30660

acccgcgagc ttagaaacag gatttttccc actctgtatg ctatatttca acagagcagg 30720

ggccaagaac aagagctgaa aataaaaaac aggtctctgc gatccctcac ccgcagctgc 30780

ctgtatcaca aaagcgaaga tcagcttcgg cgcacgctgg aagacgcgga ggctctcttc 30840

agtaaatact gcgcgctgac tcttaaggac tagtttcgcg ccctttctca aatttaagcg 30900

cgaaaactac gtcatctcca gcggccacac ccggcgccag cacctgttgt cagcgccatt 30960

atgagcaagg aaattcccac gccctacatg tggagttacc agccacaaat gggacttgcg 31020

gctggagctg cccaagacta ctcaacccga ataaactaca tgagcgcggg accccacatg 31080

atatcccggg tcaacggaat acgcgcccac cgaaaccgaa ttctcctgga acaggcggct 31140

attaccacca cacctcgtaa taaccttaat ccccgtagtt ggcccgctgc cctggtgtac 31200

caggaaagtc ccgctcccac cactgtggta cttcccagag acgcccaggc cgaagttcag 31260

atgactaact caggggcgca gcttgcgggc ggctttcgtc acagggtgcg gtcgcccggg 31320

cagggtataa ctcacctgac aatcagaggg cgaggtattc agctcaacga cgagtcggtg 31380

agctcctcgc ttggtctccg tccggacggg acatttcaga tcggcggcgc cggccgctct 31440

tcattcacgc ctcgtcaggc aatcctaact ctgcagacct cgtcctctga gccgcgctct 31500

ggaggcattg gaactctgca atttattgag gagtttgtgc catcggtcta ctttaacccc 31560

ttctcgggac ctcccggcca ctatccggat caatttattc ctaactttga cgcggtaaag 31620

gactcggcgg acggctacga ctgaatgtta agtggagagg cagagcaact gcgcctgaaa 31680

cacctggtcc actgtcgccg ccacaagtgc tttgcccgcg actccggtga gttttgctac 31740

tttgaattgc ccgaggatca tatcgagggc ccggcgcacg gcgtccggct taccgcccag 31800

ggagagcttg cccgtagcct gattcgggag tttacccagc gccccctgct agttgagcgg 31860

gacaggggac cctgtgttct cactgtgatt tgcaactgtc ctaaccctgg attacatcaa 31920

gatcctctag ttaatgtcag gtcgcctaag tcgattaact agagtacccg gggatcttat 31980

tccctttaac taataaaaaa aaataataaa gcatcactta cttaaaatca gttagcaaat 32040

ttctgtccag tttattcagc agcacctcct tgccctcctc ccagctctgg tattgcagct 32100

tcctcctggc tgcaaacttt ctccacaatc taaatggaat gtcagtttcc tcctgttcct 32160

gtccatccgc acccactatc ttcatgttgt tgcagatgaa gcgcgcaaga ccgtctgaag 32220

ataccttcaa ccccgtgtat ccatatgaca cggaaaccgg tcctccaact gtgccttttc 32280

ttactcctcc ctttgtatcc cccaatgggt ttcaagagag tccccctggg gtactctctt 32340

tgcgcctatc cgaacctcta gttacctcca atggcatgct tgcgctcaaa atgggcaacg 32400

gcctctctct ggacgaggcc ggcaacctta cctcccaaaa tgtaaccact gtgagcccac 32460

ctctcaaaaa aaccaagtca aacataaacc tggaaatatc tgcacccctc acagttacct 32520

cagaagccct aactgtggct gccgccgcac ctctaatggt cgcgggcaac acactcacca 32580

tgcaatcaca ggccccgcta accgtgcacg actccaaact tagcattgcc acccaaggac 32640

ccctcacagt gtcagaagga aagctagccc tgcaaacatc aggccccctc accaccaccg 32700

atagcagtac ccttactatc actgcctcac cccctctaac tactgccact ggtagcttgg 32760

gcattgactt gaaagagccc atttatacac aaaatggaaa actaggacta aagtacgggg 32820

ctcctttgca tgtaacagac gacctaaaca ctttgaccgt agcaactggt ccaggtgtga 32880

ctattaataa tacttccttg caaactaaag ttactggagc cttgggtttt gattcacaag 32940

gcaatatgca acttaatgta gcaggaggac taaggattga ttctcaaaac agacgcctta 33000

tacttgatgt tagttatccg tttgatgctc aaaaccaact aaatctaaga ctaggacagg 33060

gccctctttt tataaactca gcccacaact tggatattaa ctacaacaaa ggcctttact 33120

tgtttacagc ttcaaacaat tccaaaaagc ttgaggttaa cctaagcact gccaaggggt 33180

tgatgtttga cgctacagcc atagccatta atgcaggaga tgggcttgaa tttggttcac 33240

ctaatgcacc aaacacaaat cccctcaaaa caaaaattgg ccatggccta gaatttgatt 33300

caaacaaggc tatggttcct aaactaggaa ctggccttag ttttgacagc acaggtgcca 33360

ttacagtagg aaacaaaaat aatgataagc taactttgtg gaccggaata aaccctccac 33420

ctaactgtca aattgtggaa aacactaata caaatgatgg caaacttact ttagtattag 33480

taaaaaatgg agggcttgtt aatggctacg tgtctctagt tggtgtatca gacactgtga 33540

accaaatgtt cacacaaaag acagcaaaca tccaattaag attatatttt gactcttctg 33600

gaaatctatt aactgaggaa tcagacttaa aaattccact taaaaataaa tcttctacag 33660

cgaccagtga aactgtagcc agcagcaaag cctttatgcc aagtactaca gcttatccct 33720

tcaacaccac tactagggat agtgaaaact acattcatgg aatatgttac tacatgacta 33780

gttatgatag aagtctattt cccttgaaca tttctataat gctaaacagc cgtatgattt 33840

cttccaatgt tgcctatgcc atacaatttg aatggaatct aaatgcaagt gaatctccag 33900

aaagcaacat agctacgctg accacatccc ccttttttctt ttcttacatt acagaagacg 33960

acaactaaag aatcgtttgt gttatgtttc aacgtgttta tttttcaatt gcagaaaatt 34020

tcaagtcatt tttcattcag tagtatagcc ccaccaccac atagcttata cagatcaccg 34080

taccttaatc aaactcacag aaccctagta ttcaacctgc cacctccctc ccaacacaca 34140

gagtacacag tcctttctcc ccggctggcc ttaaaaagca tcatatcatg ggtaacagac 34200

atattcttag gtgttatatt ccacacggtt tcctgtcgag ccaaacgctc atcagtgata 34260

ttaataaact ccccgggcag ctcacttaag ttcatgtcgc tgtccagctg ctgagccaca 34320

ggctgctgtc caacttgcgg ttgcttaacg ggcggcgaag gagaagtcca cgcctacatg 34380

ggggtagagt cataatcgtg catcaggata gggcggtggt gctgcagcag cgcgcgaata 34440

aactgctgcc gccgccgctc cgtcctgcag gaatacaaca tggcagtggt ctcctcagcg 34500

atgattcgca ccgcccgcag cataaggcgc cttgtcctcc gggcacagca gcgcaccctg 34560

atctcactta aatcagcaca gtaactgcag cacagcacca caatattgtt caaaatccca 34620

cagtgcaagg cgctgtatcc aaagctcatg gcggggacca cagaacccac gtggccatca 34680

taccacaagc gcaggtagat taagtggcga cccctcataa acacgctgga cataaacatt 34740

acctcttttg gcatgttgta attcaccacc tcccctctga ttaaacatgg cgccatccac 34800

caccatccta aaccagctgg ccaaaacctg cccgccggct atacactgca gggaaccggg 34860

actggaacaa tgacagtgga gagcccagga ctcgtaacca tggatcatca tgctcgtcat 34920

gatatcaatg ttggcacaac acaggcacac gtgcatacac ttcctcagga ttacaagctc 34980

ctcccgcgtt agaaccatat cccagggaac aacccattcc tgaatcagcg taaatcccac 35040

actgcaggga agacctcgca cgtaactcac gttgtgcatt gtcaaagtgt tacattcggg 35100

cagcagcgga tgatcctcca gtatggtagc gcgggtttct gtctcaaaag gaggtagacg 35160

atccctactg tacggagtgc gccgagacaa ccgagatcgt gttggtcgta gtgtcatgcc 35220

aaatggaacg ccggacgtag tcatatttcc tgaagcaaaa ccaggtgcgg gcgtgacaaa 35280

cagatctgcg tctccggtct cgccgcttag atcgctctgt gtagtagttg tagtatatcc 35340

actctctcaa agcatccagg cgccccctgg cttcgggttc tatgtaaact ccttcatgcg 35400

ccgctgccct gataacatcc accaccgcag aataagccac acccagccaa cctacacatt 35460

cgttctgcga gtcacacacg ggaggagcgg gaagagctgg aagaaccatg ttttttttt 35520

tattccaaaa gattatccaa aacctcaaaa tgaagatcta ttaagtgaac gcgctcccct 35580

ccggtggcgt ggtcaaactc tacagccaaa gaacagataa tggcatttgt aagatgttgc 35640

acaatggctt ccaaaaggca aacggccctc acgtccaagt ggacgtaaag gctaaaccct 35700

tcagggtgaa tctcctctat aaacattcca gcaccttcaa ccatgcccaa ataattctca 35760

tctcgccacc ttctcaatat atctctaagc aaatcccgaa tattaagtcc ggccattgta 35820

aaaatctgct ccagagcgcc ctccaccttc agcctcaagc agcgaatcat gattgcaaaa 35880

attcaggttc ctcacagacc tgtataagat tcaaaagcgg aacattaaca aaaataccgc 35940

gatcccgtag gtcccttcgc agggccagct gaacataatc gtgcaggtct gcacggacca 36000

gcgcggccac ttccccgcca ggaaccatga caaaagaacc cacactgatt atgacacgca 36060

tactcggagc tatgctaacc agcgtagccc cgatgtaagc ttgttgcatg ggcggcgata 36120

taaaatgcaa ggtgctgctc aaaaaatcag gcaaagcctc gcgcaaaaaa gaaagcacat 36180

cgtagtcatg ctcatgcaga taaaggcagg taagctccgg aaccaccaca gaaaaagaca 36240

ccatttttct ctcaaacatg tctgcgggtt tctgcataaa cacaaaataa aataacaaaa 36300

aaacatttaa acattagaag cctgtcttac aacaggaaaa acaaccctta taagcataag 36360

acggactacg gccatgccgg cgtgaccgta aaaaaactgg tcaccgtgat taaaaagcac 36420

caccgacagc tcctcggtca tgtccggagt cataatgtaa gactcggtaa acacatcagg 36480

ttgattcaca tcggtcagtg ctaaaaagcg accgaaatag cccgggggaa tacatacccg 36540

caggcgtaga gacaacatta cagcccccat aggaggtata acaaaattaa taggagagaa 36600

aaacacataa acacctgaaa aaccctcctg cctaggcaaa atagcaccct cccgctccag 36660

aacaacatac agcgcttcca cagcggcagc cataacagtc agccttacca gtaaaaaaga 36720

aaacctatta aaaaaacacc actcgacacg gcaccagctc aatcagtcac agtgtaaaaa 36780

agggccaagt gcagagcgag tatatatagg actaaaaaat gacgtaacgg ttaaagtcca 36840

caaaaaacac ccagaaaacc gcacgcgaac ctacgcccag aaacgaaagc caaaaaaccc 36900

acaacttcct caaatcgtca cttccgtttt cccacgttac gtcacttccc attttaagaa 36960

aactacaatt cccaacacat acaagttact ccgccctaaa acctacgtca cccgccccgt 37020

tcccacgccc cgcgccacgt cacaaactcc acccctcat tatcatattg gcttcaatcc 37080

aaaataaggt atattattga tgatg 37105

<210> 18
<211> 36423
<212> DNA
<213> Artificial Sequence

<220>
<223> pAdk35F2-Spike/E4orf6(mPGK)-E4dl355(E4re#13)

<400> 18
ttaattaaca tcatcaataa tataccttat tttggattga agccaatatg ataatgaggg 60

ggtggagttt gtgacgtggc gcggggcgtg ggaacggggc gggtgacgta gtagtgtggc 120

ggaagtgtga tgttgcaagt gtggcggaac acatgtaagc gacggatgtg gcaaaagtga 180

cgtttttggt gtgcgccggt gtacacagga agtgacaatt ttcgcgcggt tttaggcgga 240

tgttgtagta aatttgggcg taaccgagta agatttggcc attttcgcgg gaaaactgaa 300

taagaggaag tgaaatctga ataattttgt gttactcata gcgcgtaata atttctgtaa 360

tagtaatcaa ttacggggtc attagttcat agcccatata tggagttccg cgttacataa 420

cttacggtaa atggcccgcc tggctgaccg cccaacgacc cccgcccatt gacgtcaata 480

atgacgtatg ttcccatagt aacgccaata gggactttcc attgacgtca atgggtggag 540

tatttacggt aaactgccca cttggcagta catcaagtgt atcatatgcc aagtacgccc 600

cctattgacg tcaatgacgg taaatggccc gcctggcatt atgcccagta catgacctta 660

tgggactttc ctacttggca gtacatctac gtattagtca tcgctattac catggtgatg 720

cggttttggc agtacatcaa tgggcgtgga tagcggtttg actcacgggg atttccaagt 780

ctccacccca ttgacgtcaa tgggagtttg ttttggcacc aaaatcaacg ggactttcca 840

aaatgtcgta acaactccgc cccattgacg caaatgggcg gtaggcgtgt acggtgggag 900

gtctatataa gcagagctct ccctatcagt gatagagatc tccctatcag tgatagagat 960

cgtcgacgag ctcgtttagt gaaccgtcag atcgcctgga gacgccatcc acgctgtttt 1020

gacctccata gaagacaccg ggaccgatcc agcctccgat ttgccaccat gtttgtgttc 1080

ctggtgctgc tgccactggt gtccagccag tgtgtgaacc tgaccaccag gacccaactt 1140

cctcctgcct acaccaactc cttcaccagg ggagtctact accctgacaa ggtgttcagg 1200

tcctctgtgc tgcacagcac ccaggacctg ttcctgccat tcttcagcaa tgtgacctgg 1260

ttccatgcca tccatgtgtc tggcaccaat ggcaccaaga ggtttgacaa ccctgtgctg 1320

ccattcaatg atggagtcta ctttgccagc acagagaaga gcaacatcat caggggctgg 1380

atttttggca ccaccctgga cagcaagacc cagtccctgc tgattgtgaa caatgccacc 1440

aatgtggtga ttaaggtgtg tgagttccag ttctgtaatg acccattcct gggagtctac 1500

taccacaaga acaacaagtc ctggatggag tctgagttca gggtctactc ctctgccaac 1560

aactgtacct ttgaatatgt gagccaacca ttcctgatgg acttggaggg caagcagggc 1620

aacttcaaga acctgaggga gtttgtgttc aagaacattg atggctactt caagatttac 1680

agcaaacaca caccaatcaa cctggtgagg gacctgccac agggcttctc tgccttggaa 1740

ccactggtgg acctgccaat tggcatcaac atcaccaggt tccagaccct gctggctctg 1800

cacaggtcct acctgacacc tggagactcc tcctctggct ggacagcagg agcagcagcc 1860

tactatgtgg gctacctcca accaaggacc ttcctgctga aatacaatga gaatggcacc 1920

atcacagatg ctgtggactg tgccctggac ccactgtctg agaccaagtg taccctgaaa 1980

tccttcacag tggagaaggg catctaccag accagcaact tcagggtcca accaacagag 2040

agcattgtga ggtttccaaa catcaccaac ctgtgtccat ttggagaggt gttcaatgcc 2100

accaggtttg cctctgtcta tgcctggaac aggaagagga ttagcaactg tgtggctgac 2160

tactctgtgc tctacaactc tgcctccttc agcaccttca agtgttatgg agtgagccca 2220

accaaactga atgacctgtg tttcaccaat gtctatgctg actcctttgt gattagggga 2280

gatgaggtga gacagattgc ccctggacaa acaggcaaga ttgctgacta caactacaaa 2340

ctgcctgatg acttcacagg ctgtgtgatt gcctggaaca gcaacaacct ggacagcaag 2400

gtgggaggca actacaacta cctctacaga ctgttcagga agagcaacct gaaaccattt 2460

gagagggaca tcagcacaga gatttaccag gctggcagca caccatgtaa tggagtggag 2520

ggcttcaact gttactttcc actccaatcc tatggcttcc aaccaaccaa tggagtgggc 2580

taccaaccat acagggtggt ggtgctgtcc tttgaactgc tccatgcccc tgccacagtg 2640

tgtggaccaa agaagagcac caacctggtg aagaacaagt gtgtgaactt caacttcaat 2700

ggactgacag gcacaggagt gctgacagag agcaacaaga agttcctgcc attccaacag 2760

tttggcaggg acattgctga caccacagat gctgtgaggg acccacagac cttggagatt 2820

ctggacatca caccatgttc ctttggagga gtgtctgtga ttacacctgg caccaacacc 2880

agcaaccagg tggctgtgct ctaccaggat gtgaactgta ctgaggtgcc tgtggctatc 2940

catgctgacc aacttacacc aacctggagg gtctacagca caggcagcaa tgtgttccag 3000

accagggctg gctgtctgat tggagcagag catgtgaaca actcctatga gtgtgacatc 3060

ccaattggag caggcatctg tgcctcctac cagacccaga ccggtggcgg tgggtcgagg 3120

tctgtggcaa gccagagcat cattgcctac acaatgagtc tgggagcaga gaactctgtg 3180

gcttacagca acaacagcat tgccatccca accaacttca ccatctctgt gaccacagag 3240

attctgcctg tgagtatgac caagacctct gtggactgta caatgtatat ctgtggagac 3300

agcacagagt gtagcaacct gctgctccaa tatggctcct tctgtaccca acttaacagg 3360

gctctgacag gcattgctgt ggaacaggac aagaacaccc aggaggtgtt tgcccaggtg 3420

aagcagattt acaagacacc tccaatcaag gactttggag gcttcaactt cagccagatt 3480

ctgcctgacc caagcaagcc aagcaagagg tccttcattg aggacctgct gttcaacaag 3540

gtgaccctgg ctgatgctgg cttcatcaag caatatggag actgtctggg agacattgct 3600

gccagggacc tgatttgtgc ccagaagttc aatggactga cagtgctgcc tccactgctg 3660

acagatgaga tgattgccca atacacctct gccctgctgg ctggcaccat cacctctggc 3720

tggacctttg gagcaggagc agccctccaa atcccatttg ctatgcagat ggcttacagg 3780

ttcaatggca ttggagtgac ccagaatgtg ctctatgaga accagaaact gattgccaac 3840

cagttcaact ctgccattgg caagattcag gactccctgt ccagcacagc ctctgccctg 3900

ggcaaactcc aagatgtggt gaaccagaat gcccaggctc tgaacaccct ggtgaagcaa 3960

ctttccagca actttggagc catctcctct gtgctgaatg acatcctgag cagactggac 4020

aaggtggagg ctgaggtcca gattgacaga ctgattacag gcagactcca atccctccaa 4080

acctatgtga cccaacaact tatcagggct gctgagatta gggcatctgc caacctggct 4140

gccaccaaga tgagtgagtg tgtgctggga caaagcaaga gggtggactt ctgtggcaag 4200

ggctaccacc tgatgagttt tccacagtct gcccctcatg gagtggtgtt cctgcatgtg 4260

acctatgtgc ctgcccagga gaagaacttc accacagccc ctgccatctg ccatgatggc 4320

aaggctcact ttccaaggga gggagtgttt gtgagcaatg gcacccactg gtttgtgacc 4380

cagaggaact tctatgaacc acagattatc accacagaca acacctttgt gtctggcaac 4440

tgtgatgtgg tgattggcat tgtgaacaac acagtctatg acccactcca acctgaactg 4500

gactccttca aggaggaact ggacaaatac ttcaagaacc acaccagccc tgatgtggac 4560

ctgggagaca tctctggcat caatgcctct gtggtgaaca tccagaagga gattgacaga 4620

ctgaatgagg tggctaagaa cctgaatgag tccctgattg acctccaaga actgggcaaa 4680

tatgaacaat acatcaagtg gccatgaaaa ttgatcataa tcagccatac cacatttgta 4740

gaggttttac ttgctttaaa aaacctccca cacctccccc tgaacctgaa acataaaatg 4800

aatgcaattg ttgttgttaa cttgtttatt gcagcttata atggttacaa ataaagcaat 4860

agcatcacaa atttcacaaa taaagcattt ttttcactgc attctagttg tggtttgtcc 4920

aaactcatca atgtatctta acgcggatcg ggtaggggag gcgcttttcc caaggcagtc 4980

tggagcatgc gctttagcag ccccgctggg cacttggcgc tacacaagtg gcctctggcc 5040

tcgcacacat tccacatcca ccggtaggcg ccaaccggct ccgttctttg gtggcccctt 5100

cgcgccacct tctactcctc ccctagtcag gaagttcccc cccgccccgc agctcgcgtc 5160

gtgcaggacg tgacaaatgg aagtagcacg tctcactagt ctcgtgcaga tggacagcac 5220

cgctgagcaa tggaagcggg taggcctttg gggcagcggc caatagcagc tttgctcctt 5280

cgctttctgg gctcagaggc tgggaagggg tgggtccggg ggcgggctca ggggcgggct 5340

caggggcggg gcgggcgccc gaaggtcctc cggaggcccg gcattctgca cgcttcaaaa 5400

gcgcacgtct gccgcgctgt tctcctcttc ctcatctccg ggcctttcga aactacccca 5460

agctggccac catgactacg tccggcgttc catttggcat gacactacga ccaacacgat 5520

ctcggttgtc tcggcgcact ccgtacagta gggatcgtct acctcctttt gagacagaaa 5580

cccgcgctac catactggag gatcatccgc tgctgcccga atgtaacact ttgacaatgc 5640

acaacgtgag ttacgtgcga ggtcttccct gcagtgtggg atttacgctg attcaggaat 5700

gggttgttcc ctgggatatg gttctaacgc gggaggagct tgtaatcctg aggaagtgta 5760

tgcacgtgtg cctgtgttgt gccaacattg atatcatgac gagcatgatg atccatggtt 5820

acgagtcctg ggctctccac tgtcattgtt ccagtcccgg ttccctgcag tgtatagccg 5880

gcgggcaggt tttggccagc tggtttagga tggtggtgga tggcgccatg tttaatcaga 5940

ggtttatatg gtaccgggag gtggtgaatt acaacatgcc aaaagaggta atgtttatgt 6000

ccagcgtgtt tatgaggggt cgccacttaa tctacctgcg cttgtggtat gatggccacg 6060

tgggttctgt ggtccccgcc atgagctttg gatacagcgc cttgcactgt gggattttga 6120

acaatattgt ggtgctgtgc tgcagttact gtgctgattt aagtgagatc agggtgcgct 6180

gctgtgcccg gaggacaagg cgccttatgc tgcgggcggt gcgaatcatc gctgaggaga 6240

ccactgccat gttgtattcc tgcaggacgg agcggcggcg gcagcagttt attcgcgcgc 6300

tgctgcagca ccaccgccct atcctgatgc acgattatga ctctaccccc atgtagaagc 6360

ttggggatca attctctaga gctcgctgat cagcctcgac tgtgccttct agttgccagc 6420

catctgttgt ttgcccctcc cccgtgcctt ccttgaccct ggaaggtgcc actcccactg 6480

tcctttccta ataaaatgag gaaattgcat cgcattgtct gagtaggtgt cattctattc 6540

tgggggggtgg ggtggggcag gacagcaagg gggaggattg ggaagacaat agcaggcatg 6600

ctggggatgc ggtgggctct atggcttctg aggaaattgg gcgtggctta agggtgggaa 6660

agaatatata aggtgggggt cttatgtagt tttgtatctg ttttgcagca gccgccgccg 6720

ccatgagcac caactcgttt gatggaagca ttgtgagctc atatttgaca acgcgcatgc 6780

ccccatgggc cggggtgcgt cagaatgtga tgggctccag cattgatggt cgccccgtcc 6840

tgcccgcaaa ctctactacc ttgacctacg agaccgtgtc tggaacgccg ttggagactg 6900

cagcctccgc cgccgcttca gccgctgcag ccaccgcccg cgggattgtg actgactttg 6960

ctttcctgag cccgcttgca agcagtgcag cttcccgttc atccgcccgc gatgacaagt 7020

tgacggctct tttggcacaa ttggattctt tgacccggga acttaatgtc gtttctcagc 7080

agctgttgga tctgcgccag caggtttctg ccctgaaggc ttcctcccct cccaatgcgg 7140

tttaaaacat aaataaaaaa ccagactctg tttggatttg gatcaagcaa gtgtcttgct 7200

gtctttattt aggggttttg cgcgcgcggt aggcccggga ccagcggtct cggtcgttga 7260

gggtcctgtg tatttttcc aggacgtggt aaaggtgact ctggatgttc agatacatgg 7320

gcataagccc gtctctgggg tggaggtagc accactgcag agcttcatgc tgcggggtgg 7380

tgttgtagat gatccagtcg tagcaggagc gctgggcgtg gtgcctaaaa atgtctttca 7440

gtagcaagct gattgccagg ggcaggccct tggtgtaagt gtttacaaag cggttaagct 7500

gggatgggtg catacgtggg gatatgagat gcatcttgga ctgtattttt aggttggcta 7560

tgttcccagc catatccctc cggggattca tgttgtgcag aaccaccagc acagtgtatc 7620

cggtgcactt gggaaatttg tcatgtagct tagaaggaaa tgcgtggaag aacttggaga 7680

cgcccttgtg acctccaaga ttttccatgc attcgtccat aatgatggca atgggcccac 7740

gggcggcggc ctgggcgaag atatttctgg gatcactaac gtcatagttg tgttccagga 7800

tgagatcgtc ataggccatt tttacaaagc gcgggcggag ggtgccagac tgcggtataa 7860

tggttccatc cggcccaggg gcgtagttac cctcacagat ttgcatttcc cacgctttga 7920

gttcagatgg ggggatcatg tctacctgcg gggcgatgaa gaaaacggtt tccggggtag 7980

gggagatcag ctgggaagaa agcaggttcc tgagcagctg cgacttaccg cagccggtgg 8040

gcccgtaaat cacacctatt accgggtgca actggtagtt aagagagctg cagctgccgt 8100

catccctgag cagggggggcc acttcgttaa gcatgtccct gactcgcatg ttttccctga 8160

ccaaatccgc cagaaggcgc tcgccgccca gcgatagcag ttcttgcaag gaagcaaagt 8220

ttttcaacgg tttgagaccg tccgccgtag gcatgctttt gagcgtttga ccaagcagtt 8280

ccaggcggtc ccacagctcg gtcacctgct ctacggcatc tcgatccagc atatctcctc 8340

gtttcgcggg ttggggcggc tttcgctgta cggcagtagt cggtgctcgt ccagacgggc 8400

cagggtcatg tctttccacg ggcgcagggt cctcgtcagc gtagtctggg tcacggtgaa 8460

ggggtgcgct ccgggctgcg cgctggccag ggtgcgcttg aggctggtcc tgctggtgct 8520

gaagcgctgc cggtcttcgc cctgcgcgtc ggccaggtag catttgacca tggtgtcata 8580

gtccagcccc tccgcggcgt ggcccttggc gcgcagcttg cccttggagg aggcgccgca 8640

cgaggggcag tgcagacttt tgagggcgta gagcttgggc gcgagaaata ccgattccgg 8700

ggagtaggca tccgcgccgc aggccccgca gacggtctcg cattccacga gccaggtgag 8760

ctctggccgt tcggggtcaa aaaccaggtt tcccccatgc tttttgatgc gtttcttacc 8820

tctggtttcc atgagccggt gtccacgctc ggtgacgaaa aggctgtccg tgtccccgta 8880

tacagacttg agaggcctgt cctcgagcgg tgttccgcgg tcctcctcgt atagaaactc 8940

ggaccactct gagacaaagg ctcgcgtcca ggccagcacg aaggaggcta agtgggaggg 9000

gtagcggtcg ttgtccacta gggggtccac tcgctccagg gtgtgaagac acatgtcgcc 9060

ctcttcggca tcaaggaagg tgattggttt gtaggtgtag gccacgtgac cgggtgttcc 9120

tgaaggggggg ctataaaagg gggtgggggc gcgttcgtcc tcactctctt ccgcatcgct 9180

gtctgcgagg gccagctgtt ggggtgagta ctccctctga aaagcgggca tgacttctgc 9240

gctaagattg tcagtttcca aaaacgagga ggatttgata ttcacctggc ccgcggtgat 9300

gcctttgagg gtggccgcat ccatctggtc agaaaagaca atctttttgt tgtcaagctt 9360

ggtggcaaac gacccgtaga gggcgttgga cagcaacttg gcgatggagc gcagggtttg 9420

gtttttgtcg cgatcggcgc gctccttggc cgcgatgttt agctgcacgt attcgcgcgc 9480

aacgcaccgc cattcgggaa agacggtggt gcgctcgtcg ggcaccaggt gcacgcgcca 9540

accgcggttg tgcagggtga caaggtcaac gctggtggct acctctccgc gtaggcgctc 9600

gttggtccag cagaggcggc cgcccttgcg cgagcagaat ggcggtaggg ggtctagctg 9660

cgtctcgtcc ggggggtctg cgtccacggt aaagaccccg ggcagcaggc gcgcgtcgaa 9720

gtagtctatc ttgcatcctt gcaagtctag cgcctgctgc catgcgcggg cggcaagcgc 9780

gcgctcgtat gggttgagtg ggggacccca tggcatgggg tgggtgagcg cggaggcgta 9840

catgccgcaa atgtcgtaaa cgtagagggg ctctctgagt attccaagat atgtagggta 9900

gcatcttcca ccgcggatgc tggcgcgcac gtaatcgtat agttcgtgcg agggagcgag 9960

gaggtcggga ccgaggttgc tacgggcggg ctgctctgct cggaagacta tctgcctgaa 10020

gatggcatgt gagttggatg atatggttgg acgctggaag acgttgaagc tggcgtctgt 10080

gagacctacc gcgtcacgca cgaaggaggc gtaggagtcg cgcagcttgt tgaccagctc 10140

ggcggtgacc tgcacgtcta gggcgcagta gtccagggtt tccttgatga tgtcatactt 10200

atcctgtccc tttttttttcc acagctcgcg gttgaggaca aactcttcgc ggtctttcca 10260

gtactcttgg atcggaaacc cgtcggcctc cgaacggtaa gagcctagca tgtagaactg 10320

gttgacggcc tggtaggcgc agcatccctt ttctacgggt agcgcgtatg cctgcgcggc 10380

cttccggagc gaggtgtggg tgagcgcaaa ggtgtccctg accatgactt tgaggtactg 10440

gtatttgaag tcagtgtcgt cgcatccgcc ctgctcccag agcaaaaagt ccgtgcgctt 10500

tttggaacgc ggatttggca gggcgaaggt gacatcgttg aagagtatct ttcccgcgcg 10560

aggcataaag ttgcgtgtga tgcggaaggg tcccggcacc tcggaacggt tgttaattac 10620

ctgggcggcg agcacgatct cgtcaaagcc gttgatgttg tggcccacaa tgtaaagttc 10680

caagaagcgc gggatgccct tgatggaagg caatttttta agttcctcgt aggtgagctc 10740

ttcaggggag ctgagcccgt gctctgaaag ggcccagtct gcaagatgag ggttggaagc 10800

gacgaatgag ctccacaggt cacgggccat tagcatttgc aggtggtcgc gaaaggtcct 10860

aaactggcga cctatggcca ttttttctgg ggtgatgcag tagaaggtaa gcgggtcttg 10920

ttcccagcgg tcccatccaa ggttcgcggc taggtctcgc gcggcagtca ctagaggctc 10980

atctccgccg aacttcatga ccagcatgaa gggcacgagc tgcttcccaa aggcccccat 11040

ccaagtatag gtctctacat cgtaggtgac aaagagacgc tcggtgcgag gatgcgagcc 11100

gatcgggaag aactggatct cccgccacca attggaggag tggctattga tgtggtgaaa 11160

gtagaagtcc ctgcgacggg ccgaacactc gtgctggctt ttgtaaaaac gtgcgcagta 11220

ctggcagcgg tgcacgggct gtacatcctg cacgaggttg acctgacgac cgcgcacaag 11280

gaagcagagt gggaatttga gcccctcgcc tggcgggttt ggctggtggt cttctacttc 11340

ggctgcttgt ccttgaccgt ctggctgctc gaggggagtt acggtggatc ggaccaccac 11400

gccgcgcgag cccaaagtcc agatgtccgc gcgcggcggt cggagcttga tgacaacatc 11460

gcgcagatgg gagctgtcca tggtctggag ctcccgcggc gtcaggtcag gcgggagctc 11520

ctgcaggttt acctcgcata gacgggtcag ggcgcgggct agatccaggt gatacctaat 11580

ttccaggggc tggttggtgg cggcgtcgat ggcttgcaag aggccgcatc cccgcggcgc 11640

gactacggta ccgcgcggcg ggcggtgggc cgcgggggtg tccttggatg atgcatctaa 11700

aagcggtgac gcgggcgagc ccccggaggt agggggggct ccggacccgc cgggagaggg 11760

ggcaggggca cgtcggcgcc gcgcgcgggc aggagctggt gctgcgcgcg taggttgctg 11820

gcgaacgcga cgacgcggcg gttgatctcc tgaatctggc gcctctgcgt gaagacgacg 11880

ggcccggtga gcttgaacct gaaagagagt tcgacagaat caatttcggt gtcgttgacg 11940

gcggcctggc gcaaaatctc ctgcacgtct cctgagttgt cttgataggc gatctcggcc 12000

atgaactgct cgatctcttc ctcctggaga tctccgcgtc cggctcgctc cacggtggcg 12060

gcgaggtcgt tggaaatgcg ggccatgagc tgcgagaagg cgttgaggcc tccctcgttc 12120

cagacgcggc tgtagaccac gccccccttcg gcatcgcggg cgcgcatgac cacctgcgcg 12180

agattgagct ccacgtgccg ggcgaagacg gcgtagtttc gcaggcgctg aaagaggtag 12240

ttgagggtgg tggcggtgtg ttctgccacg aagaagtaca taacccagcg tcgcaacgtg 12300

gattcgttga tatcccccaa ggcctcaagg cgctccatgg cctcgtagaa gtccacggcg 12360

aagttgaaaa actgggagtt gcgcgccgac acggttaact cctcctccag aagacggatg 12420

agctcggcga cagtgtcgcg cacctcgcgc tcaaaggcta caggggcctc ttcttcttct 12480

tcaatctcct cttccataag ggcctcccct tcttcttctt ctggcggcgg tgggggaggg 12540

gggacacggc ggcgacgacg gcgcaccggg aggcggtcga caaagcgctc gatcatctcc 12600

ccgcggcgac ggcgcatggt ctcggtgacg gcgcggccgt tctcgcgggg gcgcagttgg 12660

aagacgccgc ccgtcatgtc ccggttatgg gttggcgggg ggctgccatg cggcagggat 12720

acggcgctaa cgatgcatct caacaattgt tgtgtaggta ctccgccgcc gagggacctg 12780

agcgagtccg catcgaccgg atcggaaaac ctctcgagaa aggcgtctaa ccagtcacag 12840

tcgcaaggta ggctgagcac cgtggcgggc ggcagcgggc ggcggtcggg gttgtttctg 12900

gcggaggtgc tgctgatgat gtaattaaag taggcggtct tgagacggcg gatggtcgac 12960

agaagcacca tgtccttggg tccggcctgc tgaatgcgca ggcggtcggc catgccccag 13020

gcttcgtttt gacatcggcg caggtctttg tagtagtctt gcatgagcct ttctaccggc 13080

acttcttctt ctccttcctc ttgtcctgca tctcttgcat ctatcgctgc ggcggcggcg 13140

gagtttggcc gtaggtggcg ccctcttcct cccatgcgtg tgaccccgaa gcccctcatc 13200

ggctgaagca gggctaggtc ggcgacaacg cgctcggcta atatggcctg ctgcacctgc 13260

gtgagggtag actggaagtc atccatgtcc acaaagcggt ggtatgcgcc cgtgttgatg 13320

gtgtaagtgc agttggccat aacggaccag ttaacggtct ggtgacccgg ctgcgagagc 13380

tcggtgtacc tgagacgcga gtaagccctc gagtcaaata cgtagtcgtt gcaagtccgc 13440

accaggtact ggtatcccac caaaaagtgc ggcggcggct ggcggtagag gggccagcgt 13500

agggtggccg gggctccggg ggcgagatct tccaacataa ggcgatgata tccgtagatg 13560

tacctggaca tccaggtgat gccggcggcg gtggtggagg cgcgcggaaa gtcgcggacg 13620

cggttccaga tgttgcgcag cggcaaaaag tgctccatgg tcgggacgct ctggccggtc 13680

aggcgcgcgc aatcgttgac gctctagcgt gcaaaaggag agcctgtaag cgggcactct 13740

tccgtggtct ggtggataaa ttcgcaaggg tatcatggcg gacgaccggg gttcgagccc 13800

cgtatccggc cgtccgccgt gatccatgcg gttaccgccc gcgtgtcgaa cccaggtgtg 13860

cgacgtcaga caacggggga gtgctccttt tggcttcctt ccaggcgcgg cggctgctgc 13920

gctagctttt ttggccactg gccgcgcgca gcgtaagcgg ttaggctgga aagcgaaagc 13980

attaagtggc tcgctccctg tagccggagg gttattttcc aagggttgag tcgcgggacc 14040

cccggttcga gtctcggacc ggccggactg cggcgaacgg gggtttgcct ccccgtcatg 14100

caagaccccg cttgcaaatt cctccggaaa cagggacgag ccccttttt gcttttccca 14160

gatgcatccg gtgctgcggc agatgcgccc ccctcctcag cagcggcaag agcaagagca 14220

gcggcagaca tgcagggcac cctcccctcc tcctaccgcg tcaggagggg cgacatccgc 14280

ggttgacgcg gcagcagatg gtgattacga acccccgcgg cgccgggccc ggcactacct 14340

ggacttggag gagggcgagg gcctggcgcg gctaggagcg ccctctcctg agcggcaccc 14400

aagggtgcag ctgaagcgtg atacgcgtga ggcgtacgtg ccgcggcaga acctgtttcg 14460

cgaccgcgag ggagaggagc ccgaggagat gcgggatcga aagttccacg cagggcgcga 14520

gctgcggcat ggcctgaatc gcgagcggtt gctgcgcgag gaggactttg agcccgacgc 14580

gcgaaccggg attagtcccg cgcgcgcaca cgtggcggcc gccgacctgg taaccgcata 14640

cgagcagacg gtgaaccagg agattaactt tcaaaaaagc tttaacaacc acgtgcgtac 14700

gcttgtggcg cgcgaggagg tggctatagg actgatgcat ctgtgggact ttgtaagcgc 14760

gctggagcaa aacccaaata gcaagccgct catggcgcag ctgttcctta tagtgcagca 14820

cagcagggac aacgaggcat tcagggatgc gctgctaaac atagtagagc ccgagggccg 14880

ctggctgctc gatttgataa acatcctgca gagcatagtg gtgcaggagc gcagcttgag 14940

cctggctgac aaggtggccg ccatcaacta ttccatgctt agcctgggca agttttacgc 15000

ccgcaagata taccataccc cttacgttcc catagacaag gaggtaaaga tcgaggggtt 15060

ctacatgcgc atggcgctga aggtgcttac cttgagcgac gacctgggcg tttatcgcaa 15120

cgagcgcatc cacaaggccg tgagcgtgag ccggcggcgc gagctcagcg accgcgagct 15180

gatgcacagc ctgcaaaggg ccctggctgg cacgggcagc ggcgatagag aggccgagtc 15240

ctactttgac gcgggcgctg acctgcgctg ggccccaagc cgacgcgccc tggaggcagc 15300

tggggccgga cctgggctgg cggtggcacc cgcgcgcgct ggcaacgtcg gcggcgtgga 15360

ggaatatgac gaggacgatg agtacgagcc agaggacggc gagtactaag cggtgatgtt 15420

tctgatcaga tgatgcaaga cgcaacggac ccggcggtgc gggcggcgct gcagagccag 15480

ccgtccggcc ttaactccac ggacgactgg cgccaggtca tggaccgcat catgtcgctg 15540

actgcgcgca atcctgacgc gttccggcag cagccgcagg ccaaccggct ctccgcaatt 15600

ctggaagcgg tggtcccggc gcgcgcaaac cccacgcacg agaaggtgct ggcgatcgta 15660

aacgcgctgg ccgaaaacag ggccatccgg cccgacgagg ccggcctggt ctacgacgcg 15720

ctgcttcagc gcgtggctcg ttacaacagc ggcaacgtgc agaccaacct ggaccggctg 15780

gtgggggatg tgcgcgaggc cgtggcgcag cgtgagcgcg cgcagcagca gggcaacctg 15840

ggctccatgg ttgcactaaa cgccttcctg agtacacagc ccgccaacgt gccgcgggga 15900

caggaggact acaccaactt tgtgagcgca ctgcggctaa tggtgactga gacaccgcaa 15960

agtgaggtgt accagtctgg gccagactat tttttccaga ccagtagaca aggcctgcag 16020

accgtaaacc tgagccaggc tttcaaaaac ttgcaggggc tgtgggggggt gcgggctccc 16080

acaggcgacc gcgcgaccgt gtctagcttg ctgacgccca actcgcgcct gttgctgctg 16140

ctaatagcgc ccttcacgga cagtggcagc gtgtcccggg acacatacct aggtcacttg 16200

ctgacactgt accgcgaggc cataggtcag gcgcatgtgg acgagcatac tttccaggag 16260

attacaagtg tcagccgcgc gctggggcag gaggacacgg gcagcctgga ggcaacccta 16320

aactacctgc tgaccaaccg gcggcagaag atcccctcgt tgcacagttt aaacagcgag 16380

gaggagcgca ttttgcgcta cgtgcagcag agcgtgagcc ttaacctgat gcgcgacggg 16440

gtaacgccca gcgtggcgct ggacatgacc gcgcgcaaca tggaaccggg catgtatgcc 16500

tcaaaccggc cgtttatcaa ccgcctaatg gactacttgc atcgcgcggc cgccgtgaac 16560

cccgagtatt tcaccaatgc catcttgaac ccgcactggc taccgccccc tggtttctac 16620

accgggggat tcgaggtgcc cgagggtaac gatggattcc tctgggacga catagacgac 16680

agcgtgtttt ccccgcaacc gcagaccctg ctagagttgc aacagcgcga gcaggcagag 16740

gcggcgctgc gaaaggaaag cttccgcagg ccaagcagct tgtccgatct aggcgctgcg 16800

gccccgcggt cagatgctag tagcccattt ccaagcttga tagggtctct taccagcact 16860

cgcaccaccc gcccgcgcct gctgggcgag gaggagtacc taaacaactc gctgctgcag 16920

ccgcagcgcg aaaaaaacct gcctccggca tttcccaaca acgggataga gagcctagtg 16980

gacaagatga gtagatggaa gacgtacgcg caggagcaca gggacgtgcc aggcccgcgc 17040

ccgcccaccc gtcgtcaaag gcacgaccgt cagcggggtc tggtgtggga ggacgatgac 17100

tcggcagacg acagcagcgt cctggatttg ggagggagtg gcaacccgtt tgcgcacctt 17160

cgccccaggc tggggagaat gttttaaaaa aaaaaaagca tgatgcaaaa taaaaaactc 17220

accaaggcca tggcaccgag cgttggtttt cttgtattcc ccttagtatg cggcgcgcgg 17280

cgatgtatga ggaaggtcct cctccctcct acgagagtgt ggtgagcgcg gcgccagtgg 17340

cggcggcgct gggttctccc ttcgatgctc ccctggaccc gccgtttgtg cctccgcggt 17400

acctgcggcc taccgggggg agaaacagca tccgttactc tgagttggca cccctattcg 17460

acaccacccg tgtgtacctg gtggacaaca agtcaacgga tgtggcatcc ctgaactacc 17520

agaacgacca cagcaacttt ctgaccacgg tcattcaaaa caatgactac agcccggggg 17580

aggcaagcac acagaccatc aatcttgacg accggtcgca ctggggcggc gacctgaaaa 17640

ccatcctgca taccaacatg ccaaatgtga acgagttcat gtttaccaat aagtttaagg 17700

cgcgggtgat ggtgtcgcgc ttgcctacta aggacaatca ggtggagctg aaatacgagt 17760

gggtggagtt cacgctgccc gagggcaact actccgagac catgaccata gaccttatga 17820

acaacgcgat cgtggagcac tacttgaaag tgggcagaca gaacggggtt ctggaaagcg 17880

acatcggggt aaagtttgac acccgcaact tcagactggg gtttgacccc gtcactggtc 17940

ttgtcatgcc tggggtatat acaaacgaag ccttccatcc agacatcatt ttgctgccag 18000

gatgcggggt ggacttcacc cacagccgcc tgagcaactt gttgggcatc cgcaagcggc 18060

aacccttcca ggagggcttt aggatcacct acgatgatct ggagggtggt aacattcccg 18120

cactgttgga tgtggacgcc taccaggcga gcttgaaaga tgacaccgaa cagggcgggg 18180

gtggcgcagg cggcagcaac agcagtggca gcggcgcgga agagaactcc aacgcggcag 18240

ccgcggcaat gcagccggtg gaggacatga acgatcatgc cattcgcggc gacacctttg 18300

ccacacgggc tgaggagaag cgcgctgagg ccgaagcagc ggccgaagct gccgcccccg 18360

ctgcgcaacc cgaggtcgag aagcctcaga agaaaccggt gatcaaaccc ctgacagagg 18420

acagcaagaa acgcagttac aacctaataa gcaatgacag caccttcacc cagtaccgca 18480

gctggtacct tgcatacaac tacggcgacc ctcagaccgg aatccgctca tggaccctgc 18540

tttgcactcc tgacgtaacc tgcggctcgg agcaggtcta ctggtcgttg ccagacatga 18600

tgcaagaccc cgtgaccttc cgctccacgc gccagatcag caactttccg gtggtgggcg 18660

ccgagctgtt gcccgtgcac tccaagagct tctacaacga ccaggccgtc tactcccaac 18720

tcatccgcca gtttacctct ctgacccacg tgttcaatcg ctttcccgag aaccagattt 18780

tggcgcgccc gccagccccc accatcacca ccgtcagtga aaacgttcct gctctcacag 18840

atcacgggac gctaccgctg cgcaacagca tcggaggagt ccagcgagtg accattactg 18900

acgccagacg ccgcacctgc ccctacgttt acaaggccct gggcatagtc tcgccgcgcg 18960

tcctatcgag ccgcactttt tgagcaagca tgtccatcct tatatcgccc agcaataaca 19020

caggctgggg cctgcgcttc ccaagcaaga tgtttggcgg ggccaagaag cgctccgacc 19080

aacacccagt gcgcgtgcgc gggcactacc gcgcgccctg gggcgcgcac aaacgcggcc 19140

gcactgggcg caccaccgtc gatgacgcca tcgacgcggt ggtggaggag gcgcgcaact 19200

acacgcccac gccgccacca gtgtccacag tggacgcggc cattcagacc gtggtgcgcg 19260

gagcccggcg ctatgctaaa atgaagagac ggcggaggcg cgtagcacgt cgccaccgcc 19320

gccgacccgg cactgccgcc caacgcgcgg cggcggccct gcttaaccgc gcacgtcgca 19380

ccggccgacg ggcggccatg cgggccgctc gaaggctggc cgcgggtatt gtcactgtgc 19440

cccccaggtc caggcgacga gcggccgccg cagcagccgc ggccattagt gctatgactc 19500

agggtcgcag gggcaacgtg tattgggtgc gcgactcggt tagcggcctg cgcgtgcccg 19560

tgcgcacccg ccccccgcgc aactagattg caagaaaaaa ctacttagac tcgtactgtt 19620

gtatgtatcc agcggcggcg gcgcgcaacg aagctatgtc caagcgcaaa atcaaagaag 19680

agatgctcca ggtcatcgcg ccggagatct atggcccccc gaagaaggaa gagcaggatt 19740

acaagccccg aaagctaaag cgggtcaaaa agaaaaagaa agatgatgat gatgaacttg 19800

acgacgaggt ggaactgctg cacgctaccg cgcccaggcg acgggtacag tggaaaggtc 19860

gacgcgtaaa acgtgttttg cgacccggca ccaccgtagt ctttacgccc ggtgagcgct 19920

ccacccgcac ctacaagcgc gtgtatgatg aggtgtacgg cgacgaggac ctgcttgagc 19980

aggccaacga gcgcctcggg gagtttgcct acggaaagcg gcataaggac atgctggcgt 20040

tgccgctgga cgagggcaac ccaacaccta gcctaaagcc cgtaacactg cagcaggtgc 20100

tgcccgcgct tgcaccgtcc gaagaaaagc gcggcctaaa gcgcgagtct ggtgacttgg 20160

cacccaccgt gcagctgatg gtacccaagc gccagcgact ggaagatgtc ttggaaaaaa 20220

tgaccgtgga acctgggctg gagcccgagg tccgcgtgcg gccaatcaag caggtggcgc 20280

cgggactggg cgtgcagacc gtggacgttc agatacccac taccagtagc accagtattg 20340

ccaccgccac agagggcatg gagacacaaa cgtccccggt tgcctcagcg gtggcggatg 20400

ccgcggtgca ggcggtcgct gcggccgcgt ccaagacctc tacggaggtg caaacggacc 20460

cgtggatgtt tcgcgtttca gccccccggc gcccgcgccg ttcgaggaag tacggcgccg 20520

ccagcgcgct actgcccgaa tatgccctac atccttccat tgcgcctacc cccggctatc 20580

gtggctacac ctaccgcccc agaagacgag caactacccg acgccgaacc accactggaa 20640

cccgccgccg ccgtcgccgt cgccagcccg tgctggcccc gatttccgtg cgcagggtgg 20700

ctcgcgaagg aggcaggacc ctggtgctgc caacagcgcg ctaccacccc agcatcgttt 20760

aaaagccggt ctttgtggtt cttgcagata tggccctcac ctgccgcctc cgtttcccgg 20820

tgccgggatt ccgaggaaga atgcaccgta ggaggggcat ggccggccac ggcctgacgg 20880

gcggcatgcg tcgtgcgcac caccggcggc ggcgcgcgtc gcaccgtcgc atgcgcggcg 20940

gtatcctgcc cctccttatt ccactgatcg ccgcggcgat tggcgccgtg cccggaattg 21000

catccgtggc cttgcaggcg cagagacact gattaaaaac aagttgcatg tggaaaaatc 21060

aaaataaaaa gtctggactc tcacgctcgc ttggtcctgt aactattttg tagaatggaa 21120

gacatcaact ttgcgtctct ggccccgcga cacggctcgc gcccgttcat gggaaactgg 21180

caagatatcg gcaccagcaa tatgagcggt ggcgccttca gctggggctc gctgtggagc 21240

ggcattaaaa atttcggttc caccgttaag aactatggca gcaaggcctg gaacagcagc 21300

acaggccaga tgctgaggga taagttgaaa gagcaaaatt tccaacaaaa ggtggtagat 21360

ggcctggcct ctggcattag cggggtggtg gacctggcca accaggcagt gcaaaataag 21420

attaacagta agcttgatcc ccgccctccc gtagaggagc ctccaccggc cgtggagaca 21480

gtgtctccag aggggcgtgg cgaaaagcgt ccgcgccccg acagggaaga aactctggtg 21540

acgcaaatag acgagcctcc ctcgtacgag gaggcactaa agcaaggcct gcccaccacc 21600

cgtcccatcg cgcccatggc taccggagtg ctgggccagc acacacccgt aacgctggac 21660

ctgcctcccc ccgccgacac ccagcagaaa cctgtgctgc caggcccgac cgccgttgtt 21720

gtaacccgtc ctagccgcgc gtccctgcgc cgcgccgcca gcggtccgcg atcgttgcgg 21780

cccgtagcca gtggcaactg gcaaagcaca ctgaacagca tcgtgggtct gggggtgcaa 21840

tccctgaagc gccgacgatg cttctgatag ctaacgtgtc gtatgtgtgt catgtatgcg 21900

tccatgtcgc cgccagagga gctgctgagc cgccgcgcgc ccgctttcca agatggctac 21960

cccttcgatg atgccgcagt ggtcttacat gcacatctcg ggccaggacg cctcggagta 22020

cctgagcccc gggctggtgc agtttgcccg cgccaccgag acgtacttca gcctgaataa 22080

caagtttaga aaccccacgg tggcgcctac gcacgacgtg accacagacc ggtcccagcg 22140

tttgacgctg cggttcatcc ctgtggaccg tgaggatact gcgtactcgt acaaggcgcg 22200

gttcacccta gctgtgggtg ataaccgtgt gctggacatg gcttccacgt actttgacat 22260

ccgcggcgtg ctggacaggg gccctacttt taagccctac tctggcactg cctacaacgc 22320

cctggctccc aagggtgccc caaatccttg cgaatgggat gaagctgcta ctgctcttga 22380

aataaaccta gaagaagagg acgatgacaa cgaagacgaa gtagacgagc aagctgagca 22440

gcaaaaaact cacgtatttg ggcaggcgcc ttattctggt ataaatatta caaaggaggg 22500

tattcaaata ggtgtcgaag gtcaaacacc taaatatgcc gataaaacat ttcaacctga 22560

acctcaaata ggagaatctc agtggtacga aacagaaatt aatcatgcag ctgggagagt 22620

cctaaaaaag actaccccaa tgaaaccatg ttacggttca tatgcaaaac ccacaaatga 22680

aaatggaggg caaggcattc ttgtaaagca acaaaatgga aagctagaaa gtcaagtgga 22740

aatgcaattt ttctcaacta ctgaggcagc cgcaggcaat ggtgataact tgactcctaa 22800

agtggtattg tacagtgaag atgtagatat agaaacccca gacactcata tttcttacat 22860

gcccactatt aaggaaggta actcacgaga actaatgggc caacaatcta tgcccaacag 22920

gcctaattac attgctttta gggacaattt tattggtcta atgtattaca acagcacggg 22980

taatatgggt gttctggcgg gccaagcatc gcagttgaat gctgttgtag atttgcaaga 23040

cagaaacaca gagctttcat accagctttt gcttgattcc attggtgata gaaccaggta 23100

cttttctatg tggaatcagg ctgttgacag ctatgatcca gatgttagaa ttattgaaaa 23160

tcatggaact gaagatgaac ttccaaatta ctgctttcca ctgggaggtg tgattaatac 23220

agagactctt accaaggtaa aacctaaaac aggtcaggaa aatggatggg aaaaagatgc 23280

tacagaattt tcagataaaa atgaaataag agttggaaat aattttgcca tggaaatcaa 23340

tctaaatgcc aacctgtgga gaaatttcct gtactccaac atagcgctgt atttgcccga 23400

caagctaaag tacagtcctt ccaacgtaaa aatttctgat aacccaaaca cctacgacta 23460

catgaacaag cgagtggtgg ctcccgggct agtggactgc tacattaacc ttggagcacg 23520

ctggtccctt gactatatgg acaacgtcaa cccatttaac caccaccgca atgctggcct 23580

gcgctaccgc tcaatgttgc tgggcaatgg tcgctatgtg cccttccaca tccaggtgcc 23640

tcagaagttc tttgccatta aaaacctcct tctcctgccg ggctcataca cctacgagtg 23700

gaacttcagg aaggatgtta acatggttct gcagagctcc ctaggaaatg acctaagggt 23760

tgacggagcc agcattaagt ttgatagcat ttgcctttac gccaccttct tccccatggc 23820

ccacaacacc gcctccacgc ttgaggccat gcttagaaac gacaccaacg accagtcctt 23880

taacgactat ctctccgccg ccaacatgct ctaccctata cccgccaacg ctaccaacgt 23940

gcccatatcc atcccctccc gcaactgggc ggctttccgc ggctgggcct tcacgcgcct 24000

taagactaag gaaaccccat cactgggctc gggctacgac ccttattaca cctactctgg 24060

ctctataccc tacctagatg gaacctttta cctcaaccac acctttaaga aggtggccat 24120

taccttttgac tcttctgtca gctggcctgg caatgaccgc ctgcttaccc ccaacgagtt 24180

tgaaattaag cgctcagttg acggggaggg ttacaacgtt gcccagtgta acatgaccaa 24240

agactggttc ctggtacaaa tgctagctaa ctataacatt ggctaccagg gcttctatat 24300

cccagagagc tacaaggacc gcatgtactc cttctttaga aacttccagc ccatgagccg 24360

tcaggtggtg gatgatacta aatacaagga ctaccaacag gtgggcatcc tacaccaaca 24420

caacaactct ggatttgttg gctaccttgc ccccaccatg cgcgaaggac aggcctaccc 24480

tgctaacttc ccctatccgc ttataggcaa gaccgcagtt gacagcatta cccagaaaaa 24540

gtttctttgc gatcgcaccc tttggcgcat cccattctcc agtaacttta tgtccatggg 24600

cgcactcaca gacctgggcc aaaaccttct ctacgccaac tccgcccacg cgctagacat 24660

gacttttgag gtggatccca tggacgagcc cacccttctt tatgttttgt ttgaagtctt 24720

tgacgtggtc cgtgtgcacc agccgcaccg cggcgtcatc gaaaccgtgt acctgcgcac 24780

gcccttctcg gccggcaacg ccacaacata aagaagcaag caacatcaac aacagctgcc 24840

gccatgggct ccagtgagca ggaactgaaa gccattgtca aagatcttgg ttgtgggcca 24900

tatttttgg gcacctatga caagcgcttt ccaggctttg tttctccaca caagctcgcc 24960

tgcgccatag tcaatacggc cggtcgcgag actgggggcg tacactggat ggcctttgcc 25020

tggaacccgc actcaaaaac atgctacctc tttgagccct ttggcttttc tgaccagcga 25080

ctcaagcagg tttaccagtt tgagtacgag tcactcctgc gccgtagcgc cattgcttct 25140

tcccccgacc gctgtataac gctggaaaag tccacccaaa gcgtacaggg gcccaactcg 25200

gccgcctgtg gactattctg ctgcatgttt ctccacgcct ttgccaactg gccccaaact 25260

cccatggatc acaaccccac catgaacctt attaccgggg tacccaactc catgctcaac 25320

agtccccagg tacagcccac cctgcgtcgc aaccaggaac agctctacag cttcctggag 25380

cgccactcgc cctacttccg cagccacagt gcgcagatta ggagcgccac ttctttttgt 25440

cacttgaaaa acatgtaaaa ataatgtact agagacactt tcaataaagg caaatgcttt 25500

tatttgtaca ctctcgggtg attatttacc cccacccttg ccgtctgcgc cgtttaaaaa 25560

tcaaaggggt tctgccgcgc atcgctatgc gccactggca gggacacgtt gcgatactgg 25620

tgtttagtgc tccacttaaa ctcaggcaca accatccgcg gcagctcggt gaagttttca 25680

ctccacaggc tgcgcaccat caccaacgcg tttagcaggt cgggcgccga tatcttgaag 25740

tcgcagttgg ggcctccgcc ctgcgcgcgc gagttgcgat acacagggtt gcagcactgg 25800

aacactatca gcgccgggtg gtgcacgctg gccagcacgc tcttgtcgga gatcagatcc 25860

gcgtccaggt cctccgcgtt gctcagggcg aacggagtca actttggtag ctgccttccc 25920

aaaaagggcg cgtgcccagg ctttgagttg cactcgcacc gtagtggcat caaaaggtga 25980

ccgtgcccgg tctgggcgtt aggatacagc gcctgcataa aagccttgat ctgcttaaaa 26040

gccacctgag cctttgcgcc ttcagagaag aacatgccgc aagacttgcc ggaaaactga 26100

ttggccggac aggccgcgtc gtgcacgcag caccttgcgt cggtgttgga gatctgcacc 26160

acatttcggc cccaccggtt cttcacgatc ttggccttgc tagactgctc cttcagcgcg 26220

cgctgcccgt tttcgctcgt cacatccatt tcaatcacgt gctccttatt tatcataatg 26280

cttccgtgta gacacttaag ctcgccttcg atctcagcgc agcggtgcag ccacaacgcg 26340

cagcccgtgg gctcgtgatg cttgtaggtc acctctgcaa acgactgcag gtacgcctgc 26400

aggaatcgcc ccatcatcgt cacaaaggtc ttgttgctgg tgaaggtcag ctgcaacccg 26460

cggtgctcct cgttcagcca ggtcttgcat acggccgcca gagcttccac ttggtcaggc 26520

agtagtttga agttcgcctt tagatcgtta tccacgtggt acttgtccat cagcgcgcgc 26580

gcagcctcca tgcccttctc ccacgcagac acgatcggca cactcagcgg gttcatcacc 26640

gtaatttcac tttccgcttc gctgggctct tcctcttcct cttgcgtccg cataccacgc 26700

gccactgggt cgtcttcatt cagccgccgc actgtgcgct tacctccttt gccatgcttg 26760

attagcaccg gtgggttgct gaaacccacc atttgtagcg ccacatcttc tctttcttcc 26820

tcgctgtcca cgattacctc tggtgatggc gggcgctcgg gcttgggaga agggcgcttc 26880

tttttcttct tgggcgcaat ggccaaatcc gccgccgagg tcgatggccg cgggctgggt 26940

gtgcgcggca ccagcgcgtc ttgtgatgag tcttcctcgt cctcggactc gatacgccgc 27000

ctcatccgct tttttggggg cgcccgggga ggcggcggcg acggggacgg ggacgacacg 27060

tcctccatgg ttgggggacg tcgcgccgca ccgcgtccgc gctcgggggt ggtttcgcgc 27120

tgctcctctt cccgactggc catttccttc tcctataggc agaaaaagat catggagtca 27180

gtcgagaaga aggacagcct aaccgccccc tctgagttcg ccaccaccgc ctccaccgat 27240

gccgccaacg cgcctaccac cttccccgtc gaggcacccc cgcttgagga ggaggaagtg 27300

attatcgagc aggacccagg ttttgtaagc gaagacgacg aggaccgctc agtaccaaca 27360

gaggataaaa agcaagacca ggacaacgca gaggcaaacg aggaacaagt cgggcggggg 27420

gacgaaaggc atggcgacta cctagatgtg ggagacgacg tgctgttgaa gcatctgcag 27480

cgccagtgcg ccattatctg cgacgcgttg caagagcgca gcgatgtgcc cctcgccata 27540

gcggatgtca gccttgccta cgaacgccac ctattctcac cgcgcgtacc ccccaaacgc 27600

caagaaaacg gcacatgcga gcccaacccg cgcctcaact tctaccccgt atttgccgtg 27660

ccagaggtgc ttgccaccta tcacatcttt ttccaaaact gcaagatacc cctatcctgc 27720

cgtgccaacc gcagccgagc ggacaagcag ctggccttgc ggcagggcgc tgtcatacct 27780

gatatcgcct cgctcaacga agtgccaaaa atctttgagg gtcttggacg cgacgagaag 27840

cgcgcggcaa acgctctgca acaggaaaac agcgaaaatg aaagtcactc tggagtgttg 27900

gtggaactcg agggtgacaa cgcgcgccta gccgtactaa aacgcagcat cgaggtcacc 27960

cactttgcct acccggcact taacctaccc cccaaggtca tgagcacagt catgagtgag 28020

ctgatcgtgc gccgtgcgca gcccctggag agggatgcaa atttgcaaga acaaacagag 28080

gagggcctac ccgcagttgg cgacgagcag ctagcgcgct ggcttcaaac gcgcgagcct 28140

gccgacttgg aggagcgacg caaactaatg atggccgcag tgctcgttac cgtggagctt 28200

gagtgcatgc agcggttctt tgctgacccg gagatgcagc gcaagctaga ggaaacattg 28260

cactacacct ttcgacaggg ctacgtacgc caggcctgca agatctccaa cgtggagctc 28320

tgcaacctgg tctcctacct tggaattttg cacgaaaacc gccttgggca aaacgtgctt 28380

cattccacgc tcaagggcga ggcgcgccgc gactacgtcc gcgactgcgt ttacttattt 28440

ctatgctaca cctggcagac ggccatgggc gtttggcagc agtgcttgga ggagtgcaac 28500

ctcaaggagc tgcagaaact gctaaagcaa aacttgaagg acctatggac ggccttcaac 28560

gagcgctccg tggccgcgca cctggcggac atcattttcc ccgaacgcct gcttaaaacc 28620

ctgcaacagg gtctgccaga cttcaccagt caaagcatgt tgcagaactt taggaacttt 28680

atcctagagc gctcaggaat cttgcccgcc acctgctgtg cacttcctag cgactttgtg 28740

cccattaagt accgcgaatg ccctccgccg ctttggggcc actgctacct tctgcagcta 28800

gccaactacc ttgcctacca ctctgacata atggaagacg tgagcggtga cggtctactg 28860

gagtgtcact gtcgctgcaa cctatgcacc ccgcaccgct ccctggtttg caattcgcag 28920

ctgcttaacg aaagtcaaat tatcggtacc tttgagctgc agggtccctc gcctgacgaa 28980

aagtccgcgg ctccggggtt gaaactcact ccggggctgt ggacgtcggc ttaccttcgc 29040

aaatttgtac ctgaggacta ccacgcccac gagattaggt tctacgaaga ccaatcccgc 29100

ccgcctaatg cggagcttac cgcctgcgtc attacccagg gccacattct tggccaattg 29160

caagccatca acaaagcccg ccaagagttt ctgctacgaa agggacgggg ggtttacttg 29220

gacccccagt ccggcgagga gctcaaccca atccccccgc cgccgcagcc ctatcagcag 29280

cagccgcggg cccttgcttc ccaggatggc acccaaaaag aagctgcagc tgccgccgcc 29340

acccacggac gaggaggaat actgggacag tcaggcagag gaggttttgg acgaggagga 29400

ggaggacatg atggaagact gggagagcct agacgaggaa gcttccgagg tcgaagaggt 29460

gtcagacgaa acaccgtcac cctcggtcgc attcccctcg ccggcgcccc agaaatcggc 29520

aaccggttcc agcatggcta caacctccgc tcctcaggcg ccgccggcac tgcccgttcg 29580

ccgacccaac cgtagatggg acaccactgg aaccagggcc ggtaagtcca agcagccgcc 29640

gccgttagcc caagagcaac aacagcgcca aggctaccgc tcatggcgcg ggcacaagaa 29700

cgccatagtt gcttgcttgc aagactgtgg gggcaacatc tccttcgccc gccgctttct 29760

tctctaccat cacggcgtgg ccttcccccg taacatcctg cattactacc gtcatctcta 29820

cagcccatac tgcaccggcg gcagcggcag caacagcagc ggccacacag aagcaaaggc 29880

gaccggatag caagactctg acaaagccca agaaatccac agcggcggca gcagcaggag 29940

gaggagcgct gcgtctggcg cccaacgaac ccgtatcgac ccgcgagctt agaaacagga 30000

tttttcccac tctgtatgct atatttcaac agagcagggg ccaagaacaa gagctgaaaa 30060

taaaaaacag gtctctgcga tccctcaccc gcagctgcct gtatcacaaa agcgaagatc 30120

agcttcggcg cacgctggaa gacgcggagg ctctcttcag taaatactgc gcgctgactc 30180

ttaaggacta gtttcgcgcc ctttctcaaa tttaagcgcg aaaactacgt catctccagc 30240

ggccacaccc ggcgccagca cctgttgtca gcgccattat gagcaaggaa attcccacgc 30300

cctacatgtg gagttaccag ccacaaatgg gacttgcggc tggagctgcc caagactact 30360

caacccgaat aaactacatg agcgcgggac cccacatgat atcccgggtc aacggaatac 30420

gcgcccaccg aaaccgaatt ctcctggaac aggcggctat taccaccaca cctcgtaata 30480

accttaatcc ccgtagttgg cccgctgccc tggtgtacca ggaaagtccc gctcccacca 30540

ctgtggtact tcccagagac gcccaggccg aagttcagat gactaactca ggggcgcagc 30600

ttgcgggcgg ctttcgtcac agggtgcggt cgcccgggca gggtataact cacctgacaa 30660

tcagagggcg aggtattcag ctcaacgacg agtcggtgag ctcctcgctt ggtctccgtc 30720

cggacgggac atttcagatc ggcggcgccg gccgctcttc attcacgcct cgtcaggcaa 30780

tcctaactct gcagacctcg tcctctgagc cgcgctctgg aggcattgga actctgcaat 30840

ttattgagga gtttgtgcca tcggtctact ttaacccctt ctcgggacct cccggccact 30900

atccggatca atttattcct aactttgacg cggtaaagga ctcggcggac ggctacgact 30960

gaatgttaag tggagaggca gagcaactgc gcctgaaaca cctggtccac tgtcgccgcc 31020

acaagtgctt tgcccgcgac tccggtgagt tttgctactt tgaattgccc gaggatcata 31080

tcgagggccc ggcgcacggc gtccggctta ccgcccaggg agagcttgcc cgtagcctga 31140

ttcgggagtt tacccagcgc cccctgctag ttgagcggga caggggaccc tgtgttctca 31200

ctgtgatttg caactgtcct aaccctggat tacatcaaga tcctctagtt aatgtcaggt 31260

cgcctaagtc gattaactag agtacccggg gatcttattc cctttaacta ataaaaaaaa 31320

ataataaagc atcacttact taaaatcagt tagcaaattt ctgtccagtt tattcagcag 31380

cacctccttg ccctcctccc agctctggta ttgcagcttc ctcctggctg caaactttct 31440

ccacaatcta aatggaatgt cagtttcctc ctgttcctgt ccatccgcac ccactatctt 31500

catgttgttg cagatgaagc gcgcaagacc gtctgaagat accttcaacc ccgtgtatcc 31560

atatgacacg gaaaccggtc ctccaactgt gccttttctt actcctccct ttgtatcccc 31620

caatgggttt caagagagtc cccctggggt actctctttg cgcctatccg aacctctagt 31680

tacctccaat ggcatgcttg cgctcaaaat gggcaacggc ctctctctgg acgaggccgg 31740

caaccttacc tcccaaaatg taaccactgt gagcccacct ctcaaaaaaa ccaagtcaaa 31800

cataaacctg gaaatatctg cacccctcac agttacctca gaagccctaa ctgtggctgc 31860

cgccgcacct ctaatggtcg cgggcaacac actcaccatg caatcacagg ccccgctaac 31920

cgtgcacgac tccaaactta gcattgccac ccaaggaccc ctcacagtgt cagaaggaaa 31980

gctagccctg caaacatcag gccccctcac caccaccgat agcagtaccc ttactatcac 32040

tgcctcaccc cctctaacta ctgccactgg tagcttgggc attgacttga aagagcccat 32100

ttatacacaa aatggaaaac taggactaaa gtacggggct cctttgcatg taacagacga 32160

cctaaacact ttgaccgtag caactggtcc aggtgtgact attaataata cttccttgca 32220

aactaaagtt actggagcct tgggttttga ttcacaaggc aatatgcaac ttaatgtagc 32280

aggaggacta aggattgatt ctcaaaacag acgccttata cttgatgtta gttatccgtt 32340

tgatgctcaa aaccaactaa atctaagact aggacagggc cctcttttta taaactcagc 32400

ccacaacttg gatattaact acaacaaagg cctttacttg tttacagctt caaacaattc 32460

caaaaagctt gaggttaacc taagcactgc caaggggttg atgtttgacg ctacagccat 32520

agccattaat gcaggagatg ggcttgaatt tggttcacct aatgcaccaa acacaaatcc 32580

cctcaaaaca aaaattggcc atggcctaga atttgattca aacaaggcta tggttcctaa 32640

actaggaact ggccttagtt ttgacagcac aggtgccatt acagtaggaa acaaaaataa 32700

tgataagcta actttgtgga ccggaataaa ccctccacct aactgtcaaa ttgtggaaaa 32760

cactaataca aatgatggca aacttacttt agtattagta aaaaatggag ggcttgttaa 32820

tggctacgtg tctctagttg gtgtatcaga cactgtgaac caaatgttca cacaaaagac 32880

agcaaacatc caattaagat tatattttga ctcttctgga aatctattaa ctgaggaatc 32940

agacttaaaa attccactta aaaataaatc ttctacagcg accagtgaaa ctgtagccag 33000

cagcaaagcc tttatgccaa gtactacagc ttatcccttc aacaccacta ctagggatag 33060

tgaaaactac attcatggaa tatgttacta catgactagt tatgatagaa gtctatttcc 33120

cttgaacatt tctataatgc taaacagccg tatgatttct tccaatgttg cctatgccat 33180

acaatttgaa tggaatctaa atgcaagtga atctccagaa agcaacatag ctacgctgac 33240

cacatccccc tttttctttt cttacattac agaagacgac aactaaagaa tcgtttgtgt 33300

tatgtttcaa cgtgtttatt tttcaattgc agaaaatttc aagtcatttt tcattcagta 33360

gtatagcccc accaccacat agcttataca gatcaccgta ccttaatcaa actcacagaa 33420

ccctagtatt caacctgcca cctccctccc aacacacaga gtacacagtc ctttctcccc 33480

ggctggcctt aaaaagcatc atatcatggg taacagacat attcttaggt gttatattcc 33540

acacggtttc ctgtcgagcc aaacgctcat cagtgatatt aataaactcc ccgggcagct 33600

cacttaagtt catgtcgctg tccagctgct gagccacagg ctgctgtcca acttgcggtt 33660

gcttaacggg cggcgaagga gaagtccacg cctacatggg ggtagagtca taatcgtgca 33720

tcaggatagg gcggtggtgc tgcagcagcg cgcgaataaa ctgctgccgc cgccgctccg 33780

tcctgcagga atacaacatg gcagtggtct cctcagcgat gattcgcacc gcccgcagca 33840

taaggcgcct tgtcctccgg gcacagcagc gcaccctgat ctcacttaaa tcagcacagt 33900

aactgcagca cagcaccaca atattgttca aaatcccaca gtgcaaggcg ctgtatccaa 33960

agctcatggc ggggaccaca gaacccacgt ggccatcata ccacaagcgc aggtagatta 34020

agtggcgacc cctcataaac acgctggaca taaacattac ctcttttggc atgttgtaat 34080

tcaccacctc ccctctgatt aaacatggcg ccatccacca ccatcctaaa ccagctggcc 34140

aaaacctgcc cgccggctat acactgcagg gaaccgggac tggaacaatg acagtggaga 34200

gcccaggact cgtaaccatg gatcatcatg ctcgtcatga tatcaatgtt ggcacaacac 34260

aggcacacgt gcatacactt cctcaggatt acaagctcct cccgcgttag aaccatatcc 34320

cagggaacaa cccattcctg aatcagcgta aatcccacac tgcagggaag acctcgcacg 34380

taactcacgt tgtgcattgt caaagtgtta cattcgggca gcagcggatg atcctccagt 34440

atggtagcgc gggtttctgt ctcaaaagga ggtagacgat ccctactgta cggagtgcgc 34500

cgagacaacc gagatcgtgt tggtcgtagt gtcatgccaa atggaacgcc ggacgtagtc 34560

atatttcctg aagcaaaacc aggtgcgggc gtgacaaaca gatctgcgtc tccggtctcg 34620

ccgcttagat cgctctgtgt agtagttgta gtatatccac tctctcaaag catccaggcg 34680

ccccctggct tcgggttcta tgtaaactcc ttcatgcgcc gctgccctga taacatccac 34740

caccgcagaa taagccacac ccagccaacc tacacattcg ttctgcgagt cacacacggg 34800

aggagcggga agagctggaa gaaccatgtt ttttttttta ttccaaaaga ttatccaaaa 34860

cctcaaaatg aagatctatt aagtgaacgc gctcccctcc ggtggcgtgg tcaaactcta 34920

cagccaaaga acagataatg gcatttgtaa gatgttgcac aatggcttcc aaaaggcaaa 34980

cggccctcac gtccaagtgg acgtaaaggc taaacccttc agggtgaatc tcctctataa 35040

acattccagc accttcaacc atgcccaaat aattctcatc tcgccacctt ctcaatatat 35100

ctctaagcaa atcccgaata ttaagtccgg ccattgtaaa aatctgctcc agagcgccct 35160

ccaccttcag cctcaagcag cgaatcatga ttgcaaaaat tcaggttcct cacagacctg 35220

tataagattc aaaagcggaa cattaacaaa aataccgcga tcccgtaggt cccttcgcag 35280

ggccagctga acataatcgt gcaggtctgc acggaccagc gcggccactt ccccgccagg 35340

aaccatgaca aaagaaccca cactgattat gacacgcata ctcggagcta tgctaaccag 35400

cgtagccccg atgtaagctt gttgcatggg cggcgatata aaatgcaagg tgctgctcaa 35460

aaaatcaggc aaagcctcgc gcaaaaaaga aagcacatcg tagtcatgct catgcagata 35520

aaggcaggta agctccggaa ccaccacaga aaaagacacc atttttctct caaacatgtc 35580

tgcgggtttc tgcataaaca caaaataaaa taacaaaaaa acatttaaac attagaagcc 35640

tgtcttacaa caggaaaaac aacccttata agcataagac ggactacggc catgccggcg 35700

tgaccgtaaa aaaactggtc accgtgatta aaaagcacca ccgacagctc ctcggtcatg 35760

tccggagtca taatgtaaga ctcggtaaac acatcaggtt gattcacatc ggtcagtgct 35820

aaaaagcgac cgaaatagcc cgggggaata catacccgca ggcgtagaga caacattaca 35880

gcccccatag gaggtataac aaaattaata ggagagaaaa acacataaac acctgaaaaa 35940

ccctcctgcc taggcaaaat agcaccctcc cgctccagaa caacatacag cgcttccaca 36000

gcggcagcca taacagtcag ccttaccagt aaaaaagaaa acctattaaa aaaacaccac 36060

tcgacacggc accagctcaa tcagtcacag tgtaaaaaag ggccaagtgc agagcgagta 36120

tatataggac taaaaaatga cgtaacggtt aaagtccaca aaaaacaccc agaaaaccgc 36180

acgcgaacct acgcccagaa acgaaagcca aaaaacccac aacttcctca atcgtcact 36240

tccgttttcc cacgttacgt cacttcccat tttaagaaaa ctacaattcc caacacatac 36300

aagttactcc gccctaaaac ctacgtcacc cgccccgttc ccacgccccg cgccacgtca 36360

caaactccac cccctcatta tcatattggc ttcaatccaa aataaggtat attattgatg 36420

atg 36423

<210> 19
<211> 36164
<212> DNA
<213> Artificial Sequence

<220>
<223> pAdk35F2-Spike/E4orf6(RSV)-E4dl355(E4re#14)

<400> 19
ttaattaaca tcatcaataa tataccttat tttggattga agccaatatg ataatgaggg 60

ggtggagttt gtgacgtggc gcggggcgtg ggaacggggc gggtgacgta gtagtgtggc 120

ggaagtgtga tgttgcaagt gtggcggaac acatgtaagc gacggatgtg gcaaaagtga 180

cgtttttggt gtgcgccggt gtacacagga agtgacaatt ttcgcgcggt tttaggcgga 240

tgttgtagta aatttgggcg taaccgagta agatttggcc attttcgcgg gaaaactgaa 300

taagaggaag tgaaatctga ataattttgt gttactcata gcgcgtaata atttctgtaa 360

tagtaatcaa ttacggggtc attagttcat agcccatata tggagttccg cgttacataa 420

cttacggtaa atggcccgcc tggctgaccg cccaacgacc cccgcccatt gacgtcaata 480

atgacgtatg ttcccatagt aacgccaata gggactttcc attgacgtca atgggtggag 540

tatttacggt aaactgccca cttggcagta catcaagtgt atcatatgcc aagtacgccc 600

cctattgacg tcaatgacgg taaatggccc gcctggcatt atgcccagta catgacctta 660

tgggactttc ctacttggca gtacatctac gtattagtca tcgctattac catggtgatg 720

cggttttggc agtacatcaa tgggcgtgga tagcggtttg actcacgggg atttccaagt 780

ctccacccca ttgacgtcaa tgggagtttg ttttggcacc aaaatcaacg ggactttcca 840

aaatgtcgta acaactccgc cccattgacg caaatgggcg gtaggcgtgt acggtgggag 900

gtctatataa gcagagctct ccctatcagt gatagagatc tccctatcag tgatagagat 960

cgtcgacgag ctcgtttagt gaaccgtcag atcgcctgga gacgccatcc acgctgtttt 1020

gacctccata gaagacaccg ggaccgatcc agcctccgat ttgccaccat gtttgtgttc 1080

ctggtgctgc tgccactggt gtccagccag tgtgtgaacc tgaccaccag gacccaactt 1140

cctcctgcct acaccaactc cttcaccagg ggagtctact accctgacaa ggtgttcagg 1200

tcctctgtgc tgcacagcac ccaggacctg ttcctgccat tcttcagcaa tgtgacctgg 1260

ttccatgcca tccatgtgtc tggcaccaat ggcaccaaga ggtttgacaa ccctgtgctg 1320

ccattcaatg atggagtcta ctttgccagc acagagaaga gcaacatcat caggggctgg 1380

atttttggca ccaccctgga cagcaagacc cagtccctgc tgattgtgaa caatgccacc 1440

aatgtggtga ttaaggtgtg tgagttccag ttctgtaatg acccattcct gggagtctac 1500

taccacaaga acaacaagtc ctggatggag tctgagttca gggtctactc ctctgccaac 1560

aactgtacct ttgaatatgt gagccaacca ttcctgatgg acttggaggg caagcagggc 1620

aacttcaaga acctgaggga gtttgtgttc aagaacattg atggctactt caagatttac 1680

agcaaacaca caccaatcaa cctggtgagg gacctgccac agggcttctc tgccttggaa 1740

ccactggtgg acctgccaat tggcatcaac atcaccaggt tccagaccct gctggctctg 1800

cacaggtcct acctgacacc tggagactcc tcctctggct ggacagcagg agcagcagcc 1860

tactatgtgg gctacctcca accaaggacc ttcctgctga aatacaatga gaatggcacc 1920

atcacagatg ctgtggactg tgccctggac ccactgtctg agaccaagtg taccctgaaa 1980

tccttcacag tggagaaggg catctaccag accagcaact tcagggtcca accaacagag 2040

agcattgtga ggtttccaaa catcaccaac ctgtgtccat ttggagaggt gttcaatgcc 2100

accaggtttg cctctgtcta tgcctggaac aggaagagga ttagcaactg tgtggctgac 2160

tactctgtgc tctacaactc tgcctccttc agcaccttca agtgttatgg agtgagccca 2220

accaaactga atgacctgtg tttcaccaat gtctatgctg actcctttgt gattagggga 2280

gatgaggtga gacagattgc ccctggacaa acaggcaaga ttgctgacta caactacaaa 2340

ctgcctgatg acttcacagg ctgtgtgatt gcctggaaca gcaacaacct ggacagcaag 2400

gtgggaggca actacaacta cctctacaga ctgttcagga agagcaacct gaaaccattt 2460

gagagggaca tcagcacaga gatttaccag gctggcagca caccatgtaa tggagtggag 2520

ggcttcaact gttactttcc actccaatcc tatggcttcc aaccaaccaa tggagtgggc 2580

taccaaccat acagggtggt ggtgctgtcc tttgaactgc tccatgcccc tgccacagtg 2640

tgtggaccaa agaagagcac caacctggtg aagaacaagt gtgtgaactt caacttcaat 2700

ggactgacag gcacaggagt gctgacagag agcaacaaga agttcctgcc attccaacag 2760

tttggcaggg acattgctga caccacagat gctgtgaggg acccacagac cttggagatt 2820

ctggacatca caccatgttc ctttggagga gtgtctgtga ttacacctgg caccaacacc 2880

agcaaccagg tggctgtgct ctaccaggat gtgaactgta ctgaggtgcc tgtggctatc 2940

catgctgacc aacttacacc aacctggagg gtctacagca caggcagcaa tgtgttccag 3000

accagggctg gctgtctgat tggagcagag catgtgaaca actcctatga gtgtgacatc 3060

ccaattggag caggcatctg tgcctcctac cagacccaga ccggtggcgg tgggtcgagg 3120

tctgtggcaa gccagagcat cattgcctac acaatgagtc tgggagcaga gaactctgtg 3180

gcttacagca acaacagcat tgccatccca accaacttca ccatctctgt gaccacagag 3240

attctgcctg tgagtatgac caagacctct gtggactgta caatgtatat ctgtggagac 3300

agcacagagt gtagcaacct gctgctccaa tatggctcct tctgtaccca acttaacagg 3360

gctctgacag gcattgctgt ggaacaggac aagaacaccc aggaggtgtt tgcccaggtg 3420

aagcagattt acaagacacc tccaatcaag gactttggag gcttcaactt cagccagatt 3480

ctgcctgacc caagcaagcc aagcaagagg tccttcattg aggacctgct gttcaacaag 3540

gtgaccctgg ctgatgctgg cttcatcaag caatatggag actgtctggg agacattgct 3600

gccagggacc tgatttgtgc ccagaagttc aatggactga cagtgctgcc tccactgctg 3660

acagatgaga tgattgccca atacacctct gccctgctgg ctggcaccat cacctctggc 3720

tggacctttg gagcaggagc agccctccaa atcccatttg ctatgcagat ggcttacagg 3780

ttcaatggca ttggagtgac ccagaatgtg ctctatgaga accagaaact gattgccaac 3840

cagttcaact ctgccattgg caagattcag gactccctgt ccagcacagc ctctgccctg 3900

ggcaaactcc aagatgtggt gaaccagaat gcccaggctc tgaacaccct ggtgaagcaa 3960

ctttccagca actttggagc catctcctct gtgctgaatg acatcctgag cagactggac 4020

aaggtggagg ctgaggtcca gattgacaga ctgattacag gcagactcca atccctccaa 4080

acctatgtga cccaacaact tatcagggct gctgagatta gggcatctgc caacctggct 4140

gccaccaaga tgagtgagtg tgtgctggga caaagcaaga gggtggactt ctgtggcaag 4200

ggctaccacc tgatgagttt tccacagtct gcccctcatg gagtggtgtt cctgcatgtg 4260

acctatgtgc ctgcccagga gaagaacttc accacagccc ctgccatctg ccatgatggc 4320

aaggctcact ttccaaggga gggagtgttt gtgagcaatg gcacccactg gtttgtgacc 4380

cagaggaact tctatgaacc acagattatc accacagaca acacctttgt gtctggcaac 4440

tgtgatgtgg tgattggcat tgtgaacaac acagtctatg acccactcca acctgaactg 4500

gactccttca aggaggaact ggacaaatac ttcaagaacc acaccagccc tgatgtggac 4560

ctgggagaca tctctggcat caatgcctct gtggtgaaca tccagaagga gattgacaga 4620

ctgaatgagg tggctaagaa cctgaatgag tccctgattg acctccaaga actgggcaaa 4680

tatgaacaat acatcaagtg gccatgaaaa ttgatcataa tcagccatac cacatttgta 4740

gaggttttac ttgctttaaa aaacctccca cacctccccc tgaacctgaa acataaaatg 4800

aatgcaattg ttgttgttaa cttgtttatt gcagcttata atggttacaa ataaagcaat 4860

agcatcacaa atttcacaaa taaagcattt ttttcactgc attctagttg tggtttgtcc 4920

aaactcatca atgtatctta acgcggatct gtagtcttat gcaatactct tgtagtcttg 4980

caacatggta acgatgagtt agcaacatgc cttacaagga gagaaaaagc accgtgcatg 5040

ccgattggtg gaagtaaggt ggtacgatcg tgccttatta ggaaggcaac agacgggtct 5100

gacatggatt ggacgaacca ctgaattgcc gcattgcaga gatattgtat ttaagtgcct 5160

agctcgatac ataaacaaac taccccaagc tggccaccat gactacgtcc ggcgttccat 5220

ttggcatgac actacgacca acacgatctc ggttgtctcg gcgcactccg tacagtaggg 5280

atcgtctacc tccttttgag acagaaaccc gcgctaccat actggaggat catccgctgc 5340

tgcccgaatg taacactttg acaatgcaca acgtgagtta cgtgcgaggt cttccctgca 5400

gtgtgggatt tacgctgatt caggaatggg ttgttccctg ggatatggtt ctaacgcggg 5460

aggagcttgt aatcctgagg aagtgtatgc acgtgtgcct gtgttgtgcc aacattgata 5520

tcatgacgag catgatgatc catggttacg agtcctgggc tctccactgt cattgttcca 5580

gtcccggttc cctgcagtgt atagccggcg ggcaggtttt ggccagctgg tttaggatgg 5640

tggtggatgg cgccatgttt aatcagaggt ttatatggta ccgggaggtg gtgaattaca 5700

acatgccaaa agaggtaatg tttatgtcca gcgtgtttat gaggggtcgc cacttaatct 5760

acctgcgctt gtggtatgat ggccacgtgg gttctgtggt ccccgccatg agctttggat 5820

acagcgcctt gcactgtggg attttgaaca atattgtggt gctgtgctgc agttactgtg 5880

ctgatttaag tgagatcagg gtgcgctgct gtgcccggag gacaaggcgc cttatgctgc 5940

gggcggtgcg aatcatcgct gaggagacca ctgccatgtt gtattcctgc aggacggagc 6000

ggcggcggca gcagtttatt cgcgcgctgc tgcagcacca ccgccctatc ctgatgcacg 6060

attatgactc tacccccatg tagaagcttg gggatcaatt ctctagagct cgctgatcag 6120

cctcgactgt gccttctagt tgccagccat ctgttgtttg cccctccccc gtgccttcct 6180

tgaccctgga aggtgccact cccactgtcc tttcctaata aaatgaggaa attgcatcgc 6240

attgtctgag taggtgtcat tctattctgg ggggtggggt ggggcaggac agcaaggggg 6300

aggattggga agacaatagc aggcatgctg gggatgcggt gggctctatg gcttctgagg 6360

aaattgggcg tggcttaagg gtgggaaaga atatataagg tgggggtctt atgtagtttt 6420

gtatctgttt tgcagcagcc gccgccgcca tgagcaccaa ctcgtttgat ggaagcattg 6480

tgagctcata tttgacaacg cgcatgcccc catgggccgg ggtgcgtcag aatgtgatgg 6540

gctccagcat tgatggtcgc cccgtcctgc ccgcaaactc tactaccttg acctacgaga 6600

ccgtgtctgg aacgccgttg gagactgcag cctccgccgc cgcttcagcc gctgcagcca 6660

ccgcccgcgg gattgtgact gactttgctt tcctgagccc gcttgcaagc agtgcagctt 6720

cccgttcatc cgcccgcgat gacaagttga cggctctttt ggcacaattg gattctttga 6780

cccgggaact taatgtcgtt tctcagcagc tgttggatct gcgccagcag gtttctgccc 6840

tgaaggcttc ctcccctccc aatgcggttt aaaacataaa taaaaaacca gactctgttt 6900

ggatttggat caagcaagtg tcttgctgtc tttatttagg ggttttgcgc gcgcggtagg 6960

cccgggacca gcggtctcgg tcgttgaggg tcctgtgtat tttttccagg acgtggtaaa 7020

ggtgactctg gatgttcaga tacatgggca taagcccgtc tctggggtgg aggtagcacc 7080

actgcagagc ttcatgctgc ggggtggtgt tgtagatgat ccagtcgtag caggagcgct 7140

gggcgtggtg cctaaaaatg tctttcagta gcaagctgat tgccaggggc aggcccttgg 7200

tgtaagtgtt tacaaagcgg ttaagctggg atgggtgcat acgtggggat atgagatgca 7260

tcttggactg tatttttagg ttggctatgt tcccagccat atccctccgg ggattcatgt 7320

tgtgcagaac caccagcaca gtgtatccgg tgcacttggg aaatttgtca tgtagcttag 7380

aaggaaatgc gtggaagaac ttggagacgc ccttgtgacc tccaagattt tccatgcatt 7440

cgtccataat gatggcaatg ggcccacggg cggcggcctg ggcgaagata tttctgggat 7500

cactaacgtc atagttgtgt tccaggatga gatcgtcata ggccattttt acaaagcgcg 7560

ggcggagggt gccagactgc ggtataatgg ttccatccgg cccaggggcg tagttaccct 7620

cacagatttg catttcccac gctttgagtt cagatggggg gatcatgtct acctgcgggg 7680

cgatgaagaa aacggtttcc ggggtagggg agatcagctg ggaagaaagc aggttcctga 7740

gcagctgcga cttaccgcag ccggtgggcc cgtaaatcac acctattacc gggtgcaact 7800

ggtagttaag agagctgcag ctgccgtcat ccctgagcag gggggccact tcgttaagca 7860

tgtccctgac tcgcatgttt tccctgacca aatccgccag aaggcgctcg ccgcccagcg 7920

atagcagttc ttgcaaggaa gcaaagtttt tcaacggttt gagaccgtcc gccgtaggca 7980

tgcttttgag cgtttgacca agcagttcca ggcggtccca cagctcggtc acctgctcta 8040

cggcatctcg atccagcata tctcctcgtt tcgcgggttg gggcggcttt cgctgtacgg 8100

cagtagtcgg tgctcgtcca gacgggccag ggtcatgtct ttccacgggc gcagggtcct 8160

cgtcagcgta gtctgggtca cggtgaaggg gtgcgctccg ggctgcgcgc tggccagggt 8220

gcgcttgagg ctggtcctgc tggtgctgaa gcgctgccgg tcttcgccct gcgcgtcggc 8280

caggtagcat ttgaccatgg tgtcatagtc cagcccctcc gcggcgtggc ccttggcgcg 8340

cagcttgccc ttggaggagg cgccgcacga ggggcagtgc agacttttga gggcgtagag 8400

cttgggcgcg agaaataccg attccgggga gtaggcatcc gcgccgcagg ccccgcagac 8460

ggtctcgcat tccacgagcc aggtgagctc tggccgttcg gggtcaaaaa ccaggtttcc 8520

cccatgcttt ttgatgcgtt tcttacctct ggtttccatg agccggtgtc cacgctcggt 8580

gacgaaaagg ctgtccgtgt ccccgtatac agacttgaga ggcctgtcct cgagcggtgt 8640

tccgcggtcc tcctcgtata gaaactcgga ccactctgag acaaaggctc gcgtccaggc 8700

cagcacgaag gaggctaagt gggaggggta gcggtcgttg tccactaggg ggtccactcg 8760

ctccagggtg tgaagacaca tgtcgccctc ttcggcatca aggaaggtga ttggtttgta 8820

ggtgtaggcc acgtgaccgg gtgttcctga agggggggcta taaaaggggg tgggggcgcg 8880

ttcgtcctca ctctcttccg catcgctgtc tgcgagggcc agctgttggg gtgagtactc 8940

cctctgaaaa gcgggcatga cttctgcgct aagattgtca gtttccaaaa acgaggagga 9000

tttgatattc acctggcccg cggtgatgcc tttgagggtg gccgcatcca tctggtcaga 9060

aaagacaatc tttttgttgt caagcttggt ggcaaacgac ccgtagaggg cgttggacag 9120

caacttggcg atggagcgca gggtttggtt tttgtcgcga tcggcgcgct ccttggccgc 9180

gatgtttagc tgcacgtatt cgcgcgcaac gcaccgccat tcgggaaaga cggtggtgcg 9240

ctcgtcgggc accaggtgca cgcgccaacc gcggttgtgc agggtgacaa ggtcaacgct 9300

ggtggctacc tctccgcgta ggcgctcgtt ggtccagcag aggcggccgc ccttgcgcga 9360

gcagaatggc ggtagggggt ctagctgcgt ctcgtccggg gggtctgcgt ccacggtaaa 9420

gaccccgggc agcaggcgcg cgtcgaagta gtctatcttg catccttgca agtctagcgc 9480

ctgctgccat gcgcgggcgg caagcgcgcg ctcgtatggg ttgagtgggg gaccccatgg 9540

catggggtgg gtgagcgcgg aggcgtacat gccgcaaatg tcgtaaacgt agaggggctc 9600

tctgagtatt ccaagatatg tagggtagca tcttccaccg cggatgctgg cgcgcacgta 9660

atcgtatagt tcgtgcgagg gagcgaggag gtcgggaccg aggttgctac gggcgggctg 9720

ctctgctcgg aagactatct gcctgaagat ggcatgtgag ttggatgata tggttggacg 9780

ctggaagacg ttgaagctgg cgtctgtgag acctaccgcg tcacgcacga aggaggcgta 9840

ggagtcgcgc agcttgttga ccagctcggc ggtgacctgc acgtctaggg cgcagtagtc 9900

cagggtttcc ttgatgatgt catacttatc ctgtcccttt tttttccaca gctcgcggtt 9960

gaggacaaac tcttcgcggt ctttccagta ctcttggatc ggaaacccgt cggcctccga 10020

acggtaagag cctagcatgt agaactggtt gacggcctgg taggcgcagc atccctttc 10080

tacgggtagc gcgtatgcct gcgcggcctt ccggagcgag gtgtgggtga gcgcaaaggt 10140

gtccctgacc atgactttga ggtactggta tttgaagtca gtgtcgtcgc atccgccctg 10200

ctcccagagc aaaaagtccg tgcgcttttt ggaacgcgga tttggcaggg cgaaggtgac 10260

atcgttgaag agtatctttc ccgcgcgagg cataaagttg cgtgtgatgc ggaagggtcc 10320

cggcacctcg gaacggttgt taattacctg ggcggcgagc acgatctcgt caaagccgtt 10380

gatgttgtgg cccacaatgt aaagttccaa gaagcgcggg atgcccttga tggaaggcaa 10440

ttttttaagt tcctcgtagg tgagctcttc aggggagctg agcccgtgct ctgaaagggc 10500

ccagtctgca agatgagggt tggaagcgac gaatgagctc cacaggtcac gggccattag 10560

catttgcagg tggtcgcgaa aggtcctaaa ctggcgacct atggccattt tttctggggt 10620

gatgcagtag aaggtaagcg ggtcttgttc ccagcggtcc catccaaggt tcgcggctag 10680

gtctcgcgcg gcagtcacta gaggctcatc tccgccgaac ttcatgacca gcatgaaggg 10740

cacgagctgc ttcccaaagg cccccatcca agtataggtc tctacatcgt aggtgacaaa 10800

gagacgctcg gtgcgaggat gcgagccgat cgggaagaac tggatctccc gccaccaatt 10860

ggaggagtgg ctattgatgt ggtgaaagta gaagtccctg cgacgggccg aacactcgtg 10920

ctggcttttg taaaaacgtg cgcagtactg gcagcggtgc acgggctgta catcctgcac 10980

gaggttgacc tgacgaccgc gcacaaggaa gcagagtggg aatttgagcc cctcgcctgg 11040

cgggtttggc tggtggtctt ctacttcggc tgcttgtcct tgaccgtctg gctgctcgag 11100

gggagttacg gtggatcgga ccaccacgcc gcgcgagccc aaagtccaga tgtccgcgcg 11160

cggcggtcgg agcttgatga caacatcgcg cagatgggag ctgtccatgg tctggagctc 11220

ccgcggcgtc aggtcaggcg ggagctcctg caggtttacc tcgcatagac gggtcagggc 11280

gcgggctaga tccaggtgat acctaatttc caggggctgg ttggtggcgg cgtcgatggc 11340

ttgcaagagg ccgcatcccc gcggcgcgac tacggtaccg cgcggcgggc ggtgggccgc 11400

gggggtgtcc ttggatgatg catctaaaag cggtgacgcg ggcgagcccc cggaggtagg 11460

gggggctccg gacccgccgg gagaggggggc aggggcacgt cggcgccgcg cgcgggcagg 11520

agctggtgct gcgcgcgtag gttgctggcg aacgcgacga cgcggcggtt gatctcctga 11580

atctggcgcc tctgcgtgaa gacgacgggc ccggtgagct tgaacctgaa agagagttcg 11640

acagaatcaa tttcggtgtc gttgacggcg gcctggcgca aaatctcctg cacgtctcct 11700

gagttgtctt gataggcgat ctcggccatg aactgctcga tctcttcctc ctggagatct 11760

ccgcgtccgg ctcgctccac ggtggcggcg aggtcgttgg aaatgcgggc catgagctgc 11820

gagaaggcgt tgaggcctcc ctcgttccag acgcggctgt agaccacgcc cccttcggca 11880

tcgcgggcgc gcatgaccac ctgcgcgaga ttgagctcca cgtgccgggc gaagacggcg 11940

tagtttcgca ggcgctgaaa gaggtagttg agggtggtgg cggtgtgttc tgccacgaag 12000

aagtacataa cccagcgtcg caacgtggat tcgttgatat cccccaaggc ctcaaggcgc 12060

tccatggcct cgtagaagtc cacggcgaag ttgaaaaact gggagttgcg cgccgacacg 12120

gttaactcct cctccagaag acggatgagc tcggcgacag tgtcgcgcac ctcgcgctca 12180

aaggctacag gggcctcttc ttcttcttca atctcctctt ccataagggc ctccccttct 12240

tcttcttctg gcggcggtgg gggaggggcg acacggcggc gacgacggcg caccgggagg 12300

cggtcgacaa agcgctcgat catctccccg cggcgacggc gcatggtctc ggtgacggcg 12360

cggccgttct cgcgggggcg cagttggaag acgccgcccg tcatgtcccg gttatgggtt 12420

ggcgggggcc tgccatgcgg cagggatacg gcgctaacga tgcatctcaa caattgttgt 12480

gtaggtactc cgccgccgag ggacctgagc gagtccgcat cgaccggatc ggaaaacctc 12540

tcgagaaagg cgtctaacca gtcacagtcg caaggtaggc tgagcaccgt ggcgggcggc 12600

agcgggcggc ggtcggggtt gtttctggcg gaggtgctgc tgatgatgta attaaagtag 12660

gcggtcttga gacggcggat ggtcgacaga agcaccatgt ccttgggtcc ggcctgctga 12720

atgcgcaggc ggtcggccat gccccaggct tcgttttgac atcggcgcag gtctttgtag 12780

tagtcttgca tgagcctttc taccggcact tcttcttctc cttcctcttg tcctgcatct 12840

cttgcatcta tcgctgcggc ggcggcggag tttggccgta ggtggcgccc tcttcctccc 12900

atgcgtgtga ccccgaagcc cctcatcggc tgaagcaggg ctaggtcggc gacaacgcgc 12960

tcggctaata tggcctgctg cacctgcgtg agggtagact ggaagtcatc catgtccaca 13020

aagcggtggt atgcgcccgt gttgatggtg taagtgcagt tggccataac ggaccagtta 13080

acggtctggt gacccggctg cgagagctcg gtgtacctga gacgcgagta agccctcgag 13140

tcaaatacgt agtcgttgca agtccgcacc aggtactggt atcccaccaa aaagtgcggc 13200

ggcggctggc ggtagagggg ccagcgtagg gtggccgggg ctccgggggc gagatcttcc 13260

aacataaggc gatgatatcc gtagatgtac ctggacatcc aggtgatgcc ggcggcggtg 13320

gtggaggcgc gcggaaagtc gcggacgcgg ttccagatgt tgcgcagcgg caaaaagtgc 13380

tccatggtcg ggacgctctg gccggtcagg cgcgcgcaat cgttgacgct ctagcgtgca 13440

aaaggagagc ctgtaagcgg gcactcttcc gtggtctggt ggataaattc gcaagggtat 13500

catggcggac gaccggggtt cgagccccgt atccggccgt ccgccgtgat ccatgcggtt 13560

accgcccgcg tgtcgaaccc aggtgtgcga cgtcagacaa cgggggagtg ctccttttgg 13620

cttccttcca ggcgcggcgg ctgctgcgct agctttttg gccactggcc gcgcgcagcg 13680

taagcggtta ggctggaaag cgaaagcatt aagtggctcg ctccctgtag ccggagggtt 13740

attttccaag ggttgagtcg cgggaccccc ggttcgagtc tcggaccggc cggactgcgg 13800

cgaacggggg tttgcctccc cgtcatgcaa gaccccgctt gcaaattcct ccggaaacag 13860

ggacgagccc ctttttgct tttcccagat gcatccggtg ctgcggcaga tgcgcccccc 13920

tcctcagcag cggcaagagc aagagcagcg gcagacatgc agggcaccct cccctcctcc 13980

taccgcgtca ggaggggcga catccgcggt tgacgcggca gcagatggtg attacgaacc 14040

cccgcggcgc cgggcccggc actacctgga cttggaggag ggcgagggcc tggcgcggct 14100

aggagcgccc tctcctgagc ggcacccaag ggtgcagctg aagcgtgata cgcgtgaggc 14160

gtacgtgccg cggcagaacc tgtttcgcga ccgcgaggga gaggagcccg aggagatgcg 14220

ggatcgaaag ttccacgcag ggcgcgagct gcggcatggc ctgaatcgcg agcggttgct 14280

gcgcgaggag gactttgagc ccgacgcgcg aaccgggatt agtcccgcgc gcgcacacgt 14340

ggcggccgcc gacctggtaa ccgcatacga gcagacggtg aaccaggaga ttaactttca 14400

aaaaagcttt aacaaccacg tgcgtacgct tgtggcgcgc gaggaggtgg ctataggact 14460

gatgcatctg tgggactttg taagcgcgct ggagcaaaac ccaaatagca agccgctcat 14520

ggcgcagctg ttccttatag tgcagcacag cagggacaac gaggcattca gggatgcgct 14580

gctaaacata gtagagcccg agggccgctg gctgctcgat ttgataaaca tcctgcagag 14640

catagtggtg caggagcgca gcttgagcct ggctgacaag gtggccgcca tcaactattc 14700

catgcttagc ctgggcaagt tttacgcccg caagatatac catacccctt acgttcccat 14760

agacaaggag gtaaagatcg aggggttcta catgcgcatg gcgctgaagg tgcttacctt 14820

gagcgacgac ctgggcgttt atcgcaacga gcgcatccac aaggccgtga gcgtgagccg 14880

gcggcgcgag ctcagcgacc gcgagctgat gcacagcctg caaagggccc tggctggcac 14940

gggcagcggc gatagagagg ccgagtccta ctttgacgcg ggcgctgacc tgcgctgggc 15000

cccaagccga cgcgccctgg aggcagctgg ggccggacct gggctggcgg tggcacccgc 15060

gcgcgctggc aacgtcggcg gcgtggagga atatgacgag gacgatgagt acgagccaga 15120

ggacggcgag tactaagcgg tgatgtttct gatcagatga tgcaagacgc aacggacccg 15180

gcggtgcggg cggcgctgca gagccagccg tccggcctta actccacgga cgactggcgc 15240

caggtcatgg accgcatcat gtcgctgact gcgcgcaatc ctgacgcgtt ccggcagcag 15300

ccgcaggcca accggctctc cgcaattctg gaagcggtgg tcccggcgcg cgcaaacccc 15360

acgcacgaga aggtgctggc gatcgtaaac gcgctggccg aaaacagggc catccggccc 15420

gacgaggccg gcctggtcta cgacgcgctg cttcagcgcg tggctcgtta caacagcggc 15480

aacgtgcaga ccaacctgga ccggctggtg ggggatgtgc gcgaggccgt ggcgcagcgt 15540

gagcgcgcgc agcagcaggg caacctgggc tccatggttg cactaaacgc cttcctgagt 15600

acacagcccg ccaacgtgcc gcggggacag gaggactaca ccaactttgt gagcgcactg 15660

cggctaatgg tgactgagac accgcaaagt gaggtgtacc agtctgggcc agactatttt 15720

ttccagacca gtagacaagg cctgcagacc gtaaacctga gccaggcttt caaaaacttg 15780

caggggctgt ggggggtgcg ggctcccaca ggcgaccgcg cgaccgtgtc tagcttgctg 15840

acgcccaact cgcgcctgtt gctgctgcta atagcgccct tcacggacag tggcagcgtg 15900

tcccgggaca catacctagg tcacttgctg acactgtacc gcgaggccat aggtcaggcg 15960

catgtggacg agcatacttt ccaggagatt acaagtgtca gccgcgcgct ggggcaggag 16020

gacacgggca gcctggaggc aaccctaaac tacctgctga ccaaccggcg gcagaagatc 16080

ccctcgttgc acagtttaaa cagcgaggag gagcgcattt tgcgctacgt gcagcagagc 16140

gtgagcctta acctgatgcg cgacggggta acgcccagcg tggcgctgga catgaccgcg 16200

cgcaacatgg aaccgggcat gtatgcctca aaccggccgt ttatcaaccg cctaatggac 16260

tacttgcatc gcgcggccgc cgtgaacccc gagtatttca ccaatgccat cttgaacccg 16320

cactggctac cgccccctgg tttctacacc gggggattcg aggtgcccga gggtaacgat 16380

ggattcctct gggacgacat agacgacagc gtgttttccc cgcaaccgca gaccctgcta 16440

gagttgcaac agcgcgagca ggcagaggcg gcgctgcgaa aggaaagctt ccgcaggcca 16500

agcagcttgt ccgatctagg cgctgcggcc ccgcggtcag atgctagtag cccatttcca 16560

agcttgatag ggtctcttac cagcactcgc accacccgcc cgcgcctgct gggcgaggag 16620

gagtacctaa acaactcgct gctgcagccg cagcgcgaaa aaaacctgcc tccggcattt 16680

cccaacaacg ggatagagag cctagtggac aagatgagta gatggaagac gtacgcgcag 16740

gagcacaggg acgtgccagg cccgcgcccg cccacccgtc gtcaaaggca cgaccgtcag 16800

cggggtctgg tgtgggagga cgatgactcg gcagacgaca gcagcgtcct ggatttggga 16860

gggagtggca acccgtttgc gcaccttcgc cccaggctgg ggagaatgtt ttaaaaaaaa 16920

aaaagcatga tgcaaaataa aaaactcacc aaggccatgg caccgagcgt tggttttctt 16980

gtattcccct tagtatgcgg cgcgcggcga tgtatgagga aggtcctcct ccctcctacg 17040

agagtgtggt gagcgcggcg ccagtggcgg cggcgctggg ttctcccttc gatgctcccc 17100

tggacccgcc gtttgtgcct ccgcggtacc tgcggcctac cgggggggaga aacagcatcc 17160

gttactctga gttggcaccc ctattcgaca ccacccgtgt gtacctggtg gacaacaagt 17220

caacggatgt ggcatccctg aactaccaga acgaccacag caactttctg accacggtca 17280

ttcaaaacaa tgactacagc ccgggggagg caagcacaca gaccatcaat cttgacgacc 17340

ggtcgcactg gggcggcgac ctgaaaacca tcctgcatac caacatgcca aatgtgaacg 17400

agttcatgtt taccaataag tttaaggcgc gggtgatggt gtcgcgcttg cctactaagg 17460

acaatcaggt ggagctgaaa tacgagtggg tggagttcac gctgcccgag ggcaactact 17520

ccgagaccat gaccatagac cttatgaaca acgcgatcgt ggagcactac ttgaaagtgg 17580

gcagacagaa cggggttctg gaaagcgaca tcggggtaaa gtttgacacc cgcaacttca 17640

gactggggtt tgaccccgtc actggtcttg tcatgcctgg ggtatataca aacgaagcct 17700

tccatccaga catcattttg ctgccaggat gcggggtgga cttcacccac agccgcctga 17760

gcaacttgtt gggcatccgc aagcggcaac ccttccagga gggctttagg atcacctacg 17820

atgatctgga gggtggtaac attcccgcac tgttggatgt ggacgcctac caggcgagct 17880

tgaaagatga caccgaacag ggcgggggtg gcgcaggcgg cagcaacagc agtggcagcg 17940

gcgcggaaga gaactccaac gcggcagccg cggcaatgca gccggtggag gacatgaacg 18000

atcatgccat tcgcggcgac acctttgcca cacgggctga ggagaagcgc gctgaggccg 18060

aagcagcggc cgaagctgcc gcccccgctg cgcaacccga ggtcgagaag cctcagaaga 18120

aaccggtgat caaacccctg acagaggaca gcaagaaacg cagttacaac ctaataagca 18180

atgacagcac cttcacccag taccgcagct ggtaccttgc atacaactac ggcgaccctc 18240

agaccggaat ccgctcatgg accctgcttt gcactcctga cgtaacctgc ggctcggagc 18300

aggtctactg gtcgttgcca gacatgatgc aagaccccgt gaccttccgc tccacgcgcc 18360

agatcagcaa ctttccggtg gtgggcgccg agctgttgcc cgtgcactcc aagagcttct 18420

acaacgacca ggccgtctac tcccaactca tccgccagtt tacctctctg acccacgtgt 18480

tcaatcgctt tcccgagaac cagattttgg cgcgcccgcc agcccccacc atcaccaccg 18540

tcagtgaaaa cgttcctgct ctcacagatc acgggacgct accgctgcgc aacagcatcg 18600

gaggagtcca gcgagtgacc attactgacg ccagacgccg cacctgcccc tacgtttaca 18660

aggccctggg catagtctcg ccgcgcgtcc tatcgagccg cacttttga gcaagcatgt 18720

ccatccttat atcgcccagc aataacacag gctggggcct gcgcttccca agcaagatgt 18780

ttggcggggc caagaagcgc tccgaccaac acccagtgcg cgtgcgcggg cactaccgcg 18840

cgccctgggg cgcgcacaaa cgcggccgca ctgggcgcac caccgtcgat gacgccatcg 18900

acgcggtggt ggaggaggcg cgcaactaca cgcccacgcc gccaccagtg tccacagtgg 18960

acgcggccat tcagaccgtg gtgcgcggag cccggcgcta tgctaaaatg aagagacggc 19020

ggaggcgcgt agcacgtcgc caccgccgcc gacccggcac tgccgcccaa cgcgcggcgg 19080

cggccctgct taaccgcgca cgtcgcaccg gccgacgggc ggccatgcgg gccgctcgaa 19140

ggctggccgc gggtattgtc actgtgcccc ccaggtccag gcgacgagcg gccgccgcag 19200

cagccgcggc cattagtgct atgactcagg gtcgcagggg caacgtgtat tgggtgcgcg 19260

actcggttag cggcctgcgc gtgcccgtgc gcacccgccc cccgcgcaac tagattgcaa 19320

gaaaaaacta cttagactcg tactgttgta tgtatccagc ggcggcggcg cgcaacgaag 19380

ctatgtccaa gcgcaaaatc aaagaagaga tgctccaggt catcgcgccg gagatctatg 19440

gccccccgaa gaaggaagag caggattaca agccccgaaa gctaaagcgg gtcaaaaaga 19500

aaaagaaaga tgatgatgat gaacttgacg acgaggtgga actgctgcac gctaccgcgc 19560

ccaggcgacg ggtacagtgg aaaggtcgac gcgtaaaacg tgttttgcga cccggcacca 19620

ccgtagtctt tacgcccggt gagcgctcca cccgcaccta caagcgcgtg tatgatgagg 19680

tgtacggcga cgaggacctg cttgagcagg ccaacgagcg cctcggggag tttgcctacg 19740

gaaagcggca taaggacatg ctggcgttgc cgctggacga gggcaaccca acacctagcc 19800

taaagcccgt aacactgcag caggtgctgc ccgcgcttgc accgtccgaa gaaaagcgcg 19860

gcctaaagcg cgagtctggt gacttggcac ccaccgtgca gctgatggta cccaagcgcc 19920

agcgactgga agatgtcttg gaaaaaatga ccgtggaacc tgggctggag cccgaggtcc 19980

gcgtgcggcc aatcaagcag gtggcgccgg gactgggcgt gcagaccgtg gacgttcaga 20040

tacccactac cagtagcacc agtattgcca ccgccacaga gggcatggag acacaaacgt 20100

ccccggttgc ctcagcggtg gcggatgccg cggtgcaggc ggtcgctgcg gccgcgtcca 20160

agacctctac ggaggtgcaa acggacccgt ggatgtttcg cgtttcagcc ccccggcgcc 20220

cgcgccgttc gaggaagtac ggcgccgcca gcgcgctact gcccgaatat gccctacatc 20280

cttccattgc gcctaccccc ggctatcgtg gctacaccta ccgccccaga agacgagcaa 20340

ctacccgacg ccgaaccacc actggaaccc gccgccgccg tcgccgtcgc cagcccgtgc 20400

tggccccgat ttccgtgcgc agggtggctc gcgaaggagg caggaccctg gtgctgccaa 20460

cagcgcgcta ccaccccagc atcgtttaaa agccggtctt tgtggttctt gcagatatgg 20520

ccctcacctg ccgcctccgt ttcccggtgc cgggattccg aggaagaatg caccgtagga 20580

ggggcatggc cggccacggc ctgacgggcg gcatgcgtcg tgcgcaccac cggcggcggc 20640

gcgcgtcgca ccgtcgcatg cgcggcggta tcctgcccct ccttattcca ctgatcgccg 20700

cggcgattgg cgccgtgccc ggaattgcat ccgtggcctt gcaggcgcag agacactgat 20760

taaaaacaag ttgcatgtgg aaaaatcaaa ataaaaagtc tggactctca cgctcgcttg 20820

gtcctgtaac tattttgtag aatggaagac atcaactttg cgtctctggc cccgcgacac 20880

ggctcgcgcc cgttcatggg aaactggcaa gatatcggca ccagcaatat gagcggtggc 20940

gccttcagct ggggctcgct gtggagcggc attaaaaatt tcggttccac cgttaagaac 21000

tatggcagca aggcctggaa cagcagcaca ggccagatgc tgagggataa gttgaaagag 21060

caaaatttcc aacaaaaggt ggtagatggc ctggcctctg gcattagcgg ggtggtggac 21120

ctggccaacc aggcagtgca aaataagatt aacagtaagc ttgatccccg ccctcccgta 21180

gaggagcctc caccggccgt ggagacagtg tctccagagg ggcgtggcga aaagcgtccg 21240

cgccccgaca gggaagaaac tctggtgacg caaatagacg agcctccctc gtacgaggag 21300

gcactaaagc aaggcctgcc caccacccgt cccatcgcgc ccatggctac cggagtgctg 21360

ggccagcaca cacccgtaac gctggacctg cctccccccg ccgacaccca gcagaaacct 21420

gtgctgccag gcccgaccgc cgttgttgta acccgtccta gccgcgcgtc cctgcgccgc 21480

gccgccagcg gtccgcgatc gttgcggccc gtagccagtg gcaactggca aagcacactg 21540

aacagcatcg tgggtctggg ggtgcaatcc ctgaagcgcc gacgatgctt ctgatagcta 21600

acgtgtcgta tgtgtgtcat gtatgcgtcc atgtcgccgc cagaggagct gctgagccgc 21660

cgcgcgcccg ctttccaaga tggctacccc ttcgatgatg ccgcagtggt cttacatgca 21720

catctcgggc caggacgcct cggagtacct gagccccggg ctggtgcagt ttgcccgcgc 21780

caccgagacg tacttcagcc tgaataacaa gtttagaaac cccacggtgg cgcctacgca 21840

cgacgtgacc acagaccggt cccagcgttt gacgctgcgg ttcatccctg tggaccgtga 21900

ggatactgcg tactcgtaca aggcgcggtt caccctagct gtgggtgata accgtgtgct 21960

ggacatggct tccacgtact ttgacatccg cggcgtgctg gacaggggcc ctacttttaa 22020

gccctactct ggcactgcct acaacgccct ggctcccaag ggtgccccaa atccttgcga 22080

atgggatgaa gctgctactg ctcttgaaat aaacctagaa gaagaggacg atgacaacga 22140

agacgaagta gacgagcaag ctgagcagca aaaaactcac gtatttgggc aggcgcctta 22200

ttctggtata aatattacaa aggagggtat tcaaataggt gtcgaaggtc aaacacctaa 22260

atatgccgat aaaacatttc aacctgaacc tcaaatagga gaatctcagt ggtacgaaac 22320

agaaattaat catgcagctg ggagagtcct aaaaaagact accccaatga aaccatgtta 22380

cggttcatat gcaaaaccca caaatgaaaa tggagggcaa ggcattcttg taaagcaaca 22440

aaatggaaag ctagaaagtc aagtggaaat gcaatttttc tcaactactg aggcagccgc 22500

aggcaatggt gataacttga ctcctaaagt ggtattgtac agtgaagatg tagatataga 22560

aaccccagac actcatattt cttacatgcc cactattaag gaaggtaact cacgagaact 22620

aatgggccaa caatctatgc ccaacaggcc taattacatt gcttttaggg acaattttat 22680

tggtctaatg tattacaaca gcacgggtaa tatgggtgtt ctggcgggcc aagcatcgca 22740

gttgaatgct gttgtagatt tgcaagacag aaacacagag ctttcatacc agcttttgct 22800

tgattccatt ggtgatagaa ccaggtactt ttctatgtgg aatcaggctg ttgacagcta 22860

tgatccagat gttagaatta ttgaaaatca tggaactgaa gatgaacttc caaattactg 22920

ctttccactg ggaggtgtga ttaatacaga gactcttacc aaggtaaaac ctaaaacagg 22980

tcaggaaaat ggatgggaaa aagatgctac agaattttca gataaaaatg aaataagagt 23040

tggaaataat tttgccatgg aaatcaatct aaatgccaac ctgtggagaa atttcctgta 23100

ctccaacata gcgctgtatt tgcccgacaa gctaaagtac agtccttcca acgtaaaaat 23160

ttctgataac ccaaacacct acgactacat gaacaagcga gtggtggctc ccgggctagt 23220

ggactgctac attaaccttg gagcacgctg gtcccttgac tatatggaca acgtcaaccc 23280

atttaaccac caccgcaatg ctggcctgcg ctaccgctca atgttgctgg gcaatggtcg 23340

ctatgtgccc ttccacatcc aggtgcctca gaagttcttt gccattaaaa acctccttct 23400

cctgccgggc tcatacacct acgagtggaa cttcaggaag gatgttaaca tggttctgca 23460

gagctcccta ggaaatgacc taagggttga cggagccagc attaagtttg atagcatttg 23520

cctttacgcc accttcttcc ccatggccca caacaccgcc tccacgcttg aggccatgct 23580

tagaaacgac accaacgacc agtcctttaa cgactatctc tccgccgcca acatgctcta 23640

ccctataccc gccaacgcta ccaacgtgcc catatccatc ccctcccgca actgggcggc 23700

tttccgcggc tgggccttca cgcgccttaa gactaaggaa accccatcac tgggctcggg 23760

ctacgaccct tattacacct actctggctc tataccctac ctagatggaa ccttttacct 23820

caaccacacc tttaagaagg tggccattac ctttgactct tctgtcagct ggcctggcaa 23880

tgaccgcctg cttaccccca acgagtttga aattaagcgc tcagttgacg gggagggtta 23940

caacgttgcc cagtgtaaca tgaccaaaga ctggttcctg gtacaaatgc tagctaacta 24000

taacattggc taccagggct tctatatccc agagagctac aaggaccgca tgtactcctt 24060

ctttagaaac ttccagccca tgagccgtca ggtggtggat gatactaaat acaaggacta 24120

ccaacaggtg ggcatcctac accaacacaa caactctgga tttgttggct accttgcccc 24180

caccatgcgc gaaggacagg cctaccctgc taacttcccc tatccgctta taggcaagac 24240

cgcagttgac agcattaccc agaaaaagtt tctttgcgat cgcacccttt ggcgcatccc 24300

attctccagt aactttatgt ccatgggcgc actcacagac ctgggccaaa accttctcta 24360

cgccaactcc gcccacgcgc tagacatgac ttttgaggtg gatcccatgg acgagcccac 24420

ccttctttat gttttgtttg aagtctttga cgtggtccgt gtgcaccagc cgcaccgcgg 24480

cgtcatcgaa accgtgtacc tgcgcacgcc cttctcggcc ggcaacgcca caacataaag 24540

aagcaagcaa catcaacaac agctgccgcc atgggctcca gtgagcagga actgaaagcc 24600

attgtcaaag atcttggttg tgggccatat tttttgggca cctatgacaa gcgctttcca 24660

ggctttgttt ctccacacaa gctcgcctgc gccatagtca atacggccgg tcgcgagact 24720

gggggcgtac actggatggc ctttgcctgg aacccgcact caaaaacatg ctacctcttt 24780

gagccctttg gcttttctga ccagcgactc aagcaggttt accagtttga gtacgagtca 24840

ctcctgcgcc gtagcgccat tgcttcttcc cccgaccgct gtataacgct ggaaaagtcc 24900

acccaaagcg tacaggggcc caactcggcc gcctgtggac tattctgctg catgtttctc 24960

cacgcctttg ccaactggcc ccaaactccc atggatcaca accccaccat gaaccttatt 25020

accggggtac ccaactccat gctcaacagt ccccaggtac agcccaccct gcgtcgcaac 25080

caggaacagc tctacagctt cctggagcgc cactcgccct acttccgcag ccacagtgcg 25140

cagattagga gcgccacttc tttttgtcac ttgaaaaaca tgtaaaaata atgtactaga 25200

gacactttca ataaaggcaa atgcttttat ttgtacactc tcgggtgatt atttaccccc 25260

acccttgccg tctgcgccgt ttaaaaatca aaggggttct gccgcgcatc gctatgcgcc 25320

actggcaggg acacgttgcg atactggtgt ttagtgctcc acttaaactc aggcacaacc 25380

atccgcggca gctcggtgaa gttttcactc cacaggctgc gcaccatcac caacgcgttt 25440

agcaggtcgg gcgccgatat cttgaagtcg cagttggggc ctccgccctg cgcgcgcgag 25500

ttgcgataca cagggttgca gcactggaac actatcagcg ccgggtggtg cacgctggcc 25560

agcacgctct tgtcggagat cagatccgcg tccaggtcct ccgcgttgct cagggcgaac 25620

ggagtcaact ttggtagctg ccttcccaaa aagggcgcgt gcccaggctt tgagttgcac 25680

tcgcaccgta gtggcatcaa aaggtgaccg tgcccggtct gggcgttagg atacagcgcc 25740

tgcataaaag ccttgatctg cttaaaagcc acctgagcct ttgcgccttc agagaagaac 25800

atgccgcaag acttgccgga aaactgattg gccggacagg ccgcgtcgtg cacgcagcac 25860

cttgcgtcgg tgttggagat ctgcaccaca tttcggcccc accggttctt cacgatcttg 25920

gccttgctag actgctcctt cagcgcgcgc tgcccgtttt cgctcgtcac atccatttca 25980

atcacgtgct ccttatttat cataatgctt ccgtgtagac acttaagctc gccttcgatc 26040

tcagcgcagc ggtgcagcca caacgcgcag cccgtgggct cgtgatgctt gtaggtcacc 26100

tctgcaaacg actgcaggta cgcctgcagg aatcgcccca tcatcgtcac aaaggtcttg 26160

ttgctggtga aggtcagctg caacccgcgg tgctcctcgt tcagccaggt cttgcatacg 26220

gccgccagag cttccacttg gtcaggcagt agtttgaagt tcgcctttag atcgttatcc 26280

acgtggtact tgtccatcag cgcgcgcgca gcctccatgc ccttctccca cgcagacacg 26340

atcggcacac tcagcgggtt catcaccgta atttcacttt ccgcttcgct gggctcttcc 26400

tcttcctctt gcgtccgcat accacgcgcc actgggtcgt cttcattcag ccgccgcact 26460

gtgcgcttac ctcctttgcc atgcttgatt agcaccggtg ggttgctgaa acccaccatt 26520

tgtagcgcca catcttctct ttcttcctcg ctgtccacga ttacctctgg tgatggcggg 26580

cgctcgggct tgggagaagg gcgcttcttt ttcttcttgg gcgcaatggc caaatccgcc 26640

gccgaggtcg atggccgcgg gctgggtgtg cgcggcacca gcgcgtcttg tgatgagtct 26700

tcctcgtcct cggactcgat acgccgcctc atccgctttt ttgggggcgc ccggggaggc 26760

ggcggcgacg gggacgggga cgacacgtcc tccatggttg ggggacgtcg cgccgcaccg 26820

cgtccgcgct cgggggtggt ttcgcgctgc tcctcttccc gactggccat ttccttctcc 26880

tataggcaga aaaagatcat ggagtcagtc gagaagaagg acagcctaac cgccccctct 26940

gagttcgcca ccaccgcctc caccgatgcc gccaacgcgc ctaccacctt ccccgtcgag 27000

gcacccccgc ttgaggagga ggaagtgatt atcgagcagg acccaggttt tgtaagcgaa 27060

gacgacgagg accgctcagt accaacagag gataaaaagc aagaccagga caacgcagag 27120

gcaaacgagg aacaagtcgg gcgggggggac gaaaggcatg gcgactacct agatgtggga 27180

gacgacgtgc tgttgaagca tctgcagcgc cagtgcgcca ttatctgcga cgcgttgcaa 27240

gagcgcagcg atgtgcccct cgccatagcg gatgtcagcc ttgcctacga acgccaccta 27300

ttctcaccgc gcgtaccccc caaacgccaa gaaaacggca catgcgagcc caacccgcgc 27360

ctcaacttct accccgtatt tgccgtgcca gaggtgcttg ccacctatca catcttttc 27420

caaaactgca agataccccct atcctgccgt gccaaccgca gccgagcgga caagcagctg 27480

gccttgcggc agggcgctgt catacctgat atcgcctcgc tcaacgaagt gccaaaaatc 27540

tttgagggtc ttggacgcga cgagaagcgc gcggcaaacg ctctgcaaca ggaaaacagc 27600

gaaaatgaaa gtcactctgg agtgttggtg gaactcgagg gtgacaacgc gcgcctagcc 27660

gtactaaaac gcagcatcga ggtcacccac tttgcctacc cggcacttaa cctacccccc 27720

aaggtcatga gcacagtcat gagtgagctg atcgtgcgcc gtgcgcagcc cctggagagg 27780

gatgcaaatt tgcaagaaca aacagaggag ggcctacccg cagttggcga cgagcagcta 27840

gcgcgctggc ttcaaacgcg cgagcctgcc gacttggagg agcgacgcaa actaatgatg 27900

gccgcagtgc tcgttaccgt ggagcttgag tgcatgcagc ggttctttgc tgacccggag 27960

atgcagcgca agctagagga aacattgcac tacacctttc gacagggcta cgtacgccag 28020

gcctgcaaga tctccaacgt ggagctctgc aacctggtct cctaccttgg aattttgcac 28080

gaaaaccgcc ttgggcaaaa cgtgcttcat tccacgctca agggcgaggc gcgccgcgac 28140

tacgtccgcg actgcgttta cttatttcta tgctacacct ggcagacggc catgggcgtt 28200

tggcagcagt gcttggagga gtgcaacctc aaggagctgc agaaactgct aaagcaaaac 28260

ttgaaggacc tatggacggc cttcaacgag cgctccgtgg ccgcgcacct ggcggacatc 28320

attttccccg aacgcctgct taaaaccctg caacagggtc tgccagactt caccagtcaa 28380

agcatgttgc agaactttag gaactttatc ctagagcgct caggaatctt gcccgccacc 28440

tgctgtgcac ttcctagcga ctttgtgccc attaagtacc gcgaatgccc tccgccgctt 28500

tggggccact gctaccttct gcagctagcc aactaccttg cctaccactc tgacataatg 28560

gaagacgtga gcggtgacgg tctactggag tgtcactgtc gctgcaacct atgcaccccg 28620

caccgctccc tggtttgcaa ttcgcagctg cttaacgaaa gtcaaattat cggtaccttt 28680

gagctgcagg gtccctcgcc tgacgaaaag tccgcggctc cggggttgaa actcactccg 28740

gggctgtgga cgtcggctta ccttcgcaaa tttgtacctg aggactacca cgcccacgag 28800

attaggttct acgaagacca atcccgcccg cctaatgcgg agcttaccgc ctgcgtcatt 28860

acccagggcc acattcttgg ccaattgcaa gccatcaaca aagcccgcca agagtttctg 28920

ctacgaaagg gacgggggggt ttacttggac ccccagtccg gcgaggagct caacccaatc 28980

cccccgccgc cgcagcccta tcagcagcag ccgcgggccc ttgcttccca ggatggcacc 29040

caaaaagaag ctgcagctgc cgccgccacc cacggacgag gaggaatact gggacagtca 29100

ggcagaggag gttttggacg aggaggagga ggacatgatg gaagactggg agagcctaga 29160

cgaggaagct tccgaggtcg aagaggtgtc agacgaaaca ccgtcaccct cggtcgcatt 29220

cccctcgccg gcgccccaga aatcggcaac cggttccagc atggctacaa cctccgctcc 29280

tcaggcgccg ccggcactgc ccgttcgccg acccaaccgt agatgggaca ccactggaac 29340

cagggccggt aagtccaagc agccgccgcc gttagcccaa gagcaacaac agcgccaagg 29400

ctaccgctca tggcgcgggc acaagaacgc catagttgct tgcttgcaag actgtggggg 29460

caacatctcc ttcgcccgcc gctttcttct ctaccatcac ggcgtggcct tcccccgtaa 29520

catcctgcat tactaccgtc atctctacag cccatactgc accggcggca gcggcagcaa 29580

cagcagcggc cacacagaag caaaggcgac cggatagcaa gactctgaca aagcccaaga 29640

aatccacagc ggcggcagca gcaggaggag gagcgctgcg tctggcgccc aacgaacccg 29700

tatcgacccg cgagcttaga aacaggattt ttcccactct gtatgctata tttcaacaga 29760

gcaggggcca agaacaagag ctgaaaataa aaaacaggtc tctgcgatcc ctcacccgca 29820

gctgcctgta tcacaaaagc gaagatcagc ttcggcgcac gctggaagac gcggaggctc 29880

tcttcagtaa atactgcgcg ctgactctta aggactagtt tcgcgccctt tctcaaattt 29940

aagcgcgaaa actacgtcat ctccagcggc cacacccggc gccagcacct gttgtcagcg 30000

ccattatgag caaggaaatt cccacgccct acatgtggag ttaccagcca caaatgggac 30060

ttgcggctgg agctgcccaa gactactcaa cccgaataaa ctacatgagc gcgggacccc 30120

acatgatatc ccgggtcaac ggaatacgcg cccaccgaaa ccgaattctc ctggaacagg 30180

cggctattac caccacacct cgtaataacc ttaatccccg tagttggccc gctgccctgg 30240

tgtaccagga aagtcccgct cccaccactg tggtacttcc cagagacgcc caggccgaag 30300

ttcagatgac taactcaggg gcgcagcttg cgggcggctt tcgtcacagg gtgcggtcgc 30360

ccgggcaggg tataactcac ctgacaatca gagggcgagg tattcagctc aacgacgagt 30420

cggtgagctc ctcgcttggt ctccgtccgg acgggacatt tcagatcggc ggcgccggcc 30480

gctcttcatt cacgcctcgt caggcaatcc taactctgca gacctcgtcc tctgagccgc 30540

gctctggagg cattggaact ctgcaattta ttgaggagtt tgtgccatcg gtctacttta 30600

accccttctc gggacctccc ggccactatc cggatcaatt tattcctaac tttgacgcgg 30660

taaaggactc ggcggacggc tacgactgaa tgttaagtgg agaggcagag caactgcgcc 30720

tgaaacacct ggtccactgt cgccgccaca agtgctttgc ccgcgactcc ggtgagtttt 30780

gctactttga attgcccgag gatcatatcg agggcccggc gcacggcgtc cggcttaccg 30840

cccagggaga gcttgcccgt agcctgattc gggagtttac ccagcgcccc ctgctagttg 30900

agcgggacag gggaccctgt gttctcactg tgatttgcaa ctgtcctaac cctggattac 30960

atcaagatcc tctagttaat gtcaggtcgc ctaagtcgat taactagagt acccggggat 31020

cttattccct ttaactaata aaaaaaaata ataaagcatc acttacttaa aatcagttag 31080

caaatttctg tccagtttat tcagcagcac ctccttgccc tcctcccagc tctggtattg 31140

cagcttcctc ctggctgcaa actttctcca caatctaaat ggaatgtcag tttcctcctg 31200

ttcctgtcca tccgcaccca ctatcttcat gttgttgcag atgaagcgcg caagaccgtc 31260

tgaagatacc ttcaaccccg tgtatccata tgacacggaa accggtcctc caactgtgcc 31320

ttttcttact cctccctttg tatcccccaa tgggtttcaa gagagtcccc ctggggtact 31380

ctctttgcgc ctatccgaac ctctagttac ctccaatggc atgcttgcgc tcaaaatggg 31440

caacggcctc tctctggacg aggccggcaa ccttacctcc caaaatgtaa ccactgtgag 31500

cccacctctc aaaaaaacca agtcaaacat aaacctggaa atatctgcac ccctcacagt 31560

tacctcagaa gccctaactg tggctgccgc cgcacctcta atggtcgcgg gcaacacact 31620

caccatgcaa tcacaggccc cgctaaccgt gcacgactcc aaacttagca ttgccaccca 31680

aggacccctc acagtgtcag aaggaaagct agccctgcaa acatcaggcc ccctcaccac 31740

caccgatagc agtaccctta ctatcactgc ctcacccccc ctaactactg ccactggtag 31800

cttgggcatt gacttgaaag agcccattta tacacaaaat ggaaaactag gactaaagta 31860

cggggctcct ttgcatgtaa cagacgacct aaacactttg accgtagcaa ctggtccagg 31920

tgtgactatt aataatactt ccttgcaaac taaagttact ggagccttgg gttttgattc 31980

acaaggcaat atgcaactta atgtagcagg aggactaagg attgattctc aaaacagacg 32040

ccttatactt gatgttagtt atccgtttga tgctcaaaac caactaaatc taagactagg 32100

acagggccct ctttttataa actcagccca caacttggat attaactaca acaaaggcct 32160

ttacttgttt acagcttcaa acaattccaa aaagcttgag gttaacctaa gcactgccaa 32220

ggggttgatg tttgacgcta cagccatagc cattaatgca ggagatgggc ttgaatttgg 32280

ttcacctaat gcaccaaaca caaatcccct caaaacaaaa attggccatg gcctagaatt 32340

tgattcaaac aaggctatgg ttcctaaact aggaactggc cttagttttg acagcacagg 32400

tgccattaca gtaggaaaca aaaataatga taagctaact ttgtggaccg gaataaaccc 32460

tccacctaac tgtcaaattg tggaaaacac taatacaaat gatggcaaac ttactttagt 32520

attagtaaaa aatggagggc ttgttaatgg ctacgtgtct ctagttggtg tatcagacac 32580

tgtgaaccaa atgttcacac aaaagacagc aaacatccaa ttaagattat attttgactc 32640

ttctggaaat ctattaactg aggaatcaga cttaaaaatt ccacttaaaa ataaatcttc 32700

tacagcgacc agtgaaactg tagccagcag caaagccttt atgccaagta ctacagctta 32760

tcccttcaac accactacta gggatagtga aaactacatt catggaatat gttactacat 32820

gactagttat gatagaagtc tatttccctt gaacatttct ataatgctaa acagccgtat 32880

gatttcttcc aatgttgcct atgccataca atttgaatgg aatctaaatg caagtgaatc 32940

tccagaaagc aacatagcta cgctgaccac atcccccttt ttcttttctt acattacaga 33000

agacgacaac taaagaatcg tttgtgttat gtttcaacgt gtttattttt caattgcaga 33060

aaatttcaag tcatttttca ttcagtagta tagccccacc accacatagc ttatacagat 33120

caccgtacct taatcaaact cacagaaccc tagtattcaa cctgccacct ccctcccaac 33180

acacagagta cacagtcctt tctccccggc tggccttaaa aagcatcata tcatgggtaa 33240

cagacatatt cttaggtgtt atattccaca cggtttcctg tcgagccaaa cgctcatcag 33300

tgatattaat aaactccccg ggcagctcac ttaagttcat gtcgctgtcc agctgctgag 33360

ccacaggctg ctgtccaact tgcggttgct taacgggcgg cgaaggagaa gtccacgcct 33420

acatgggggt agagtcataa tcgtgcatca ggatagggcg gtggtgctgc agcagcgcgc 33480

gaataaactg ctgccgccgc cgctccgtcc tgcaggaata caacatggca gtggtctcct 33540

cagcgatgat tcgcaccgcc cgcagcataa ggcgccttgt cctccgggca cagcagcgca 33600

ccctgatctc acttaaatca gcacagtaac tgcagcacag caccacaata ttgttcaaaa 33660

tcccacagtg caaggcgctg tatccaaagc tcatggcggg gaccacagaa cccacgtggc 33720

catcatacca caagcgcagg tagattaagt ggcgacccct cataaacacg ctggacataa 33780

acattacctc ttttggcatg ttgtaattca ccacctcccg gtaccatata aacctctgat 33840

taaacatggc gccatccacc accatcctaa accagctggc caaaacctgc ccgccggcta 33900

tacactgcag ggaaccggga ctggaacaat gacagtggag agcccaggac tcgtaaccat 33960

ggatcatcat gctcgtcatg atatcaatgt tggcacaaca caggcacacg tgcatacact 34020

tcctcaggat tacaagctcc tcccgcgtta gaaccatatc ccagggaaca acccattcct 34080

gaatcagcgt aaatcccaca ctgcagggaa gacctcgcac gtaactcacg ttgtgcattg 34140

tcaaagtgtt acattcgggc agcagcggat gatcctccag tatggtagcg cgggtttctg 34200

tctcaaaagg aggtagacga tccctactgt acggagtgcg ccgagacaac cgagatcgtg 34260

ttggtcgtag tgtcatgcca aatggaacgc cggacgtagt catatttcct gaagcaaaac 34320

caggtgcggg cgtgacaaac agatctgcgt ctccggtctc gccgcttaga tcgctctgtg 34380

tagtagttgt agtatatcca ctctctcaaa gcatccaggc gcccctggc ttcgggttct 34440

atgtaaactc cttcatgcgc cgctgccctg ataacatcca ccaccgcaga ataagccaca 34500

cccagccaac ctacacattc gttctgcgag tcacacacgg gaggagcggg aagagctgga 34560

agaaccatgt ttttttttt attccaaaag attatccaaa acctcaaaat gaagatctat 34620

taagtgaacg cgctcccctc cggtggcgtg gtcaaactct acagccaaag aacagataat 34680

ggcatttgta agatgttgca caatggcttc caaaaggcaa acggccctca cgtccaagtg 34740

gacgtaaagg ctaaaccctt cagggtgaat ctcctctata aacattccag caccttcaac 34800

catgcccaaa taattctcat ctcgccacct tctcaatata tctctaagca aatcccgaat 34860

attaagtccg gccattgtaa aaatctgctc cagagcgccc tccaccttca gcctcaagca 34920

gcgaatcatg attgcaaaaa ttcaggttcc tcacagacct gtataagatt caaaagcgga 34980

acattaacaa aaataccgcg atcccgtagg tcccttcgca gggccagctg aacataatcg 35040

tgcaggtctg cacggaccag cgcggccact tccccgccag gaaccatgac aaaagaaccc 35100

acactgatta tgacacgcat actcggagct atgctaacca gcgtagcccc gatgtaagct 35160

tgttgcatgg gcggcgatat aaaatgcaag gtgctgctca aaaaatcagg caaagcctcg 35220

cgcaaaaaag aaagcacatc gtagtcatgc tcatgcagat aaaggcaggt aagctccgga 35280

accaccacag aaaaagacac catttttctc tcaaacatgt ctgcgggttt ctgcataaac 35340

acaaaataaa ataacaaaaa aacatttaaa cattagaagc ctgtcttaca acaggaaaaa 35400

caacccttat aagcataaga cggactacgg ccatgccggc gtgaccgtaa aaaaactggt 35460

caccgtgatt aaaaagcacc accgacagct cctcggtcat gtccggagtc ataatgtaag 35520

actcggtaaa cacatcaggt tgattcacat cggtcagtgc taaaaagcga ccgaaatagc 35580

ccgggggaat acatacccgc aggcgtagag acaacattac agcccccata ggaggtataa 35640

caaaattaat aggagagaaa aacacataaa cacctgaaaa accctcctgc ctaggcaaaa 35700

tagcaccctc ccgctccaga acaacataca gcgcttccac agcggcagcc ataacagtca 35760

gccttaccag taaaaaagaa aacctattaa aaaaacacca ctcgacacgg caccagctca 35820

atcagtcaca gtgtaaaaaa gggccaagtg cagagcgagt atatatagga ctaaaaaatg 35880

acgtaacggt taaagtccac aaaaaacacc cagaaaaccg cacgcgaacc tacgcccaga 35940

aacgaaagcc aaaaaaccca caacttcctc aaatcgtcac ttccgttttc ccacgttacg 36000

tcacttccca ttttaagaaa actacaattc ccaacacata caagttactc cgccctaaaa 36060

cctacgtcac ccgccccgtt cccacgcccc gcgccacgtc acaaactcca ccccctcatt 36120

atcatattgg cttcaatcca aaataaggta tattattgat gatg 36164

<210> 20
<211> 36151
<212> DNA
<213> Artificial Sequence

<220>
<223> pAdk35F2-Spike/E4orf6(-0.25kb)-E4dl355(E4re#15)

<400> 20
ttaattaaca tcatcaataa tataccttat tttggattga agccaatatg ataatgaggg 60

ggtggagttt gtgacgtggc gcggggcgtg ggaacggggc gggtgacgta gtagtgtggc 120

ggaagtgtga tgttgcaagt gtggcggaac acatgtaagc gacggatgtg gcaaaagtga 180

cgtttttggt gtgcgccggt gtacacagga agtgacaatt ttcgcgcggt tttaggcgga 240

tgttgtagta aatttgggcg taaccgagta agatttggcc attttcgcgg gaaaactgaa 300

taagaggaag tgaaatctga ataattttgt gttactcata gcgcgtaata atttctgtaa 360

tagtaatcaa ttacggggtc attagttcat agcccatata tggagttccg cgttacataa 420

cttacggtaa atggcccgcc tggctgaccg cccaacgacc cccgcccatt gacgtcaata 480

atgacgtatg ttcccatagt aacgccaata gggactttcc attgacgtca atgggtggag 540

tatttacggt aaactgccca cttggcagta catcaagtgt atcatatgcc aagtacgccc 600

cctattgacg tcaatgacgg taaatggccc gcctggcatt atgcccagta catgacctta 660

tgggactttc ctacttggca gtacatctac gtattagtca tcgctattac catggtgatg 720

cggttttggc agtacatcaa tgggcgtgga tagcggtttg actcacgggg atttccaagt 780

ctccacccca ttgacgtcaa tgggagtttg ttttggcacc aaaatcaacg ggactttcca 840

aaatgtcgta acaactccgc cccattgacg caaatgggcg gtaggcgtgt acggtgggag 900

gtctatataa gcagagctct ccctatcagt gatagagatc tccctatcag tgatagagat 960

cgtcgacgag ctcgtttagt gaaccgtcag atcgcctgga gacgccatcc acgctgtttt 1020

gacctccata gaagacaccg ggaccgatcc agcctccgat ttgccaccat gtttgtgttc 1080

ctggtgctgc tgccactggt gtccagccag tgtgtgaacc tgaccaccag gacccaactt 1140

cctcctgcct acaccaactc cttcaccagg ggagtctact accctgacaa ggtgttcagg 1200

tcctctgtgc tgcacagcac ccaggacctg ttcctgccat tcttcagcaa tgtgacctgg 1260

ttccatgcca tccatgtgtc tggcaccaat ggcaccaaga ggtttgacaa ccctgtgctg 1320

ccattcaatg atggagtcta ctttgccagc acagagaaga gcaacatcat caggggctgg 1380

atttttggca ccaccctgga cagcaagacc cagtccctgc tgattgtgaa caatgccacc 1440

aatgtggtga ttaaggtgtg tgagttccag ttctgtaatg acccattcct gggagtctac 1500

taccacaaga acaacaagtc ctggatggag tctgagttca gggtctactc ctctgccaac 1560

aactgtacct ttgaatatgt gagccaacca ttcctgatgg acttggaggg caagcagggc 1620

aacttcaaga acctgaggga gtttgtgttc aagaacattg atggctactt caagatttac 1680

agcaaacaca caccaatcaa cctggtgagg gacctgccac agggcttctc tgccttggaa 1740

ccactggtgg acctgccaat tggcatcaac atcaccaggt tccagaccct gctggctctg 1800

cacaggtcct acctgacacc tggagactcc tcctctggct ggacagcagg agcagcagcc 1860

tactatgtgg gctacctcca accaaggacc ttcctgctga aatacaatga gaatggcacc 1920

atcacagatg ctgtggactg tgccctggac ccactgtctg agaccaagtg taccctgaaa 1980

tccttcacag tggagaaggg catctaccag accagcaact tcagggtcca accaacagag 2040

agcattgtga ggtttccaaa catcaccaac ctgtgtccat ttggagaggt gttcaatgcc 2100

accaggtttg cctctgtcta tgcctggaac aggaagagga ttagcaactg tgtggctgac 2160

tactctgtgc tctacaactc tgcctccttc agcaccttca agtgttatgg agtgagccca 2220

accaaactga atgacctgtg tttcaccaat gtctatgctg actcctttgt gattagggga 2280

gatgaggtga gacagattgc ccctggacaa acaggcaaga ttgctgacta caactacaaa 2340

ctgcctgatg acttcacagg ctgtgtgatt gcctggaaca gcaacaacct ggacagcaag 2400

gtgggaggca actacaacta cctctacaga ctgttcagga agagcaacct gaaaccattt 2460

gagagggaca tcagcacaga gatttaccag gctggcagca caccatgtaa tggagtggag 2520

ggcttcaact gttactttcc actccaatcc tatggcttcc aaccaaccaa tggagtgggc 2580

taccaaccat acagggtggt ggtgctgtcc tttgaactgc tccatgcccc tgccacagtg 2640

tgtggaccaa agaagagcac caacctggtg aagaacaagt gtgtgaactt caacttcaat 2700

ggactgacag gcacaggagt gctgacagag agcaacaaga agttcctgcc attccaacag 2760

tttggcaggg acattgctga caccacagat gctgtgaggg acccacagac cttggagatt 2820

ctggacatca caccatgttc ctttggagga gtgtctgtga ttacacctgg caccaacacc 2880

agcaaccagg tggctgtgct ctaccaggat gtgaactgta ctgaggtgcc tgtggctatc 2940

catgctgacc aacttacacc aacctggagg gtctacagca caggcagcaa tgtgttccag 3000

accagggctg gctgtctgat tggagcagag catgtgaaca actcctatga gtgtgacatc 3060

ccaattggag caggcatctg tgcctcctac cagacccaga ccggtggcgg tgggtcgagg 3120

tctgtggcaa gccagagcat cattgcctac acaatgagtc tgggagcaga gaactctgtg 3180

gcttacagca acaacagcat tgccatccca accaacttca ccatctctgt gaccacagag 3240

attctgcctg tgagtatgac caagacctct gtggactgta caatgtatat ctgtggagac 3300

agcacagagt gtagcaacct gctgctccaa tatggctcct tctgtaccca acttaacagg 3360

gctctgacag gcattgctgt ggaacaggac aagaacaccc aggaggtgtt tgcccaggtg 3420

aagcagattt acaagacacc tccaatcaag gactttggag gcttcaactt cagccagatt 3480

ctgcctgacc caagcaagcc aagcaagagg tccttcattg aggacctgct gttcaacaag 3540

gtgaccctgg ctgatgctgg cttcatcaag caatatggag actgtctggg agacattgct 3600

gccagggacc tgatttgtgc ccagaagttc aatggactga cagtgctgcc tccactgctg 3660

acagatgaga tgattgccca atacacctct gccctgctgg ctggcaccat cacctctggc 3720

tggacctttg gagcaggagc agccctccaa atcccatttg ctatgcagat ggcttacagg 3780

ttcaatggca ttggagtgac ccagaatgtg ctctatgaga accagaaact gattgccaac 3840

cagttcaact ctgccattgg caagattcag gactccctgt ccagcacagc ctctgccctg 3900

ggcaaactcc aagatgtggt gaaccagaat gcccaggctc tgaacaccct ggtgaagcaa 3960

ctttccagca actttggagc catctcctct gtgctgaatg acatcctgag cagactggac 4020

aaggtggagg ctgaggtcca gattgacaga ctgattacag gcagactcca atccctccaa 4080

acctatgtga cccaacaact tatcagggct gctgagatta gggcatctgc caacctggct 4140

gccaccaaga tgagtgagtg tgtgctggga caaagcaaga gggtggactt ctgtggcaag 4200

ggctaccacc tgatgagttt tccacagtct gcccctcatg gagtggtgtt cctgcatgtg 4260

acctatgtgc ctgcccagga gaagaacttc accacagccc ctgccatctg ccatgatggc 4320

aaggctcact ttccaaggga gggagtgttt gtgagcaatg gcacccactg gtttgtgacc 4380

cagaggaact tctatgaacc acagattatc accacagaca acacctttgt gtctggcaac 4440

tgtgatgtgg tgattggcat tgtgaacaac acagtctatg acccactcca acctgaactg 4500

gactccttca aggaggaact ggacaaatac ttcaagaacc acaccagccc tgatgtggac 4560

ctgggagaca tctctggcat caatgcctct gtggtgaaca tccagaagga gattgacaga 4620

ctgaatgagg tggctaagaa cctgaatgag tccctgattg acctccaaga actgggcaaa 4680

tatgaacaat acatcaagtg gccatgaaaa ttgatcataa tcagccatac cacatttgta 4740

gaggttttac ttgctttaaa aaacctccca cacctccccc tgaacctgaa acataaaatg 4800

aatgcaattg ttgttgttaa cttgtttatt gcagcttata atggttacaa ataaagcaat 4860

agcatcacaa atttcacaaa taaagcattt ttttcactgc attctagttg tggtttgtcc 4920

aaactcatca atgtatctta acgcggatcc ttcccgctcc tcccgtgtgt gactcgcaga 4980

acgaatgtgt aggttggctg ggtgtggctt attctgcggt ggtggatgtt atcagggcag 5040

cggcgcatga aggagtttac atagaacccg aagccagggg gcgcctggat gctttgagag 5100

agtggatata ctacaactac tacacagagc gatctaagcg gcgagaccgg agacgcagat 5160

ctgtttgtca cgcccgcacc tggttttgct tcaggaaata tgactacgtc cggcgttcca 5220

tttggcatga cactacgacc aacacgatct cggttgtctc ggcgcactcc gtacagtagg 5280

gatcgtctac ctccttttga gacagaaacc cgcgctacca tactggagga tcatccgctg 5340

ctgcccgaat gtaacacttt gacaatgcac aacgtgagtt acgtgcgagg tcttccctgc 5400

agtgtgggat ttacgctgat tcaggaatgg gttgttccct gggatatggt tctaacgcgg 5460

gaggagcttg taatcctgag gaagtgtatg cacgtgtgcc tgtgttgtgc caacattgat 5520

atcatgacga gcatgatgat ccatggttac gagtcctggg ctctccactg tcattgttcc 5580

agtcccggtt ccctgcagtg tatagccggc gggcaggttt tggccagctg gtttaggatg 5640

gtggtggatg gcgccatgtt taatcagagg tttatatggt accgggaggt ggtgaattac 5700

aacatgccaa aagaggtaat gtttatgtcc agcgtgttta tgaggggtcg ccacttaatc 5760

tacctgcgct tgtggtatga tggccacgtg ggttctgtgg tccccgccat gagctttgga 5820

tacagcgcct tgcactgtgg gattttgaac aatattgtgg tgctgtgctg cagttactgt 5880

gctgatttaa gtgagatcag ggtgcgctgc tgtgcccgga ggacaaggcg ccttatgctg 5940

cgggcggtgc gaatcatcgc tgaggagacc actgccatgt tgtattcctg caggacggag 6000

cggcggcggc agcagtttat tcgcgcgctg ctgcagcacc accgccctat cctgatgcac 6060

gattatgact ctacccccat gtagaagctt ggggatcaat tctctagagc tcgctgatca 6120

gcctcgactg tgccttctag ttgccagcca tctgttgttt gcccctcccc cgtgccttcc 6180

ttgaccctgg aaggtgccac tcccactgtc ctttcctaat aaaatgagga aattgcatcg 6240

cattgtctga gtaggtgtca ttctattctg gggggtgggg tggggcagga cagcaagggg 6300

gaggattggg aagacaatag caggcatgct ggggatgcgg tgggctctat ggcttctgag 6360

gaaattgggc gtggcttaag ggtgggaaag aatatataag gtgggggtct tatgtagttt 6420

tgtatctgtt ttgcagcagc cgccgccgcc atgagcacca actcgtttga tggaagcatt 6480

gtgagctcat atttgacaac gcgcatgccc ccatgggccg gggtgcgtca gaatgtgatg 6540

ggctccagca ttgatggtcg ccccgtcctg cccgcaaact ctactacctt gacctacgag 6600

accgtgtctg gaacgccgtt ggagactgca gcctccgccg ccgcttcagc cgctgcagcc 6660

accgcccgcg ggattgtgac tgactttgct ttcctgagcc cgcttgcaag cagtgcagct 6720

tcccgttcat ccgcccgcga tgacaagttg acggctcttt tggcacaatt ggattctttg 6780

acccgggaac ttaatgtcgt ttctcagcag ctgttggatc tgcgccagca ggtttctgcc 6840

ctgaaggctt cctcccctcc caatgcggtt taaaacataa ataaaaaacc agactctgtt 6900

tggatttgga tcaagcaagt gtcttgctgt ctttatttag gggttttgcg cgcgcggtag 6960

gcccgggacc agcggtctcg gtcgttgagg gtcctgtgta ttttttccag gacgtggtaa 7020

aggtgactct ggatgttcag atacatgggc ataagcccgt ctctggggtg gaggtagcac 7080

cactgcagag cttcatgctg cggggtggtg ttgtagatga tccagtcgta gcaggagcgc 7140

tgggcgtggt gcctaaaaat gtctttcagt agcaagctga ttgccagggg caggcccttg 7200

gtgtaagtgt ttacaaagcg gttaagctgg gatgggtgca tacgtgggga tatgagatgc 7260

atcttggact gtatttttag gttggctatg ttcccagcca tatccctccg gggattcatg 7320

ttgtgcagaa ccaccagcac agtgtatccg gtgcacttgg gaaatttgtc atgtagctta 7380

gaaggaaatg cgtggaagaa cttggagacg cccttgtgac ctccaagatt ttccatgcat 7440

tcgtccataa tgatggcaat gggcccacgg gcggcggcct gggcgaagat atttctggga 7500

tcactaacgt catagttgtg ttccaggatg agatcgtcat aggccatttt tacaaagcgc 7560

gggcggaggg tgccagactg cggtataatg gttccatccg gcccaggggc gtagttaccc 7620

tcacagattt gcatttccca cgctttgagt tcagatgggg ggatcatgtc tacctgcggg 7680

gcgatgaaga aaacggtttc cggggtaggg gagatcagct gggaagaaag caggttcctg 7740

agcagctgcg acttaccgca gccggtgggc ccgtaaatca cacctattac cgggtgcaac 7800

tggtagttaa gagagctgca gctgccgtca tccctgagca ggggggccac ttcgttaagc 7860

atgtccctga ctcgcatgtt ttccctgacc aaatccgcca gaaggcgctc gccgcccagc 7920

gatagcagtt cttgcaagga agcaaagttt ttcaacggtt tgagaccgtc cgccgtaggc 7980

atgcttttga gcgtttgacc aagcagttcc aggcggtccc acagctcggt cacctgctct 8040

acggcatctc gatccagcat atctcctcgt ttcgcgggtt ggggcggctt tcgctgtacg 8100

gcagtagtcg gtgctcgtcc agacgggcca gggtcatgtc tttccacggg cgcagggtcc 8160

tcgtcagcgt agtctgggtc acggtgaagg ggtgcgctcc gggctgcgcg ctggccaggg 8220

tgcgcttgag gctggtcctg ctggtgctga agcgctgccg gtcttcgccc tgcgcgtcgg 8280

ccaggtagca tttgaccatg gtgtcatagt ccagcccctc cgcggcgtgg cccttggcgc 8340

gcagcttgcc cttggaggag gcgccgcacg aggggcagtg cagacttttg agggcgtaga 8400

gcttgggcgc gagaaatacc gattccgggg agtaggcatc cgcgccgcag gccccgcaga 8460

cggtctcgca ttccacgagc caggtgagct ctggccgttc ggggtcaaaa accaggtttc 8520

ccccatgctt tttgatgcgt ttcttacctc tggtttccat gagccggtgt ccacgctcgg 8580

tgacgaaaag gctgtccgtg tccccgtata cagacttgag aggcctgtcc tcgagcggtg 8640

ttccgcggtc ctcctcgtat agaaactcgg accactctga gacaaaggct cgcgtccagg 8700

ccagcacgaa ggaggctaag tgggaggggt agcggtcgtt gtccactagg gggtccactc 8760

gctccagggt gtgaagacac atgtcgccct cttcggcatc aaggaaggtg attggtttgt 8820

aggtgtaggc cacgtgaccg ggtgttcctg aaggggggct ataaaagggg gtgggggcgc 8880

gttcgtcctc actctcttcc gcatcgctgt ctgcgagggc cagctgttgg ggtgagtact 8940

ccctctgaaa agcgggcatg acttctgcgc taagattgtc agtttccaaa aacgaggagg 9000

atttgatatt cacctggccc gcggtgatgc ctttgagggt ggccgcatcc atctggtcag 9060

aaaagacaat ctttttgttg tcaagcttgg tggcaaacga cccgtagagg gcgttggaca 9120

gcaacttggc gatggagcgc agggtttggt ttttgtcgcg atcggcgcgc tccttggccg 9180

cgatgtttag ctgcacgtat tcgcgcgcaa cgcaccgcca ttcgggaaag acggtggtgc 9240

gctcgtcggg caccaggtgc acgcgccaac cgcggttgtg cagggtgaca aggtcaacgc 9300

tggtggctac ctctccgcgt aggcgctcgt tggtccagca gaggcggccg cccttgcgcg 9360

agcagaatgg cggtaggggg tctagctgcg tctcgtccgg ggggtctgcg tccacggtaa 9420

agaccccggg cagcaggcgc gcgtcgaagt agtctatctt gcatccttgc aagtctagcg 9480

cctgctgcca tgcgcgggcg gcaagcgcgc gctcgtatgg gttgagtggg ggaccccatg 9540

gcatggggtg ggtgagcgcg gaggcgtaca tgccgcaaat gtcgtaaacg tagaggggct 9600

ctctgagtat tccaagatat gtagggtagc atcttccacc gcggatgctg gcgcgcacgt 9660

aatcgtatag ttcgtgcgag ggagcgagga ggtcgggacc gaggttgcta cgggcgggct 9720

gctctgctcg gaagactatc tgcctgaaga tggcatgtga gttggatgat atggttggac 9780

gctggaagac gttgaagctg gcgtctgtga gacctaccgc gtcacgcacg aaggaggcgt 9840

aggagtcgcg cagcttgttg accagctcgg cggtgacctg cacgtctagg gcgcagtagt 9900

ccagggtttc cttgatgatg tcatacttat cctgtccctt ttttttccac agctcgcggt 9960

tgaggacaaa ctcttcgcgg tctttccagt actcttggat cggaaacccg tcggcctccg 10020

aacggtaaga gcctagcatg tagaactggt tgacggcctg gtaggcgcag catccctttt 10080

ctacgggtag cgcgtatgcc tgcgcggcct tccggagcga ggtgtgggtg agcgcaaagg 10140

tgtccctgac catgactttg aggtactggt atttgaagtc agtgtcgtcg catccgccct 10200

gctcccagag caaaaagtcc gtgcgctttt tggaacgcgg atttggcagg gcgaaggtga 10260

catcgttgaa gagtatcttt cccgcgcgag gcataaagtt gcgtgtgatg cggaagggtc 10320

ccggcacctc ggaacggttg ttaattacct gggcggcgag cacgatctcg tcaaagccgt 10380

tgatgttgtg gcccacaatg taaagttcca agaagcgcgg gatgcccttg atggaaggca 10440

atttttaag ttcctcgtag gtgagctctt caggggagct gagcccgtgc tctgaaaggg 10500

cccagtctgc aagatgaggg ttggaagcga cgaatgagct ccacaggtca cgggccatta 10560

gcatttgcag gtggtcgcga aaggtcctaa actggcgacc tatggccatt ttttctgggg 10620

tgatgcagta gaaggtaagc gggtcttgtt cccagcggtc ccatccaagg ttcgcggcta 10680

ggtctcgcgc ggcagtcact agaggctcat ctccgccgaa cttcatgacc agcatgaagg 10740

gcacgagctg cttcccaaag gcccccatcc aagtataggt ctctacatcg taggtgacaa 10800

agagacgctc ggtgcgagga tgcgagccga tcgggaagaa ctggatctcc cgccaccaat 10860

tggaggagtg gctattgatg tggtgaaagt agaagtccct gcgacgggcc gaacactcgt 10920

gctggctttt gtaaaaacgt gcgcagtact ggcagcggtg cacgggctgt acatcctgca 10980

cgaggttgac ctgacgaccg cgcacaagga agcagagtgg gaatttgagc ccctcgcctg 11040

gcgggtttgg ctggtggtct tctacttcgg ctgcttgtcc ttgaccgtct ggctgctcga 11100

ggggagttac ggtggatcgg accaccacgc cgcgcgagcc caaagtccag atgtccgcgc 11160

gcggcggtcg gagcttgatg acaacatcgc gcagatggga gctgtccatg gtctggagct 11220

cccgcggcgt caggtcaggc gggagctcct gcaggtttac ctcgcataga cgggtcaggg 11280

cgcgggctag atccaggtga tacctaattt ccaggggctg gttggtggcg gcgtcgatgg 11340

cttgcaagag gccgcatccc cgcggcgcga ctacggtacc gcgcggcggg cggtgggccg 11400

cgggggtgtc cttggatgat gcatctaaaa gcggtgacgc gggcgagccc ccggaggtag 11460

gggggctcc ggacccgccg ggagaggggg caggggcacg tcggcgccgc gcgcgggcag 11520

gagctggtgc tgcgcgcgta ggttgctggc gaacgcgacg acgcggcggt tgatctcctg 11580

aatctggcgc ctctgcgtga agacgacggg cccggtgagc ttgaacctga aagagagttc 11640

gacagaatca atttcggtgt cgttgacggc ggcctggcgc aaaatctcct gcacgtctcc 11700

tgagttgtct tgataggcga tctcggccat gaactgctcg atctcttcct cctggagatc 11760

tccgcgtccg gctcgctcca cggtggcggc gaggtcgttg gaaatgcggg ccatgagctg 11820

cgagaaggcg ttgaggcctc cctcgttcca gacgcggctg tagaccacgc ccccttcggc 11880

atcgcgggcg cgcatgacca cctgcgcgag attgagctcc acgtgccggg cgaagacggc 11940

gtagtttcgc aggcgctgaa agaggtagtt gagggtggtg gcggtgtgtt ctgccacgaa 12000

gaagtacata acccagcgtc gcaacgtgga ttcgttgata tcccccaagg cctcaaggcg 12060

ctccatggcc tcgtagaagt ccacggcgaa gttgaaaaac tgggagttgc gcgccgacac 12120

ggttaactcc tcctccagaa gacggatgag ctcggcgaca gtgtcgcgca cctcgcgctc 12180

aaaggctaca ggggcctctt cttcttcttc aatctcctct tccataaggg cctccccttc 12240

ttcttcttct ggcggcggtg ggggaggggg gacacggcgg cgacgacggc gcaccgggag 12300

gcggtcgaca aagcgctcga tcatctcccc gcggcgacgg cgcatggtct cggtgacggc 12360

gcggccgttc tcgcgggggc gcagttggaa gacgccgccc gtcatgtccc ggttatgggt 12420

tggcgggggg ctgccatgcg gcagggatac ggcgctaacg atgcatctca acaattgttg 12480

tgtaggtact ccgccgccga gggacctgag cgagtccgca tcgaccggat cggaaaacct 12540

ctcgagaaag gcgtctaacc agtcacagtc gcaaggtagg ctgagcaccg tggcgggcgg 12600

cagcgggcgg cggtcggggt tgtttctggc ggaggtgctg ctgatgatgt aattaaagta 12660

ggcggtcttg agacggcgga tggtcgacag aagcaccatg tccttgggtc cggcctgctg 12720

aatgcgcagg cggtcggcca tgccccaggc ttcgttttga catcggcgca ggtctttgta 12780

gtagtcttgc atgagccttt ctaccggcac ttcttcttct ccttcctctt gtcctgcatc 12840

tcttgcatct atcgctgcgg cggcggcgga gtttggccgt aggtggcgcc ctcttcctcc 12900

catgcgtgtg accccgaagc ccctcatcgg ctgaagcagg gctaggtcgg cgacaacgcg 12960

ctcggctaat atggcctgct gcacctgcgt gagggtagac tggaagtcat ccatgtccac 13020

aaagcggtgg tatgcgcccg tgttgatggt gtaagtgcag ttggccataa cggaccagtt 13080

aacggtctgg tgacccggct gcgagagctc ggtgtacctg agacgcgagt aagccctcga 13140

gtcaaatacg tagtcgttgc aagtccgcac caggtactgg tatcccacca aaaagtgcgg 13200

cggcggctgg cggtagaggg gccagcgtag ggtggccggg gctccggggg cgagatcttc 13260

caacataagg cgatgatatc cgtagatgta cctggacatc caggtgatgc cggcggcggt 13320

ggtggaggcg cgcggaaagt cgcggacgcg gttccagatg ttgcgcagcg gcaaaaagtg 13380

ctccatggtc gggacgctct ggccggtcag gcgcgcgcaa tcgttgacgc tctagcgtgc 13440

aaaaggagag cctgtaagcg ggcactcttc cgtggtctgg tggataaatt cgcaagggta 13500

tcatggcgga cgaccggggt tcgagccccg tatccggccg tccgccgtga tccatgcggt 13560

taccgcccgc gtgtcgaacc caggtgtgcg acgtcagaca acgggggagt gctccttttg 13620

gcttccttcc aggcgcggcg gctgctgcgc tagcttttt ggccactggc cgcgcgcagc 13680

gtaagcggtt aggctggaaa gcgaaagcat taagtggctc gctccctgta gccggagggt 13740

tattttccaa gggttgagtc gcgggacccc cggttcgagt ctcggaccgg ccggactgcg 13800

gcgaacgggg gtttgcctcc ccgtcatgca agaccccgct tgcaaattcc tccggaaaca 13860

gggacgagcc ccttttttgc ttttcccaga tgcatccggt gctgcggcag atgcgccccc 13920

ctcctcagca gcggcaagag caagagcagc ggcagacatg cagggcaccc tcccctcctc 13980

ctaccgcgtc aggaggggcg acatccgcgg ttgacgcggc agcagatggt gattacgaac 14040

ccccgcggcg ccgggcccgg cactacctgg acttggagga gggcgagggc ctggcgcggc 14100

taggagcgcc ctctcctgag cggcacccaa gggtgcagct gaagcgtgat acgcgtgagg 14160

cgtacgtgcc gcggcagaac ctgtttcgcg accgcgaggg agaggagccc gaggagatgc 14220

gggatcgaaa gttccacgca gggcgcgagc tgcggcatgg cctgaatcgc gagcggttgc 14280

tgcgcgagga ggactttgag cccgacgcgc gaaccgggat tagtcccgcg cgcgcacacg 14340

tggcggccgc cgacctggta accgcatacg agcagacggt gaaccaggag attaactttc 14400

aaaaaagctt taacaaccac gtgcgtacgc ttgtggcgcg cgaggaggtg gctataggac 14460

tgatgcatct gtgggacttt gtaagcgcgc tggagcaaaa cccaaatagc aagccgctca 14520

tggcgcagct gttccttata gtgcagcaca gcagggacaa cgaggcattc agggatgcgc 14580

tgctaaacat agtagagccc gagggccgct ggctgctcga tttgataaac atcctgcaga 14640

gcatagtggt gcaggagcgc agcttgagcc tggctgacaa ggtggccgcc atcaactatt 14700

ccatgcttag cctgggcaag ttttacgccc gcaagatata ccatacccct tacgttccca 14760

tagacaagga ggtaaagatc gaggggttct acatgcgcat ggcgctgaag gtgcttacct 14820

tgagcgacga cctgggcgtt tatcgcaacg agcgcatcca caaggccgtg agcgtgagcc 14880

ggcggcgcga gctcagcgac cgcgagctga tgcacagcct gcaaagggcc ctggctggca 14940

cgggcagcgg cgatagagag gccgagtcct actttgacgc gggcgctgac ctgcgctggg 15000

ccccaagccg acgcgccctg gaggcagctg gggccggacc tgggctggcg gtggcacccg 15060

cgcgcgctgg caacgtcggc ggcgtggagg aatatgacga ggacgatgag tacgagccag 15120

aggacggcga gtactaagcg gtgatgtttc tgatcagatg atgcaagacg caacggaccc 15180

ggcggtgcgg gcggcgctgc agagccagcc gtccggcctt aactccacgg acgactggcg 15240

ccaggtcatg gaccgcatca tgtcgctgac tgcgcgcaat cctgacgcgt tccggcagca 15300

gccgcaggcc aaccggctct ccgcaattct ggaagcggtg gtcccggcgc gcgcaaaccc 15360

cacgcacgag aaggtgctgg cgatcgtaaa cgcgctggcc gaaaacaggg ccatccggcc 15420

cgacgaggcc ggcctggtct acgacgcgct gcttcagcgc gtggctcgtt acaacagcgg 15480

caacgtgcag accaacctgg accggctggt gggggatgtg cgcgaggccg tggcgcagcg 15540

tgagcgcgcg cagcagcagg gcaacctggg ctccatggtt gcactaaacg ccttcctgag 15600

tacacagccc gccaacgtgc cgcggggaca ggaggactac accaactttg tgagcgcact 15660

gcggctaatg gtgactgaga caccgcaaag tgaggtgtac cagtctgggc cagactattt 15720

tttccagacc agtagacaag gcctgcagac cgtaaacctg agccaggctt tcaaaaactt 15780

gcaggggctg tgggggtgc gggctcccac aggcgaccgc gcgaccgtgt ctagcttgct 15840

gacgcccaac tcgcgcctgt tgctgctgct aatagcgccc ttcacggaca gtggcagcgt 15900

gtcccgggac acatacctag gtcacttgct gacactgtac cgcgaggcca taggtcaggc 15960

gcatgtggac gagcatactt tccaggagat tacaagtgtc agccgcgcgc tggggcagga 16020

ggacacgggc agcctggagg caaccctaaa ctacctgctg accaaccggc ggcagaagat 16080

cccctcgttg cacagtttaa acagcgagga ggagcgcatt ttgcgctacg tgcagcagag 16140

cgtgagcctt aacctgatgc gcgacggggt aacgcccagc gtggcgctgg acatgaccgc 16200

gcgcaacatg gaaccgggca tgtatgcctc aaaccggccg tttatcaacc gcctaatgga 16260

ctacttgcat cgcgcggccg ccgtgaaccc cgagtatttc accaatgcca tcttgaaccc 16320

gcactggcta ccgccccctg gtttctacac cgggggattc gaggtgcccg agggtaacga 16380

tggattcctc tgggacgaca tagacgacag cgtgttttcc ccgcaaccgc agaccctgct 16440

agagttgcaa cagcgcgagc aggcagaggc ggcgctgcga aaggaaagct tccgcaggcc 16500

aagcagcttg tccgatctag gcgctgcggc cccgcggtca gatgctagta gcccatttcc 16560

aagcttgata gggtctctta ccagcactcg caccacccgc ccgcgcctgc tgggcgagga 16620

ggagtaccta aacaactcgc tgctgcagcc gcagcgcgaa aaaaacctgc ctccggcatt 16680

tcccaacaac gggatagaga gcctagtgga caagatgagt agatggaaga cgtacgcgca 16740

ggagcacagg gacgtgccag gcccgcgccc gcccacccgt cgtcaaaggc acgaccgtca 16800

gcggggtctg gtgtgggagg acgatgactc ggcagacgac agcagcgtcc tggatttggg 16860

agggagtggc aacccgtttg cgcaccttcg ccccaggctg gggagaatgt tttaaaaaaa 16920

aaaaagcatg atgcaaaata aaaaactcac caaggccatg gcaccgagcg ttggttttct 16980

tgtattcccc ttagtatgcg gcgcgcggcg atgtatgagg aaggtcctcc tccctcctac 17040

gagagtgtgg tgagcgcggc gccagtggcg gcggcgctgg gttctccctt cgatgctccc 17100

ctggacccgc cgtttgtgcc tccgcggtac ctgcggccta ccgggggggag aaacagcatc 17160

cgttactctg agttggcacc cctattcgac accacccgtg tgtacctggt ggacaacaag 17220

tcaacggatg tggcatccct gaactaccag aacgaccaca gcaactttct gaccacggtc 17280

attcaaaaca atgactacag cccgggggag gcaagcacac agaccatcaa tcttgacgac 17340

cggtcgcact ggggcggcga cctgaaaacc atcctgcata ccaacatgcc aaatgtgaac 17400

gagttcatgt ttaccaataa gtttaaggcg cgggtgatgg tgtcgcgctt gcctactaag 17460

gacaatcagg tggagctgaa atacgagtgg gtggagttca cgctgcccga gggcaactac 17520

tccgagacca tgaccataga ccttatgaac aacgcgatcg tggagcacta cttgaaagtg 17580

ggcagacaga acggggttct ggaaagcgac atcggggtaa agtttgacac ccgcaacttc 17640

agactggggt ttgaccccgt cactggtctt gtcatgcctg gggtatatac aaacgaagcc 17700

ttccatccag acatcatttt gctgccagga tgcggggtgg acttcaccca cagccgcctg 17760

agcaacttgt tgggcatccg caagcggcaa cccttccagg agggctttag gatcacctac 17820

gatgatctgg agggtggtaa cattcccgca ctgttggatg tggacgccta ccaggcgagc 17880

ttgaaagatg acaccgaaca gggcgggggt ggcgcaggcg gcagcaacag cagtggcagc 17940

ggcgcggaag agaactccaa cgcggcagcc gcggcaatgc agccggtgga ggacatgaac 18000

gatcatgcca ttcgcggcga cacctttgcc acacgggctg aggagaagcg cgctgaggcc 18060

gaagcagcgg ccgaagctgc cgcccccgct gcgcaacccg aggtcgagaa gcctcagaag 18120

aaaccggtga tcaaacccct gacagaggac agcaagaaac gcagttacaa cctaataagc 18180

aatgacagca ccttcaccca gtaccgcagc tggtaccttg catacaacta cggcgaccct 18240

cagaccggaa tccgctcatg gaccctgctt tgcactcctg acgtaacctg cggctcggag 18300

caggtctact ggtcgttgcc agacatgatg caagaccccg tgaccttccg ctccacgcgc 18360

cagatcagca actttccggt ggtgggcgcc gagctgttgc ccgtgcactc caagagcttc 18420

tacaacgacc aggccgtcta ctcccaactc atccgccagt ttacctctct gacccacgtg 18480

ttcaatcgct ttcccgagaa ccagattttg gcgcgcccgc cagcccccac catcaccacc 18540

gtcagtgaaa acgttcctgc tctcacagat cacgggacgc taccgctgcg caacagcatc 18600

ggaggagtcc agcgagtgac cattactgac gccagacgcc gcacctgccc ctacgtttac 18660

aaggccctgg gcatagtctc gccgcgcgtc ctatcgagcc gcacttttg agcaagcatg 18720

tccatcctta tatcgcccag caataacaca ggctggggcc tgcgcttccc aagcaagatg 18780

tttggcgggg ccaagaagcg ctccgaccaa cacccagtgc gcgtgcgcgg gcactaccgc 18840

gcgccctggg gcgcgcacaa acgcggccgc actgggcgca ccaccgtcga tgacgccatc 18900

gacgcggtgg tggaggaggc gcgcaactac acgcccacgc cgccaccagt gtccacagtg 18960

gacgcggcca ttcagaccgt ggtgcgcgga gcccggcgct atgctaaaat gaagagacgg 19020

cggaggcgcg tagcacgtcg ccaccgccgc cgacccggca ctgccgccca acgcgcggcg 19080

gcggccctgc ttaaccgcgc acgtcgcacc ggccgacggg cggccatgcg ggccgctcga 19140

aggctggccg cgggtattgt cactgtgccc cccaggtcca ggcgacgagc ggccgccgca 19200

gcagccgcgg ccattagtgc tatgactcag ggtcgcaggg gcaacgtgta ttgggtgcgc 19260

gactcggtta gcggcctgcg cgtgcccgtg cgcacccgcc ccccgcgcaa ctagattgca 19320

agaaaaaact acttagactc gtactgttgt atgtatccag cggcggcggc gcgcaacgaa 19380

gctatgtcca agcgcaaaat caaagaagag atgctccagg tcatcgcgcc ggagatctat 19440

ggcccccga agaaggaaga gcaggattac aagccccgaa agctaaagcg ggtcaaaaag 19500

aaaaagaaag atgatgatga tgaacttgac gacgaggtgg aactgctgca cgctaccgcg 19560

cccaggcgac gggtacagtg gaaaggtcga cgcgtaaaac gtgttttgcg acccggcacc 19620

accgtagtct ttacgcccgg tgagcgctcc acccgcacct acaagcgcgt gtatgatgag 19680

gtgtacggcg acgaggacct gcttgagcag gccaacgagc gcctcgggga gtttgcctac 19740

ggaaagcggc ataaggacat gctggcgttg ccgctggacg agggcaaccc aacacctagc 19800

ctaaagcccg taacactgca gcaggtgctg cccgcgcttg caccgtccga agaaaagcgc 19860

ggcctaaagc gcgagtctgg tgacttggca cccaccgtgc agctgatggt acccaagcgc 19920

cagcgactgg aagatgtctt ggaaaaaatg accgtggaac ctgggctgga gcccgaggtc 19980

cgcgtgcggc caatcaagca ggtggcgccg ggactgggcg tgcagaccgt ggacgttcag 20040

atacccacta ccagtagcac cagtattgcc accgccacag agggcatgga gacacaaacg 20100

tccccggttg cctcagcggt ggcggatgcc gcggtgcagg cggtcgctgc ggccgcgtcc 20160

aagacctcta cggaggtgca aacggacccg tggatgtttc gcgtttcagc cccccggcgc 20220

ccgcgccgtt cgaggaagta cggcgccgcc agcgcgctac tgcccgaata tgccctacat 20280

ccttccattg cgcctacccc cggctatcgt ggctacacct accgccccag aagacgagca 20340

actacccgac gccgaaccac cactggaacc cgccgccgcc gtcgccgtcg ccagcccgtg 20400

ctggccccga tttccgtgcg cagggtggct cgcgaaggag gcaggaccct ggtgctgcca 20460

acagcgcgct accaccccag catcgtttaa aagccggtct ttgtggttct tgcagatatg 20520

gccctcacct gccgcctccg tttcccggtg ccgggattcc gaggaagaat gcaccgtagg 20580

aggggcatgg ccggccacgg cctgacgggc ggcatgcgtc gtgcgcacca ccggcggcgg 20640

cgcgcgtcgc accgtcgcat gcgcggcggt atcctgcccc tccttattcc actgatcgcc 20700

gcggcgattg gcgccgtgcc cggaattgca tccgtggcct tgcaggcgca gagacactga 20760

ttaaaaacaa gttgcatgtg gaaaaatcaa aataaaaagt ctggactctc acgctcgctt 20820

ggtcctgtaa ctattttgta gaatggaaga catcaacttt gcgtctctgg ccccgcgaca 20880

cggctcgcgc ccgttcatgg gaaactggca agatatcggc accagcaata tgagcggtgg 20940

cgccttcagc tggggctcgc tgtggagcgg cattaaaaat ttcggttcca ccgttaagaa 21000

ctatggcagc aaggcctgga acagcagcac aggccagatg ctgagggata agttgaaaga 21060

gcaaaatttc caacaaaagg tggtagatgg cctggcctct ggcattagcg gggtggtgga 21120

cctggccaac caggcagtgc aaaataagat taacagtaag cttgatcccc gccctcccgt 21180

agaggagcct ccaccggccg tggagacagt gtctccagag gggcgtggcg aaaagcgtcc 21240

gcgccccgac agggaagaaa ctctggtgac gcaaatagac gagcctccct cgtacgagga 21300

ggcactaaag caaggcctgc ccaccacccg tcccatcgcg cccatggcta ccggagtgct 21360

gggccagcac acacccgtaa cgctggacct gcctcccccc gccgacaccc agcagaaacc 21420

tgtgctgcca ggcccgaccg ccgttgttgt aacccgtcct agccgcgcgt ccctgcgccg 21480

cgccgccagc ggtccgcgat cgttgcggcc cgtagccagt ggcaactggc aaagcacact 21540

gaacagcatc gtgggtctgg gggtgcaatc cctgaagcgc cgacgatgct tctgatagct 21600

aacgtgtcgt atgtgtgtca tgtatgcgtc catgtcgccg ccagaggagc tgctgagccg 21660

ccgcgcgccc gctttccaag atggctaccc cttcgatgat gccgcagtgg tcttacatgc 21720

acatctcggg ccaggacgcc tcggagtacc tgagccccgg gctggtgcag tttgcccgcg 21780

ccaccgagac gtacttcagc ctgaataaca agtttagaaa ccccacggtg gcgcctacgc 21840

acgacgtgac cacagaccgg tcccagcgtt tgacgctgcg gttcatccct gtggaccgtg 21900

aggatactgc gtactcgtac aaggcgcggt tcaccctagc tgtgggtgat aaccgtgtgc 21960

tggacatggc ttccacgtac tttgacatcc gcggcgtgct ggacaggggc cctactttta 22020

agccctactc tggcactgcc tacaacgccc tggctcccaa gggtgcccca aatccttgcg 22080

aatgggatga agctgctact gctcttgaaa taaacctaga agaagaggac gatgacaacg 22140

aagacgaagt agacgagcaa gctgagcagc aaaaaactca cgtatttggg caggcgcctt 22200

attctggtat aaatattaca aaggagggta ttcaaatagg tgtcgaaggt caaacaccta 22260

aatatgccga taaaacattt caacctgaac ctcaaatagg agaatctcag tggtacgaaa 22320

cagaaattaa tcatgcagct gggagagtcc taaaaaagac taccccaatg aaaccatgtt 22380

acggttcata tgcaaaaccc acaaatgaaa atggagggca aggcattctt gtaaagcaac 22440

aaaatggaaa gctagaaagt caagtggaaa tgcaattttt ctcaactact gaggcagccg 22500

caggcaatgg tgataacttg actcctaaag tggtattgta cagtgaagat gtagatatag 22560

aaaccccaga cactcatatt tcttacatgc ccactattaa ggaaggtaac tcacgagaac 22620

taatgggcca acaatctatg cccaacaggc ctaattacat tgcttttagg gacaatttta 22680

ttggtctaat gtattacaac agcacgggta atatgggtgt tctggcgggc caagcatcgc 22740

agttgaatgc tgttgtagat ttgcaagaca gaaacacaga gctttcatac cagcttttgc 22800

ttgattccat tggtgataga accaggtact tttctatgtg gaatcaggct gttgacagct 22860

atgatccaga tgttagaatt attgaaaatc atggaactga agatgaactt ccaaattact 22920

gctttccact gggaggtgtg attaatacag agactcttac caaggtaaaa cctaaaacag 22980

gtcaggaaaa tggatgggaa aaagatgcta cagaattttc agataaaaat gaaataagag 23040

ttggaaataa ttttgccatg gaaatcaatc taaatgccaa cctgtggaga aatttcctgt 23100

actccaacat agcgctgtat ttgcccgaca agctaaagta cagtccttcc aacgtaaaaa 23160

tttctgataa cccaaacacc tacgactaca tgaacaagcg agtggtggct cccgggctag 23220

tggactgcta cattaacctt ggagcacgct ggtcccttga ctatatggac aacgtcaacc 23280

catttaacca ccaccgcaat gctggcctgc gctaccgctc aatgttgctg ggcaatggtc 23340

gctatgtgcc cttccacatc caggtgcctc agaagttctt tgccattaaa aacctccttc 23400

tcctgccggg ctcatacacc tacgagtgga acttcaggaa ggatgttaac atggttctgc 23460

agagctccct aggaaatgac ctaagggttg acggagccag cattaagttt gatagcattt 23520

gcctttacgc caccttcttc cccatggccc acaacaccgc ctccacgctt gaggccatgc 23580

ttagaaacga caccaacgac cagtccttta acgactatct ctccgccgcc aacatgctct 23640

accctatacc cgccaacgct accaacgtgc ccatatccat cccctcccgc aactgggcgg 23700

ctttccgcgg ctgggccttc acgcgcctta agactaagga aaccccatca ctgggctcgg 23760

gctacgaccc ttattacacc tactctggct ctatacccta cctagatgga acctttacc 23820

tcaaccacac ctttaagaag gtggccatta cctttgactc ttctgtcagc tggcctggca 23880

atgaccgcct gcttaccccc aacgagtttg aaattaagcg ctcagttgac ggggagggtt 23940

acaacgttgc ccagtgtaac atgaccaaag actggttcct ggtacaaatg ctagctaact 24000

ataacattgg ctaccagggc ttctatatcc cagagagcta caaggaccgc atgtactcct 24060

tctttagaaa cttccagccc atgagccgtc aggtggtgga tgatactaaa tacaaggact 24120

accaacaggt gggcatccta caccaacaca acaactctgg atttgttggc taccttgccc 24180

ccaccatgcg cgaaggacag gcctaccctg ctaacttccc ctatccgctt ataggcaaga 24240

ccgcagttga cagcattacc cagaaaaagt ttctttgcga tcgcaccctt tggcgcatcc 24300

cattctccag taactttatg tccatgggcg cactcacaga cctgggccaa aaccttctct 24360

acgccaactc cgcccacgcg ctagacatga cttttgaggt ggatcccatg gacgagccca 24420

cccttcttta tgttttgttt gaagtctttg acgtggtccg tgtgcaccag ccgcaccgcg 24480

gcgtcatcga aaccgtgtac ctgcgcacgc ccttctcggc cggcaacgcc acaacataaa 24540

gaagcaagca acatcaacaa cagctgccgc catgggctcc agtgagcagg aactgaaagc 24600

cattgtcaaa gatcttggtt gtgggccata ttttttgggc acctatgaca agcgctttcc 24660

aggctttgtt tctccacaca agctcgcctg cgccatagtc aatacggccg gtcgcgagac 24720

tgggggcgta cactggatgg cctttgcctg gaacccgcac tcaaaaacat gctacctctt 24780

tgagcccttt ggcttttctg accagcgact caagcaggtt taccagtttg agtacgagtc 24840

actcctgcgc cgtagcgcca ttgcttcttc ccccgaccgc tgtataacgc tggaaaagtc 24900

cacccaaagc gtacaggggc ccaactcggc cgcctgtgga ctattctgct gcatgtttct 24960

ccacgccttt gccaactggc cccaaactcc catggatcac aaccccacca tgaaccttat 25020

taccggggta cccaactcca tgctcaacag tccccaggta cagcccaccc tgcgtcgcaa 25080

ccaggaacag ctctacagct tcctggagcg ccactcgccc tacttccgca gccacagtgc 25140

gcagattagg agcgccactt ctttttgtca cttgaaaaac atgtaaaaat aatgtactag 25200

agacactttc aataaaggca aatgctttta tttgtacact ctcgggtgat tatttacccc 25260

caccttgcc gtctgcgccg tttaaaaatc aaaggggttc tgccgcgcat cgctatgcgc 25320

cactggcagg gacacgttgc gatactggtg tttagtgctc cacttaaact caggcacaac 25380

catccgcggc agctcggtga agttttcact ccacaggctg cgcaccatca ccaacgcgtt 25440

tagcaggtcg ggcgccgata tcttgaagtc gcagttgggg cctccgccct gcgcgcgcga 25500

gttgcgatac acagggttgc agcactggaa cactatcagc gccgggtggt gcacgctggc 25560

cagcacgctc ttgtcggaga tcagatccgc gtccaggtcc tccgcgttgc tcagggcgaa 25620

cggagtcaac tttggtagct gccttcccaa aaagggcgcg tgcccaggct ttgagttgca 25680

ctcgcaccgt agtggcatca aaaggtgacc gtgcccggtc tgggcgttag gatacagcgc 25740

ctgcataaaa gccttgatct gcttaaaagc cacctgagcc tttgcgcctt cagagaagaa 25800

catgccgcaa gacttgccgg aaaactgatt ggccggacag gccgcgtcgt gcacgcagca 25860

ccttgcgtcg gtgttggaga tctgcaccac atttcggccc caccggttct tcacgatctt 25920

ggccttgcta gactgctcct tcagcgcgcg ctgcccgttt tcgctcgtca catccatttc 25980

aatcacgtgc tccttattta tcataatgct tccgtgtaga cacttaagct cgccttcgat 26040

ctcagcgcag cggtgcagcc acaacgcgca gcccgtgggc tcgtgatgct tgtaggtcac 26100

ctctgcaaac gactgcaggt acgcctgcag gaatcgcccc atcatcgtca caaaggtctt 26160

gttgctggtg aaggtcagct gcaacccgcg gtgctcctcg ttcagccagg tcttgcatac 26220

ggccgccaga gcttccactt ggtcaggcag tagtttgaag ttcgccttta gatcgttatc 26280

cacgtggtac ttgtccatca gcgcgcgcgc agcctccatg cccttctccc acgcagacac 26340

gatcggcaca ctcagcgggt tcatcaccgt aatttcactt tccgcttcgc tgggctcttc 26400

ctcttcctct tgcgtccgca taccacgcgc cactgggtcg tcttcattca gccgccgcac 26460

tgtgcgctta cctcctttgc catgcttgat tagcaccggt gggttgctga aacccaccat 26520

ttgtagcgcc acatcttctc tttcttcctc gctgtccacg attacctctg gtgatggcgg 26580

gcgctcgggc ttgggagaag ggcgcttctt tttcttcttg ggcgcaatgg ccaaatccgc 26640

cgccgaggtc gatggccgcg ggctgggtgt gcgcggcacc agcgcgtctt gtgatgagtc 26700

ttcctcgtcc tcggactcga tacgccgcct catccgcttt tttgggggcg cccggggagg 26760

cggcggcgac ggggacgggg acgacacgtc ctccatggtt gggggacgtc gcgccgcacc 26820

gcgtccgcgc tcgggggtgg tttcgcgctg ctcctcttcc cgactggcca tttccttctc 26880

ctataggcag aaaaagatca tggagtcagt cgagaagaag gacagcctaa ccgccccctc 26940

tgagttcgcc accaccgcct ccaccgatgc cgccaacgcg cctaccacct tccccgtcga 27000

ggcacccccg cttgaggagg aggaagtgat tatcgagcag gacccaggtt ttgtaagcga 27060

agacgacgag gaccgctcag taccaacaga ggataaaaag caagaccagg acaacgcaga 27120

ggcaaacgag gaacaagtcg ggcgggggga cgaaaggcat ggcgactacc tagatgtggg 27180

agacgacgtg ctgttgaagc atctgcagcg ccagtgcgcc attatctgcg acgcgttgca 27240

agagcgcagc gatgtgcccc tcgccatagc ggatgtcagc cttgcctacg aacgccacct 27300

attctcaccg cgcgtacccc ccaaacgcca agaaaacggc acatgcgagc ccaacccgcg 27360

cctcaacttc taccccgtat ttgccgtgcc agaggtgctt gccacctatc acatcttttt 27420

ccaaaactgc aagatacccc tatcctgccg tgccaaccgc agccgagcgg acaagcagct 27480

ggccttgcgg cagggcgctg tcatacctga tatcgcctcg ctcaacgaag tgccaaaaat 27540

ctttgagggt cttggacgcg acgagaagcg cgcggcaaac gctctgcaac aggaaaacag 27600

cgaaaatgaa agtcactctg gagtgttggt ggaactcgag ggtgacaacg cgcgcctagc 27660

cgtactaaaa cgcagcatcg aggtcaccca ctttgcctac ccggcactta acctaccccc 27720

caaggtcatg agcacagtca tgagtgagct gatcgtgcgc cgtgcgcagc ccctggagag 27780

ggatgcaaat ttgcaagaac aaacagagga gggcctaccc gcagttggcg acgagcagct 27840

agcgcgctgg cttcaaacgc gcgagcctgc cgacttggag gagcgacgca aactaatgat 27900

ggccgcagtg ctcgttaccg tggagcttga gtgcatgcag cggttctttg ctgacccgga 27960

gatgcagcgc aagctagagg aaacattgca ctacaccttt cgacagggct acgtacgcca 28020

ggcctgcaag atctccaacg tggagctctg caacctggtc tcctaccttg gaattttgca 28080

cgaaaaccgc cttgggcaaa acgtgcttca ttccacgctc aagggcgagg cgcgccgcga 28140

ctacgtccgc gactgcgttt acttatttct atgctacacc tggcagacgg ccatgggcgt 28200

ttggcagcag tgcttggagg agtgcaacct caaggagctg cagaaactgc taaagcaaaa 28260

cttgaaggac ctatggacgg ccttcaacga gcgctccgtg gccgcgcacc tggcggacat 28320

cattttcccc gaacgcctgc ttaaaaccct gcaacagggt ctgccagact tcaccagtca 28380

aagcatgttg cagaacttta ggaactttat cctagagcgc tcaggaatct tgcccgccac 28440

ctgctgtgca cttcctagcg actttgtgcc cattaagtac cgcgaatgcc ctccgccgct 28500

ttggggccac tgctaccttc tgcagctagc caactacctt gcctaccact ctgacataat 28560

ggaagacgtg agcggtgacg gtctactgga gtgtcactgt cgctgcaacc tatgcacccc 28620

gcaccgctcc ctggtttgca attcgcagct gcttaacgaa agtcaaatta tcggtacctt 28680

tgagctgcag ggtccctcgc ctgacgaaaa gtccgcggct ccggggttga aactcactcc 28740

ggggctgtgg acgtcggctt accttcgcaa atttgtacct gaggactacc acgcccacga 28800

gattaggttc tacgaagacc aatcccgccc gcctaatgcg gagcttaccg cctgcgtcat 28860

tacccagggc cacattcttg gccaattgca agccatcaac aaagcccgcc aagagtttct 28920

gctacgaaag ggacgggggg tttacttgga cccccagtcc ggcgaggagc tcaacccaat 28980

ccccccgccg ccgcagccct atcagcagca gccgcgggcc cttgcttccc aggatggcac 29040

ccaaaaagaa gctgcagctg ccgccgccac ccacggacga ggaggaatac tgggacagtc 29100

aggcagagga ggttttggac gaggaggagg aggacatgat ggaagactgg gagagcctag 29160

acgaggaagc ttccgaggtc gaagaggtgt cagacgaaac accgtcaccc tcggtcgcat 29220

tcccctcgcc ggcgccccag aaatcggcaa ccggttccag catggctaca acctccgctc 29280

ctcaggcgcc gccggcactg cccgttcgcc gacccaaccg tagatgggac accactggaa 29340

ccagggccgg taagtccaag cagccgccgc cgttagccca agagcaacaa cagcgccaag 29400

gctaccgctc atggcgcggg cacaagaacg ccatagttgc ttgcttgcaa gactgtgggg 29460

gcaacatctc cttcgcccgc cgctttcttc tctaccatca cggcgtggcc ttcccccgta 29520

acatcctgca ttactaccgt catctctaca gcccatactg caccggcggc agcggcagca 29580

acagcagcgg ccacacagaa gcaaaggcga ccggatagca agactctgac aaagcccaag 29640

aaatccacag cggcggcagc agcaggagga ggagcgctgc gtctggcgcc caacgaaccc 29700

gtatcgaccc gcgagcttag aaacaggatt tttcccactc tgtatgctat atttcaacag 29760

agcaggggcc aagaacaaga gctgaaaata aaaaacaggt ctctgcgatc cctcacccgc 29820

agctgcctgt atcacaaaag cgaagatcag cttcggcgca cgctggaaga cgcggaggct 29880

ctcttcagta aatactgcgc gctgactctt aaggactagt ttcgcgccct ttctcaaatt 29940

taagcgcgaa aactacgtca tctccagcgg ccacacccgg cgccagcacc tgttgtcagc 30000

gccattatga gcaaggaaat tcccacgccc tacatgtgga gttaccagcc acaaatggga 30060

cttgcggctg gagctgccca agactactca acccgaataa actacatgag cgcgggaccc 30120

cacatgatat cccgggtcaa cggaatacgc gcccaccgaa accgaattct cctggaacag 30180

gcggctatta ccaccacacc tcgtaataac cttaatcccc gtagttggcc cgctgccctg 30240

gtgtaccagg aaagtcccgc tcccaccact gtggtacttc ccagagacgc ccaggccgaa 30300

gttcagatga ctaactcagg ggcgcagctt gcgggcggct ttcgtcacag ggtgcggtcg 30360

cccgggcagg gtataactca cctgacaatc agagggcgag gtattcagct caacgacgag 30420

tcggtgagct cctcgcttgg tctccgtccg gacgggacat ttcagatcgg cggcgccggc 30480

cgctcttcat tcacgcctcg tcaggcaatc ctaactctgc agacctcgtc ctctgagccg 30540

cgctctggag gcattggaac tctgcaattt attgaggagt ttgtgccatc ggtctacttt 30600

aaccccttct cgggacctcc cggccactat ccggatcaat ttattcctaa ctttgacgcg 30660

gtaaaggact cggcggacgg ctacgactga atgttaagtg gagaggcaga gcaactgcgc 30720

ctgaaacacc tggtccactg tcgccgccac aagtgctttg cccgcgactc cggtgagttt 30780

tgctactttg aattgcccga ggatcatatc gagggcccgg cgcacggcgt ccggcttacc 30840

gcccagggag agcttgcccg tagcctgatt cgggagttta cccagcgccc cctgctagtt 30900

gagcgggaca ggggaccctg tgttctcact gtgatttgca actgtcctaa ccctggatta 30960

catcaagatc ctctagttaa tgtcaggtcg cctaagtcga ttaactagag tacccgggga 31020

tcttattccc tttaactaat aaaaaaaaat aataaagcat cacttactta aaatcagtta 31080

gcaaatttct gtccagttta ttcagcagca cctccttgcc ctcctcccag ctctggtatt 31140

gcagcttcct cctggctgca aactttctcc acaatctaaa tggaatgtca gtttcctcct 31200

gttcctgtcc atccgcaccc actatcttca tgttgttgca gatgaagcgc gcaagaccgt 31260

ctgaagatac cttcaacccc gtgtatccat atgacacgga aaccggtcct ccaactgtgc 31320

cttttcttac tcctcccttt gtatccccca atgggtttca agagagtccc cctggggtac 31380

tctctttgcg cctatccgaa cctctagtta cctccaatgg catgcttgcg ctcaaaatgg 31440

gcaacggcct ctctctggac gaggccggca accttacctc ccaaaatgta accactgtga 31500

gcccacctct caaaaaaacc aagtcaaaca taaacctgga aatatctgca cccctcacag 31560

ttacctcaga agccctaact gtggctgccg ccgcacctct aatggtcgcg ggcaacacac 31620

tcaccatgca atcacaggcc ccgctaaccg tgcacgactc caaacttagc attgccaccc 31680

aaggacccct cacagtgtca gaaggaaagc tagccctgca aacatcaggc cccctcacca 31740

ccaccgatag cagtaccctt actatcactg cctcaccccc tctaactact gccactggta 31800

gcttgggcat tgacttgaaa gagcccattt atacacaaaa tggaaaacta ggactaaagt 31860

acggggctcc tttgcatgta acagacgacc taaacacttt gaccgtagca actggtccag 31920

gtgtgactat taataatact tccttgcaaa ctaaagttac tggagccttg ggttttgatt 31980

cacaaggcaa tatgcaactt aatgtagcag gaggactaag gattgattct caaaacagac 32040

gccttatact tgatgttagt tatccgtttg atgctcaaaa ccaactaaat ctaagactag 32100

gacagggccc tctttttata aactcagccc acaacttgga tattaactac aacaaaggcc 32160

tttacttgtt tacagcttca aacaattcca aaaagcttga ggttaaccta agcactgcca 32220

aggggttgat gtttgacgct acagccatag ccattaatgc aggagatggg cttgaatttg 32280

gttcacctaa tgcaccaaac acaaatcccc tcaaaacaaa aattggccat ggcctagaat 32340

ttgattcaaa caaggctatg gttcctaaac taggaactgg ccttagtttt gacagcacag 32400

gtgccattac agtaggaaac aaaaataatg ataagctaac tttgtggacc ggaataaacc 32460

ctccacctaa ctgtcaaatt gtggaaaaca ctaatacaaa tgatggcaaa cttactttag 32520

tattagtaaa aaatggaggg cttgttaatg gctacgtgtc tctagttggt gtatcagaca 32580

ctgtgaacca aatgttcaca caaaagacag caaacatcca attaagatta tattttgact 32640

cttctggaaa tctattaact gaggaatcag acttaaaaat tccacttaaa aataaatctt 32700

ctacagcgac cagtgaaact gtagccagca gcaaagcctt tatgccaagt actacagctt 32760

atcccttcaa caccactact agggatagtg aaaactacat tcatggaata tgttactaca 32820

tgactagtta tgatagaagt ctatttccct tgaacatttc tataatgcta aacagccgta 32880

tgatttcttc caatgttgcc tatgccatac aatttgaatg gaatctaaat gcaagtgaat 32940

ctccagaaag caacatagct acgctgacca catccccctt tttcttttct tacattacag 33000

aagacgacaa ctaaagaatc gtttgtgtta tgtttcaacg tgtttatttt tcaattgcag 33060

aaaatttcaa gtcatttttc attcagtagt atagccccac caccacatag cttatacaga 33120

tcaccgtacc ttaatcaaac tcacagaacc ctagtattca acctgccacc tccctcccaa 33180

cacacagagt acacagtcct ttctccccgg ctggccttaa aaagcatcat atcatgggta 33240

acagacatat tcttaggtgt tatattccac acggtttcct gtcgagccaa acgctcatca 33300

gtgatattaa taaactcccc gggcagctca cttaagttca tgtcgctgtc cagctgctga 33360

gccacaggct gctgtccaac ttgcggttgc ttaacgggcg gcgaaggaga agtccacgcc 33420

tacatggggg tagagtcata atcgtgcatc aggatagggc ggtggtgctg cagcagcgcg 33480

cgaataaact gctgccgccg ccgctccgtc ctgcaggaat acaacatggc agtggtctcc 33540

tcagcgatga ttcgcaccgc ccgcagcata aggcgccttg tcctccgggc acagcagcgc 33600

accctgatct cacttaaatc agcacagtaa ctgcagcaca gcaccacaat attgttcaaa 33660

atcccacagt gcaaggcgct gtatccaaag ctcatggcgg ggaccacaga acccacgtgg 33720

ccatcatacc acaagcgcag gtagattaag tggcgacccc tcataaacac gctggacata 33780

aacattacct cttttggcat gttgtaattc accacctccc ctctgattaa acatggcgcc 33840

atccaccacc atcctaaacc agctggccaa aacctgcccg ccggctatac actgcaggga 33900

accgggactg gaacaatgac agtggagagc ccaggactcg taaccatgga tcatcatgct 33960

cgtcatgata tcaatgttgg cacaacacag gcacacgtgc atacacttcc tcaggattac 34020

aagctcctcc cgcgttagaa ccatatccca gggaacaacc cattcctgaa tcagcgtaaa 34080

tcccacactg cagggaagac ctcgcacgta actcacgttg tgcattgtca aagtgttaca 34140

ttcgggcagc agcggatgat cctccagtat ggtagcgcgg gtttctgtct caaaaggagg 34200

tagacgatcc ctactgtacg gagtgcgccg agacaaccga gatcgtgttg gtcgtagtgt 34260

catgccaaat ggaacgccgg acgtagtcat atttcctgaa gcaaaaccag gtgcgggcgt 34320

gacaaacaga tctgcgtctc cggtctcgcc gcttagatcg ctctgtgtag tagttgtagt 34380

atatccactc tctcaaagca tccaggcgcc ccctggcttc gggttctatg taaactcctt 34440

catgcgccgc tgccctgata acatccacca ccgcagaata agccacaccc agccaaccta 34500

cacattcgtt ctgcgagtca cacacgggag gagcgggaag agctggaaga accatgtttt 34560

ttttttttatt ccaaaagatt atccaaaacc tcaaaatgaa gatctattaa gtgaacgcgc 34620

tcccctccgg tggcgtggtc aaactctaca gccaaagaac agataatggc atttgtaaga 34680

tgttgcacaa tggcttccaa aaggcaaacg gccctcacgt ccaagtggac gtaaaggcta 34740

aacccttcag ggtgaatctc ctctataaac attccagcac cttcaaccat gcccaaataa 34800

ttctcatctc gccaccttct caatatatct ctaagcaaat cccgaatatt aagtccggcc 34860

attgtaaaaa tctgctccag agcgccctcc accttcagcc tcaagcagcg aatcatgatt 34920

gcaaaaattc aggttcctca cagacctgta taagattcaa aagcggaaca ttaacaaaaa 34980

taccgcgatc ccgtaggtcc cttcgcaggg ccagctgaac ataatcgtgc aggtctgcac 35040

ggaccagcgc ggccacttcc ccgccaggaa ccatgacaaa agaacccaca ctgattatga 35100

cacgcatact cggagctatg ctaaccagcg tagccccgat gtaagcttgt tgcatgggcg 35160

gcgatataaa atgcaaggtg ctgctcaaaa aatcaggcaa agcctcgcgc aaaaaagaaa 35220

gcacatcgta gtcatgctca tgcagataaa ggcaggtaag ctccggaacc accacagaaa 35280

aagacaccat ttttctctca aacatgtctg cgggtttctg cataaacaca aaataaaata 35340

acaaaaaaac atttaaacat tagaagcctg tcttacaaca ggaaaaacaa cccttataag 35400

cataagacgg actacggcca tgccggcgtg accgtaaaaa aactggtcac cgtgattaaa 35460

aagcaccacc gacagctcct cggtcatgtc cggagtcata atgtaagact cggtaaacac 35520

atcaggttga ttcacatcgg tcagtgctaa aaagcgaccg aaatagcccg ggggaataca 35580

tacccgcagg cgtagagaca acattacagc ccccatagga ggtataacaa aattaatagg 35640

agagaaaaac acataaacac ctgaaaaacc ctcctgccta ggcaaaatag caccctcccg 35700

ctccagaaca acatacagcg cttccacagc ggcagccata acagtcagcc ttaccagtaa 35760

aaaagaaaac ctattaaaaa aacaccactc gacacggcac cagctcaatc agtcacagtg 35820

taaaaaaggg ccaagtgcag agcgagtata tataggacta aaaaatgacg taacggttaa 35880

agtccacaaa aaacacccag aaaaccgcac gcgaacctac gcccagaaac gaaagccaaa 35940

aaacccacaa cttcctcaaa tcgtcacttc cgttttccca cgttacgtca cttcccattt 36000

taagaaaact acaattccca acacatacaa gttactccgc cctaaaacct acgtcacccg 36060

ccccgttccc acgccccgcg ccacgtcaca aactccaccc cctcattatc atattggctt 36120

caatccaaaa taaggtatat tattgatgat g 36151

<210> 21
<211> 36401
<212> DNA
<213> Artificial Sequence

<220>
<223> pAdk35F2-Spike/E4orf6(-0.5kb)-pE4dl355(E4re#16)

<400> 21
ttaattaaca tcatcaataa tataccttat tttggattga agccaatatg ataatgaggg 60

ggtggagttt gtgacgtggc gcggggcgtg ggaacggggc gggtgacgta gtagtgtggc 120

ggaagtgtga tgttgcaagt gtggcggaac acatgtaagc gacggatgtg gcaaaagtga 180

cgtttttggt gtgcgccggt gtacacagga agtgacaatt ttcgcgcggt ttaggcgga 240

tgttgtagta aatttgggcg taaccgagta agatttggcc attttcgcgg gaaaactgaa 300

taagaggaag tgaaatctga ataattttgt gttactcata gcgcgtaata atttctgtaa 360

tagtaatcaa ttacggggtc attagttcat agcccatata tggagttccg cgttacataa 420

cttacggtaa atggcccgcc tggctgaccg cccaacgacc cccgcccatt gacgtcaata 480

atgacgtatg ttcccatagt aacgccaata gggactttcc attgacgtca atgggtggag 540

tatttacggt aaactgccca cttggcagta catcaagtgt atcatatgcc aagtacgccc 600

cctattgacg tcaatgacgg taaatggccc gcctggcatt atgcccagta catgacctta 660

tgggactttc ctacttggca gtacatctac gtattagtca tcgctattac catggtgatg 720

cggttttggc agtacatcaa tgggcgtgga tagcggtttg actcacgggg atttccaagt 780

ctccacccca ttgacgtcaa tgggagtttg ttttggcacc aaaatcaacg ggactttcca 840

aaatgtcgta acaactccgc cccattgacg caaatgggcg gtaggcgtgt acggtgggag 900

gtctatataa gcagagctct ccctatcagt gatagagatc tccctatcag tgatagagat 960

cgtcgacgag ctcgtttagt gaaccgtcag atcgcctgga gacgccatcc acgctgtttt 1020

gacctccata gaagacaccg ggaccgatcc agcctccgat ttgccaccat gtttgtgttc 1080

ctggtgctgc tgccactggt gtccagccag tgtgtgaacc tgaccaccag gacccaactt 1140

cctcctgcct acaccaactc cttcaccagg ggagtctact accctgacaa ggtgttcagg 1200

tcctctgtgc tgcacagcac ccaggacctg ttcctgccat tcttcagcaa tgtgacctgg 1260

ttccatgcca tccatgtgtc tggcaccaat ggcaccaaga ggtttgacaa ccctgtgctg 1320

ccattcaatg atggagtcta ctttgccagc acagagaaga gcaacatcat caggggctgg 1380

atttttggca ccaccctgga cagcaagacc cagtccctgc tgattgtgaa caatgccacc 1440

aatgtggtga ttaaggtgtg tgagttccag ttctgtaatg acccattcct gggagtctac 1500

taccacaaga acaacaagtc ctggatggag tctgagttca gggtctactc ctctgccaac 1560

aactgtacct ttgaatatgt gagccaacca ttcctgatgg acttggaggg caagcagggc 1620

aacttcaaga acctgaggga gtttgtgttc aagaacattg atggctactt caagatttac 1680

agcaaacaca caccaatcaa cctggtgagg gacctgccac agggcttctc tgccttggaa 1740

ccactggtgg acctgccaat tggcatcaac atcaccaggt tccagaccct gctggctctg 1800

cacaggtcct acctgacacc tggagactcc tcctctggct ggacagcagg agcagcagcc 1860

tactatgtgg gctacctcca accaaggacc ttcctgctga aatacaatga gaatggcacc 1920

atcacagatg ctgtggactg tgccctggac ccactgtctg agaccaagtg taccctgaaa 1980

tccttcacag tggagaaggg catctaccag accagcaact tcagggtcca accaacagag 2040

agcattgtga ggtttccaaa catcaccaac ctgtgtccat ttggagaggt gttcaatgcc 2100

accaggtttg cctctgtcta tgcctggaac aggaagagga ttagcaactg tgtggctgac 2160

tactctgtgc tctacaactc tgcctccttc agcaccttca agtgttatgg agtgagccca 2220

accaaactga atgacctgtg tttcaccaat gtctatgctg actcctttgt gattagggga 2280

gatgaggtga gacagattgc ccctggacaa acaggcaaga ttgctgacta caactacaaa 2340

ctgcctgatg acttcacagg ctgtgtgatt gcctggaaca gcaacaacct ggacagcaag 2400

gtgggaggca actacaacta cctctacaga ctgttcagga agagcaacct gaaaccattt 2460

gagagggaca tcagcacaga gatttaccag gctggcagca caccatgtaa tggagtggag 2520

ggcttcaact gttactttcc actccaatcc tatggcttcc aaccaaccaa tggagtgggc 2580

taccaaccat acagggtggt ggtgctgtcc tttgaactgc tccatgcccc tgccacagtg 2640

tgtggaccaa agaagagcac caacctggtg aagaacaagt gtgtgaactt caacttcaat 2700

ggactgacag gcacaggagt gctgacagag agcaacaaga agttcctgcc attccaacag 2760

tttggcaggg acattgctga caccacagat gctgtgaggg acccacagac cttggagatt 2820

ctggacatca caccatgttc ctttggagga gtgtctgtga ttacacctgg caccaacacc 2880

agcaaccagg tggctgtgct ctaccaggat gtgaactgta ctgaggtgcc tgtggctatc 2940

catgctgacc aacttacacc aacctggagg gtctacagca caggcagcaa tgtgttccag 3000

accagggctg gctgtctgat tggagcagag catgtgaaca actcctatga gtgtgacatc 3060

ccaattggag caggcatctg tgcctcctac cagacccaga ccggtggcgg tgggtcgagg 3120

tctgtggcaa gccagagcat cattgcctac acaatgagtc tgggagcaga gaactctgtg 3180

gcttacagca acaacagcat tgccatccca accaacttca ccatctctgt gaccacagag 3240

attctgcctg tgagtatgac caagacctct gtggactgta caatgtatat ctgtggagac 3300

agcacagagt gtagcaacct gctgctccaa tatggctcct tctgtaccca acttaacagg 3360

gctctgacag gcattgctgt ggaacaggac aagaacaccc aggaggtgtt tgcccaggtg 3420

aagcagattt acaagacacc tccaatcaag gactttggag gcttcaactt cagccagatt 3480

ctgcctgacc caagcaagcc aagcaagagg tccttcattg aggacctgct gttcaacaag 3540

gtgaccctgg ctgatgctgg cttcatcaag caatatggag actgtctggg agacattgct 3600

gccagggacc tgatttgtgc ccagaagttc aatggactga cagtgctgcc tccactgctg 3660

acagatgaga tgattgccca atacacctct gccctgctgg ctggcaccat cacctctggc 3720

tggacctttg gagcaggagc agccctccaa atcccatttg ctatgcagat ggcttacagg 3780

ttcaatggca ttggagtgac ccagaatgtg ctctatgaga accagaaact gattgccaac 3840

cagttcaact ctgccattgg caagattcag gactccctgt ccagcacagc ctctgccctg 3900

ggcaaactcc aagatgtggt gaaccagaat gcccaggctc tgaacaccct ggtgaagcaa 3960

ctttccagca actttggagc catctcctct gtgctgaatg acatcctgag cagactggac 4020

aaggtggagg ctgaggtcca gattgacaga ctgattacag gcagactcca atccctccaa 4080

acctatgtga cccaacaact tatcagggct gctgagatta gggcatctgc caacctggct 4140

gccaccaaga tgagtgagtg tgtgctggga caaagcaaga gggtggactt ctgtggcaag 4200

ggctaccacc tgatgagttt tccacagtct gcccctcatg gagtggtgtt cctgcatgtg 4260

acctatgtgc ctgcccagga gaagaacttc accacagccc ctgccatctg ccatgatggc 4320

aaggctcact ttccaaggga gggagtgttt gtgagcaatg gcacccactg gtttgtgacc 4380

cagaggaact tctatgaacc acagattatc accacagaca acacctttgt gtctggcaac 4440

tgtgatgtgg tgattggcat tgtgaacaac acagtctatg acccactcca acctgaactg 4500

gactccttca aggaggaact ggacaaatac ttcaagaacc acaccagccc tgatgtggac 4560

ctgggagaca tctctggcat caatgcctct gtggtgaaca tccagaagga gattgacaga 4620

ctgaatgagg tggctaagaa cctgaatgag tccctgattg acctccaaga actgggcaaa 4680

tatgaacaat acatcaagtg gccatgaaaa ttgatcataa tcagccatac cacatttgta 4740

gaggttttac ttgctttaaa aaacctccca cacctccccc tgaacctgaa acataaaatg 4800

aatgcaattg ttgttgttaa cttgtttatt gcagcttata atggttacaa ataaagcaat 4860

agcatcacaa atttcacaaa taaagcattt ttttcactgc attctagttg tggtttgtcc 4920

aaactcatca atgtatctta acgcggatca tggttgaagg tgctggaatg tttatagagg 4980

agattcaccc tgaagggttt agcctttacg tccacttgga cgtgagggcc gtttgccttt 5040

tggaagccat tgtgcaacat cttacaaatg ccattatctg ttctttggct gtagagtttg 5100

accacgccac cggaggggag cgcgttcact taatagatct tcattttgag gttttggata 5160

atcttttgga ataaaaaaaa aaacatggtt cttccagctc ttcccgctcc tcccgtgtgt 5220

gactcgcaga acgaatgtgt aggttggctg ggtgtggctt attctgcggt ggtggatgtt 5280

atcagggcag cggcgcatga aggagtttac atagaacccg aagccagggg gcgcctggat 5340

gctttgagag agtggatata ctacaactac tacacagagc gatctaagcg gcgagaccgg 5400

agacgcagat ctgtttgtca cgcccgcacc tggttttgct tcaggaaata tgactacgtc 5460

cggcgttcca tttggcatga cactacgacc aacacgatct cggttgtctc ggcgcactcc 5520

gtacagtagg gatcgtctac ctccttttga gacagaaacc cgcgctacca tactggagga 5580

tcatccgctg ctgcccgaat gtaacacttt gacaatgcac aacgtgagtt acgtgcgagg 5640

tcttccctgc agtgtgggat ttacgctgat tcaggaatgg gttgttccct gggatatggt 5700

tctaacgcgg gaggagcttg taatcctgag gaagtgtatg cacgtgtgcc tgtgttgtgc 5760

caacattgat atcatgacga gcatgatgat ccatggttac gagtcctggg ctctccactg 5820

tcattgttcc agtcccggtt ccctgcagtg tatagccggc gggcaggttt tggccagctg 5880

gtttaggatg gtggtggatg gcgccatgtt taatcagagg tttatatggt accgggaggt 5940

ggtgaattac aacatgccaa aagaggtaat gtttatgtcc agcgtgttta tgaggggtcg 6000

ccacttaatc tacctgcgct tgtggtatga tggccacgtg ggttctgtgg tccccgccat 6060

gagctttgga tacagcgcct tgcactgtgg gattttgaac aatattgtgg tgctgtgctg 6120

cagttactgt gctgatttaa gtgagatcag ggtgcgctgc tgtgcccgga ggacaaggcg 6180

ccttatgctg cgggcggtgc gaatcatcgc tgaggagacc actgccatgt tgtattcctg 6240

caggacggag cggcggcggc agcagtttat tcgcgcgctg ctgcagcacc accgccctat 6300

cctgatgcac gattatgact ctacccccat gtagaagctt ggggatcaat tctctagagc 6360

tcgctgatca gcctcgactg tgccttctag ttgccagcca tctgttgttt gcccctcccc 6420

cgtgccttcc ttgaccctgg aaggtgccac tcccactgtc ctttcctaat aaaatgagga 6480

aattgcatcg cattgtctga gtaggtgtca ttctattctg gggggtgggg tggggcagga 6540

cagcaagggg gaggattggg aagacaatag caggcatgct ggggatgcgg tgggctctat 6600

ggcttctgag gaaattgggc gtggcttaag ggtgggaaag aatatataag gtgggggtct 6660

tatgtagttt tgtatctgtt ttgcagcagc cgccgccgcc atgagcacca actcgtttga 6720

tggaagcatt gtgagctcat atttgacaac gcgcatgccc ccatgggccg gggtgcgtca 6780

gaatgtgatg ggctccagca ttgatggtcg ccccgtcctg cccgcaaact ctactacctt 6840

gacctacgag accgtgtctg gaacgccgtt ggagactgca gcctccgccg ccgcttcagc 6900

cgctgcagcc accgcccgcg ggattgtgac tgactttgct ttcctgagcc cgcttgcaag 6960

cagtgcagct tcccgttcat ccgcccgcga tgacaagttg acggctcttt tggcacaatt 7020

ggattctttg acccgggaac ttaatgtcgt ttctcagcag ctgttggatc tgcgccagca 7080

ggtttctgcc ctgaaggctt cctcccctcc caatgcggtt taaaacataa ataaaaaacc 7140

agactctgtt tggatttgga tcaagcaagt gtcttgctgt ctttatttag gggttttgcg 7200

cgcgcggtag gcccgggacc agcggtctcg gtcgttgagg gtcctgtgta ttttttccag 7260

gacgtggtaa aggtgactct ggatgttcag atacatgggc ataagcccgt ctctggggtg 7320

gaggtagcac cactgcagag cttcatgctg cggggtggtg ttgtagatga tccagtcgta 7380

gcaggagcgc tgggcgtggt gcctaaaaat gtctttcagt agcaagctga ttgccagggg 7440

caggcccttg gtgtaagtgt ttacaaagcg gttaagctgg gatgggtgca tacgtgggga 7500

tatgagatgc atcttggact gtatttttag gttggctatg ttcccagcca tatccctccg 7560

gggattcatg ttgtgcagaa ccaccagcac agtgtatccg gtgcacttgg gaaatttgtc 7620

atgtagctta gaaggaaatg cgtggaagaa cttggagacg cccttgtgac ctccaagatt 7680

ttccatgcat tcgtccataa tgatggcaat gggcccacgg gcggcggcct gggcgaagat 7740

atttctggga tcactaacgt catagttgtg ttccaggatg agatcgtcat aggccatttt 7800

tacaaagcgc gggcggaggg tgccagactg cggtataatg gttccatccg gcccaggggc 7860

gtagttaccc tcacagattt gcatttccca cgctttgagt tcagatgggg ggatcatgtc 7920

tacctgcggg gcgatgaaga aaacggtttc cggggtaggg gagatcagct gggaagaaag 7980

caggttcctg agcagctgcg acttaccgca gccggtgggc ccgtaaatca cacctattac 8040

cgggtgcaac tggtagttaa gagagctgca gctgccgtca tccctgagca ggggggccac 8100

ttcgttaagc atgtccctga ctcgcatgtt ttccctgacc aaatccgcca gaaggcgctc 8160

gccgcccagc gatagcagtt cttgcaagga agcaaagttt ttcaacggtt tgagaccgtc 8220

cgccgtaggc atgcttttga gcgtttgacc aagcagttcc aggcggtccc acagctcggt 8280

cacctgctct acggcatctc gatccagcat atctcctcgt ttcgcgggtt ggggcggctt 8340

tcgctgtacg gcagtagtcg gtgctcgtcc agacgggcca gggtcatgtc tttccacggg 8400

cgcagggtcc tcgtcagcgt agtctgggtc acggtgaagg ggtgcgctcc gggctgcgcg 8460

ctggccaggg tgcgcttgag gctggtcctg ctggtgctga agcgctgccg gtcttcgccc 8520

tgcgcgtcgg ccaggtagca tttgaccatg gtgtcatagt ccagcccctc cgcggcgtgg 8580

cccttggcgc gcagcttgcc cttggaggag gcgccgcacg aggggcagtg cagacttttg 8640

agggcgtaga gcttgggcgc gagaaatacc gattccgggg agtaggcatc cgcgccgcag 8700

gccccgcaga cggtctcgca ttccacgagc caggtgagct ctggccgttc ggggtcaaaa 8760

accaggtttc ccccatgctt tttgatgcgt ttcttacctc tggtttccat gagccggtgt 8820

ccacgctcgg tgacgaaaag gctgtccgtg tccccgtata cagacttgag aggcctgtcc 8880

tcgagcggtg ttccgcggtc ctcctcgtat agaaactcgg accactctga gacaaaggct 8940

cgcgtccagg ccagcacgaa ggaggctaag tgggaggggt agcggtcgtt gtccactagg 9000

gggtccactc gctccagggt gtgaagacac atgtcgccct cttcggcatc aaggaaggtg 9060

attggtttgt aggtgtaggc cacgtgaccg ggtgttcctg aaggggggct ataaaagggg 9120

gtgggggcgc gttcgtcctc actctcttcc gcatcgctgt ctgcgagggc cagctgttgg 9180

ggtgagtact ccctctgaaa agcgggcatg acttctgcgc taagattgtc agtttccaaa 9240

aacgaggagg atttgatatt cacctggccc gcggtgatgc ctttgagggt ggccgcatcc 9300

atctggtcag aaaagacaat ctttttgttg tcaagcttgg tggcaaacga cccgtagagg 9360

gcgttggaca gcaacttggc gatggagcgc agggtttggt ttttgtcgcg atcggcgcgc 9420

tccttggccg cgatgtttag ctgcacgtat tcgcgcgcaa cgcaccgcca ttcgggaaag 9480

acggtggtgc gctcgtcggg caccaggtgc acgcgccaac cgcggttgtg cagggtgaca 9540

aggtcaacgc tggtggctac ctctccgcgt aggcgctcgt tggtccagca gaggcggccg 9600

ccttgcgcg agcagaatgg cggtaggggg tctagctgcg tctcgtccgg ggggtctgcg 9660

tccacggtaa agaccccggg cagcaggcgc gcgtcgaagt agtctatctt gcatccttgc 9720

aagtctagcg cctgctgcca tgcgcgggcg gcaagcgcgc gctcgtatgg gttgagtggg 9780

ggaccccatg gcatggggtg ggtgagcgcg gaggcgtaca tgccgcaaat gtcgtaaacg 9840

tagaggggct ctctgagtat tccaagatat gtagggtagc atcttccacc gcggatgctg 9900

gcgcgcacgt aatcgtatag ttcgtgcgag ggagcgagga ggtcgggacc gaggttgcta 9960

cgggcgggct gctctgctcg gaagactatc tgcctgaaga tggcatgtga gttggatgat 10020

atggttggac gctggaagac gttgaagctg gcgtctgtga gacctaccgc gtcacgcacg 10080

aaggaggcgt aggagtcgcg cagcttgttg accagctcgg cggtgacctg cacgtctagg 10140

gcgcagtagt ccagggtttc cttgatgatg tcatacttat cctgtccctt ttttttccac 10200

agctcgcggt tgaggacaaa ctcttcgcgg tctttccagt actcttggat cggaaacccg 10260

tcggcctccg aacggtaaga gcctagcatg tagaactggt tgacggcctg gtaggcgcag 10320

catccctttt ctacgggtag cgcgtatgcc tgcgcggcct tccggagcga ggtgtgggtg 10380

agcgcaaagg tgtccctgac catgactttg aggtactggt atttgaagtc agtgtcgtcg 10440

catccgccct gctcccagag caaaaagtcc gtgcgctttt tggaacgcgg atttggcagg 10500

gcgaaggtga catcgttgaa gagtatcttt cccgcgcgag gcataaagtt gcgtgtgatg 10560

cggaagggtc ccggcacctc ggaacggttg ttaattacct gggcggcgag cacgatctcg 10620

tcaaagccgt tgatgttgtg gcccacaatg taaagttcca agaagcgcgg gatgcccttg 10680

atggaaggca atttttaag ttcctcgtag gtgagctctt caggggagct gagcccgtgc 10740

tctgaaaggg cccagtctgc aagatgaggg ttggaagcga cgaatgagct ccacaggtca 10800

cgggccatta gcatttgcag gtggtcgcga aaggtcctaa actggcgacc tatggccatt 10860

ttttctgggg tgatgcagta gaaggtaagc gggtcttgtt cccagcggtc ccatccaagg 10920

ttcgcggcta ggtctcgcgc ggcagtcact agaggctcat ctccgccgaa cttcatgacc 10980

agcatgaagg gcacgagctg cttcccaaag gcccccatcc aagtataggt ctctacatcg 11040

taggtgacaa agagacgctc ggtgcgagga tgcgagccga tcgggaagaa ctggatctcc 11100

cgccaccaat tggaggagtg gctattgatg tggtgaaagt agaagtccct gcgacgggcc 11160

gaacactcgt gctggctttt gtaaaaacgt gcgcagtact ggcagcggtg cacgggctgt 11220

acatcctgca cgaggttgac ctgacgaccg cgcacaagga agcagagtgg gaatttgagc 11280

ccctcgcctg gcgggtttgg ctggtggtct tctacttcgg ctgcttgtcc ttgaccgtct 11340

ggctgctcga ggggagttac ggtggatcgg accaccacgc cgcgcgagcc caaagtccag 11400

atgtccgcgc gcggcggtcg gagcttgatg acaacatcgc gcagatggga gctgtccatg 11460

gtctggagct cccgcggcgt caggtcaggc gggagctcct gcaggtttac ctcgcataga 11520

cgggtcaggg cgcgggctag atccaggtga tacctaattt ccaggggctg gttggtggcg 11580

gcgtcgatgg cttgcaagag gccgcatccc cgcggcgcga ctacggtacc gcgcggcggg 11640

cggtgggccg cgggggtgtc cttggatgat gcatctaaaa gcggtgacgc gggcgagccc 11700

ccggaggtag ggggggctcc ggacccgccg ggagaggggg caggggcacg tcggcgccgc 11760

gcgcgggcag gagctggtgc tgcgcgcgta ggttgctggc gaacgcgacg acgcggcggt 11820

tgatctcctg aatctggcgc ctctgcgtga agacgacggg cccggtgagc ttgaacctga 11880

aagagagttc gacagaatca atttcggtgt cgttgacggc ggcctggcgc aaaatctcct 11940

gcacgtctcc tgagttgtct tgataggcga tctcggccat gaactgctcg atctcttcct 12000

cctggagatc tccgcgtccg gctcgctcca cggtggcggc gaggtcgttg gaaatgcggg 12060

ccatgagctg cgagaaggcg ttgaggcctc cctcgttcca gacgcggctg tagaccacgc 12120

ccccttcggc atcgcgggcg cgcatgacca cctgcgcgag attgagctcc acgtgccggg 12180

cgaagacggc gtagtttcgc aggcgctgaa agaggtagtt gagggtggtg gcggtgtgtt 12240

ctgccacgaa gaagtacata acccagcgtc gcaacgtgga ttcgttgata tcccccaagg 12300

cctcaaggcg ctccatggcc tcgtagaagt ccacggcgaa gttgaaaaac tgggagttgc 12360

gcgccgacac ggttaactcc tcctccagaa gacggatgag ctcggcgaca gtgtcgcgca 12420

cctcgcgctc aaaggctaca ggggcctctt cttcttcttc aatctcctct tccataaggg 12480

cctccccttc ttcttcttct ggcggcggtg ggggaggggg gacacggcgg cgacgacggc 12540

gcaccgggag gcggtcgaca aagcgctcga tcatctcccc gcggcgacgg cgcatggtct 12600

cggtgacggc gcggccgttc tcgcgggggc gcagttggaa gacgccgccc gtcatgtccc 12660

ggttatgggt tggcgggggg ctgccatgcg gcagggatac ggcgctaacg atgcatctca 12720

acaattgttg tgtaggtact ccgccgccga gggacctgag cgagtccgca tcgaccggat 12780

cggaaaacct ctcgagaaag gcgtctaacc agtcacagtc gcaaggtagg ctgagcaccg 12840

tggcgggcgg cagcgggcgg cggtcggggt tgtttctggc ggaggtgctg ctgatgatgt 12900

aattaaagta ggcggtcttg agacggcgga tggtcgacag aagcaccatg tccttgggtc 12960

cggcctgctg aatgcgcagg cggtcggcca tgccccaggc ttcgttttga catcggcgca 13020

ggtctttgta gtagtcttgc atgagccttt ctaccggcac ttcttcttct ccttcctctt 13080

gtcctgcatc tcttgcatct atcgctgcgg cggcggcgga gtttggccgt aggtggcgcc 13140

ctcttcctcc catgcgtgtg accccgaagc ccctcatcgg ctgaagcagg gctaggtcgg 13200

cgacaacgcg ctcggctaat atggcctgct gcacctgcgt gagggtagac tggaagtcat 13260

ccatgtccac aaagcggtgg tatgcgcccg tgttgatggt gtaagtgcag ttggccataa 13320

cggaccagtt aacggtctgg tgacccggct gcgagagctc ggtgtacctg agacgcgagt 13380

aagccctcga gtcaaatacg tagtcgttgc aagtccgcac caggtactgg tatcccacca 13440

aaaagtgcgg cggcggctgg cggtagaggg gccagcgtag ggtggccggg gctccggggg 13500

cgagatcttc caacataagg cgatgatatc cgtagatgta cctggacatc caggtgatgc 13560

cggcggcggt ggtggaggcg cgcggaaagt cgcggacgcg gttccagatg ttgcgcagcg 13620

gcaaaaagtg ctccatggtc gggacgctct ggccggtcag gcgcgcgcaa tcgttgacgc 13680

tctagcgtgc aaaaggagag cctgtaagcg ggcactcttc cgtggtctgg tggataaatt 13740

cgcaagggta tcatggcgga cgaccggggt tcgagccccg tatccggccg tccgccgtga 13800

tccatgcggt taccgcccgc gtgtcgaacc caggtgtgcg acgtcagaca acgggggagt 13860

gctccttttg gcttccttcc aggcgcggcg gctgctgcgc tagcttttt ggccactggc 13920

cgcgcgcagc gtaagcggtt aggctggaaa gcgaaagcat taagtggctc gctccctgta 13980

gccggagggt tattttccaa gggttgagtc gcgggacccc cggttcgagt ctcggaccgg 14040

ccggactgcg gcgaacgggg gtttgcctcc ccgtcatgca agaccccgct tgcaaattcc 14100

tccggaaaca gggacgagcc ccttttttgc ttttcccaga tgcatccggt gctgcggcag 14160

atgcgccccc ctcctcagca gcggcaagag caagagcagc ggcagacatg cagggcaccc 14220

tcccctcctc ctaccgcgtc aggaggggcg acatccgcgg ttgacgcggc agcagatggt 14280

gattacgaac ccccgcggcg ccgggcccgg cactacctgg acttggagga gggcgagggc 14340

ctggcgcggc taggagcgcc ctctcctgag cggcacccaa gggtgcagct gaagcgtgat 14400

acgcgtgagg cgtacgtgcc gcggcagaac ctgtttcgcg accgcgaggg agaggagccc 14460

gaggagatgc gggatcgaaa gttccacgca gggcgcgagc tgcggcatgg cctgaatcgc 14520

gagcggttgc tgcgcgagga ggactttgag cccgacgcgc gaaccgggat tagtcccgcg 14580

cgcgcacacg tggcggccgc cgacctggta accgcatacg agcagacggt gaaccaggag 14640

attaactttc aaaaaagctt taacaaccac gtgcgtacgc ttgtggcgcg cgaggaggtg 14700

gctataggac tgatgcatct gtgggacttt gtaagcgcgc tggagcaaaa cccaaatagc 14760

aagccgctca tggcgcagct gttccttata gtgcagcaca gcagggacaa cgaggcattc 14820

agggatgcgc tgctaaacat agtagagccc gagggccgct ggctgctcga tttgataaac 14880

atcctgcaga gcatagtggt gcaggagcgc agcttgagcc tggctgacaa ggtggccgcc 14940

atcaactatt ccatgcttag cctgggcaag ttttacgccc gcaagatata ccatacccct 15000

tacgttccca tagacaagga ggtaaagatc gaggggttct acatgcgcat ggcgctgaag 15060

gtgcttacct tgagcgacga cctgggcgtt tatcgcaacg agcgcatcca caaggccgtg 15120

agcgtgagcc ggcggcgcga gctcagcgac cgcgagctga tgcacagcct gcaaagggcc 15180

ctggctggca cgggcagcgg cgatagagag gccgagtcct actttgacgc gggcgctgac 15240

ctgcgctggg ccccaagccg acgcgccctg gaggcagctg gggccggacc tgggctggcg 15300

gtggcacccg cgcgcgctgg caacgtcggc ggcgtggagg aatatgacga ggacgatgag 15360

tacgagccag aggacggcga gtactaagcg gtgatgtttc tgatcagatg atgcaagacg 15420

caacggaccc ggcggtgcgg gcggcgctgc agagccagcc gtccggcctt aactccacgg 15480

acgactggcg ccaggtcatg gaccgcatca tgtcgctgac tgcgcgcaat cctgacgcgt 15540

tccggcagca gccgcaggcc aaccggctct ccgcaattct ggaagcggtg gtcccggcgc 15600

gcgcaaaccc cacgcacgag aaggtgctgg cgatcgtaaa cgcgctggcc gaaaacaggg 15660

ccatccggcc cgacgaggcc ggcctggtct acgacgcgct gcttcagcgc gtggctcgtt 15720

acaacagcgg caacgtgcag accaacctgg accggctggt gggggatgtg cgcgaggccg 15780

tggcgcagcg tgagcgcgcg cagcagcagg gcaacctggg ctccatggtt gcactaaacg 15840

ccttcctgag tacacagccc gccaacgtgc cgcggggaca ggaggactac accaactttg 15900

tgagcgcact gcggctaatg gtgactgaga caccgcaaag tgaggtgtac cagtctgggc 15960

cagactattt tttccagacc agtagacaag gcctgcagac cgtaaacctg agccaggctt 16020

tcaaaaactt gcaggggctg tgggggggtgc gggctcccac aggcgaccgc gcgaccgtgt 16080

ctagcttgct gacgcccaac tcgcgcctgt tgctgctgct aatagcgccc ttcacggaca 16140

gtggcagcgt gtcccgggac acatacctag gtcacttgct gacactgtac cgcgaggcca 16200

taggtcaggc gcatgtggac gagcatactt tccaggagat tacaagtgtc agccgcgcgc 16260

tggggcagga ggacacgggc agcctggagg caaccctaaa ctacctgctg accaaccggc 16320

ggcagaagat cccctcgttg cacagtttaa acagcgagga ggagcgcatt ttgcgctacg 16380

tgcagcagag cgtgagcctt aacctgatgc gcgacggggt aacgcccagc gtggcgctgg 16440

acatgaccgc gcgcaacatg gaaccgggca tgtatgcctc aaaccggccg tttatcaacc 16500

gcctaatgga ctacttgcat cgcgcggccg ccgtgaaccc cgagtatttc accaatgcca 16560

tcttgaaccc gcactggcta ccgccccctg gtttctacac cgggggattc gaggtgcccg 16620

agggtaacga tggattcctc tgggacgaca tagacgacag cgtgttttcc ccgcaaccgc 16680

agaccctgct agagttgcaa cagcgcgagc aggcagaggc ggcgctgcga aaggaaagct 16740

tccgcaggcc aagcagcttg tccgatctag gcgctgcggc cccgcggtca gatgctagta 16800

gcccatttcc aagcttgata gggtctctta ccagcactcg caccacccgc ccgcgcctgc 16860

tgggcgagga ggagtaccta aacaactcgc tgctgcagcc gcagcgcgaa aaaaacctgc 16920

ctccggcatt tcccaacaac gggatagaga gcctagtgga caagatgagt agatggaaga 16980

cgtacgcgca ggagcacagg gacgtgccag gcccgcgccc gcccacccgt cgtcaaaggc 17040

acgaccgtca gcggggtctg gtgtgggagg acgatgactc ggcagacgac agcagcgtcc 17100

tggatttggg agggagtggc aacccgtttg cgcaccttcg ccccaggctg gggagaatgt 17160

tttaaaaaaa aaaaagcatg atgcaaaata aaaaactcac caaggccatg gcaccgagcg 17220

ttggttttct tgtattcccc ttagtatgcg gcgcgcggcg atgtatgagg aaggtcctcc 17280

tccctcctac gagagtgtgg tgagcgcggc gccagtggcg gcggcgctgg gttctccctt 17340

cgatgctccc ctggacccgc cgtttgtgcc tccgcggtac ctgcggccta ccgggggggag 17400

aaacagcatc cgttactctg agttggcacc cctattcgac accacccgtg tgtacctggt 17460

ggacaacaag tcaacggatg tggcatccct gaactaccag aacgaccaca gcaactttct 17520

gaccacggtc attcaaaaca atgactacag cccgggggag gcaagcacac agaccatcaa 17580

tcttgacgac cggtcgcact ggggcggcga cctgaaaacc atcctgcata ccaacatgcc 17640

aaatgtgaac gagttcatgt ttaccaataa gtttaaggcg cgggtgatgg tgtcgcgctt 17700

gcctactaag gacaatcagg tggagctgaa atacgagtgg gtggagttca cgctgcccga 17760

gggcaactac tccgagacca tgaccataga ccttatgaac aacgcgatcg tggagcacta 17820

cttgaaagtg ggcagacaga acggggttct ggaaagcgac atcggggtaa agtttgacac 17880

ccgcaacttc agactggggt ttgaccccgt cactggtctt gtcatgcctg gggtatatac 17940

aaacgaagcc ttccatccag acatcatttt gctgccagga tgcggggtgg acttcaccca 18000

cagccgcctg agcaacttgt tgggcatccg caagcggcaa cccttccagg agggctttag 18060

gatcacctac gatgatctgg agggtggtaa cattcccgca ctgttggatg tggacgccta 18120

ccaggcgagc ttgaaagatg acaccgaaca gggcgggggt ggcgcaggcg gcagcaacag 18180

cagtggcagc ggcgcggaag agaactccaa cgcggcagcc gcggcaatgc agccggtgga 18240

ggacatgaac gatcatgcca ttcgcggcga cacctttgcc acacgggctg aggagaagcg 18300

cgctgaggcc gaagcagcgg ccgaagctgc cgcccccgct gcgcaacccg aggtcgagaa 18360

gcctcagaag aaaccggtga tcaaacccct gacagaggac agcaagaaac gcagttacaa 18420

cctaataagc aatgacagca ccttcaccca gtaccgcagc tggtaccttg catacaacta 18480

cggcgaccct cagaccggaa tccgctcatg gaccctgctt tgcactcctg acgtaacctg 18540

cggctcggag caggtctact ggtcgttgcc agacatgatg caagaccccg tgaccttccg 18600

ctccacgcgc cagatcagca actttccggt ggtgggcgcc gagctgttgc ccgtgcactc 18660

caagagcttc tacaacgacc aggccgtcta ctcccaactc atccgccagt ttacctctct 18720

gacccacgtg ttcaatcgct ttcccgagaa ccagattttg gcgcgcccgc cagcccccac 18780

catcaccacc gtcagtgaaa acgttcctgc tctcacagat cacgggacgc taccgctgcg 18840

caacagcatc ggaggagtcc agcgagtgac cattactgac gccagacgcc gcacctgccc 18900

ctacgtttac aaggccctgg gcatagtctc gccgcgcgtc ctatcgagcc gcacttttg 18960

agcaagcatg tccatcctta tatcgcccag caataacaca ggctggggcc tgcgcttccc 19020

aagcaagatg tttggcgggg ccaagaagcg ctccgaccaa cacccagtgc gcgtgcgcgg 19080

gcactaccgc gcgccctggg gcgcgcacaa acgcggccgc actgggcgca ccaccgtcga 19140

tgacgccatc gacgcggtgg tggaggaggc gcgcaactac acgcccacgc cgccaccagt 19200

gtccacagtg gacgcggcca ttcagaccgt ggtgcgcgga gcccggcgct atgctaaaat 19260

gaagagacgg cggaggcgcg tagcacgtcg ccaccgccgc cgacccggca ctgccgccca 19320

acgcgcggcg gcggccctgc ttaaccgcgc acgtcgcacc ggccgacggg cggccatgcg 19380

ggccgctcga aggctggccg cgggtattgt cactgtgccc cccaggtcca ggcgacgagc 19440

ggccgccgca gcagccgcgg ccattagtgc tatgactcag ggtcgcaggg gcaacgtgta 19500

ttgggtgcgc gactcggtta gcggcctgcg cgtgcccgtg cgcacccgcc ccccgcgcaa 19560

ctagattgca agaaaaaact acttagactc gtactgttgt atgtatccag cggcggcggc 19620

gcgcaacgaa gctatgtcca agcgcaaaat caaagaagag atgctccagg tcatcgcgcc 19680

ggagatctat ggcccccga agaaggaaga gcaggattac aagccccgaa agctaaagcg 19740

ggtcaaaaag aaaaagaaag atgatgatga tgaacttgac gacgaggtgg aactgctgca 19800

cgctaccgcg cccaggcgac gggtacagtg gaaaggtcga cgcgtaaaac gtgttttgcg 19860

acccggcacc accgtagtct ttacgcccgg tgagcgctcc acccgcacct acaagcgcgt 19920

gtatgatgag gtgtacggcg acgaggacct gcttgagcag gccaacgagc gcctcgggga 19980

gtttgcctac ggaaagcggc ataaggacat gctggcgttg ccgctggacg agggcaaccc 20040

aacacctagc ctaaagcccg taacactgca gcaggtgctg cccgcgcttg caccgtccga 20100

agaaaagcgc ggcctaaagc gcgagtctgg tgacttggca cccaccgtgc agctgatggt 20160

acccaagcgc cagcgactgg aagatgtctt ggaaaaaatg accgtggaac ctgggctgga 20220

gcccgaggtc cgcgtgcggc caatcaagca ggtggcgccg ggactgggcg tgcagaccgt 20280

ggacgttcag atacccacta ccagtagcac cagtattgcc accgccacag agggcatgga 20340

gacacaaacg tccccggttg cctcagcggt ggcggatgcc gcggtgcagg cggtcgctgc 20400

ggccgcgtcc aagacctcta cggaggtgca aacggacccg tggatgtttc gcgtttcagc 20460

cccccggcgc ccgcgccgtt cgaggaagta cggcgccgcc agcgcgctac tgcccgaata 20520

tgccctacat ccttccattg cgcctacccc cggctatcgt ggctacacct accgccccag 20580

aagacgagca actacccgac gccgaaccac cactggaacc cgccgccgcc gtcgccgtcg 20640

ccagcccgtg ctggccccga tttccgtgcg cagggtggct cgcgaaggag gcaggaccct 20700

ggtgctgcca acagcgcgct accaccccag catcgtttaa aagccggtct ttgtggttct 20760

tgcagatatg gccctcacct gccgcctccg tttcccggtg ccgggattcc gaggaagaat 20820

gcaccgtagg aggggcatgg ccggccacgg cctgacgggc ggcatgcgtc gtgcgcacca 20880

ccggcggcgg cgcgcgtcgc accgtcgcat gcgcggcggt atcctgcccc tccttattcc 20940

actgatcgcc gcggcgattg gcgccgtgcc cggaattgca tccgtggcct tgcaggcgca 21000

gagacactga ttaaaaacaa gttgcatgtg gaaaaatcaa aataaaaagt ctggactctc 21060

acgctcgctt ggtcctgtaa ctattttgta gaatggaaga catcaacttt gcgtctctgg 21120

ccccgcgaca cggctcgcgc ccgttcatgg gaaactggca agatatcggc accagcaata 21180

tgagcggtgg cgccttcagc tggggctcgc tgtggagcgg cattaaaaat ttcggttcca 21240

ccgttaagaa ctatggcagc aaggcctgga acagcagcac aggccagatg ctgagggata 21300

agttgaaaga gcaaaatttc caacaaaagg tggtagatgg cctggcctct ggcattagcg 21360

gggtggtgga cctggccaac caggcagtgc aaaataagat taacagtaag cttgatcccc 21420

gccctcccgt agaggagcct ccaccggccg tggagacagt gtctccagag gggcgtggcg 21480

aaaagcgtcc gcgccccgac agggaagaaa ctctggtgac gcaaatagac gagcctccct 21540

cgtacgagga ggcactaaag caaggcctgc ccaccacccg tcccatcgcg cccatggcta 21600

ccggagtgct gggccagcac acacccgtaa cgctggacct gcctcccccc gccgacaccc 21660

agcagaaacc tgtgctgcca ggcccgaccg ccgttgttgt aacccgtcct agccgcgcgt 21720

ccctgcgccg cgccgccagc ggtccgcgat cgttgcggcc cgtagccagt ggcaactggc 21780

aaagcacact gaacagcatc gtgggtctgg gggtgcaatc cctgaagcgc cgacgatgct 21840

tctgatagct aacgtgtcgt atgtgtgtca tgtatgcgtc catgtcgccg ccagaggagc 21900

tgctgagccg ccgcgcgccc gctttccaag atggctaccc cttcgatgat gccgcagtgg 21960

tcttacatgc acatctcggg ccaggacgcc tcggagtacc tgagccccgg gctggtgcag 22020

tttgcccgcg ccaccgagac gtacttcagc ctgaataaca agtttagaaa ccccacggtg 22080

gcgcctacgc acgacgtgac cacagaccgg tcccagcgtt tgacgctgcg gttcatccct 22140

gtggaccgtg aggatactgc gtactcgtac aaggcgcggt tcaccctagc tgtgggtgat 22200

aaccgtgtgc tggacatggc ttccacgtac tttgacatcc gcggcgtgct ggacaggggc 22260

cctacttta agccctactc tggcactgcc tacaacgccc tggctcccaa gggtgcccca 22320

aatccttgcg aatgggatga agctgctact gctcttgaaa taaacctaga agaagaggac 22380

gatgacaacg aagacgaagt agacgagcaa gctgagcagc aaaaaactca cgtatttggg 22440

caggcgcctt attctggtat aaatattaca aaggagggta ttcaaatagg tgtcgaaggt 22500

caaacaccta aatatgccga taaaacattt caacctgaac ctcaaatagg agaatctcag 22560

tggtacgaaa cagaaattaa tcatgcagct gggagagtcc taaaaaagac taccccaatg 22620

aaaccatgtt acggttcata tgcaaaaccc acaaatgaaa atggagggca aggcattctt 22680

gtaaagcaac aaaatggaaa gctagaaagt caagtggaaa tgcaattttt ctcaactact 22740

gaggcagccg caggcaatgg tgataacttg actcctaaag tggtattgta cagtgaagat 22800

gtagatatag aaaccccaga cactcatatt tcttacatgc ccactattaa ggaaggtaac 22860

tcacgagaac taatgggcca acaatctatg cccaacaggc ctaattacat tgcttttagg 22920

gacaatttta ttggtctaat gtattacaac agcacgggta atatgggtgt tctggcgggc 22980

caagcatcgc agttgaatgc tgttgtagat ttgcaagaca gaaacacaga gctttcatac 23040

cagcttttgc ttgattccat tggtgataga accaggtact tttctatgtg gaatcaggct 23100

gttgacagct atgatccaga tgttagaatt attgaaaatc atggaactga agatgaactt 23160

ccaaattact gctttccact gggaggtgtg attaatacag agactcttac caaggtaaaa 23220

cctaaaacag gtcaggaaaa tggatgggaa aaagatgcta cagaattttc agataaaaat 23280

gaaataagag ttggaaataa ttttgccatg gaaatcaatc taaatgccaa cctgtggaga 23340

aatttcctgt actccaacat agcgctgtat ttgcccgaca agctaaagta cagtccttcc 23400

aacgtaaaaa tttctgataa cccaaacacc tacgactaca tgaacaagcg agtggtggct 23460

cccgggctag tggactgcta cattaacctt ggagcacgct ggtcccttga ctatatggac 23520

aacgtcaacc catttaacca ccaccgcaat gctggcctgc gctaccgctc aatgttgctg 23580

ggcaatggtc gctatgtgcc cttccacatc caggtgcctc agaagttctt tgccattaaa 23640

aacctccttc tcctgccggg ctcatacacc tacgagtgga acttcaggaa ggatgttaac 23700

atggttctgc agagctccct aggaaatgac ctaagggttg acggagccag cattaagttt 23760

gatagcattt gcctttacgc caccttcttc cccatggccc acaacaccgc ctccacgctt 23820

gaggccatgc ttagaaacga caccaacgac cagtccttta acgactatct ctccgccgcc 23880

aacatgctct accctatacc cgccaacgct accaacgtgc ccatatccat cccctcccgc 23940

aactgggcgg ctttccgcgg ctgggccttc acgcgcctta agactaagga aaccccatca 24000

ctgggctcgg gctacgaccc ttattacacc tactctggct ctatacccta cctagatgga 24060

acctttacc tcaaccacac ctttaagaag gtggccatta cctttgactc ttctgtcagc 24120

tggcctggca atgaccgcct gcttaccccc aacgagtttg aaattaagcg ctcagttgac 24180

ggggagggtt acaacgttgc ccagtgtaac atgaccaaag actggttcct ggtacaaatg 24240

ctagctaact ataacattgg ctaccagggc ttctatatcc cagagagcta caaggaccgc 24300

atgtactcct tctttagaaa cttccagccc atgagccgtc aggtggtgga tgatactaaa 24360

tacaaggact accaacaggt gggcatccta caccaacaca acaactctgg atttgttggc 24420

taccttgccc ccaccatgcg cgaaggacag gcctaccctg ctaacttccc ctatccgctt 24480

ataggcaaga ccgcagttga cagcattacc cagaaaaagt ttctttgcga tcgcaccctt 24540

tggcgcatcc cattctccag taactttatg tccatgggcg cactcacaga cctgggccaa 24600

aaccttctct acgccaactc cgcccacgcg ctagacatga cttttgaggt ggatcccatg 24660

gacgagccca cccttcttta tgttttgttt gaagtctttg acgtggtccg tgtgcaccag 24720

ccgcaccgcg gcgtcatcga aaccgtgtac ctgcgcacgc ccttctcggc cggcaacgcc 24780

acaacataaa gaagcaagca acatcaacaa cagctgccgc catgggctcc agtgagcagg 24840

aactgaaagc cattgtcaaa gatcttggtt gtgggccata ttttttgggc acctatgaca 24900

agcgctttcc aggctttgtt tctccacaca agctcgcctg cgccatagtc aatacggccg 24960

gtcgcgagac tgggggcgta cactggatgg cctttgcctg gaacccgcac tcaaaaacat 25020

gctacctctt tgagcccttt ggcttttctg accagcgact caagcaggtt taccagtttg 25080

agtacgagtc actcctgcgc cgtagcgcca ttgcttcttc ccccgaccgc tgtataacgc 25140

tggaaaagtc cacccaaagc gtacaggggc ccaactcggc cgcctgtgga ctattctgct 25200

gcatgtttct ccacgccttt gccaactggc cccaaactcc catggatcac aaccccacca 25260

tgaaccttat taccggggta cccaactcca tgctcaacag tccccaggta cagcccaccc 25320

tgcgtcgcaa ccaggaacag ctctacagct tcctggagcg ccactcgccc tacttccgca 25380

gccacagtgc gcagattagg agcgccactt ctttttgtca cttgaaaaac atgtaaaaat 25440

aatgtactag agacactttc aataaaggca aatgctttta tttgtacact ctcgggtgat 25500

tatttacccc cacccttgcc gtctgcgccg tttaaaaatc aaaggggttc tgccgcgcat 25560

cgctatgcgc cactggcagg gacacgttgc gatactggtg tttagtgctc cacttaaact 25620

caggcacaac catccgcggc agctcggtga agttttcact ccacaggctg cgcaccatca 25680

ccaacgcgtt tagcaggtcg ggcgccgata tcttgaagtc gcagttgggg cctccgccct 25740

gcgcgcgcga gttgcgatac acagggttgc agcactggaa cactatcagc gccgggtggt 25800

gcacgctggc cagcacgctc ttgtcggaga tcagatccgc gtccaggtcc tccgcgttgc 25860

tcagggcgaa cggagtcaac tttggtagct gccttcccaa aaagggcgcg tgcccaggct 25920

ttgagttgca ctcgcaccgt agtggcatca aaaggtgacc gtgcccggtc tgggcgttag 25980

gatacagcgc ctgcataaaa gccttgatct gcttaaaagc cacctgagcc tttgcgcctt 26040

cagagaagaa catgccgcaa gacttgccgg aaaactgatt ggccggacag gccgcgtcgt 26100

gcacgcagca ccttgcgtcg gtgttggaga tctgcaccac atttcggccc caccggttct 26160

tcacgatctt ggccttgcta gactgctcct tcagcgcgcg ctgcccgttt tcgctcgtca 26220

catccatttc aatcacgtgc tccttattta tcataatgct tccgtgtaga cacttaagct 26280

cgccttcgat ctcagcgcag cggtgcagcc acaacgcgca gcccgtgggc tcgtgatgct 26340

tgtaggtcac ctctgcaaac gactgcaggt acgcctgcag gaatcgcccc atcatcgtca 26400

caaaggtctt gttgctggtg aaggtcagct gcaacccgcg gtgctcctcg ttcagccagg 26460

tcttgcatac ggccgccaga gcttccactt ggtcaggcag tagtttgaag ttcgccttta 26520

gatcgttatc cacgtggtac ttgtccatca gcgcgcgcgc agcctccatg cccttctccc 26580

acgcagacac gatcggcaca ctcagcgggt tcatcaccgt aatttcactt tccgcttcgc 26640

tgggctcttc ctcttcctct tgcgtccgca taccacgcgc cactgggtcg tcttcattca 26700

gccgccgcac tgtgcgctta cctcctttgc catgcttgat tagcaccggt gggttgctga 26760

aacccaccat ttgtagcgcc acatcttctc tttcttcctc gctgtccacg attacctctg 26820

gtgatggcgg gcgctcgggc ttgggagaag ggcgcttctt tttcttcttg ggcgcaatgg 26880

ccaaatccgc cgccgaggtc gatggccgcg ggctgggtgt gcgcggcacc agcgcgtctt 26940

gtgatgagtc ttcctcgtcc tcggactcga tacgccgcct catccgcttt tttgggggcg 27000

cccggggagg cggcggcgac ggggacgggg acgacacgtc ctccatggtt gggggacgtc 27060

gcgccgcacc gcgtccgcgc tcgggggtgg tttcgcgctg ctcctcttcc cgactggcca 27120

tttccttctc ctataggcag aaaaagatca tggagtcagt cgagaagaag gacagcctaa 27180

ccgccccctc tgagttcgcc accaccgcct ccaccgatgc cgccaacgcg cctaccacct 27240

tccccgtcga ggcacccccg cttgaggagg aggaagtgat tatcgagcag gacccaggtt 27300

ttgtaagcga agacgacgag gaccgctcag taccaacaga ggataaaaag caagaccagg 27360

acaacgcaga ggcaaacgag gaacaagtcg ggcgggggga cgaaaggcat ggcgactacc 27420

tagatgtggg agacgacgtg ctgttgaagc atctgcagcg ccagtgcgcc attatctgcg 27480

acgcgttgca agagcgcagc gatgtgcccc tcgccatagc ggatgtcagc cttgcctacg 27540

aacgccacct attctcaccg cgcgtacccc ccaaacgcca agaaaacggc acatgcgagc 27600

ccaacccgcg cctcaacttc taccccgtat ttgccgtgcc agaggtgctt gccacctatc 27660

acatcttttt ccaaaactgc aagatacccc tatcctgccg tgccaaccgc agccgagcgg 27720

acaagcagct ggccttgcgg cagggcgctg tcatacctga tatcgcctcg ctcaacgaag 27780

tgccaaaaat ctttgagggt cttggacgcg acgagaagcg cgcggcaaac gctctgcaac 27840

aggaaaacag cgaaaatgaa agtcactctg gagtgttggt ggaactcgag ggtgacaacg 27900

cgcgcctagc cgtactaaaa cgcagcatcg aggtcaccca ctttgcctac ccggcactta 27960

acctaccccc caaggtcatg agcacagtca tgagtgagct gatcgtgcgc cgtgcgcagc 28020

ccctggagag ggatgcaaat ttgcaagaac aaacagagga gggcctaccc gcagttggcg 28080

acgagcagct agcgcgctgg cttcaaacgc gcgagcctgc cgacttggag gagcgacgca 28140

aactaatgat ggccgcagtg ctcgttaccg tggagcttga gtgcatgcag cggttctttg 28200

ctgacccgga gatgcagcgc aagctagagg aaacattgca ctacaccttt cgacagggct 28260

acgtacgcca ggcctgcaag atctccaacg tggagctctg caacctggtc tcctaccttg 28320

gaattttgca cgaaaaccgc cttgggcaaa acgtgcttca ttccacgctc aagggcgagg 28380

cgcgccgcga ctacgtccgc gactgcgttt acttatttct atgctacacc tggcagacgg 28440

ccatgggcgt ttggcagcag tgcttggagg agtgcaacct caaggagctg cagaaactgc 28500

taaagcaaaa cttgaaggac ctatggacgg ccttcaacga gcgctccgtg gccgcgcacc 28560

tggcggacat cattttcccc gaacgcctgc ttaaaaccct gcaacagggt ctgccagact 28620

tcaccagtca aagcatgttg cagaacttta ggaactttat cctagagcgc tcaggaatct 28680

tgcccgccac ctgctgtgca cttcctagcg actttgtgcc cattaagtac cgcgaatgcc 28740

ctccgccgct ttggggccac tgctaccttc tgcagctagc caactacctt gcctaccact 28800

ctgacataat ggaagacgtg agcggtgacg gtctactgga gtgtcactgt cgctgcaacc 28860

tatgcacccc gcaccgctcc ctggtttgca attcgcagct gcttaacgaa agtcaaatta 28920

tcggtacctt tgagctgcag ggtccctcgc ctgacgaaaa gtccgcggct ccggggttga 28980

aactcactcc ggggctgtgg acgtcggctt accttcgcaa atttgtacct gaggactacc 29040

acgcccacga gattaggttc tacgaagacc aatcccgccc gcctaatgcg gagcttaccg 29100

cctgcgtcat tacccagggc cacattcttg gccaattgca agccatcaac aaagcccgcc 29160

aagagtttct gctacgaaag ggacgggggg tttacttgga cccccagtcc ggcgaggagc 29220

tcaacccaat ccccccgccg ccgcagccct atcagcagca gccgcgggcc cttgcttccc 29280

aggatggcac ccaaaaagaa gctgcagctg ccgccgccac ccacggacga ggaggaatac 29340

tgggacagtc aggcagagga ggttttggac gaggaggagg aggacatgat ggaagactgg 29400

gagagcctag acgaggaagc ttccgaggtc gaagaggtgt cagacgaaac accgtcaccc 29460

tcggtcgcat tcccctcgcc ggcgccccag aaatcggcaa ccggttccag catggctaca 29520

acctccgctc ctcaggcgcc gccggcactg cccgttcgcc gacccaaccg tagatgggac 29580

accactggaa ccagggccgg taagtccaag cagccgccgc cgttagccca agagcaacaa 29640

cagcgccaag gctaccgctc atggcgcggg cacaagaacg ccatagttgc ttgcttgcaa 29700

gactgtgggg gcaacatctc cttcgcccgc cgctttcttc tctaccatca cggcgtggcc 29760

ttcccccgta acatcctgca ttactaccgt catctctaca gcccatactg caccggcggc 29820

agcggcagca acagcagcgg ccacacagaa gcaaaggcga ccggatagca agactctgac 29880

aaagcccaag aaatccacag cggcggcagc agcaggagga ggagcgctgc gtctggcgcc 29940

caacgaaccc gtatcgaccc gcgagcttag aaacaggatt tttcccactc tgtatgctat 30000

atttcaacag agcaggggcc aagaacaaga gctgaaaata aaaaacaggt ctctgcgatc 30060

cctcacccgc agctgcctgt atcacaaaag cgaagatcag cttcggcgca cgctggaaga 30120

cgcggaggct ctcttcagta aatactgcgc gctgactctt aaggactagt ttcgcgccct 30180

ttctcaaatt taagcgcgaa aactacgtca tctccagcgg ccacacccgg cgccagcacc 30240

tgttgtcagc gccattatga gcaaggaaat tcccacgccc tacatgtgga gttaccagcc 30300

acaaatggga cttgcggctg gagctgccca agactactca acccgaataa actacatgag 30360

cgcgggaccc cacatgatat cccgggtcaa cggaatacgc gcccaccgaa accgaattct 30420

cctggaacag gcggctatta ccaccacacc tcgtaataac cttaatcccc gtagttggcc 30480

cgctgccctg gtgtaccagg aaagtcccgc tcccaccact gtggtacttc ccagagacgc 30540

ccaggccgaa gttcagatga ctaactcagg ggcgcagctt gcgggcggct ttcgtcacag 30600

ggtgcggtcg cccgggcagg gtataactca cctgacaatc agagggcgag gtattcagct 30660

caacgacgag tcggtgagct cctcgcttgg tctccgtccg gacgggacat ttcagatcgg 30720

cggcgccggc cgctcttcat tcacgcctcg tcaggcaatc ctaactctgc agacctcgtc 30780

ctctgagccg cgctctggag gcattggaac tctgcaattt attgaggagt ttgtgccatc 30840

ggtctacttt aacccccttct cgggacctcc cggccactat ccggatcaat ttattcctaa 30900

ctttgacgcg gtaaaggact cggcggacgg ctacgactga atgttaagtg gagaggcaga 30960

gcaactgcgc ctgaaacacc tggtccactg tcgccgccac aagtgctttg cccgcgactc 31020

cggtgagttt tgctactttg aattgcccga ggatcatatc gagggcccgg cgcacggcgt 31080

ccggcttacc gcccagggag agcttgcccg tagcctgatt cgggagttta cccagcgccc 31140

cctgctagtt gagcgggaca ggggaccctg tgttctcact gtgatttgca actgtcctaa 31200

ccctggatta catcaagatc ctctagttaa tgtcaggtcg cctaagtcga ttaactagag 31260

tacccgggga tcttattccc tttaactaat aaaaaaaaat aataaagcat cacttactta 31320

aaatcagtta gcaaatttct gtccagttta ttcagcagca cctccttgcc ctcctcccag 31380

ctctggtatt gcagcttcct cctggctgca aactttctcc acaatctaaa tggaatgtca 31440

gtttcctcct gttcctgtcc atccgcaccc actatcttca tgttgttgca gatgaagcgc 31500

gcaagaccgt ctgaagatac cttcaacccc gtgtatccat atgacacgga aaccggtcct 31560

ccaactgtgc cttttcttac tcctcccttt gtatccccca atgggtttca agagagtccc 31620

cctggggtac tctctttgcg cctatccgaa cctctagtta cctccaatgg catgcttgcg 31680

ctcaaaatgg gcaacggcct ctctctggac gaggccggca accttacctc ccaaaatgta 31740

accactgtga gcccacctct caaaaaaacc aagtcaaaca taaacctgga aatatctgca 31800

cccctcacag ttacctcaga agccctaact gtggctgccg ccgcacctct aatggtcgcg 31860

ggcaacacac tcaccatgca atcacaggcc ccgctaaccg tgcacgactc caaacttagc 31920

attgccaccc aaggacccct cacagtgtca gaaggaaagc tagccctgca aacatcaggc 31980

cccctcacca ccaccgatag cagtaccctt actatcactg cctcaccccc tctaactact 32040

gccactggta gcttgggcat tgacttgaaa gagcccattt atacacaaaa tggaaaacta 32100

ggactaaagt acggggctcc tttgcatgta acagacgacc taaacacttt gaccgtagca 32160

actggtccag gtgtgactat taataatact tccttgcaaa ctaaagttac tggagccttg 32220

ggttttgatt cacaaggcaa tatgcaactt aatgtagcag gaggactaag gattgattct 32280

caaaacagac gccttatact tgatgttagt tatccgtttg atgctcaaaa ccaactaaat 32340

ctaagactag gacagggccc tctttttata aactcagccc acaacttgga tattaactac 32400

aacaaaggcc tttacttgtt tacagcttca aacaattcca aaaagcttga ggttaaccta 32460

agcactgcca aggggttgat gtttgacgct acagccatag ccattaatgc aggagatggg 32520

cttgaatttg gttcacctaa tgcaccaaac acaaatcccc tcaaaacaaa aattggccat 32580

ggcctagaat ttgattcaaa caaggctatg gttcctaaac taggaactgg ccttagtttt 32640

gacagcacag gtgccattac agtaggaaac aaaaataatg ataagctaac tttgtggacc 32700

ggaataaacc ctccacctaa ctgtcaaatt gtggaaaaca ctaatacaaa tgatggcaaa 32760

cttactttag tattagtaaa aaatggaggg cttgttaatg gctacgtgtc tctagttggt 32820

gtatcagaca ctgtgaacca aatgttcaca caaaagacag caaacatcca attaagatta 32880

tattttgact cttctggaaa tctattaact gaggaatcag acttaaaaat tccacttaaa 32940

aataaatctt ctacagcgac cagtgaaact gtagccagca gcaaagcctt tatgccaagt 33000

actacagctt atcccttcaa caccactact agggatagtg aaaactacat tcatggaata 33060

tgttactaca tgactagtta tgatagaagt ctatttccct tgaacatttc tataatgcta 33120

aacagccgta tgatttcttc caatgttgcc tatgccatac aatttgaatg gaatctaaat 33180

gcaagtgaat ctccagaaag caacatagct acgctgacca catccccctt tttcttttct 33240

tacattacag aagacgacaa ctaaagaatc gtttgtgtta tgtttcaacg tgtttatttt 33300

tcaattgcag aaaatttcaa gtcatttttc attcagtagt atagccccac caccacatag 33360

cttatacaga tcaccgtacc ttaatcaaac tcacagaacc ctagtattca acctgccacc 33420

tccctcccaa cacacagagt acacagtcct ttctccccgg ctggccttaa aaagcatcat 33480

atcatgggta acagacatat tcttaggtgt tatattccac acggtttcct gtcgagccaa 33540

acgctcatca gtgatattaa taaactcccc gggcagctca cttaagttca tgtcgctgtc 33600

cagctgctga gccacaggct gctgtccaac ttgcggttgc ttaacgggcg gcgaaggaga 33660

agtccacgcc tacatggggg tagagtcata atcgtgcatc aggatagggc ggtggtgctg 33720

cagcagcgcg cgaataaact gctgccgccg ccgctccgtc ctgcaggaat acaacatggc 33780

agtggtctcc tcagcgatga ttcgcaccgc ccgcagcata aggcgccttg tcctccgggc 33840

acagcagcgc accctgatct cacttaaatc agcacagtaa ctgcagcaca gcaccacaat 33900

attgttcaaa atcccacagt gcaaggcgct gtatccaaag ctcatggcgg ggaccacaga 33960

acccacgtgg ccatcatacc acaagcgcag gtagattaag tggcgacccc tcataaacac 34020

gctggacata aacattacct cttttggcat gttgtaattc accacctccc ctctgattaa 34080

acatggcgcc atccaccacc atcctaaacc agctggccaa aacctgcccg ccggctatac 34140

actgcaggga accgggactg gaacaatgac agtggagagc ccaggactcg taaccatgga 34200

tcatcatgct cgtcatgata tcaatgttgg cacaacacag gcacacgtgc atacacttcc 34260

tcaggattac aagctcctcc cgcgttagaa ccatatccca gggaacaacc cattcctgaa 34320

tcagcgtaaa tcccacactg cagggaagac ctcgcacgta actcacgttg tgcattgtca 34380

aagtgttaca ttcgggcagc agcggatgat cctccagtat ggtagcgcgg gtttctgtct 34440

caaaaggagg tagacgatcc ctactgtacg gagtgcgccg agacaaccga gatcgtgttg 34500

gtcgtagtgt catgccaaat ggaacgccgg acgtagtcat atttcctgaa gcaaaaccag 34560

gtgcgggcgt gacaaacaga tctgcgtctc cggtctcgcc gcttagatcg ctctgtgtag 34620

tagttgtagt atatccactc tctcaaagca tccaggcgcc ccctggcttc gggttctatg 34680

taaactcctt catgcgccgc tgccctgata acatccacca ccgcagaata agccacaccc 34740

agccaaccta cacattcgtt ctgcgagtca cacacgggag gagcgggaag agctggaaga 34800

accatgtttt ttttttatt ccaaaagatt atccaaaacc tcaaaatgaa gatctattaa 34860

gtgaacgcgc tcccctccgg tggcgtggtc aaactctaca gccaaagaac agataatggc 34920

atttgtaaga tgttgcacaa tggcttccaa aaggcaaacg gccctcacgt ccaagtggac 34980

gtaaaggcta aacccttcag ggtgaatctc ctctataaac attccagcac cttcaaccat 35040

gcccaaataa ttctcatctc gccaccttct caatatatct ctaagcaaat cccgaatatt 35100

aagtccggcc attgtaaaaa tctgctccag agcgccctcc accttcagcc tcaagcagcg 35160

aatcatgatt gcaaaaattc aggttcctca cagacctgta taagattcaa aagcggaaca 35220

ttaacaaaaa taccgcgatc ccgtaggtcc cttcgcaggg ccagctgaac ataatcgtgc 35280

aggtctgcac ggaccagcgc ggccacttcc ccgccaggaa ccatgacaaa agaacccaca 35340

ctgattatga cacgcatact cggagctatg ctaaccagcg tagccccgat gtaagcttgt 35400

tgcatgggcg gcgatataaa atgcaaggtg ctgctcaaaa aatcaggcaa agcctcgcgc 35460

aaaaaagaaa gcacatcgta gtcatgctca tgcagataaa ggcaggtaag ctccggaacc 35520

accacagaaa aagacaccat ttttctctca aacatgtctg cgggtttctg cataaacaca 35580

aaataaaata acaaaaaaac atttaaacat tagaagcctg tcttacaaca ggaaaaacaa 35640

cccttataag cataagacgg actacggcca tgccggcgtg accgtaaaaa aactggtcac 35700

cgtgattaaa aagcaccacc gacagctcct cggtcatgtc cggagtcata atgtaagact 35760

cggtaaacac atcaggttga ttcacatcgg tcagtgctaa aaagcgaccg aaatagcccg 35820

ggggaataca tacccgcagg cgtagagaca acattacagc ccccatagga ggtataacaa 35880

aattaatagg agagaaaaac acataaacac ctgaaaaacc ctcctgccta ggcaaaatag 35940

caccctcccg ctccagaaca acatacagcg cttccacagc ggcagccata acagtcagcc 36000

ttaccagtaa aaaagaaaac ctattaaaaa aacaccactc gacacggcac cagctcaatc 36060

agtcacagtg taaaaaaggg ccaagtgcag agcgagtata tataggacta aaaaatgacg 36120

taacggttaa agtccacaaa aaacacccag aaaaccgcac gcgaacctac gcccagaaac 36180

gaaagccaaa aaacccacaa cttcctcaaa tcgtcacttc cgttttccca cgttacgtca 36240

cttcccattt taagaaaact acaattccca acacatacaa gttactccgc cctaaaacct 36300

acgtcacccg ccccgttccc acgccccgcg ccacgtcaca aactccaccc cctcattatc 36360

atattggctt caatccaaaa taaggtatat tattgatgat g 36401

<210> 22
<211> 36901
<212> DNA
<213> Artificial Sequence

<220>
<223> pAdk35F2-Spike/E4orf6(-1kb)-E4dlO4-7(E4re#17)

<400> 22
ttaattaaca tcatcaataa tataccttat tttggattga agccaatatg ataatgaggg 60

ggtggagttt gtgacgtggc gcggggcgtg ggaacggggc gggtgacgta gtagtgtggc 120

ggaagtgtga tgttgcaagt gtggcggaac acatgtaagc gacggatgtg gcaaaagtga 180

cgtttttggt gtgcgccggt gtacacagga agtgacaatt ttcgcgcggt ttaggcgga 240

tgttgtagta aatttgggcg taaccgagta agatttggcc attttcgcgg gaaaactgaa 300

taagaggaag tgaaatctga ataattttgt gttactcata gcgcgtaata atttctgtaa 360

tagtaatcaa ttacggggtc attagttcat agcccatata tggagttccg cgttacataa 420

cttacggtaa atggcccgcc tggctgaccg cccaacgacc cccgcccatt gacgtcaata 480

atgacgtatg ttcccatagt aacgccaata gggactttcc attgacgtca atgggtggag 540

tatttacggt aaactgccca cttggcagta catcaagtgt atcatatgcc aagtacgccc 600

cctattgacg tcaatgacgg taaatggccc gcctggcatt atgcccagta catgacctta 660

tgggactttc ctacttggca gtacatctac gtattagtca tcgctattac catggtgatg 720

cggttttggc agtacatcaa tgggcgtgga tagcggtttg actcacgggg atttccaagt 780

ctccacccca ttgacgtcaa tgggagtttg ttttggcacc aaaatcaacg ggactttcca 840

aaatgtcgta acaactccgc cccattgacg caaatgggcg gtaggcgtgt acggtgggag 900

gtctatataa gcagagctct ccctatcagt gatagagatc tccctatcag tgatagagat 960

cgtcgacgag ctcgtttagt gaaccgtcag atcgcctgga gacgccatcc acgctgtttt 1020

gacctccata gaagacaccg ggaccgatcc agcctccgat ttgccaccat gtttgtgttc 1080

ctggtgctgc tgccactggt gtccagccag tgtgtgaacc tgaccaccag gacccaactt 1140

cctcctgcct acaccaactc cttcaccagg ggagtctact accctgacaa ggtgttcagg 1200

tcctctgtgc tgcacagcac ccaggacctg ttcctgccat tcttcagcaa tgtgacctgg 1260

ttccatgcca tccatgtgtc tggcaccaat ggcaccaaga ggtttgacaa ccctgtgctg 1320

ccattcaatg atggagtcta ctttgccagc acagagaaga gcaacatcat caggggctgg 1380

atttttggca ccaccctgga cagcaagacc cagtccctgc tgattgtgaa caatgccacc 1440

aatgtggtga ttaaggtgtg tgagttccag ttctgtaatg acccattcct gggagtctac 1500

taccacaaga acaacaagtc ctggatggag tctgagttca gggtctactc ctctgccaac 1560

aactgtacct ttgaatatgt gagccaacca ttcctgatgg acttggaggg caagcagggc 1620

aacttcaaga acctgaggga gtttgtgttc aagaacattg atggctactt caagatttac 1680

agcaaacaca caccaatcaa cctggtgagg gacctgccac agggcttctc tgccttggaa 1740

ccactggtgg acctgccaat tggcatcaac atcaccaggt tccagaccct gctggctctg 1800

cacaggtcct acctgacacc tggagactcc tcctctggct ggacagcagg agcagcagcc 1860

tactatgtgg gctacctcca accaaggacc ttcctgctga aatacaatga gaatggcacc 1920

atcacagatg ctgtggactg tgccctggac ccactgtctg agaccaagtg taccctgaaa 1980

tccttcacag tggagaaggg catctaccag accagcaact tcagggtcca accaacagag 2040

agcattgtga ggtttccaaa catcaccaac ctgtgtccat ttggagaggt gttcaatgcc 2100

accaggtttg cctctgtcta tgcctggaac aggaagagga ttagcaactg tgtggctgac 2160

tactctgtgc tctacaactc tgcctccttc agcaccttca agtgttatgg agtgagccca 2220

accaaactga atgacctgtg tttcaccaat gtctatgctg actcctttgt gattagggga 2280

gatgaggtga gacagattgc ccctggacaa acaggcaaga ttgctgacta caactacaaa 2340

ctgcctgatg acttcacagg ctgtgtgatt gcctggaaca gcaacaacct ggacagcaag 2400

gtgggaggca actacaacta cctctacaga ctgttcagga agagcaacct gaaaccattt 2460

gagagggaca tcagcacaga gatttaccag gctggcagca caccatgtaa tggagtggag 2520

ggcttcaact gttactttcc actccaatcc tatggcttcc aaccaaccaa tggagtgggc 2580

taccaaccat acagggtggt ggtgctgtcc tttgaactgc tccatgcccc tgccacagtg 2640

tgtggaccaa agaagagcac caacctggtg aagaacaagt gtgtgaactt caacttcaat 2700

ggactgacag gcacaggagt gctgacagag agcaacaaga agttcctgcc attccaacag 2760

tttggcaggg acattgctga caccacagat gctgtgaggg acccacagac cttggagatt 2820

ctggacatca caccatgttc ctttggagga gtgtctgtga ttacacctgg caccaacacc 2880

agcaaccagg tggctgtgct ctaccaggat gtgaactgta ctgaggtgcc tgtggctatc 2940

catgctgacc aacttacacc aacctggagg gtctacagca caggcagcaa tgtgttccag 3000

accagggctg gctgtctgat tggagcagag catgtgaaca actcctatga gtgtgacatc 3060

ccaattggag caggcatctg tgcctcctac cagacccaga ccggtggcgg tgggtcgagg 3120

tctgtggcaa gccagagcat cattgcctac acaatgagtc tgggagcaga gaactctgtg 3180

gcttacagca acaacagcat tgccatccca accaacttca ccatctctgt gaccacagag 3240

attctgcctg tgagtatgac caagacctct gtggactgta caatgtatat ctgtggagac 3300

agcacagagt gtagcaacct gctgctccaa tatggctcct tctgtaccca acttaacagg 3360

gctctgacag gcattgctgt ggaacaggac aagaacaccc aggaggtgtt tgcccaggtg 3420

aagcagattt acaagacacc tccaatcaag gactttggag gcttcaactt cagccagatt 3480

ctgcctgacc caagcaagcc aagcaagagg tccttcattg aggacctgct gttcaacaag 3540

gtgaccctgg ctgatgctgg cttcatcaag caatatggag actgtctggg agacattgct 3600

gccagggacc tgatttgtgc ccagaagttc aatggactga cagtgctgcc tccactgctg 3660

acagatgaga tgattgccca atacacctct gccctgctgg ctggcaccat cacctctggc 3720

tggacctttg gagcaggagc agccctccaa atcccatttg ctatgcagat ggcttacagg 3780

ttcaatggca ttggagtgac ccagaatgtg ctctatgaga accagaaact gattgccaac 3840

cagttcaact ctgccattgg caagattcag gactccctgt ccagcacagc ctctgccctg 3900

ggcaaactcc aagatgtggt gaaccagaat gcccaggctc tgaacaccct ggtgaagcaa 3960

ctttccagca actttggagc catctcctct gtgctgaatg acatcctgag cagactggac 4020

aaggtggagg ctgaggtcca gattgacaga ctgattacag gcagactcca atccctccaa 4080

acctatgtga cccaacaact tatcagggct gctgagatta gggcatctgc caacctggct 4140

gccaccaaga tgagtgagtg tgtgctggga caaagcaaga gggtggactt ctgtggcaag 4200

ggctaccacc tgatgagttt tccacagtct gcccctcatg gagtggtgtt cctgcatgtg 4260

acctatgtgc ctgcccagga gaagaacttc accacagccc ctgccatctg ccatgatggc 4320

aaggctcact ttccaaggga gggagtgttt gtgagcaatg gcacccactg gtttgtgacc 4380

cagaggaact tctatgaacc acagattatc accacagaca acacctttgt gtctggcaac 4440

tgtgatgtgg tgattggcat tgtgaacaac acagtctatg acccactcca acctgaactg 4500

gactccttca aggaggaact ggacaaatac ttcaagaacc acaccagccc tgatgtggac 4560

ctgggagaca tctctggcat caatgcctct gtggtgaaca tccagaagga gattgacaga 4620

ctgaatgagg tggctaagaa cctgaatgag tccctgattg acctccaaga actgggcaaa 4680

tatgaacaat acatcaagtg gccatgaaaa ttgatcataa tcagccatac cacatttgta 4740

gaggttttac ttgctttaaa aaacctccca cacctccccc tgaacctgaa acataaaatg 4800

aatgcaattg ttgttgttaa cttgtttatt gcagcttata atggttacaa ataaagcaat 4860

agcatcacaa atttcacaaa taaagcattt ttttcactgc attctagttg tggtttgtcc 4920

aaactcatca atgtatctta acgcggatca tggtgtcttt ttctgtggtg gttccggagc 4980

ttacctgcct ttatctgcat gagcatgact acgatgtgct ttctttttg cgcgaggctt 5040

tgcctgattt tttgagcagc accttgcatt ttatatcgcc gcccatgcaa caagcttaca 5100

tcggggctac gctggttagc atagctccga gtatgcgtgt cataatcagt gtgggttctt 5160

ttgtcatggt tcctggcggg gaagtggccg cgctggtccg tgcagacctg cacgattatg 5220

ttcagctggc cctgcgaagg gacctacggg atcgcggtat ttttgttaat gttccgcttt 5280

tgaatcttat acaggtctgt gaggaacctg aatttttgca atcatgattc gctgcttgag 5340

gctgaaggtg gagggcgctc tggagcagat ttttacaatg gccggactta atattcggga 5400

tttgcttaga gatatattga gaaggtggcg agatgagaat tatttgggca tggttgaagg 5460

tgctggaatg tttatagagg agattcaccc tgaagggttt agcctttacg tccacttgga 5520

cgtgagggcc gtttgccttt tggaagccat tgtgcaacat cttacaaatg ccattatctg 5580

ttctttggct gtagagtttg accacgccac cggaggggag cgcgttcact taatagatct 5640

tcattttgag gttttggata atcttttgga ataaaaaaaa aaacatggtt cttccagctc 5700

ttcccgctcc tcccgtgtgt gactcgcaga acgaatgtgt aggttggctg ggtgtggctt 5760

attctgcggt ggtggatgtt atcagggcag cggcgcatga aggagtttac atagaacccg 5820

aagccagggg gcgcctggat gctttgagag agtggatata ctacaactac tacacagagc 5880

gatctaagcg gcgagaccgg agacgcagat ctgtttgtca cgcccgcacc tggttttgct 5940

tcaggaaata tgactacgtc cggcgttcca tttggcatga cactacgacc aacacgatct 6000

cggttgtctc ggcgcactcc gtacagtagg gatcgtctac ctccttttga gacagaaacc 6060

cgcgctacca tactggagga tcatccgctg ctgcccgaat gtaacacttt gacaatgcac 6120

aacgtgagtt acgtgcgagg tcttccctgc agtgtgggat ttacgctgat tcaggaatgg 6180

gttgttccct gggatatggt tctaacgcgg gaggagcttg taatcctgag gaagtgtatg 6240

cacgtgtgcc tgtgttgtgc caacattgat atcatgacga gcatgatgat ccatggttac 6300

gagtcctggg ctctccactg tcattgttcc agtcccggtt ccctgcagtg tatagccggc 6360

gggcaggttt tggccagctg gtttaggatg gtggtggatg gcgccatgtt taatcagagg 6420

tttatatggt accgggaggt ggtgaattac aacatgccaa aagaggtaat gtttatgtcc 6480

agcgtgttta tgaggggtcg ccacttaatc tacctgcgct tgtggtatga tggccacgtg 6540

ggttctgtgg tccccgccat gagctttgga tacagcgcct tgcactgtgg gattttgaac 6600

aatattgtgg tgctgtgctg cagttactgt gctgatttaa gtgagatcag ggtgcgctgc 6660

tgtgcccgga ggacaaggcg ccttatgctg cgggcggtgc gaatcatcgc tgaggagacc 6720

actgccatgt tgtattcctg caggacggag cggcggcggc agcagtttat tcgcgcgctg 6780

ctgcagcacc accgccctat cctgatgcac gattatgact ctacccccat gtagaagctt 6840

ggggatcaat tctctagagc tcgctgatca gcctcgactg tgccttctag ttgccagcca 6900

tctgttgttt gcccctcccc cgtgccttcc ttgaccctgg aaggtgccac tcccactgtc 6960

ctttcctaat aaaatgagga aattgcatcg cattgtctga gtaggtgtca ttctattctg 7020

gggggtgggg tggggcagga cagcaagggg gaggattggg aagacaatag caggcatgct 7080

ggggatgcgg tgggctctat ggcttctgag gaaattgggc gtggcttaag ggtgggaaag 7140

aatatataag gtgggggtct tatgtagttt tgtatctgtt ttgcagcagc cgccgccgcc 7200

atgagcacca actcgtttga tggaagcatt gtgagctcat atttgacaac gcgcatgccc 7260

ccatgggccg gggtgcgtca gaatgtgatg ggctccagca ttgatggtcg ccccgtcctg 7320

cccgcaaact ctactacctt gacctacgag accgtgtctg gaacgccgtt ggagactgca 7380

gcctccgccg ccgcttcagc cgctgcagcc accgcccgcg ggattgtgac tgactttgct 7440

ttcctgagcc cgcttgcaag cagtgcagct tcccgttcat ccgcccgcga tgacaagttg 7500

acggctcttt tggcacaatt ggattctttg acccgggaac ttaatgtcgt ttctcagcag 7560

ctgttggatc tgcgccagca ggtttctgcc ctgaaggctt cctcccctcc caatgcggtt 7620

taaaacataa ataaaaaacc agactctgtt tggatttgga tcaagcaagt gtcttgctgt 7680

ctttatttag gggttttgcg cgcgcggtag gcccgggacc agcggtctcg gtcgttgagg 7740

gtcctgtgta ttttttccag gacgtggtaa aggtgactct ggatgttcag atacatgggc 7800

ataagcccgt ctctggggtg gaggtagcac cactgcagag cttcatgctg cggggtggtg 7860

ttgtagatga tccagtcgta gcaggagcgc tgggcgtggt gcctaaaaat gtctttcagt 7920

agcaagctga ttgccagggg caggcccttg gtgtaagtgt ttacaaagcg gttaagctgg 7980

gatgggtgca tacgtgggga tatgagatgc atcttggact gtatttttag gttggctatg 8040

ttcccagcca tatccctccg gggattcatg ttgtgcagaa ccaccagcac agtgtatccg 8100

gtgcacttgg gaaatttgtc atgtagctta gaaggaaatg cgtggaagaa cttggagacg 8160

cccttgtgac ctccaagatt ttccatgcat tcgtccataa tgatggcaat gggcccacgg 8220

gcggcggcct gggcgaagat atttctggga tcactaacgt catagttgtg ttccaggatg 8280

agatcgtcat aggccatttt tacaaagcgc gggcggaggg tgccagactg cggtataatg 8340

gttccatccg gcccaggggc gtagttaccc tcacagattt gcatttccca cgctttgagt 8400

tcagatgggg ggatcatgtc tacctgcggg gcgatgaaga aaacggtttc cggggtaggg 8460

gagatcagct gggaagaaag caggttcctg agcagctgcg acttaccgca gccggtgggc 8520

ccgtaaatca cacctattac cgggtgcaac tggtagttaa gagagctgca gctgccgtca 8580

tccctgagca ggggggccac ttcgttaagc atgtccctga ctcgcatgtt ttccctgacc 8640

aaatccgcca gaaggcgctc gccgcccagc gatagcagtt cttgcaagga agcaaagttt 8700

ttcaacggtt tgagaccgtc cgccgtaggc atgcttttga gcgtttgacc aagcagttcc 8760

aggcggtccc acagctcggt cacctgctct acggcatctc gatccagcat atctcctcgt 8820

ttcgcgggtt ggggcggctt tcgctgtacg gcagtagtcg gtgctcgtcc agacgggcca 8880

gggtcatgtc tttccacggg cgcagggtcc tcgtcagcgt agtctgggtc acggtgaagg 8940

ggtgcgctcc gggctgcgcg ctggccaggg tgcgcttgag gctggtcctg ctggtgctga 9000

agcgctgccg gtcttcgccc tgcgcgtcgg ccaggtagca tttgaccatg gtgtcatagt 9060

ccagcccctc cgcggcgtgg cccttggcgc gcagcttgcc cttggaggag gcgccgcacg 9120

aggggcagtg cagacttttg agggcgtaga gcttgggcgc gagaaatacc gattccgggg 9180

agtaggcatc cgcgccgcag gccccgcaga cggtctcgca ttccacgagc caggtgagct 9240

ctggccgttc ggggtcaaaa accaggtttc ccccatgctt tttgatgcgt ttcttacctc 9300

tggtttccat gagccggtgt ccacgctcgg tgacgaaaag gctgtccgtg tccccgtata 9360

cagacttgag aggcctgtcc tcgagcggtg ttccgcggtc ctcctcgtat agaaactcgg 9420

accactctga gacaaaggct cgcgtccagg ccagcacgaa ggaggctaag tgggaggggt 9480

agcggtcgtt gtccactagg gggtccactc gctccagggt gtgaagacac atgtcgccct 9540

cttcggcatc aaggaaggtg attggtttgt aggtgtaggc cacgtgaccg ggtgttcctg 9600

aaggggggct ataaaagggg gtgggggcgc gttcgtcctc actctcttcc gcatcgctgt 9660

ctgcgagggc cagctgttgg ggtgagtact ccctctgaaa agcgggcatg acttctgcgc 9720

taagattgtc agtttccaaa aacgaggagg atttgatatt cacctggccc gcggtgatgc 9780

ctttgagggt ggccgcatcc atctggtcag aaaagacaat ctttttgttg tcaagcttgg 9840

tggcaaacga cccgtagagg gcgttggaca gcaacttggc gatggagcgc agggtttggt 9900

ttttgtcgcg atcggcgcgc tccttggccg cgatgtttag ctgcacgtat tcgcgcgcaa 9960

cgcaccgcca ttcgggaaag acggtggtgc gctcgtcggg caccaggtgc acgcgccaac 10020

cgcggttgtg cagggtgaca aggtcaacgc tggtggctac ctctccgcgt aggcgctcgt 10080

tggtccagca gaggcggccg cccttgcgcg agcagaatgg cggtaggggg tctagctgcg 10140

tctcgtccgg ggggtctgcg tccacggtaa agaccccggg cagcaggcgc gcgtcgaagt 10200

agtctatctt gcatccttgc aagtctagcg cctgctgcca tgcgcgggcg gcaagcgcgc 10260

gctcgtatgg gttgagtggg ggaccccatg gcatggggtg ggtgagcgcg gaggcgtaca 10320

tgccgcaaat gtcgtaaacg tagaggggct ctctgagtat tccaagatat gtagggtagc 10380

atcttccacc gcggatgctg gcgcgcacgt aatcgtatag ttcgtgcgag ggagcgagga 10440

ggtcgggacc gaggttgcta cgggcgggct gctctgctcg gaagactatc tgcctgaaga 10500

tggcatgtga gttggatgat atggttggac gctggaagac gttgaagctg gcgtctgtga 10560

gacctaccgc gtcacgcacg aaggaggcgt aggagtcgcg cagcttgttg accagctcgg 10620

cggtgacctg cacgtctagg gcgcagtagt ccagggtttc cttgatgatg tcatacttat 10680

cctgtccctt ttttttccac agctcgcggt tgaggacaaa ctcttcgcgg tctttccagt 10740

actcttggat cggaaacccg tcggcctccg aacggtaaga gcctagcatg tagaactggt 10800

tgacggcctg gtaggcgcag catccctttt ctacgggtag cgcgtatgcc tgcgcggcct 10860

tccggagcga ggtgtgggtg agcgcaaagg tgtccctgac catgactttg aggtactggt 10920

atttgaagtc agtgtcgtcg catccgccct gctcccagag caaaaagtcc gtgcgctttt 10980

tggaacgcgg atttggcagg gcgaaggtga catcgttgaa gagtatcttt cccgcgcgag 11040

gcataaagtt gcgtgtgatg cggaagggtc ccggcacctc ggaacggttg ttaattacct 11100

gggcggcgag cacgatctcg tcaaagccgt tgatgttgtg gcccacaatg taaagttcca 11160

agaagcgcgg gatgcccttg atggaaggca atttttaag ttcctcgtag gtgagctctt 11220

caggggagct gagcccgtgc tctgaaaggg cccagtctgc aagatgaggg ttggaagcga 11280

cgaatgagct ccacaggtca cgggccatta gcatttgcag gtggtcgcga aaggtcctaa 11340

actggcgacc tatggccatt ttttctgggg tgatgcagta gaaggtaagc gggtcttgtt 11400

cccagcggtc ccatccaagg ttcgcggcta ggtctcgcgc ggcagtcact agaggctcat 11460

ctccgccgaa cttcatgacc agcatgaagg gcacgagctg cttcccaaag gcccccatcc 11520

aagtataggt ctctacatcg taggtgacaa agagacgctc ggtgcgagga tgcgagccga 11580

tcgggaagaa ctggatctcc cgccaccaat tggaggagtg gctattgatg tggtgaaagt 11640

agaagtccct gcgacgggcc gaacactcgt gctggctttt gtaaaaacgt gcgcagtact 11700

ggcagcggtg cacgggctgt acatcctgca cgaggttgac ctgacgaccg cgcacaagga 11760

agcagagtgg gaatttgagc ccctcgcctg gcgggtttgg ctggtggtct tctacttcgg 11820

ctgcttgtcc ttgaccgtct ggctgctcga ggggagttac ggtggatcgg accaccacgc 11880

cgcgcgagcc caaagtccag atgtccgcgc gcggcggtcg gagcttgatg acaacatcgc 11940

gcagatggga gctgtccatg gtctggagct cccgcggcgt caggtcaggc gggagctcct 12000

gcaggtttac ctcgcataga cgggtcaggg cgcgggctag atccaggtga tacctaattt 12060

ccaggggctg gttggtggcg gcgtcgatgg cttgcaagag gccgcatccc cgcggcgcga 12120

ctacggtacc gcgcggcggg cggtgggccg cgggggtgtc cttggatgat gcatctaaaa 12180

gcggtgacgc gggcgagccc ccggaggtag ggggggctcc ggacccgccg ggagaggggg 12240

caggggcacg tcggcgccgc gcgcgggcag gagctggtgc tgcgcgcgta ggttgctggc 12300

gaacgcgacg acgcggcggt tgatctcctg aatctggcgc ctctgcgtga agacgacggg 12360

cccggtgagc ttgaacctga aagagagttc gacagaatca atttcggtgt cgttgacggc 12420

ggcctggcgc aaaatctcct gcacgtctcc tgagttgtct tgataggcga tctcggccat 12480

gaactgctcg atctcttcct cctggagatc tccgcgtccg gctcgctcca cggtggcggc 12540

gaggtcgttg gaaatgcggg ccatgagctg cgagaaggcg ttgaggcctc cctcgttcca 12600

gacgcggctg tagaccacgc ccccttcggc atcgcgggcg cgcatgacca cctgcgcgag 12660

attgagctcc acgtgccggg cgaagacggc gtagtttcgc aggcgctgaa agaggtagtt 12720

gagggtggtg gcggtgtgtt ctgccacgaa gaagtacata acccagcgtc gcaacgtgga 12780

ttcgttgata tcccccaagg cctcaaggcg ctccatggcc tcgtagaagt ccacggcgaa 12840

gttgaaaaac tgggagttgc gcgccgacac ggttaactcc tcctccagaa gacggatgag 12900

ctcggcgaca gtgtcgcgca cctcgcgctc aaaggctaca ggggcctctt cttcttcttc 12960

aatctcctct tccataaggg cctccccttc ttcttcttct ggcggcggtg ggggaggggg 13020

gacacggcgg cgacgacggc gcaccgggag gcggtcgaca aagcgctcga tcatctcccc 13080

gcggcgacgg cgcatggtct cggtgacggc gcggccgttc tcgcgggggc gcagttggaa 13140

gacgccgccc gtcatgtccc ggttatgggt tggcgggggg ctgccatgcg gcagggatac 13200

ggcgctaacg atgcatctca acaattgttg tgtaggtact ccgccgccga gggacctgag 13260

cgagtccgca tcgaccggat cggaaaacct ctcgagaaag gcgtctaacc agtcacagtc 13320

gcaaggtagg ctgagcaccg tggcgggcgg cagcgggcgg cggtcggggt tgtttctggc 13380

ggaggtgctg ctgatgatgt aattaaagta ggcggtcttg agacggcgga tggtcgacag 13440

aagcaccatg tccttgggtc cggcctgctg aatgcgcagg cggtcggcca tgccccaggc 13500

ttcgttttga catcggcgca ggtctttgta gtagtcttgc atgagccttt ctaccggcac 13560

ttcttcttct ccttcctctt gtcctgcatc tcttgcatct atcgctgcgg cggcggcgga 13620

gtttggccgt aggtggcgcc ctcttcctcc catgcgtgtg accccgaagc ccctcatcgg 13680

ctgaagcagg gctaggtcgg cgacaacgcg ctcggctaat atggcctgct gcacctgcgt 13740

gagggtagac tggaagtcat ccatgtccac aaagcggtgg tatgcgcccg tgttgatggt 13800

gtaagtgcag ttggccataa cggaccagtt aacggtctgg tgacccggct gcgagagctc 13860

ggtgtacctg agacgcgagt aagccctcga gtcaaatacg tagtcgttgc aagtccgcac 13920

caggtactgg tatcccacca aaaagtgcgg cggcggctgg cggtagaggg gccagcgtag 13980

ggtggccggg gctccggggg cgagatcttc caacataagg cgatgatatc cgtagatgta 14040

cctggacatc caggtgatgc cggcggcggt ggtggaggcg cgcggaaagt cgcggacgcg 14100

gttccagatg ttgcgcagcg gcaaaaagtg ctccatggtc gggacgctct ggccggtcag 14160

gcgcgcgcaa tcgttgacgc tctagcgtgc aaaaggagag cctgtaagcg ggcactcttc 14220

cgtggtctgg tggataaatt cgcaagggta tcatggcgga cgaccggggt tcgagccccg 14280

tatccggccg tccgccgtga tccatgcggt taccgcccgc gtgtcgaacc caggtgtgcg 14340

acgtcagaca acgggggagt gctccttttg gcttccttcc aggcgcggcg gctgctgcgc 14400

tagctttttt ggccactggc cgcgcgcagc gtaagcggtt aggctggaaa gcgaaagcat 14460

taagtggctc gctccctgta gccggagggt tattttccaa gggttgagtc gcgggacccc 14520

cggttcgagt ctcggaccgg ccggactgcg gcgaacgggg gtttgcctcc ccgtcatgca 14580

agaccccgct tgcaaattcc tccggaaaca gggacgagcc ccttttttgc ttttcccaga 14640

tgcatccggt gctgcggcag atgcgccccc ctcctcagca gcggcaagag caagagcagc 14700

ggcagacatg cagggcaccc tcccctcctc ctaccgcgtc aggaggggcg acatccgcgg 14760

ttgacgcggc agcagatggt gattacgaac ccccgcggcg ccgggcccgg cactacctgg 14820

acttggagga gggcgagggc ctggcgcggc taggagcgcc ctctcctgag cggcacccaa 14880

gggtgcagct gaagcgtgat acgcgtgagg cgtacgtgcc gcggcagaac ctgtttcgcg 14940

accgcgaggg agaggagccc gaggagatgc gggatcgaaa gttccacgca gggcgcgagc 15000

tgcggcatgg cctgaatcgc gagcggttgc tgcgcgagga ggactttgag cccgacgcgc 15060

gaaccgggat tagtcccgcg cgcgcacacg tggcggccgc cgacctggta accgcatacg 15120

agcagacggt gaaccaggag attaactttc aaaaaagctt taacaaccac gtgcgtacgc 15180

ttgtggcgcg cgaggaggtg gctataggac tgatgcatct gtgggacttt gtaagcgcgc 15240

tggagcaaaa cccaaatagc aagccgctca tggcgcagct gttccttata gtgcagcaca 15300

gcagggacaa cgaggcattc agggatgcgc tgctaaacat agtagagccc gagggccgct 15360

ggctgctcga tttgataaac atcctgcaga gcatagtggt gcaggagcgc agcttgagcc 15420

tggctgacaa ggtggccgcc atcaactatt ccatgcttag cctgggcaag ttttacgccc 15480

gcaagatata ccataccct tacgttccca tagacaagga ggtaaagatc gaggggttct 15540

acatgcgcat ggcgctgaag gtgcttacct tgagcgacga cctgggcgtt tatcgcaacg 15600

agcgcatcca caaggccgtg agcgtgagcc ggcggcgcga gctcagcgac cgcgagctga 15660

tgcacagcct gcaaagggcc ctggctggca cgggcagcgg cgatagagag gccgagtcct 15720

actttgacgc gggcgctgac ctgcgctggg ccccaagccg acgcgccctg gaggcagctg 15780

gggccggacc tgggctggcg gtggcacccg cgcgcgctgg caacgtcggc ggcgtggagg 15840

aatatgacga ggacgatgag tacgagccag aggacggcga gtactaagcg gtgatgtttc 15900

tgatcagatg atgcaagacg caacggaccc ggcggtgcgg gcggcgctgc agagccagcc 15960

gtccggcctt aactccacgg acgactggcg ccaggtcatg gaccgcatca tgtcgctgac 16020

tgcgcgcaat cctgacgcgt tccggcagca gccgcaggcc aaccggctct ccgcaattct 16080

ggaagcggtg gtcccggcgc gcgcaaaccc cacgcacgag aaggtgctgg cgatcgtaaa 16140

cgcgctggcc gaaaacaggg ccatccggcc cgacgaggcc ggcctggtct acgacgcgct 16200

gcttcagcgc gtggctcgtt acaacagcgg caacgtgcag accaacctgg accggctggt 16260

gggggatgtg cgcgaggccg tggcgcagcg tgagcgcgcg cagcagcagg gcaacctggg 16320

ctccatggtt gcactaaacg ccttcctgag tacacagccc gccaacgtgc cgcggggaca 16380

ggaggactac accaactttg tgagcgcact gcggctaatg gtgactgaga caccgcaaag 16440

tgaggtgtac cagtctgggc cagactattt tttccagacc agtagacaag gcctgcagac 16500

cgtaaacctg agccaggctt tcaaaaactt gcaggggctg tgggggggtgc gggctcccac 16560

aggcgaccgc gcgaccgtgt ctagcttgct gacgcccaac tcgcgcctgt tgctgctgct 16620

aatagcgccc ttcacggaca gtggcagcgt gtcccgggac acatacctag gtcacttgct 16680

gacactgtac cgcgaggcca taggtcaggc gcatgtggac gagcatactt tccaggagat 16740

tacaagtgtc agccgcgcgc tggggcagga ggacacgggc agcctggagg caaccctaaa 16800

ctacctgctg accaaccggc ggcagaagat cccctcgttg cacagtttaa acagcgagga 16860

ggagcgcatt ttgcgctacg tgcagcagag cgtgagcctt aacctgatgc gcgacggggt 16920

aacgcccagc gtggcgctgg acatgaccgc gcgcaacatg gaaccgggca tgtatgcctc 16980

aaaccggccg tttatcaacc gcctaatgga ctacttgcat cgcgcggccg ccgtgaaccc 17040

cgagtatttc accaatgcca tcttgaaccc gcactggcta ccgccccctg gtttctacac 17100

cgggggattc gaggtgcccg agggtaacga tggattcctc tgggacgaca tagacgacag 17160

cgtgttttcc ccgcaaccgc agaccctgct agagttgcaa cagcgcgagc aggcagaggc 17220

ggcgctgcga aaggaaagct tccgcaggcc aagcagcttg tccgatctag gcgctgcggc 17280

cccgcggtca gatgctagta gcccatttcc aagcttgata gggtctctta ccagcactcg 17340

caccacccgc ccgcgcctgc tgggcgagga ggagtaccta aacaactcgc tgctgcagcc 17400

gcagcgcgaa aaaaacctgc ctccggcatt tcccaacaac gggatagaga gcctagtgga 17460

caagatgagt agatggaaga cgtacgcgca ggagcacagg gacgtgccag gcccgcgccc 17520

gcccacccgt cgtcaaaggc acgaccgtca gcggggtctg gtgtgggagg acgatgactc 17580

ggcagacgac agcagcgtcc tggatttggg agggagtggc aacccgtttg cgcaccttcg 17640

ccccaggctg gggagaatgt tttaaaaaaa aaaaagcatg atgcaaaata aaaaactcac 17700

caaggccatg gcaccgagcg ttggttttct tgtattcccc ttagtatgcg gcgcgcggcg 17760

atgtatgagg aaggtcctcc tccctcctac gagagtgtgg tgagcgcggc gccagtggcg 17820

gcggcgctgg gttctccctt cgatgctccc ctggacccgc cgtttgtgcc tccgcggtac 17880

ctgcggccta ccgggggggag aaacagcatc cgttactctg agttggcacc cctattcgac 17940

accacccgtg tgtacctggt ggacaacaag tcaacggatg tggcatccct gaactaccag 18000

aacgaccaca gcaactttct gaccacggtc attcaaaaca atgactacag cccgggggag 18060

gcaagcacac agaccatcaa tcttgacgac cggtcgcact ggggcggcga cctgaaaacc 18120

atcctgcata ccaacatgcc aaatgtgaac gagttcatgt ttaccaataa gtttaaggcg 18180

cgggtgatgg tgtcgcgctt gcctactaag gacaatcagg tggagctgaa atacgagtgg 18240

gtggagttca cgctgcccga gggcaactac tccgagacca tgaccataga ccttatgaac 18300

aacgcgatcg tggagcacta cttgaaagtg ggcagacaga acggggttct ggaaagcgac 18360

atcggggtaa agtttgacac ccgcaacttc agactggggt ttgaccccgt cactggtctt 18420

gtcatgcctg gggtatatac aaacgaagcc ttccatccag acatcatttt gctgccagga 18480

tgcggggtgg acttcaccca cagccgcctg agcaacttgt tgggcatccg caagcggcaa 18540

cccttccagg agggctttag gatcacctac gatgatctgg agggtggtaa cattcccgca 18600

ctgttggatg tggacgccta ccaggcgagc ttgaaagatg acaccgaaca gggcgggggt 18660

ggcgcaggcg gcagcaacag cagtggcagc ggcgcggaag agaactccaa cgcggcagcc 18720

gcggcaatgc agccggtgga ggacatgaac gatcatgcca ttcgcggcga cacctttgcc 18780

acacgggctg aggagaagcg cgctgaggcc gaagcagcgg ccgaagctgc cgcccccgct 18840

gcgcaacccg aggtcgagaa gcctcagaag aaaccggtga tcaaacccct gacagaggac 18900

agcaagaaac gcagttacaa cctaataagc aatgacagca ccttcaccca gtaccgcagc 18960

tggtaccttg catacaacta cggcgaccct cagaccggaa tccgctcatg gaccctgctt 19020

tgcactcctg acgtaacctg cggctcggag caggtctact ggtcgttgcc agacatgatg 19080

caagaccccg tgaccttccg ctccacgcgc cagatcagca actttccggt ggtgggcgcc 19140

gagctgttgc ccgtgcactc caagagcttc tacaacgacc aggccgtcta ctcccaactc 19200

atccgccagt ttacctctct gacccacgtg ttcaatcgct ttcccgagaa ccagattttg 19260

gcgcgcccgc cagcccccac catcaccacc gtcagtgaaa acgttcctgc tctcacagat 19320

cacgggacgc taccgctgcg caacagcatc ggaggagtcc agcgagtgac cattactgac 19380

gccagacgcc gcacctgccc ctacgtttac aaggccctgg gcatagtctc gccgcgcgtc 19440

ctatcgagcc gcacttttg agcaagcatg tccatcctta tatcgcccag caataacaca 19500

ggctggggcc tgcgcttccc aagcaagatg tttggcgggg ccaagaagcg ctccgaccaa 19560

cacccagtgc gcgtgcgcgg gcactaccgc gcgccctggg gcgcgcacaa acgcggccgc 19620

actgggcgca ccaccgtcga tgacgccatc gacgcggtgg tggaggaggc gcgcaactac 19680

acgcccacgc cgccaccagt gtccacagtg gacgcggcca ttcagaccgt ggtgcgcgga 19740

gcccggcgct atgctaaaat gaagagacgg cggaggcgcg tagcacgtcg ccaccgccgc 19800

cgacccggca ctgccgccca acgcgcggcg gcggccctgc ttaaccgcgc acgtcgcacc 19860

ggccgacggg cggccatgcg ggccgctcga aggctggccg cgggtattgt cactgtgccc 19920

cccaggtcca ggcgacgagc ggccgccgca gcagccgcgg ccattagtgc tatgactcag 19980

ggtcgcaggg gcaacgtgta ttgggtgcgc gactcggtta gcggcctgcg cgtgcccgtg 20040

cgcacccgcc ccccgcgcaa ctagattgca agaaaaaact acttagactc gtactgttgt 20100

atgtatccag cggcggcggc gcgcaacgaa gctatgtcca agcgcaaaat caaagaagag 20160

atgctccagg tcatcgcgcc ggagatctat ggccccccga agaaggaaga gcaggattac 20220

aagccccgaa agctaaagcg ggtcaaaaag aaaaagaaag atgatgatga tgaacttgac 20280

gacgaggtgg aactgctgca cgctaccgcg cccaggcgac gggtacagtg gaaaggtcga 20340

cgcgtaaaac gtgttttgcg acccggcacc accgtagtct ttacgcccgg tgagcgctcc 20400

acccgcacct acaagcgcgt gtatgatgag gtgtacggcg acgaggacct gcttgagcag 20460

gccaacgagc gcctcgggga gtttgcctac ggaaagcggc ataaggacat gctggcgttg 20520

ccgctggacg agggcaaccc aacacctagc ctaaagcccg taacactgca gcaggtgctg 20580

cccgcgcttg caccgtccga agaaaagcgc ggcctaaagc gcgagtctgg tgacttggca 20640

cccaccgtgc agctgatggt acccaagcgc cagcgactgg aagatgtctt ggaaaaaatg 20700

accgtggaac ctgggctgga gcccgaggtc cgcgtgcggc caatcaagca ggtggcgccg 20760

ggactgggcg tgcagaccgt ggacgttcag atacccacta ccagtagcac cagtattgcc 20820

accgccacag agggcatgga gacacaaacg tccccggttg cctcagcggt ggcggatgcc 20880

gcggtgcagg cggtcgctgc ggccgcgtcc aagacctcta cggaggtgca aacggacccg 20940

tggatgtttc gcgtttcagc cccccggcgc ccgcgccgtt cgaggaagta cggcgccgcc 21000

agcgcgctac tgcccgaata tgccctacat ccttccattg cgcctacccc cggctatcgt 21060

ggctacacct accgccccag aagacgagca actacccgac gccgaaccac cactggaacc 21120

cgccgccgcc gtcgccgtcg ccagcccgtg ctggccccga tttccgtgcg cagggtggct 21180

cgcgaaggag gcaggaccct ggtgctgcca acagcgcgct accaccccag catcgtttaa 21240

aagccggtct ttgtggttct tgcagatatg gccctcacct gccgcctccg tttcccggtg 21300

ccgggattcc gaggaagaat gcaccgtagg aggggcatgg ccggccacgg cctgacgggc 21360

ggcatgcgtc gtgcgcacca ccggcggcgg cgcgcgtcgc accgtcgcat gcgcggcggt 21420

atcctgcccc tccttattcc actgatcgcc gcggcgattg gcgccgtgcc cggaattgca 21480

tccgtggcct tgcaggcgca gagacactga ttaaaaacaa gttgcatgtg gaaaaatcaa 21540

aataaaaagt ctggactctc acgctcgctt ggtcctgtaa ctattttgta gaatggaaga 21600

catcaacttt gcgtctctgg ccccgcgaca cggctcgcgc ccgttcatgg gaaactggca 21660

agatatcggc accagcaata tgagcggtgg cgccttcagc tggggctcgc tgtggagcgg 21720

cattaaaaat ttcggttcca ccgttaagaa ctatggcagc aaggcctgga acagcagcac 21780

aggccagatg ctgagggata agttgaaaga gcaaaatttc caacaaaagg tggtagatgg 21840

cctggcctct ggcattagcg gggtggtgga cctggccaac caggcagtgc aaaataagat 21900

taacagtaag cttgatcccc gccctcccgt agaggagcct ccaccggccg tggagacagt 21960

gtctccagag gggcgtggcg aaaagcgtcc gcgccccgac agggaagaaa ctctggtgac 22020

gcaaatagac gagcctccct cgtacgagga ggcactaaag caaggcctgc ccaccacccg 22080

tcccatcgcg cccatggcta ccggagtgct gggccagcac acacccgtaa cgctggacct 22140

gcctcccccc gccgacaccc agcagaaacc tgtgctgcca ggcccgaccg ccgttgttgt 22200

aacccgtcct agccgcgcgt ccctgcgccg cgccgccagc ggtccgcgat cgttgcggcc 22260

cgtagccagt ggcaactggc aaagcacact gaacagcatc gtgggtctgg gggtgcaatc 22320

cctgaagcgc cgacgatgct tctgatagct aacgtgtcgt atgtgtgtca tgtatgcgtc 22380

catgtcgccg ccagaggagc tgctgagccg ccgcgcgccc gctttccaag atggctaccc 22440

cttcgatgat gccgcagtgg tcttacatgc acatctcggg ccaggacgcc tcggagtacc 22500

tgagccccgg gctggtgcag tttgcccgcg ccaccgagac gtacttcagc ctgaataaca 22560

agtttagaaa ccccacggtg gcgcctacgc acgacgtgac cacagaccgg tcccagcgtt 22620

tgacgctgcg gttcatccct gtggaccgtg aggatactgc gtactcgtac aaggcgcggt 22680

tcaccctagc tgtgggtgat aaccgtgtgc tggacatggc ttccacgtac tttgacatcc 22740

gcggcgtgct ggacaggggc cctactttta agccctactc tggcactgcc tacaacgccc 22800

tggctcccaa gggtgcccca aatccttgcg aatgggatga agctgctact gctcttgaaa 22860

taaacctaga agaagaggac gatgacaacg aagacgaagt agacgagcaa gctgagcagc 22920

aaaaaactca cgtatttggg caggcgcctt attctggtat aaatattaca aaggagggta 22980

ttcaaatagg tgtcgaaggt caaacaccta aatatgccga taaaacattt caacctgaac 23040

ctcaaatagg agaatctcag tggtacgaaa cagaaattaa tcatgcagct gggagagtcc 23100

taaaaaagac taccccaatg aaaccatgtt acggttcata tgcaaaaccc acaaatgaaa 23160

atggagggca aggcattctt gtaaagcaac aaaatggaaa gctagaaagt caagtggaaa 23220

tgcaattttt ctcaactact gaggcagccg caggcaatgg tgataacttg actcctaaag 23280

tggtattgta cagtgaagat gtagatatag aaaccccaga cactcatatt tcttacatgc 23340

ccactattaa ggaaggtaac tcacgagaac taatgggcca acaatctatg cccaacaggc 23400

ctaattacat tgcttttagg gacaatttta ttggtctaat gtattacaac agcacgggta 23460

atatgggtgt tctggcgggc caagcatcgc agttgaatgc tgttgtagat ttgcaagaca 23520

gaaacacaga gctttcatac cagcttttgc ttgattccat tggtgataga accaggtact 23580

tttctatgtg gaatcaggct gttgacagct atgatccaga tgttagaatt attgaaaatc 23640

atggaactga agatgaactt ccaaattact gctttccact gggaggtgtg attaatacag 23700

agactcttac caaggtaaaa cctaaaacag gtcaggaaaa tggatgggaa aaagatgcta 23760

cagaattttc agataaaaat gaaataagag ttggaaataa ttttgccatg gaaatcaatc 23820

taaatgccaa cctgtggaga aatttcctgt actccaacat agcgctgtat ttgcccgaca 23880

agctaaagta cagtccttcc aacgtaaaaa tttctgataa cccaaacacc tacgactaca 23940

tgaacaagcg agtggtggct cccgggctag tggactgcta cattaacctt ggagcacgct 24000

ggtcccttga ctatatggac aacgtcaacc catttaacca ccaccgcaat gctggcctgc 24060

gctaccgctc aatgttgctg ggcaatggtc gctatgtgcc cttccacatc caggtgcctc 24120

agaagttctt tgccattaaa aacctccttc tcctgccggg ctcatacacc tacgagtgga 24180

acttcaggaa ggatgttaac atggttctgc agagctccct aggaaatgac ctaagggttg 24240

acggagccag cattaagttt gatagcattt gcctttacgc caccttcttc cccatggccc 24300

acaacaccgc ctccacgctt gaggccatgc ttagaaacga caccaacgac cagtccttta 24360

acgactatct ctccgccgcc aacatgctct accctatacc cgccaacgct accaacgtgc 24420

ccatatccat cccctcccgc aactgggcgg ctttccgcgg ctgggccttc acgcgcctta 24480

agactaagga aaccccatca ctgggctcgg gctacgaccc ttattacacc tactctggct 24540

ctatacccta cctagatgga acctttttacc tcaaccacac ctttaagaag gtggccatta 24600

cctttgactc ttctgtcagc tggcctggca atgaccgcct gcttaccccc aacgagtttg 24660

aaattaagcg ctcagttgac ggggagggtt acaacgttgc ccagtgtaac atgaccaaag 24720

actggttcct ggtacaaatg ctagctaact ataacattgg ctaccagggc ttctatatcc 24780

cagagagcta caaggaccgc atgtactcct tctttagaaa cttccagccc atgagccgtc 24840

aggtggtgga tgatactaaa tacaaggact accaacaggt gggcatccta caccaacaca 24900

acaactctgg atttgttggc taccttgccc ccaccatgcg cgaaggacag gcctaccctg 24960

ctaacttccc ctatccgctt ataggcaaga ccgcagttga cagcattacc cagaaaaagt 25020

ttctttgcga tcgcaccctt tggcgcatcc cattctccag taactttatg tccatgggcg 25080

cactcacaga cctgggccaa aaccttctct acgccaactc cgcccacgcg ctagacatga 25140

cttttgaggt ggatcccatg gacgagccca cccttcttta tgttttgttt gaagtctttg 25200

acgtggtccg tgtgcaccag ccgcaccgcg gcgtcatcga aaccgtgtac ctgcgcacgc 25260

ccttctcggc cggcaacgcc acaacataaa gaagcaagca acatcaacaa cagctgccgc 25320

catgggctcc agtgagcagg aactgaaagc cattgtcaaa gatcttggtt gtgggccata 25380

ttttttgggc acctatgaca agcgctttcc aggctttgtt tctccacaca agctcgcctg 25440

cgccatagtc aatacggccg gtcgcgagac tgggggcgta cactggatgg cctttgcctg 25500

gaacccgcac tcaaaaacat gctacctctt tgagcccttt ggcttttctg accagcgact 25560

caagcaggtt taccagtttg agtacgagtc actcctgcgc cgtagcgcca ttgcttcttc 25620

ccccgaccgc tgtataacgc tggaaaagtc cacccaaagc gtacaggggc ccaactcggc 25680

cgcctgtgga ctattctgct gcatgtttct ccacgccttt gccaactggc cccaaactcc 25740

catggatcac aaccccacca tgaaccttat taccggggta cccaactcca tgctcaacag 25800

tccccaggta cagcccaccc tgcgtcgcaa ccaggaacag ctctacagct tcctggagcg 25860

ccactcgccc tacttccgca gccacagtgc gcagattagg agcgccactt ctttttgtca 25920

cttgaaaaac atgtaaaaat aatgtactag agacactttc aataaaggca aatgctttta 25980

tttgtacact ctcgggtgat tatttacccc cacccttgcc gtctgcgccg tttaaaaatc 26040

aaaggggttc tgccgcgcat cgctatgcgc cactggcagg gacacgttgc gatactggtg 26100

tttagtgctc cacttaaact caggcacaac catccgcggc agctcggtga agttttcact 26160

ccacaggctg cgcaccatca ccaacgcgtt tagcaggtcg ggcgccgata tcttgaagtc 26220

gcagttgggg cctccgccct gcgcgcgcga gttgcgatac acagggttgc agcactggaa 26280

cactatcagc gccgggtggt gcacgctggc cagcacgctc ttgtcggaga tcagatccgc 26340

gtccaggtcc tccgcgttgc tcagggcgaa cggagtcaac tttggtagct gccttcccaa 26400

aaagggcgcg tgcccaggct ttgagttgca ctcgcaccgt agtggcatca aaaggtgacc 26460

gtgcccggtc tgggcgttag gatacagcgc ctgcataaaa gccttgatct gcttaaaagc 26520

cacctgagcc tttgcgcctt cagagaagaa catgccgcaa gacttgccgg aaaactgatt 26580

ggccggacag gccgcgtcgt gcacgcagca ccttgcgtcg gtgttggaga tctgcaccac 26640

atttcggccc caccggttct tcacgatctt ggccttgcta gactgctcct tcagcgcgcg 26700

ctgcccgttt tcgctcgtca catccatttc aatcacgtgc tccttattta tcataatgct 26760

tccgtgtaga cacttaagct cgccttcgat ctcagcgcag cggtgcagcc acaacgcgca 26820

gcccgtgggc tcgtgatgct tgtaggtcac ctctgcaaac gactgcaggt acgcctgcag 26880

gaatcgcccc atcatcgtca caaaggtctt gttgctggtg aaggtcagct gcaacccgcg 26940

gtgctcctcg ttcagccagg tcttgcatac ggccgccaga gcttccactt ggtcaggcag 27000

tagtttgaag ttcgccttta gatcgttatc cacgtggtac ttgtccatca gcgcgcgcgc 27060

agcctccatg cccttctccc acgcagacac gatcggcaca ctcagcgggt tcatcaccgt 27120

aatttcactt tccgcttcgc tgggctcttc ctcttcctct tgcgtccgca taccacgcgc 27180

cactgggtcg tcttcattca gccgccgcac tgtgcgctta cctcctttgc catgcttgat 27240

tagcaccggt gggttgctga aacccaccat ttgtagcgcc acatcttctc tttcttcctc 27300

gctgtccacg attacctctg gtgatggcgg gcgctcgggc ttgggagaag ggcgcttctt 27360

tttcttcttg ggcgcaatgg ccaaatccgc cgccgaggtc gatggccgcg ggctgggtgt 27420

gcgcggcacc agcgcgtctt gtgatgagtc ttcctcgtcc tcggactcga tacgccgcct 27480

catccgcttt tttgggggcg cccggggagg cggcggcgac ggggacgggg acgacacgtc 27540

ctccatggtt gggggacgtc gcgccgcacc gcgtccgcgc tcgggggtgg tttcgcgctg 27600

ctcctcttcc cgactggcca tttccttctc ctataggcag aaaaagatca tggagtcagt 27660

cgagaagaag gacagcctaa ccgccccctc tgagttcgcc accaccgcct ccaccgatgc 27720

cgccaacgcg cctaccacct tccccgtcga ggcacccccg cttgaggagg aggaagtgat 27780

tatcgagcag gacccaggtt ttgtaagcga agacgacgag gaccgctcag taccaacaga 27840

ggataaaaag caagaccagg acaacgcaga ggcaaacgag gaacaagtcg ggcgggggga 27900

cgaaaggcat ggcgactacc tagatgtggg agacgacgtg ctgttgaagc atctgcagcg 27960

ccagtgcgcc attatctgcg acgcgttgca agagcgcagc gatgtgcccc tcgccatagc 28020

ggatgtcagc cttgcctacg aacgccacct attctcaccg cgcgtacccc ccaaacgcca 28080

agaaaacggc acatgcgagc ccaacccgcg cctcaacttc taccccgtat ttgccgtgcc 28140

agaggtgctt gccacctatc acatcttttt ccaaaactgc aagatacccc tatcctgccg 28200

tgccaaccgc agccgagcgg acaagcagct ggccttgcgg cagggcgctg tcatacctga 28260

tatcgcctcg ctcaacgaag tgccaaaaat ctttgagggt cttggacgcg acgagaagcg 28320

cgcggcaaac gctctgcaac aggaaaacag cgaaaatgaa agtcactctg gagtgttggt 28380

ggaactcgag ggtgacaacg cgcgcctagc cgtactaaaa cgcagcatcg aggtcaccca 28440

ctttgcctac ccggcactta acctaccccc caaggtcatg agcacagtca tgagtgagct 28500

gatcgtgcgc cgtgcgcagc ccctggagag ggatgcaaat ttgcaagaac aaacagagga 28560

gggcctaccc gcagttggcg acgagcagct agcgcgctgg cttcaaacgc gcgagcctgc 28620

cgacttggag gagcgacgca aactaatgat ggccgcagtg ctcgttaccg tggagcttga 28680

gtgcatgcag cggttctttg ctgacccgga gatgcagcgc aagctagagg aaacattgca 28740

ctacaccttt cgacagggct acgtacgcca ggcctgcaag atctccaacg tggagctctg 28800

caacctggtc tcctaccttg gaattttgca cgaaaaccgc cttgggcaaa acgtgcttca 28860

ttccacgctc aagggcgagg cgcgccgcga ctacgtccgc gactgcgttt acttatttct 28920

atgctacacc tggcagacgg ccatgggcgt ttggcagcag tgcttggagg agtgcaacct 28980

caaggagctg cagaaactgc taaagcaaaa cttgaaggac ctatggacgg ccttcaacga 29040

gcgctccgtg gccgcgcacc tggcggacat cattttcccc gaacgcctgc ttaaaaccct 29100

gcaacagggt ctgccagact tcaccagtca aagcatgttg cagaacttta ggaactttat 29160

cctagagcgc tcaggaatct tgcccgccac ctgctgtgca cttcctagcg actttgtgcc 29220

cattaagtac cgcgaatgcc ctccgccgct ttggggccac tgctaccttc tgcagctagc 29280

caactacctt gcctaccact ctgacataat ggaagacgtg agcggtgacg gtctactgga 29340

gtgtcactgt cgctgcaacc tatgcacccc gcaccgctcc ctggtttgca attcgcagct 29400

gcttaacgaa agtcaaatta tcggtacctt tgagctgcag ggtccctcgc ctgacgaaaa 29460

gtccgcggct ccggggttga aactcactcc ggggctgtgg acgtcggctt accttcgcaa 29520

atttgtacct gaggactacc acgcccacga gattaggttc tacgaagacc aatcccgccc 29580

gcctaatgcg gagcttaccg cctgcgtcat tacccagggc cacattcttg gccaattgca 29640

agccatcaac aaagcccgcc aagagtttct gctacgaaag ggacgggggg tttacttgga 29700

cccccagtcc ggcgaggagc tcaacccaat ccccccgccg ccgcagccct atcagcagca 29760

gccgcgggcc cttgcttccc aggatggcac ccaaaaagaa gctgcagctg ccgccgccac 29820

ccacggacga ggaggaatac tgggacagtc aggcagagga ggttttggac gaggaggagg 29880

aggacatgat ggaagactgg gagagcctag acgaggaagc ttccgaggtc gaagaggtgt 29940

cagacgaaac accgtcaccc tcggtcgcat tcccctcgcc ggcgccccag aaatcggcaa 30000

ccggttccag catggctaca acctccgctc ctcaggcgcc gccggcactg cccgttcgcc 30060

gacccaaccg tagatgggac accactggaa ccagggccgg taagtccaag cagccgccgc 30120

cgttagccca agagcaacaa cagcgccaag gctaccgctc atggcgcggg cacaagaacg 30180

ccatagttgc ttgcttgcaa gactgtgggg gcaacatctc cttcgcccgc cgctttcttc 30240

tctaccatca cggcgtggcc ttcccccgta acatcctgca ttactaccgt catctctaca 30300

gcccatactg caccggcggc agcggcagca acagcagcgg ccacacagaa gcaaaggcga 30360

ccggatagca agactctgac aaagcccaag aaatccacag cggcggcagc agcaggagga 30420

ggagcgctgc gtctggcgcc caacgaaccc gtatcgaccc gcgagcttag aaacaggatt 30480

tttcccactc tgtatgctat atttcaacag agcaggggcc aagaacaaga gctgaaaata 30540

aaaaacaggt ctctgcgatc cctcacccgc agctgcctgt atcacaaaag cgaagatcag 30600

cttcggcgca cgctggaaga cgcggaggct ctcttcagta aatactgcgc gctgactctt 30660

aaggactagt ttcgcgccct ttctcaaatt taagcgcgaa aactacgtca tctccagcgg 30720

ccacacccgg cgccagcacc tgttgtcagc gccattatga gcaaggaaat tcccacgccc 30780

tacatgtgga gttaccagcc acaaatggga cttgcggctg gagctgccca agactactca 30840

acccgaataa actacatgag cgcgggaccc cacatgatat cccgggtcaa cggaatacgc 30900

gcccaccgaa accgaattct cctggaacag gcggctatta ccaccacacc tcgtaataac 30960

cttaatcccc gtagttggcc cgctgccctg gtgtaccagg aaagtcccgc tcccaccact 31020

gtggtacttc ccagagacgc ccaggccgaa gttcagatga ctaactcagg ggcgcagctt 31080

gcgggcggct ttcgtcacag ggtgcggtcg cccgggcagg gtataactca cctgacaatc 31140

agagggcgag gtattcagct caacgacgag tcggtgagct cctcgcttgg tctccgtccg 31200

gacgggacat ttcagatcgg cggcgccggc cgctcttcat tcacgcctcg tcaggcaatc 31260

ctaactctgc agacctcgtc ctctgagccg cgctctggag gcattggaac tctgcaattt 31320

attgaggagt ttgtgccatc ggtctacttt aaccccttct cgggacctcc cggccactat 31380

ccggatcaat ttattcctaa ctttgacgcg gtaaaggact cggcggacgg ctacgactga 31440

atgttaagtg gagaggcaga gcaactgcgc ctgaaacacc tggtccactg tcgccgccac 31500

aagtgctttg cccgcgactc cggtgagttt tgctactttg aattgcccga ggatcatatc 31560

gagggcccgg cgcacggcgt ccggcttacc gcccagggag agcttgcccg tagcctgatt 31620

cgggagttta cccagcgccc cctgctagtt gagcgggaca ggggaccctg tgttctcact 31680

gtgatttgca actgtcctaa ccctggatta catcaagatc ctctagttaa tgtcaggtcg 31740

cctaagtcga ttaactagag tacccgggga tcttattccc tttaactaat aaaaaaaaat 31800

aataaagcat cacttactta aaatcagtta gcaaatttct gtccagttta ttcagcagca 31860

cctccttgcc ctcctcccag ctctggtatt gcagcttcct cctggctgca aactttctcc 31920

acaatctaaa tggaatgtca gtttcctcct gttcctgtcc atccgcaccc actatcttca 31980

tgttgttgca gatgaagcgc gcaagaccgt ctgaagatac cttcaacccc gtgtatccat 32040

atgacacgga aaccggtcct ccaactgtgc cttttcttac tcctcccttt gtatccccca 32100

atgggtttca agagagtccc cctggggtac tctctttgcg cctatccgaa cctctagtta 32160

cctccaatgg catgcttgcg ctcaaaatgg gcaacggcct ctctctggac gaggccggca 32220

accttacctc ccaaaatgta accactgtga gcccacctct caaaaaaacc aagtcaaaca 32280

taaacctgga aatatctgca cccctcacag ttacctcaga agccctaact gtggctgccg 32340

ccgcacctct aatggtcgcg ggcaacacac tcaccatgca atcacaggcc ccgctaaccg 32400

tgcacgactc caaacttagc attgccaccc aaggacccct cacagtgtca gaaggaaagc 32460

tagccctgca aacatcaggc cccctcacca ccaccgatag cagtaccctt actatcactg 32520

cctcaccccc tctaactact gccactggta gcttgggcat tgacttgaaa gagcccattt 32580

atacacaaaa tggaaaacta ggactaaagt acggggctcc tttgcatgta acagacgacc 32640

taaacacttt gaccgtagca actggtccag gtgtgactat taataatact tccttgcaaa 32700

ctaaagttac tggagccttg ggttttgatt cacaaggcaa tatgcaactt aatgtagcag 32760

gaggactaag gattgattct caaaacagac gccttatact tgatgttagt tatccgtttg 32820

atgctcaaaa ccaactaaat ctaagactag gacagggccc tctttttata aactcagccc 32880

acaacttgga tattaactac aacaaaggcc tttacttgtt tacagcttca aacaattcca 32940

aaaagcttga ggttaaccta agcactgcca aggggttgat gtttgacgct acagccatag 33000

ccattaatgc aggagatggg cttgaatttg gttcacctaa tgcaccaaac acaaatcccc 33060

tcaaaacaaa aattggccat ggcctagaat ttgattcaaa caaggctatg gttcctaaac 33120

taggaactgg ccttagtttt gacagcacag gtgccattac agtaggaaac aaaaataatg 33180

ataagctaac tttgtggacc ggaataaacc ctccacctaa ctgtcaaatt gtggaaaaca 33240

ctaatacaaa tgatggcaaa cttactttag tattagtaaa aaatggaggg cttgttaatg 33300

gctacgtgtc tctagttggt gtatcagaca ctgtgaacca aatgttcaca caaaagacag 33360

caaacatcca attaagatta tattttgact cttctggaaa tctattaact gaggaatcag 33420

acttaaaaat tccacttaaa aataaatctt ctacagcgac cagtgaaact gtagccagca 33480

gcaaagcctt tatgccaagt actacagctt atcccttcaa caccactact agggatagtg 33540

aaaactacat tcatggaata tgttactaca tgactagtta tgatagaagt ctatttccct 33600

tgaacatttc tataatgcta aacagccgta tgatttcttc caatgttgcc tatgccatac 33660

aatttgaatg gaatctaaat gcaagtgaat ctccagaaag caacatagct acgctgacca 33720

catccccctt tttcttttct tacattacag aagacgacaa ctaaagaatc gtttgtgtta 33780

tgtttcaacg tgtttatttt tcaattgcag aaaatttcaa gtcatttttc attcagtagt 33840

atagccccac caccacatag cttatacaga tcaccgtacc ttaatcaaac tcacagaacc 33900

ctagtattca acctgccacc tccctcccaa cacacagagt acacagtcct ttctccccgg 33960

ctggccttaa aaagcatcat atcatgggta acagacatat tcttaggtgt tatattccac 34020

acggtttcct gtcgagccaa acgctcatca gtgatattaa taaactcccc gggcagctca 34080

cttaagttca tgtcgctgtc cagctgctga gccacaggct gctgtccaac ttgcggttgc 34140

ttaacgggcg gcgaaggaga agtccacgcc tacatggggg tagagtcata atcgtgcatc 34200

aggatagggc ggtggtgctg cagcagcgcg cgaataaact gctgccgccg ccgctccgtc 34260

ctgcaggaat acaacatggc agtggtctcc tcagcgatga ttcgcaccgc ccgcagcata 34320

aggcgccttg tcctccgggc acagcagcgc accctgatct cacttaaatc agcacagtaa 34380

ctgcagcaca gcaccacaat attgttcaaa atcccacagt gcaaggcgct gtatccaaag 34440

ctcatggcgg ggaccacaga acccacgtgg ccatcatacc acaagcgcag gtagattaag 34500

tggcgacccc tcataaacac gctggacata aacattacct cttttggcat gttgtaattc 34560

accacctccc ctctgattaa acatggcgcc atccaccacc atcctaaacc agctggccaa 34620

aacctgcccg ccggctatac actgcaggga accgggactg gaacaatgac agtggagagc 34680

ccaggactcg taaccatgga tcatcatgct cgtcatgata tcaatgttgg cacaacacag 34740

gcacacgtgc atacacttcc tcaggattac aagctcctcc cgcgttagaa ccatatccca 34800

gggaacaacc cattcctgaa tcagcgtaaa tcccacactg cagggaagac ctcgcacgta 34860

actcacgttg tgcattgtca aagtgttaca ttcgggcagc agcggatgat cctccagtat 34920

ggtagcgcgg gtttctgtct caaaaggagg tagacgatcc ctactgtacg gagtgcgccg 34980

agacaaccga gatcgtgttg gtcgtagtgt catgccaaat ggaacgccgg acgtagtcat 35040

atttcctgaa gcaaaaccag gtgcgggcgt gacaaacaga tctgcgtctc cggtctcgcc 35100

gcttagatcg ctctgtgtag tagttgtagt atatccactc tctcaaagca tccaggcgcc 35160

ccctggcttc gggttctatg taaactcctt catgcgccgc tgccctgata acatccacca 35220

ccgcagaata agccacaccc agccaaccta cacattcgtt ctgcgagtca cacacgggag 35280

gagcgggaag agctggaaga accatgtttt ttttttatt ccaaaagatt atccaaaacc 35340

tcaaaatgaa gatctattaa gtgaacgcgc tcccctccgg tggcgtggtc aaactctaca 35400

gccaaagaac agataatggc atttgtaaga tgttgcacaa tggcttccaa aaggcaaacg 35460

gccctcacgt ccaagtggac gtaaaggcta aacccttcag ggtgaatctc ctctataaac 35520

attccagcac cttcaaccat gcccaaataa ttctcatctc gccaccttct caatatatct 35580

ctaagcaaat cccgaatatt aagtccggcc attgtaaaaa tctgctccag agcgccctcc 35640

accttcagcc tcaagcagcg aatcatgatt gcaaaaattc aggttcctca cagacctgta 35700

taagattcaa aagcggaaca ttaacaaaaa taccgcgatc ccgtaggtcc cttcgcaggg 35760

ccagctgaac ataatcgtgc aggtctgcac ggaccagcgc ggccacttcc ccgccaggaa 35820

ccatgacaaa agaacccaca ctgattatga cacgcatact cggagctatg ctaaccagcg 35880

tagccccgat gtaagcttgt tgcatgggcg gcgatataaa atgcaaggtg ctgctcaaaa 35940

aatcaggcaa agcctcgcgc aaaaaagaaa gcacatcgta gtcatgctca tgcagataaa 36000

ggcaggtaag ctccggaacc accacagaaa aagacaccat ttttctctca aacatgtctg 36060

cgggtttctg cataaacaca aaataaaata acaaaaaaac atttaaacat tagaagcctg 36120

tcttacaaca ggaaaaacaa cccttataag cataagacgg actacggcca tgccggcgtg 36180

accgtaaaaa aactggtcac cgtgattaaa aagcaccacc gacagctcct cggtcatgtc 36240

cggagtcata atgtaagact cggtaaacac atcaggttga ttcacatcgg tcagtgctaa 36300

aaagcgaccg aaatagcccg ggggaataca tacccgcagg cgtagagaca acattacagc 36360

ccccatagga ggtataacaa aattaatagg agagaaaaac acataaacac ctgaaaaacc 36420

ctcctgccta ggcaaaatag caccctcccg ctccagaaca acatacagcg cttccacagc 36480

ggcagccata acagtcagcc ttaccagtaa aaaagaaaac ctattaaaaa aacaccactc 36540

gacacggcac cagctcaatc agtcacagtg taaaaaaggg ccaagtgcag agcgagtata 36600

tataggacta aaaaatgacg taacggttaa agtccacaaa aaacacccag aaaaccgcac 36660

gcgaacctac gcccagaaac gaaagccaaa aaacccacaa cttcctcaaa tcgtcacttc 36720

cgttttccca cgttacgtca cttcccattt taagaaaact acaattccca acacatacaa 36780

gttactccgc cctaaaacct acgtcacccg ccccgttccc acgccccgcg ccacgtcaca 36840

aactccaccc cctcattatc atattggctt caatccaaaa taaggtatat tattgatgat 36900

g 36901

<210> 23
<211> 36431
<212> DNA
<213> Artificial Sequence

<220>
<223> pAdk35F2-Spike/E4orf6(CMV)-E4dlO4-7(E4re#18)

<400> 23
ttaattaaca tcatcaataa tataccttat tttggattga agccaatatg ataatgaggg 60

ggtggagttt gtgacgtggc gcggggcgtg ggaacggggc gggtgacgta gtagtgtggc 120

ggaagtgtga tgttgcaagt gtggcggaac acatgtaagc gacggatgtg gcaaaagtga 180

cgtttttggt gtgcgccggt gtacacagga agtgacaatt ttcgcgcggt tttaggcgga 240

tgttgtagta aatttgggcg taaccgagta agatttggcc attttcgcgg gaaaactgaa 300

taagaggaag tgaaatctga ataattttgt gttactcata gcgcgtaata atttctgtaa 360

tagtaatcaa ttacggggtc attagttcat agcccatata tggagttccg cgttacataa 420

cttacggtaa atggcccgcc tggctgaccg cccaacgacc cccgcccatt gacgtcaata 480

atgacgtatg ttcccatagt aacgccaata gggactttcc attgacgtca atgggtggag 540

tatttacggt aaactgccca cttggcagta catcaagtgt atcatatgcc aagtacgccc 600

cctattgacg tcaatgacgg taaatggccc gcctggcatt atgcccagta catgacctta 660

tgggactttc ctacttggca gtacatctac gtattagtca tcgctattac catggtgatg 720

cggttttggc agtacatcaa tgggcgtgga tagcggtttg actcacgggg atttccaagt 780

ctccacccca ttgacgtcaa tgggagtttg ttttggcacc aaaatcaacg ggactttcca 840

aaatgtcgta acaactccgc cccattgacg caaatgggcg gtaggcgtgt acggtgggag 900

gtctatataa gcagagctct ccctatcagt gatagagatc tccctatcag tgatagagat 960

cgtcgacgag ctcgtttagt gaaccgtcag atcgcctgga gacgccatcc acgctgtttt 1020

gacctccata gaagacaccg ggaccgatcc agcctccgat ttgccaccat gtttgtgttc 1080

ctggtgctgc tgccactggt gtccagccag tgtgtgaacc tgaccaccag gacccaactt 1140

cctcctgcct acaccaactc cttcaccagg ggagtctact accctgacaa ggtgttcagg 1200

tcctctgtgc tgcacagcac ccaggacctg ttcctgccat tcttcagcaa tgtgacctgg 1260

ttccatgcca tccatgtgtc tggcaccaat ggcaccaaga ggtttgacaa ccctgtgctg 1320

ccattcaatg atggagtcta ctttgccagc acagagaaga gcaacatcat caggggctgg 1380

atttttggca ccaccctgga cagcaagacc cagtccctgc tgattgtgaa caatgccacc 1440

aatgtggtga ttaaggtgtg tgagttccag ttctgtaatg acccattcct gggagtctac 1500

taccacaaga acaacaagtc ctggatggag tctgagttca gggtctactc ctctgccaac 1560

aactgtacct ttgaatatgt gagccaacca ttcctgatgg acttggaggg caagcagggc 1620

aacttcaaga acctgaggga gtttgtgttc aagaacattg atggctactt caagatttac 1680

agcaaacaca caccaatcaa cctggtgagg gacctgccac agggcttctc tgccttggaa 1740

ccactggtgg acctgccaat tggcatcaac atcaccaggt tccagaccct gctggctctg 1800

cacaggtcct acctgacacc tggagactcc tcctctggct ggacagcagg agcagcagcc 1860

tactatgtgg gctacctcca accaaggacc ttcctgctga aatacaatga gaatggcacc 1920

atcacagatg ctgtggactg tgccctggac ccactgtctg agaccaagtg taccctgaaa 1980

tccttcacag tggagaaggg catctaccag accagcaact tcagggtcca accaacagag 2040

agcattgtga ggtttccaaa catcaccaac ctgtgtccat ttggagaggt gttcaatgcc 2100

accaggtttg cctctgtcta tgcctggaac aggaagagga ttagcaactg tgtggctgac 2160

tactctgtgc tctacaactc tgcctccttc agcaccttca agtgttatgg agtgagccca 2220

accaaactga atgacctgtg tttcaccaat gtctatgctg actcctttgt gattagggga 2280

gatgaggtga gacagattgc ccctggacaa acaggcaaga ttgctgacta caactacaaa 2340

ctgcctgatg acttcacagg ctgtgtgatt gcctggaaca gcaacaacct ggacagcaag 2400

gtgggaggca actacaacta cctctacaga ctgttcagga agagcaacct gaaaccattt 2460

gagagggaca tcagcacaga gatttaccag gctggcagca caccatgtaa tggagtggag 2520

ggcttcaact gttactttcc actccaatcc tatggcttcc aaccaaccaa tggagtgggc 2580

taccaaccat acagggtggt ggtgctgtcc tttgaactgc tccatgcccc tgccacagtg 2640

tgtggaccaa agaagagcac caacctggtg aagaacaagt gtgtgaactt caacttcaat 2700

ggactgacag gcacaggagt gctgacagag agcaacaaga agttcctgcc attccaacag 2760

tttggcaggg acattgctga caccacagat gctgtgaggg acccacagac cttggagatt 2820

ctggacatca caccatgttc ctttggagga gtgtctgtga ttacacctgg caccaacacc 2880

agcaaccagg tggctgtgct ctaccaggat gtgaactgta ctgaggtgcc tgtggctatc 2940

catgctgacc aacttacacc aacctggagg gtctacagca caggcagcaa tgtgttccag 3000

accagggctg gctgtctgat tggagcagag catgtgaaca actcctatga gtgtgacatc 3060

ccaattggag caggcatctg tgcctcctac cagacccaga ccggtggcgg tgggtcgagg 3120

tctgtggcaa gccagagcat cattgcctac acaatgagtc tgggagcaga gaactctgtg 3180

gcttacagca acaacagcat tgccatccca accaacttca ccatctctgt gaccacagag 3240

attctgcctg tgagtatgac caagacctct gtggactgta caatgtatat ctgtggagac 3300

agcacagagt gtagcaacct gctgctccaa tatggctcct tctgtaccca acttaacagg 3360

gctctgacag gcattgctgt ggaacaggac aagaacaccc aggaggtgtt tgcccaggtg 3420

aagcagattt acaagacacc tccaatcaag gactttggag gcttcaactt cagccagatt 3480

ctgcctgacc caagcaagcc aagcaagagg tccttcattg aggacctgct gttcaacaag 3540

gtgaccctgg ctgatgctgg cttcatcaag caatatggag actgtctggg agacattgct 3600

gccagggacc tgatttgtgc ccagaagttc aatggactga cagtgctgcc tccactgctg 3660

acagatgaga tgattgccca atacacctct gccctgctgg ctggcaccat cacctctggc 3720

tggacctttg gagcaggagc agccctccaa atcccatttg ctatgcagat ggcttacagg 3780

ttcaatggca ttggagtgac ccagaatgtg ctctatgaga accagaaact gattgccaac 3840

cagttcaact ctgccattgg caagattcag gactccctgt ccagcacagc ctctgccctg 3900

ggcaaactcc aagatgtggt gaaccagaat gcccaggctc tgaacaccct ggtgaagcaa 3960

ctttccagca actttggagc catctcctct gtgctgaatg acatcctgag cagactggac 4020

aaggtggagg ctgaggtcca gattgacaga ctgattacag gcagactcca atccctccaa 4080

acctatgtga cccaacaact tatcagggct gctgagatta gggcatctgc caacctggct 4140

gccaccaaga tgagtgagtg tgtgctggga caaagcaaga gggtggactt ctgtggcaag 4200

ggctaccacc tgatgagttt tccacagtct gcccctcatg gagtggtgtt cctgcatgtg 4260

acctatgtgc ctgcccagga gaagaacttc accacagccc ctgccatctg ccatgatggc 4320

aaggctcact ttccaaggga gggagtgttt gtgagcaatg gcacccactg gtttgtgacc 4380

cagaggaact tctatgaacc acagattatc accacagaca acacctttgt gtctggcaac 4440

tgtgatgtgg tgattggcat tgtgaacaac acagtctatg acccactcca acctgaactg 4500

gactccttca aggaggaact ggacaaatac ttcaagaacc acaccagccc tgatgtggac 4560

ctgggagaca tctctggcat caatgcctct gtggtgaaca tccagaagga gattgacaga 4620

ctgaatgagg tggctaagaa cctgaatgag tccctgattg acctccaaga actgggcaaa 4680

tatgaacaat acatcaagtg gccatgaaaa ttgatcataa tcagccatac cacatttgta 4740

gaggttttac ttgctttaaa aaacctccca cacctccccc tgaacctgaa acataaaatg 4800

aatgcaattg ttgttgttaa cttgtttatt gcagcttata atggttacaa ataaagcaat 4860

agcatcacaa atttcacaaa taaagcattt ttttcactgc attctagttg tggtttgtcc 4920

aaactcatca atgtatctta acgcggatcc gttacataac ttacggtaaa tggcccgcct 4980

ggctgaccgc ccaacgaccc ccgcccattg acgtcaataa tgacgtatgt tcccatagta 5040

acgccaatag ggactttcca ttgacgtcaa tgggtggagt atttacggta aactgcccac 5100

ttggcagtac atcaagtgta tcatatgcca agtacgcccc ctattgacgt caatgacggt 5160

aaatggcccg cctggcatta tgcccagtac atgaccttat gggactttcc tacttggcag 5220

tacatctacg tattagtcat cgctattacc atggtgatgc ggttttggca gtacatcaat 5280

gggcgtggat agcggtttga ctcacgggga tttccaagtc tccaccccat tgacgtcaat 5340

gggagtttgt tttggcacca aaatcaacgg gactttccaa aatgtcgtaa caactccgcc 5400

ccattgacgc aaatgggcgg taggcgtgta cggtgggagg tctatataag cagagctaaa 5460

ctaccccaag ctggccacca tgactacgtc cggcgttcca tttggcatga cactacgacc 5520

aacacgatct cggttgtctc ggcgcactcc gtacagtagg gatcgtctac ctccttttga 5580

gacagaaacc cgcgctacca tactggagga tcatccgctg ctgcccgaat gtaacacttt 5640

gacaatgcac aacgtgagtt acgtgcgagg tcttccctgc agtgtgggat ttacgctgat 5700

tcaggaatgg gttgttccct gggatatggt tctaacgcgg gaggagcttg taatcctgag 5760

gaagtgtatg cacgtgtgcc tgtgttgtgc caacattgat atcatgacga gcatgatgat 5820

ccatggttac gagtcctggg ctctccactg tcattgttcc agtcccggtt ccctgcagtg 5880

tatagccggc gggcaggttt tggccagctg gtttaggatg gtggtggatg gcgccatgtt 5940

taatcagagg tttatatggt accgggaggt ggtgaattac aacatgccaa aagaggtaat 6000

gtttatgtcc agcgtgttta tgaggggtcg ccacttaatc tacctgcgct tgtggtatga 6060

tggccacgtg ggttctgtgg tccccgccat gagctttgga tacagcgcct tgcactgtgg 6120

gattttgaac aatattgtgg tgctgtgctg cagttactgt gctgatttaa gtgagatcag 6180

ggtgcgctgc tgtgcccgga ggacaaggcg ccttatgctg cgggcggtgc gaatcatcgc 6240

tgaggagacc actgccatgt tgtattcctg caggacggag cggcggcggc agcagtttat 6300

tcgcgcgctg ctgcagcacc accgccctat cctgatgcac gattatgact ctacccccat 6360

gtagaagctt ggggatcaat tctctagagc tcgctgatca gcctcgactg tgccttctag 6420

ttgccagcca tctgttgttt gcccctcccc cgtgccttcc ttgaccctgg aaggtgccac 6480

tcccactgtc ctttcctaat aaaatgagga aattgcatcg cattgtctga gtaggtgtca 6540

ttctattctg gggggtgggg tggggcagga cagcaagggg gaggattggg aagacaatag 6600

caggcatgct ggggatgcgg tgggctctat ggcttctgag gaaattgggc gtggcttaag 6660

ggtgggaaag aatatataag gtgggggtct tatgtagttt tgtatctgtt ttgcagcagc 6720

cgccgccgcc atgagcacca actcgtttga tggaagcatt gtgagctcat atttgacaac 6780

gcgcatgccc ccatgggccg gggtgcgtca gaatgtgatg ggctccagca ttgatggtcg 6840

ccccgtcctg cccgcaaact ctactacctt gacctacgag accgtgtctg gaacgccgtt 6900

ggagactgca gcctccgccg ccgcttcagc cgctgcagcc accgcccgcg ggattgtgac 6960

tgactttgct ttcctgagcc cgcttgcaag cagtgcagct tcccgttcat ccgcccgcga 7020

tgacaagttg acggctcttt tggcacaatt ggattctttg acccgggaac ttaatgtcgt 7080

ttctcagcag ctgttggatc tgcgccagca ggtttctgcc ctgaaggctt cctcccctcc 7140

caatgcggtt taaaacataa ataaaaaacc agactctgtt tggatttgga tcaagcaagt 7200

gtcttgctgt ctttatttag gggttttgcg cgcgcggtag gcccgggacc agcggtctcg 7260

gtcgttgagg gtcctgtgta ttttttccag gacgtggtaa aggtgactct ggatgttcag 7320

atacatgggc ataagcccgt ctctggggtg gaggtagcac cactgcagag cttcatgctg 7380

cggggtggtg ttgtagatga tccagtcgta gcaggagcgc tgggcgtggt gcctaaaaat 7440

gtctttcagt agcaagctga ttgccagggg caggcccttg gtgtaagtgt ttacaaagcg 7500

gttaagctgg gatgggtgca tacgtgggga tatgagatgc atcttggact gtatttttag 7560

gttggctatg ttcccagcca tatccctccg gggattcatg ttgtgcagaa ccaccagcac 7620

agtgtatccg gtgcacttgg gaaatttgtc atgtagctta gaaggaaatg cgtggaagaa 7680

cttggagacg cccttgtgac ctccaagatt ttccatgcat tcgtccataa tgatggcaat 7740

gggcccacgg gcggcggcct gggcgaagat atttctggga tcactaacgt catagttgtg 7800

ttccaggatg agatcgtcat aggccatttt tacaaagcgc gggcggaggg tgccagactg 7860

cggtataatg gttccatccg gcccaggggc gtagttaccc tcacagattt gcatttccca 7920

cgctttgagt tcagatgggg ggatcatgtc tacctgcggg gcgatgaaga aaacggtttc 7980

cggggtaggg gagatcagct gggaagaaag caggttcctg agcagctgcg acttaccgca 8040

gccggtgggc ccgtaaatca cacctattac cgggtgcaac tggtagttaa gagagctgca 8100

gctgccgtca tccctgagca ggggggccac ttcgttaagc atgtccctga ctcgcatgtt 8160

ttccctgacc aaatccgcca gaaggcgctc gccgcccagc gatagcagtt cttgcaagga 8220

agcaaagttt ttcaacggtt tgagaccgtc cgccgtaggc atgcttttga gcgtttgacc 8280

aagcagttcc aggcggtccc acagctcggt cacctgctct acggcatctc gatccagcat 8340

atctcctcgt ttcgcgggtt ggggcggctt tcgctgtacg gcagtagtcg gtgctcgtcc 8400

agacgggcca gggtcatgtc tttccacggg cgcagggtcc tcgtcagcgt agtctgggtc 8460

acggtgaagg ggtgcgctcc gggctgcgcg ctggccaggg tgcgcttgag gctggtcctg 8520

ctggtgctga agcgctgccg gtcttcgccc tgcgcgtcgg ccaggtagca tttgaccatg 8580

gtgtcatagt ccagcccctc cgcggcgtgg cccttggcgc gcagcttgcc cttggaggag 8640

gcgccgcacg aggggcagtg cagacttttg agggcgtaga gcttgggcgc gagaaatacc 8700

gattccgggg agtaggcatc cgcgccgcag gccccgcaga cggtctcgca ttccacgagc 8760

caggtgagct ctggccgttc ggggtcaaaa accaggtttc ccccatgctt tttgatgcgt 8820

ttcttacctc tggtttccat gagccggtgt ccacgctcgg tgacgaaaag gctgtccgtg 8880

tccccgtata cagacttgag aggcctgtcc tcgagcggtg ttccgcggtc ctcctcgtat 8940

agaaactcgg accactctga gacaaaggct cgcgtccagg ccagcacgaa ggaggctaag 9000

tgggaggggt agcggtcgtt gtccactagg gggtccactc gctccagggt gtgaagacac 9060

atgtcgccct cttcggcatc aaggaaggtg attggtttgt aggtgtaggc cacgtgaccg 9120

ggtgttcctg aaggggggct ataaaagggg gtgggggcgc gttcgtcctc actctcttcc 9180

gcatcgctgt ctgcgagggc cagctgttgg ggtgagtact ccctctgaaa agcgggcatg 9240

acttctgcgc taagattgtc agtttccaaa aacgaggagg atttgatatt cacctggccc 9300

gcggtgatgc ctttgagggt ggccgcatcc atctggtcag aaaagacaat ctttttgttg 9360

tcaagcttgg tggcaaacga cccgtagagg gcgttggaca gcaacttggc gatggagcgc 9420

agggtttggt ttttgtcgcg atcggcgcgc tccttggccg cgatgtttag ctgcacgtat 9480

tcgcgcgcaa cgcaccgcca ttcgggaaag acggtggtgc gctcgtcggg caccaggtgc 9540

acgcgccaac cgcggttgtg cagggtgaca aggtcaacgc tggtggctac ctctccgcgt 9600

aggcgctcgt tggtccagca gaggcggccg cccttgcgcg agcagaatgg cggtaggggg 9660

tctagctgcg tctcgtccgg ggggtctgcg tccacggtaa agaccccggg cagcaggcgc 9720

gcgtcgaagt agtctatctt gcatccttgc aagtctagcg cctgctgcca tgcgcgggcg 9780

gcaagcgcgc gctcgtatgg gttgagtggg ggaccccatg gcatggggtg ggtgagcgcg 9840

gaggcgtaca tgccgcaaat gtcgtaaacg tagaggggct ctctgagtat tccaagatat 9900

gtagggtagc atcttccacc gcggatgctg gcgcgcacgt aatcgtatag ttcgtgcgag 9960

ggagcgagga ggtcgggacc gaggttgcta cgggcgggct gctctgctcg gaagactatc 10020

tgcctgaaga tggcatgtga gttggatgat atggttggac gctggaagac gttgaagctg 10080

gcgtctgtga gacctaccgc gtcacgcacg aaggaggcgt aggagtcgcg cagcttgttg 10140

accagctcgg cggtgacctg cacgtctagg gcgcagtagt ccagggtttc cttgatgatg 10200

tcatacttat cctgtccctt ttttttccac agctcgcggt tgaggacaaa ctcttcgcgg 10260

tctttccagt actcttggat cggaaacccg tcggcctccg aacggtaaga gcctagcatg 10320

tagaactggt tgacggcctg gtaggcgcag catccctttt ctacgggtag cgcgtatgcc 10380

tgcgcggcct tccggagcga ggtgtgggtg agcgcaaagg tgtccctgac catgactttg 10440

aggtactggt atttgaagtc agtgtcgtcg catccgccct gctcccagag caaaaagtcc 10500

gtgcgctttt tggaacgcgg atttggcagg gcgaaggtga catcgttgaa gagtatcttt 10560

cccgcgcgag gcataaagtt gcgtgtgatg cggaagggtc ccggcacctc ggaacggttg 10620

ttaattacct gggcggcgag cacgatctcg tcaaagccgt tgatgttgtg gcccacaatg 10680

taaagttcca agaagcgcgg gatgcccttg atggaaggca atttttaag ttcctcgtag 10740

gtgagctctt caggggagct gagcccgtgc tctgaaaggg cccagtctgc aagatgaggg 10800

ttggaagcga cgaatgagct ccacaggtca cgggccatta gcatttgcag gtggtcgcga 10860

aaggtcctaa actggcgacc tatggccatt ttttctgggg tgatgcagta gaaggtaagc 10920

gggtcttgtt cccagcggtc ccatccaagg ttcgcggcta ggtctcgcgc ggcagtcact 10980

agaggctcat ctccgccgaa cttcatgacc agcatgaagg gcacgagctg cttcccaaag 11040

gcccccatcc aagtataggt ctctacatcg taggtgacaa agagacgctc ggtgcgagga 11100

tgcgagccga tcgggaagaa ctggatctcc cgccaccaat tggaggagtg gctattgatg 11160

tggtgaaagt agaagtccct gcgacgggcc gaacactcgt gctggctttt gtaaaaacgt 11220

gcgcagtact ggcagcggtg cacgggctgt acatcctgca cgaggttgac ctgacgaccg 11280

cgcacaagga agcagagtgg gaatttgagc ccctcgcctg gcgggtttgg ctggtggtct 11340

tctacttcgg ctgcttgtcc ttgaccgtct ggctgctcga ggggagttac ggtggatcgg 11400

accaccacgc cgcgcgagcc caaagtccag atgtccgcgc gcggcggtcg gagcttgatg 11460

acaacatcgc gcagatggga gctgtccatg gtctggagct cccgcggcgt caggtcaggc 11520

gggagctcct gcaggtttac ctcgcataga cgggtcaggg cgcgggctag atccaggtga 11580

tacctaattt ccaggggctg gttggtggcg gcgtcgatgg cttgcaagag gccgcatccc 11640

cgcggcgcga ctacggtacc gcgcggcggg cggtgggccg cgggggtgtc cttggatgat 11700

gcatctaaaa gcggtgacgc gggcgagccc ccggaggtag ggggggctcc ggacccgccg 11760

ggagaggggg caggggcacg tcggcgccgc gcgcgggcag gagctggtgc tgcgcgcgta 11820

ggttgctggc gaacgcgacg acgcggcggt tgatctcctg aatctggcgc ctctgcgtga 11880

agacgacggg cccggtgagc ttgaacctga aagagagttc gacagaatca atttcggtgt 11940

cgttgacggc ggcctggcgc aaaatctcct gcacgtctcc tgagttgtct tgataggcga 12000

tctcggccat gaactgctcg atctcttcct cctggagatc tccgcgtccg gctcgctcca 12060

cggtggcggc gaggtcgttg gaaatgcggg ccatgagctg cgagaaggcg ttgaggcctc 12120

cctcgttcca gacgcggctg tagaccacgc ccccttcggc atcgcgggcg cgcatgacca 12180

cctgcgcgag attgagctcc acgtgccggg cgaagacggc gtagtttcgc aggcgctgaa 12240

agaggtagtt gagggtggtg gcggtgtgtt ctgccacgaa gaagtacata acccagcgtc 12300

gcaacgtgga ttcgttgata tcccccaagg cctcaaggcg ctccatggcc tcgtagaagt 12360

ccacggcgaa gttgaaaaac tgggagttgc gcgccgacac ggttaactcc tcctccagaa 12420

gacggatgag ctcggcgaca gtgtcgcgca cctcgcgctc aaaggctaca ggggcctctt 12480

cttcttcttc aatctcctct tccataaggg cctccccttc ttcttcttct ggcggcggtg 12540

ggggaggggg gacacggcgg cgacgacggc gcaccgggag gcggtcgaca aagcgctcga 12600

tcatctcccc gcggcgacgg cgcatggtct cggtgacggc gcggccgttc tcgcgggggc 12660

gcagttggaa gacgccgccc gtcatgtccc ggttatgggt tggcgggggg ctgccatgcg 12720

gcagggatac ggcgctaacg atgcatctca acaattgttg tgtaggtact ccgccgccga 12780

gggacctgag cgagtccgca tcgaccggat cggaaaacct ctcgagaaag gcgtctaacc 12840

agtcacagtc gcaaggtagg ctgagcaccg tggcgggcgg cagcgggcgg cggtcggggt 12900

tgtttctggc ggaggtgctg ctgatgatgt aattaaagta ggcggtcttg agacggcgga 12960

tggtcgacag aagcaccatg tccttgggtc cggcctgctg aatgcgcagg cggtcggcca 13020

tgccccaggc ttcgttttga catcggcgca ggtctttgta gtagtcttgc atgagccttt 13080

ctaccggcac ttcttcttct ccttcctctt gtcctgcatc tcttgcatct atcgctgcgg 13140

cggcggcgga gtttggccgt aggtggcgcc ctcttcctcc catgcgtgtg accccgaagc 13200

ccctcatcgg ctgaagcagg gctaggtcgg cgacaacgcg ctcggctaat atggcctgct 13260

gcacctgcgt gagggtagac tggaagtcat ccatgtccac aaagcggtgg tatgcgcccg 13320

tgttgatggt gtaagtgcag ttggccataa cggaccagtt aacggtctgg tgacccggct 13380

gcgagagctc ggtgtacctg agacgcgagt aagccctcga gtcaaatacg tagtcgttgc 13440

aagtccgcac caggtactgg tatcccacca aaaagtgcgg cggcggctgg cggtagaggg 13500

gccagcgtag ggtggccggg gctccggggg cgagatcttc caacataagg cgatgatatc 13560

cgtagatgta cctggacatc caggtgatgc cggcggcggt ggtggaggcg cgcggaaagt 13620

cgcggacgcg gttccagatg ttgcgcagcg gcaaaaagtg ctccatggtc gggacgctct 13680

ggccggtcag gcgcgcgcaa tcgttgacgc tctagcgtgc aaaaggagag cctgtaagcg 13740

ggcactcttc cgtggtctgg tggataaatt cgcaagggta tcatggcgga cgaccggggt 13800

tcgagccccg tatccggccg tccgccgtga tccatgcggt taccgcccgc gtgtcgaacc 13860

caggtgtgcg acgtcagaca acgggggagt gctccttttg gcttccttcc aggcgcggcg 13920

gctgctgcgc tagcttttt ggccactggc cgcgcgcagc gtaagcggtt aggctggaaa 13980

gcgaaagcat taagtggctc gctccctgta gccggagggt tattttccaa gggttgagtc 14040

gcgggacccc cggttcgagt ctcggaccgg ccggactgcg gcgaacgggg gtttgcctcc 14100

ccgtcatgca agaccccgct tgcaaattcc tccggaaaca gggacgagcc ccttttttgc 14160

ttttcccaga tgcatccggt gctgcggcag atgcgccccc ctcctcagca gcggcaagag 14220

caagagcagc ggcagacatg cagggcaccc tcccctcctc ctaccgcgtc aggaggggcg 14280

acatccgcgg ttgacgcggc agcagatggt gattacgaac ccccgcggcg ccgggcccgg 14340

cactacctgg acttggagga gggcgagggc ctggcgcggc taggagcgcc ctctcctgag 14400

cggcacccaa gggtgcagct gaagcgtgat acgcgtgagg cgtacgtgcc gcggcagaac 14460

ctgtttcgcg accgcgaggg agaggagccc gaggagatgc gggatcgaaa gttccacgca 14520

gggcgcgagc tgcggcatgg cctgaatcgc gagcggttgc tgcgcgagga ggactttgag 14580

cccgacgcgc gaaccgggat tagtcccgcg cgcgcacacg tggcggccgc cgacctggta 14640

accgcatacg agcagacggt gaaccaggag attaactttc aaaaaagctt taacaaccac 14700

gtgcgtacgc ttgtggcgcg cgaggaggtg gctataggac tgatgcatct gtgggacttt 14760

gtaagcgcgc tggagcaaaa cccaaatagc aagccgctca tggcgcagct gttccttata 14820

gtgcagcaca gcagggacaa cgaggcattc agggatgcgc tgctaaacat agtagagccc 14880

gagggccgct ggctgctcga tttgataaac atcctgcaga gcatagtggt gcaggagcgc 14940

agcttgagcc tggctgacaa ggtggccgcc atcaactatt ccatgcttag cctgggcaag 15000

ttttacgccc gcaagatata ccatacccct tacgttccca tagacaagga ggtaaagatc 15060

gaggggttct acatgcgcat ggcgctgaag gtgcttacct tgagcgacga cctgggcgtt 15120

tatcgcaacg agcgcatcca caaggccgtg agcgtgagcc ggcggcgcga gctcagcgac 15180

cgcgagctga tgcacagcct gcaaagggcc ctggctggca cgggcagcgg cgatagagag 15240

gccgagtcct actttgacgc gggcgctgac ctgcgctggg ccccaagccg acgcgccctg 15300

gaggcagctg gggccggacc tgggctggcg gtggcacccg cgcgcgctgg caacgtcggc 15360

ggcgtggagg aatatgacga ggacgatgag tacgagccag aggacggcga gtactaagcg 15420

gtgatgtttc tgatcagatg atgcaagacg caacggaccc ggcggtgcgg gcggcgctgc 15480

agagccagcc gtccggcctt aactccacgg acgactggcg ccaggtcatg gaccgcatca 15540

tgtcgctgac tgcgcgcaat cctgacgcgt tccggcagca gccgcaggcc aaccggctct 15600

ccgcaattct ggaagcggtg gtcccggcgc gcgcaaaccc cacgcacgag aaggtgctgg 15660

cgatcgtaaa cgcgctggcc gaaaacaggg ccatccggcc cgacgaggcc ggcctggtct 15720

acgacgcgct gcttcagcgc gtggctcgtt acaacagcgg caacgtgcag accaacctgg 15780

accggctggt gggggatgtg cgcgaggccg tggcgcagcg tgagcgcgcg cagcagcagg 15840

gcaacctggg ctccatggtt gcactaaacg ccttcctgag tacacagccc gccaacgtgc 15900

cgcggggaca ggaggactac accaactttg tgagcgcact gcggctaatg gtgactgaga 15960

caccgcaaag tgaggtgtac cagtctgggc cagactattt tttccagacc agtagacaag 16020

gcctgcagac cgtaaacctg agccaggctt tcaaaaactt gcaggggctg tgggggtgc 16080

gggctcccac aggcgaccgc gcgaccgtgt ctagcttgct gacgcccaac tcgcgcctgt 16140

tgctgctgct aatagcgccc ttcacggaca gtggcagcgt gtcccgggac acatacctag 16200

gtcacttgct gacactgtac cgcgaggcca taggtcaggc gcatgtggac gagcatactt 16260

tccaggagat tacaagtgtc agccgcgcgc tggggcagga ggacacgggc agcctggagg 16320

caaccctaaa ctacctgctg accaaccggc ggcagaagat cccctcgttg cacagtttaa 16380

acagcgagga ggagcgcatt ttgcgctacg tgcagcagag cgtgagcctt aacctgatgc 16440

gcgacggggt aacgcccagc gtggcgctgg acatgaccgc gcgcaacatg gaaccgggca 16500

tgtatgcctc aaaccggccg tttatcaacc gcctaatgga ctacttgcat cgcgcggccg 16560

ccgtgaaccc cgagtatttc accaatgcca tcttgaaccc gcactggcta ccgccccctg 16620

gtttctacac cgggggattc gaggtgcccg agggtaacga tggattcctc tgggacgaca 16680

tagacgacag cgtgttttcc ccgcaaccgc agaccctgct agagttgcaa cagcgcgagc 16740

aggcagaggc ggcgctgcga aaggaaagct tccgcaggcc aagcagcttg tccgatctag 16800

gcgctgcggc cccgcggtca gatgctagta gcccatttcc aagcttgata gggtctctta 16860

ccagcactcg caccacccgc ccgcgcctgc tgggcgagga ggagtaccta aacaactcgc 16920

tgctgcagcc gcagcgcgaa aaaaacctgc ctccggcatt tcccaacaac gggatagaga 16980

gcctagtgga caagatgagt agatggaaga cgtacgcgca ggagcacagg gacgtgccag 17040

gcccgcgccc gcccacccgt cgtcaaaggc acgaccgtca gcggggtctg gtgtgggagg 17100

acgatgactc ggcagacgac agcagcgtcc tggatttggg agggagtggc aacccgtttg 17160

cgcaccttcg ccccaggctg gggagaatgt tttaaaaaaa aaaaagcatg atgcaaaata 17220

aaaaactcac caaggccatg gcaccgagcg ttggttttct tgtattcccc ttagtatgcg 17280

gcgcgcggcg atgtatgagg aaggtcctcc tccctcctac gagagtgtgg tgagcgcggc 17340

gccagtggcg gcggcgctgg gttctccctt cgatgctccc ctggacccgc cgtttgtgcc 17400

tccgcggtac ctgcggccta ccgggggggag aaacagcatc cgttactctg agttggcacc 17460

cctattcgac accacccgtg tgtacctggt ggacaacaag tcaacggatg tggcatccct 17520

gaactaccag aacgaccaca gcaactttct gaccacggtc attcaaaaca atgactacag 17580

cccgggggag gcaagcacac agaccatcaa tcttgacgac cggtcgcact ggggcggcga 17640

cctgaaaacc atcctgcata ccaacatgcc aaatgtgaac gagttcatgt ttaccaataa 17700

gtttaaggcg cgggtgatgg tgtcgcgctt gcctactaag gacaatcagg tggagctgaa 17760

atacgagtgg gtggagttca cgctgcccga gggcaactac tccgagacca tgaccataga 17820

ccttatgaac aacgcgatcg tggagcacta cttgaaagtg ggcagacaga acggggttct 17880

ggaaagcgac atcggggtaa agtttgacac ccgcaacttc agactggggt ttgaccccgt 17940

cactggtctt gtcatgcctg gggtatatac aaacgaagcc ttccatccag acatcatttt 18000

gctgccagga tgcggggtgg acttcaccca cagccgcctg agcaacttgt tgggcatccg 18060

caagcggcaa cccttccagg agggctttag gatcacctac gatgatctgg agggtggtaa 18120

cattcccgca ctgttggatg tggacgccta ccaggcgagc ttgaaagatg acaccgaaca 18180

gggcgggggt ggcgcaggcg gcagcaacag cagtggcagc ggcgcggaag agaactccaa 18240

cgcggcagcc gcggcaatgc agccggtgga ggacatgaac gatcatgcca ttcgcggcga 18300

caccttgcc acacgggctg aggagaagcg cgctgaggcc gaagcagcgg ccgaagctgc 18360

cgcccccgct gcgcaacccg aggtcgagaa gcctcagaag aaaccggtga tcaaacccct 18420

gacagaggac agcaagaaac gcagttacaa cctaataagc aatgacagca ccttcaccca 18480

gtaccgcagc tggtaccttg catacaacta cggcgaccct cagaccggaa tccgctcatg 18540

gaccctgctt tgcactcctg acgtaacctg cggctcggag caggtctact ggtcgttgcc 18600

agacatgatg caagaccccg tgaccttccg ctccacgcgc cagatcagca actttccggt 18660

ggtgggcgcc gagctgttgc ccgtgcactc caagagcttc tacaacgacc aggccgtcta 18720

ctcccaactc atccgccagt ttacctctct gacccacgtg ttcaatcgct ttcccgagaa 18780

ccagattttg gcgcgcccgc cagcccccac catcaccacc gtcagtgaaa acgttcctgc 18840

tctcacagat cacgggacgc taccgctgcg caacagcatc ggaggagtcc agcgagtgac 18900

cattactgac gccagacgcc gcacctgccc ctacgtttac aaggccctgg gcatagtctc 18960

gccgcgcgtc ctatcgagcc gcacttttg agcaagcatg tccatcctta tatcgcccag 19020

caataacaca ggctggggcc tgcgcttccc aagcaagatg tttggcgggg ccaagaagcg 19080

ctccgaccaa cacccagtgc gcgtgcgcgg gcactaccgc gcgccctggg gcgcgcacaa 19140

acgcggccgc actgggcgca ccaccgtcga tgacgccatc gacgcggtgg tggaggaggc 19200

gcgcaactac acgcccacgc cgccaccagt gtccacagtg gacgcggcca ttcagaccgt 19260

ggtgcgcgga gcccggcgct atgctaaaat gaagagacgg cggaggcgcg tagcacgtcg 19320

ccaccgccgc cgacccggca ctgccgccca acgcgcggcg gcggccctgc ttaaccgcgc 19380

acgtcgcacc ggccgacggg cggccatgcg ggccgctcga aggctggccg cgggtattgt 19440

cactgtgccc cccaggtcca ggcgacgagc ggccgccgca gcagccgcgg ccattagtgc 19500

tatgactcag ggtcgcaggg gcaacgtgta ttgggtgcgc gactcggtta gcggcctgcg 19560

cgtgcccgtg cgcacccgcc ccccgcgcaa ctagattgca agaaaaaact acttagactc 19620

gtactgttgt atgtatccag cggcggcggc gcgcaacgaa gctatgtcca agcgcaaaat 19680

caaagaagag atgctccagg tcatcgcgcc ggagatctat ggccccccga agaaggaaga 19740

gcaggattac aagccccgaa agctaaagcg ggtcaaaaag aaaaagaaag atgatgatga 19800

tgaacttgac gacgaggtgg aactgctgca cgctaccgcg cccaggcgac gggtacagtg 19860

gaaaggtcga cgcgtaaaac gtgttttgcg acccggcacc accgtagtct ttacgcccgg 19920

tgagcgctcc acccgcacct acaagcgcgt gtatgatgag gtgtacggcg acgaggacct 19980

gcttgagcag gccaacgagc gcctcgggga gtttgcctac ggaaagcggc ataaggacat 20040

gctggcgttg ccgctggacg agggcaaccc aacacctagc ctaaagcccg taacactgca 20100

gcaggtgctg cccgcgcttg caccgtccga agaaaagcgc ggcctaaagc gcgagtctgg 20160

tgacttggca cccaccgtgc agctgatggt acccaagcgc cagcgactgg aagatgtctt 20220

ggaaaaaatg accgtggaac ctgggctgga gcccgaggtc cgcgtgcggc caatcaagca 20280

ggtggcgccg ggactgggcg tgcagaccgt ggacgttcag atacccacta ccagtagcac 20340

cagtattgcc accgccacag agggcatgga gacacaaacg tccccggttg cctcagcggt 20400

ggcggatgcc gcggtgcagg cggtcgctgc ggccgcgtcc aagacctcta cggaggtgca 20460

aacggacccg tggatgtttc gcgtttcagc cccccggcgc ccgcgccgtt cgaggaagta 20520

cggcgccgcc agcgcgctac tgcccgaata tgccctacat ccttccattg cgcctacccc 20580

cggctatcgt ggctacacct accgccccag aagacgagca actacccgac gccgaaccac 20640

cactggaacc cgccgccgcc gtcgccgtcg ccagcccgtg ctggccccga tttccgtgcg 20700

cagggtggct cgcgaaggag gcaggaccct ggtgctgcca acagcgcgct accaccccag 20760

catcgtttaa aagccggtct ttgtggttct tgcagatatg gccctcacct gccgcctccg 20820

tttcccggtg ccgggattcc gaggaagaat gcaccgtagg aggggcatgg ccggccacgg 20880

cctgacgggc ggcatgcgtc gtgcgcacca ccggcggcgg cgcgcgtcgc accgtcgcat 20940

gcgcggcggt atcctgcccc tccttattcc actgatcgcc gcggcgattg gcgccgtgcc 21000

cggaattgca tccgtggcct tgcaggcgca gagacactga ttaaaaacaa gttgcatgtg 21060

gaaaaatcaa aataaaaagt ctggactctc acgctcgctt ggtcctgtaa ctattttgta 21120

gaatggaaga catcaacttt gcgtctctgg ccccgcgaca cggctcgcgc ccgttcatgg 21180

gaaactggca agatatcggc accagcaata tgagcggtgg cgccttcagc tggggctcgc 21240

tgtggagcgg cattaaaaat ttcggttcca ccgttaagaa ctatggcagc aaggcctgga 21300

acagcagcac aggccagatg ctgagggata agttgaaaga gcaaaatttc caacaaaagg 21360

tggtagatgg cctggcctct ggcattagcg gggtggtgga cctggccaac caggcagtgc 21420

aaaataagat taacagtaag cttgatcccc gccctcccgt agaggagcct ccaccggccg 21480

tggagacagt gtctccagag gggcgtggcg aaaagcgtcc gcgccccgac agggaagaaa 21540

ctctggtgac gcaaatagac gagcctccct cgtacgagga ggcactaaag caaggcctgc 21600

ccaccacccg tcccatcgcg cccatggcta ccggagtgct gggccagcac acacccgtaa 21660

cgctggacct gcctcccccc gccgacaccc agcagaaacc tgtgctgcca ggcccgaccg 21720

ccgttgttgt aacccgtcct agccgcgcgt ccctgcgccg cgccgccagc ggtccgcgat 21780

cgttgcggcc cgtagccagt ggcaactggc aaagcacact gaacagcatc gtgggtctgg 21840

gggtgcaatc cctgaagcgc cgacgatgct tctgatagct aacgtgtcgt atgtgtgtca 21900

tgtatgcgtc catgtcgccg ccagaggagc tgctgagccg ccgcgcgccc gctttccaag 21960

atggctaccc cttcgatgat gccgcagtgg tcttacatgc acatctcggg ccaggacgcc 22020

tcggagtacc tgagccccgg gctggtgcag tttgcccgcg ccaccgagac gtacttcagc 22080

ctgaataaca agtttagaaa ccccacggtg gcgcctacgc acgacgtgac cacagaccgg 22140

tcccagcgtt tgacgctgcg gttcatccct gtggaccgtg aggatactgc gtactcgtac 22200

aaggcgcggt tcaccctagc tgtgggtgat aaccgtgtgc tggacatggc ttccacgtac 22260

tttgacatcc gcggcgtgct ggacaggggc cctactttta agccctactc tggcactgcc 22320

tacaacgccc tggctcccaa gggtgcccca aatccttgcg aatgggatga agctgctact 22380

gctcttgaaa taaacctaga agaagaggac gatgacaacg aagacgaagt agacgagcaa 22440

gctgagcagc aaaaaactca cgtatttggg caggcgcctt attctggtat aaatattaca 22500

aaggagggta ttcaaatagg tgtcgaaggt caaacaccta aatatgccga taaaacattt 22560

caacctgaac ctcaaatagg agaatctcag tggtacgaaa cagaaattaa tcatgcagct 22620

gggagagtcc taaaaaagac taccccaatg aaaccatgtt acggttcata tgcaaaaccc 22680

acaaatgaaa atggagggca aggcattctt gtaaagcaac aaaatggaaa gctagaaagt 22740

caagtggaaa tgcaattttt ctcaactact gaggcagccg caggcaatgg tgataacttg 22800

actcctaaag tggtattgta cagtgaagat gtagatatag aaaccccaga cactcatatt 22860

tcttacatgc ccactattaa ggaaggtaac tcacgagaac taatgggcca acaatctatg 22920

cccaacaggc ctaattacat tgcttttagg gacaatttta ttggtctaat gtattacaac 22980

agcacgggta atatgggtgt tctggcgggc caagcatcgc agttgaatgc tgttgtagat 23040

ttgcaagaca gaaacacaga gctttcatac cagcttttgc ttgattccat tggtgataga 23100

accaggtact tttctatgtg gaatcaggct gttgacagct atgatccaga tgttagaatt 23160

attgaaaatc atggaactga agatgaactt ccaaattact gctttccact gggaggtgtg 23220

attaatacag agactcttac caaggtaaaa cctaaaacag gtcaggaaaa tggatgggaa 23280

aaagatgcta cagaattttc agataaaaat gaaataagag ttggaaataa ttttgccatg 23340

gaaatcaatc taaatgccaa cctgtggaga aatttcctgt actccaacat agcgctgtat 23400

ttgcccgaca agctaaagta cagtccttcc aacgtaaaaa tttctgataa cccaaacacc 23460

tacgactaca tgaacaagcg agtggtggct cccgggctag tggactgcta cattaacctt 23520

ggagcacgct ggtcccttga ctatatggac aacgtcaacc catttaacca ccaccgcaat 23580

gctggcctgc gctaccgctc aatgttgctg ggcaatggtc gctatgtgcc cttccacatc 23640

caggtgcctc agaagttctt tgccattaaa aacctccttc tcctgccggg ctcatacacc 23700

tacgagtgga acttcaggaa ggatgttaac atggttctgc agagctccct aggaaatgac 23760

ctaagggttg acggagccag cattaagttt gatagcattt gcctttacgc caccttcttc 23820

cccatggccc acaacaccgc ctccacgctt gaggccatgc ttagaaacga caccaacgac 23880

cagtccttta acgactatct ctccgccgcc aacatgctct accctatacc cgccaacgct 23940

accaacgtgc ccatatccat cccctcccgc aactgggcgg ctttccgcgg ctgggccttc 24000

acgcgcctta agactaagga aaccccatca ctgggctcgg gctacgaccc ttattacacc 24060

tactctggct ctatacccta cctagatgga acctttacc tcaaccacac ctttaagaag 24120

gtggccatta cctttgactc ttctgtcagc tggcctggca atgaccgcct gcttaccccc 24180

aacgagtttg aaattaagcg ctcagttgac ggggagggtt acaacgttgc ccagtgtaac 24240

atgaccaaag actggttcct ggtacaaatg ctagctaact ataacattgg ctaccagggc 24300

ttctatatcc cagagagcta caaggaccgc atgtactcct tctttagaaa cttccagccc 24360

atgagccgtc aggtggtgga tgatactaaa tacaaggact accaacaggt gggcatccta 24420

caccaacaca acaactctgg atttgttggc taccttgccc ccaccatgcg cgaaggacag 24480

gcctaccctg ctaacttccc ctatccgctt ataggcaaga ccgcagttga cagcattacc 24540

cagaaaaagt ttctttgcga tcgcaccctt tggcgcatcc cattctccag taactttatg 24600

tccatgggcg cactcacaga cctgggccaa aaccttctct acgccaactc cgcccacgcg 24660

ctagacatga cttttgaggt ggatcccatg gacgagccca cccttcttta tgttttgttt 24720

gaagtctttg acgtggtccg tgtgcaccag ccgcaccgcg gcgtcatcga aaccgtgtac 24780

ctgcgcacgc ccttctcggc cggcaacgcc acaacataaa gaagcaagca acatcaacaa 24840

cagctgccgc catgggctcc agtgagcagg aactgaaagc cattgtcaaa gatcttggtt 24900

gtgggccata ttttttgggc acctatgaca agcgctttcc aggctttgtt tctccacaca 24960

agctcgcctg cgccatagtc aatacggccg gtcgcgagac tgggggcgta cactggatgg 25020

cctttgcctg gaacccgcac tcaaaaacat gctacctctt tgagcccttt ggcttttctg 25080

accagcgact caagcaggtt taccagtttg agtacgagtc actcctgcgc cgtagcgcca 25140

ttgcttcttc ccccgaccgc tgtataacgc tggaaaagtc cacccaaagc gtacaggggc 25200

ccaactcggc cgcctgtgga ctattctgct gcatgtttct ccacgccttt gccaactggc 25260

cccaaactcc catggatcac aaccccacca tgaaccttat taccggggta cccaactcca 25320

tgctcaacag tccccaggta cagcccaccc tgcgtcgcaa ccaggaacag ctctacagct 25380

tcctggagcg ccactcgccc tacttccgca gccacagtgc gcagattagg agcgccactt 25440

ctttttgtca cttgaaaaac atgtaaaaat aatgtactag agacactttc aataaaggca 25500

aatgctttta tttgtacact ctcgggtgat tatttacccc cacccttgcc gtctgcgccg 25560

tttaaaaatc aaaggggttc tgccgcgcat cgctatgcgc cactggcagg gacacgttgc 25620

gatactggtg tttagtgctc cacttaaact caggcacaac catccgcggc agctcggtga 25680

agttttcact ccacaggctg cgcaccatca ccaacgcgtt tagcaggtcg ggcgccgata 25740

tcttgaagtc gcagttgggg cctccgccct gcgcgcgcga gttgcgatac acagggttgc 25800

agcactggaa cactatcagc gccgggtggt gcacgctggc cagcacgctc ttgtcggaga 25860

tcagatccgc gtccaggtcc tccgcgttgc tcagggcgaa cggagtcaac tttggtagct 25920

gccttcccaa aaagggcgcg tgcccaggct ttgagttgca ctcgcaccgt agtggcatca 25980

aaaggtgacc gtgcccggtc tgggcgttag gatacagcgc ctgcataaaa gccttgatct 26040

gcttaaaagc cacctgagcc tttgcgcctt cagagaagaa catgccgcaa gacttgccgg 26100

aaaactgatt ggccggacag gccgcgtcgt gcacgcagca ccttgcgtcg gtgttggaga 26160

tctgcaccac atttcggccc caccggttct tcacgatctt ggccttgcta gactgctcct 26220

tcagcgcgcg ctgcccgttt tcgctcgtca catccatttc aatcacgtgc tccttattta 26280

tcataatgct tccgtgtaga cacttaagct cgccttcgat ctcagcgcag cggtgcagcc 26340

acaacgcgca gcccgtgggc tcgtgatgct tgtaggtcac ctctgcaaac gactgcaggt 26400

acgcctgcag gaatcgcccc atcatcgtca caaaggtctt gttgctggtg aaggtcagct 26460

gcaacccgcg gtgctcctcg ttcagccagg tcttgcatac ggccgccaga gcttccactt 26520

ggtcaggcag tagtttgaag ttcgccttta gatcgttatc cacgtggtac ttgtccatca 26580

gcgcgcgcgc agcctccatg cccttctccc acgcagacac gatcggcaca ctcagcgggt 26640

tcatcaccgt aatttcactt tccgcttcgc tgggctcttc ctcttcctct tgcgtccgca 26700

taccacgcgc cactgggtcg tcttcattca gccgccgcac tgtgcgctta cctcctttgc 26760

catgcttgat tagcaccggt gggttgctga aacccaccat ttgtagcgcc acatcttctc 26820

tttcttcctc gctgtccacg attacctctg gtgatggcgg gcgctcgggc ttgggagaag 26880

ggcgcttctt tttcttcttg ggcgcaatgg ccaaatccgc cgccgaggtc gatggccgcg 26940

ggctgggtgt gcgcggcacc agcgcgtctt gtgatgagtc ttcctcgtcc tcggactcga 27000

tacgccgcct catccgcttt tttgggggcg cccggggagg cggcggcgac ggggacgggg 27060

acgacacgtc ctccatggtt gggggacgtc gcgccgcacc gcgtccgcgc tcgggggtgg 27120

tttcgcgctg ctcctcttcc cgactggcca tttccttctc ctataggcag aaaaagatca 27180

tggagtcagt cgagaagaag gacagcctaa ccgccccctc tgagttcgcc accaccgcct 27240

ccaccgatgc cgccaacgcg cctaccacct tccccgtcga ggcacccccg cttgaggagg 27300

aggaagtgat tatcgagcag gacccaggtt ttgtaagcga agacgacgag gaccgctcag 27360

taccaacaga ggataaaaag caagaccagg acaacgcaga ggcaaacgag gaacaagtcg 27420

ggcgggggga cgaaaggcat ggcgactacc tagatgtggg agacgacgtg ctgttgaagc 27480

atctgcagcg ccagtgcgcc attatctgcg acgcgttgca agagcgcagc gatgtgcccc 27540

tcgccatagc ggatgtcagc cttgcctacg aacgccacct attctcaccg cgcgtacccc 27600

ccaaacgcca agaaaacggc acatgcgagc ccaacccgcg cctcaacttc taccccgtat 27660

ttgccgtgcc agaggtgctt gccacctatc acatcttttt ccaaaactgc aagatacccc 27720

tatcctgccg tgccaaccgc agccgagcgg acaagcagct ggccttgcgg cagggcgctg 27780

tcatacctga tatcgcctcg ctcaacgaag tgccaaaaat ctttgagggt cttggacgcg 27840

acgagaagcg cgcggcaaac gctctgcaac aggaaaacag cgaaaatgaa agtcactctg 27900

gagtgttggt ggaactcgag ggtgacaacg cgcgcctagc cgtactaaaa cgcagcatcg 27960

aggtcaccca ctttgcctac ccggcactta acctaccccc caaggtcatg agcacagtca 28020

tgagtgagct gatcgtgcgc cgtgcgcagc ccctggagag ggatgcaaat ttgcaagaac 28080

aaacagagga gggcctaccc gcagttggcg acgagcagct agcgcgctgg cttcaaacgc 28140

gcgagcctgc cgacttggag gagcgacgca aactaatgat ggccgcagtg ctcgttaccg 28200

tggagcttga gtgcatgcag cggttctttg ctgacccgga gatgcagcgc aagctagagg 28260

aaacattgca ctacaccttt cgacagggct acgtacgcca ggcctgcaag atctccaacg 28320

tggagctctg caacctggtc tcctaccttg gaattttgca cgaaaaccgc cttgggcaaa 28380

acgtgcttca ttccacgctc aagggcgagg cgcgccgcga ctacgtccgc gactgcgttt 28440

acttatttct atgctacacc tggcagacgg ccatgggcgt ttggcagcag tgcttggagg 28500

agtgcaacct caaggagctg cagaaactgc taaagcaaaa cttgaaggac ctatggacgg 28560

ccttcaacga gcgctccgtg gccgcgcacc tggcggacat cattttcccc gaacgcctgc 28620

ttaaaaccct gcaacagggt ctgccagact tcaccagtca aagcatgttg cagaacttta 28680

ggaactttat cctagagcgc tcaggaatct tgcccgccac ctgctgtgca cttcctagcg 28740

actttgtgcc cattaagtac cgcgaatgcc ctccgccgct ttggggccac tgctaccttc 28800

tgcagctagc caactacctt gcctaccact ctgacataat ggaagacgtg agcggtgacg 28860

gtctactgga gtgtcactgt cgctgcaacc tatgcacccc gcaccgctcc ctggtttgca 28920

attcgcagct gcttaacgaa agtcaaatta tcggtacctt tgagctgcag ggtccctcgc 28980

ctgacgaaaa gtccgcggct ccggggttga aactcactcc ggggctgtgg acgtcggctt 29040

accttcgcaa atttgtacct gaggactacc acgcccacga gattaggttc tacgaagacc 29100

aatcccgccc gcctaatgcg gagcttaccg cctgcgtcat tacccagggc cacattcttg 29160

gccaattgca agccatcaac aaagcccgcc aagagtttct gctacgaaag ggacgggggg 29220

tttacttgga cccccagtcc ggcgaggagc tcaacccaat ccccccgccg ccgcagccct 29280

atcagcagca gccgcgggcc cttgcttccc aggatggcac ccaaaaagaa gctgcagctg 29340

ccgccgccac ccacggacga ggaggaatac tgggacagtc aggcagagga ggttttggac 29400

gaggaggagg aggacatgat ggaagactgg gagagcctag acgaggaagc ttccgaggtc 29460

gaagaggtgt cagacgaaac accgtcaccc tcggtcgcat tcccctcgcc ggcgccccag 29520

aaatcggcaa ccggttccag catggctaca acctccgctc ctcaggcgcc gccggcactg 29580

cccgttcgcc gacccaaccg tagatgggac accactggaa ccagggccgg taagtccaag 29640

cagccgccgc cgttagccca agagcaacaa cagcgccaag gctaccgctc atggcgcggg 29700

cacaagaacg ccatagttgc ttgcttgcaa gactgtgggg gcaacatctc cttcgcccgc 29760

cgctttcttc tctaccatca cggcgtggcc ttcccccgta acatcctgca ttactaccgt 29820

catctctaca gcccatactg caccggcggc agcggcagca acagcagcgg ccacacagaa 29880

gcaaaggcga ccggatagca agactctgac aaagcccaag aaatccacag cggcggcagc 29940

agcaggagga ggagcgctgc gtctggcgcc caacgaaccc gtatcgaccc gcgagcttag 30000

aaacaggatt tttcccactc tgtatgctat atttcaacag agcaggggcc aagaacaaga 30060

gctgaaaata aaaaacaggt ctctgcgatc cctcacccgc agctgcctgt atcacaaaag 30120

cgaagatcag cttcggcgca cgctggaaga cgcggaggct ctcttcagta aatactgcgc 30180

gctgactctt aaggactagt ttcgcgccct ttctcaaatt taagcgcgaa aactacgtca 30240

tctccagcgg ccacacccgg cgccagcacc tgttgtcagc gccattatga gcaaggaaat 30300

tcccacgccc tacatgtgga gttaccagcc acaaatggga cttgcggctg gagctgccca 30360

agactactca acccgaataa actacatgag cgcgggaccc cacatgatat cccgggtcaa 30420

cggaatacgc gcccaccgaa accgaattct cctggaacag gcggctatta ccaccacacc 30480

tcgtaataac cttaatcccc gtagttggcc cgctgccctg gtgtaccagg aaagtcccgc 30540

tcccaccact gtggtacttc ccagagacgc ccaggccgaa gttcagatga ctaactcagg 30600

ggcgcagctt gcgggcggct ttcgtcacag ggtgcggtcg cccgggcagg gtataactca 30660

cctgacaatc agagggcgag gtattcagct caacgacgag tcggtgagct cctcgcttgg 30720

tctccgtccg gacgggacat ttcagatcgg cggcgccggc cgctcttcat tcacgcctcg 30780

tcaggcaatc ctaactctgc agacctcgtc ctctgagccg cgctctggag gcattggaac 30840

tctgcaattt attgaggagt ttgtgccatc ggtctacttt aacccccttct cgggacctcc 30900

cggccactat ccggatcaat ttattcctaa ctttgacgcg gtaaaggact cggcggacgg 30960

ctacgactga atgttaagtg gagaggcaga gcaactgcgc ctgaaacacc tggtccactg 31020

tcgccgccac aagtgctttg cccgcgactc cggtgagttt tgctactttg aattgcccga 31080

ggatcatatc gagggcccgg cgcacggcgt ccggcttacc gcccagggag agcttgcccg 31140

tagcctgatt cgggagttta cccagcgccc cctgctagtt gagcgggaca ggggaccctg 31200

tgttctcact gtgatttgca actgtcctaa ccctggatta catcaagatc ctctagttaa 31260

tgtcaggtcg cctaagtcga ttaactagag tacccgggga tcttattccc tttaactaat 31320

aaaaaaaaat aataaagcat cacttactta aaatcagtta gcaaatttct gtccagttta 31380

ttcagcagca cctccttgcc ctcctcccag ctctggtatt gcagcttcct cctggctgca 31440

aactttctcc acaatctaaa tggaatgtca gtttcctcct gttcctgtcc atccgcaccc 31500

actatcttca tgttgttgca gatgaagcgc gcaagaccgt ctgaagatac cttcaacccc 31560

gtgtatccat atgacacgga aaccggtcct ccaactgtgc cttttcttac tcctcccttt 31620

gtatccccca atgggtttca agagagtccc cctggggtac tctctttgcg cctatccgaa 31680

cctctagtta cctccaatgg catgcttgcg ctcaaaatgg gcaacggcct ctctctggac 31740

gaggccggca accttacctc ccaaaatgta accactgtga gcccacctct caaaaaaacc 31800

aagtcaaaca taaacctgga aatatctgca cccctcacag ttacctcaga agccctaact 31860

gtggctgccg ccgcacctct aatggtcgcg ggcaacacac tcaccatgca atcacaggcc 31920

ccgctaaccg tgcacgactc caaacttagc attgccaccc aaggacccct cacagtgtca 31980

gaaggaaagc tagccctgca aacatcaggc cccctcacca ccaccgatag cagtaccctt 32040

actatcactg cctcaccccc tctaactact gccactggta gcttgggcat tgacttgaaa 32100

gagcccattt atacacaaaa tggaaaacta ggactaaagt acggggctcc tttgcatgta 32160

acagacgacc taaacacttt gaccgtagca actggtccag gtgtgactat taataatact 32220

tccttgcaaa ctaaagttac tggagccttg ggttttgatt cacaaggcaa tatgcaactt 32280

aatgtagcag gaggactaag gattgattct caaaacagac gccttatact tgatgttagt 32340

tatccgtttg atgctcaaaa ccaactaaat ctaagactag gacagggccc tctttttata 32400

aactcagccc acaacttgga tattaactac aacaaaggcc tttacttgtt tacagcttca 32460

aacaattcca aaaagcttga ggttaaccta agcactgcca aggggttgat gtttgacgct 32520

acagccatag ccattaatgc aggagatggg cttgaatttg gttcacctaa tgcaccaaac 32580

acaaatcccc tcaaaacaaa aattggccat ggcctagaat ttgattcaaa caaggctatg 32640

gttcctaaac taggaactgg ccttagtttt gacagcacag gtgccattac agtaggaaac 32700

aaaaataatg ataagctaac tttgtggacc ggaataaacc ctccacctaa ctgtcaaatt 32760

gtggaaaaca ctaatacaaa tgatggcaaa cttactttag tattagtaaa aaatggaggg 32820

cttgttaatg gctacgtgtc tctagttggt gtatcagaca ctgtgaacca aatgttcaca 32880

caaaagacag caaacatcca attaagatta tattttgact cttctggaaa tctattaact 32940

gaggaatcag acttaaaaat tccacttaaa aataaatctt ctacagcgac cagtgaaact 33000

gtagccagca gcaaagcctt tatgccaagt actacagctt atcccttcaa caccactact 33060

agggatagtg aaaactacat tcatggaata tgttactaca tgactagtta tgatagaagt 33120

ctatttccct tgaacatttc tataatgcta aacagccgta tgatttcttc caatgttgcc 33180

tatgccatac aatttgaatg gaatctaaat gcaagtgaat ctccagaaag caacatagct 33240

acgctgacca catccccctt tttcttttct tacattacag aagacgacaa ctaaagaatc 33300

gtttgtgtta tgtttcaacg tgtttatttt tcaattgcag aaaatttcaa gtcatttttc 33360

attcagtagt atagccccac caccacatag cttatacaga tcaccgtacc ttaatcaaac 33420

tcacagaacc ctagtattca acctgccacc tccctcccaa cacacagagt acacagtcct 33480

ttctccccgg ctggccttaa aaagcatcat atcatgggta acagacatat tcttaggtgt 33540

tatattccac acggtttcct gtcgagccaa acgctcatca gtgatattaa taaactcccc 33600

gggcagctca cttaagttca tgtcgctgtc cagctgctga gccacaggct gctgtccaac 33660

ttgcggttgc ttaacgggcg gcgaaggaga agtccacgcc tacatggggg tagagtcata 33720

atcgtgcatc aggatagggc ggtggtgctg cagcagcgcg cgaataaact gctgccgccg 33780

ccgctccgtc ctgcaggaat acaacatggc agtggtctcc tcagcgatga ttcgcaccgc 33840

ccgcagcata aggcgccttg tcctccgggc acagcagcgc accctgatct cacttaaatc 33900

agcacagtaa ctgcagcaca gcaccacaat attgttcaaa atcccacagt gcaaggcgct 33960

gtatccaaag ctcatggcgg ggaccacaga acccacgtgg ccatcatacc acaagcgcag 34020

gtagattaag tggcgacccc tcataaacac gctggacata aacattacct cttttggcat 34080

gttgtaattc accacctccc ctctgattaa acatggcgcc atccaccacc atcctaaacc 34140

agctggccaa aacctgcccg ccggctatac actgcaggga accgggactg gaacaatgac 34200

agtggagagc ccaggactcg taaccatgga tcatcatgct cgtcatgata tcaatgttgg 34260

cacaacacag gcacacgtgc atacacttcc tcaggattac aagctcctcc cgcgttagaa 34320

ccatatccca gggaacaacc cattcctgaa tcagcgtaaa tcccacactg cagggaagac 34380

ctcgcacgta actcacgttg tgcattgtca aagtgttaca ttcgggcagc agcggatgat 34440

cctccagtat ggtagcgcgg gtttctgtct caaaaggagg tagacgatcc ctactgtacg 34500

gagtgcgccg agacaaccga gatcgtgttg gtcgtagtgt catgccaaat ggaacgccgg 34560

acgtagtcat atttcctgaa gcaaaaccag gtgcgggcgt gacaaacaga tctgcgtctc 34620

cggtctcgcc gcttagatcg ctctgtgtag tagttgtagt atatccactc tctcaaagca 34680

tccaggcgcc ccctggcttc gggttctatg taaactcctt catgcgccgc tgccctgata 34740

acatccacca ccgcagaata agccacaccc agccaaccta cacattcgtt ctgcgagtca 34800

cacacgggag gagcgggaag agctggaaga accatgtttt ttttttatt ccaaaagatt 34860

atccaaaacc tcaaaatgaa gatctattaa gtgaacgcgc tcccctccgg tggcgtggtc 34920

aaactctaca gccaaagaac agataatggc atttgtaaga tgttgcacaa tggcttccaa 34980

aaggcaaacg gccctcacgt ccaagtggac gtaaaggcta aacccttcag ggtgaatctc 35040

ctctataaac attccagcac cttcaaccat gcccaaataa ttctcatctc gccaccttct 35100

caatatatct ctaagcaaat cccgaatatt aagtccggcc attgtaaaaa tctgctccag 35160

agcgccctcc accttcagcc tcaagcagcg aatcatgatt gcaaaaattc aggttcctca 35220

cagacctgta taagattcaa aagcggaaca ttaacaaaaa taccgcgatc ccgtaggtcc 35280

cttcgcaggg ccagctgaac ataatcgtgc aggtctgcac ggaccagcgc ggccacttcc 35340

ccgccaggaa ccatgacaaa agaacccaca ctgattatga cacgcatact cggagctatg 35400

ctaaccagcg tagccccgat gtaagcttgt tgcatgggcg gcgatataaa atgcaaggtg 35460

ctgctcaaaa aatcaggcaa agcctcgcgc aaaaaagaaa gcacatcgta gtcatgctca 35520

tgcagataaa ggcaggtaag ctccggaacc accacagaaa aagacaccat ttttctctca 35580

aacatgtctg cgggtttctg cataaacaca aaataaaata acaaaaaaac atttaaacat 35640

tagaagcctg tcttacaaca ggaaaaacaa cccttataag cataagacgg actacggcca 35700

tgccggcgtg accgtaaaaa aactggtcac cgtgattaaa aagcaccacc gacagctcct 35760

cggtcatgtc cggagtcata atgtaagact cggtaaacac atcaggttga ttcacatcgg 35820

tcagtgctaa aaagcgaccg aaatagcccg ggggaataca tacccgcagg cgtagagaca 35880

acattacagc ccccatagga ggtataacaa aattaatagg agagaaaaac acataaacac 35940

ctgaaaaacc ctcctgccta ggcaaaatag caccctcccg ctccagaaca acatacagcg 36000

cttccacagc ggcagccata acagtcagcc ttaccagtaa aaaagaaaac ctattaaaaa 36060

aacaccactc gacacggcac cagctcaatc agtcacagtg taaaaaaggg ccaagtgcag 36120

agcgagtata tataggacta aaaaatgacg taacggttaa agtccacaaa aaacacccag 36180

aaaaccgcac gcgaacctac gcccagaaac gaaagccaaa aaacccacaa cttcctcaaa 36240

tcgtcacttc cgttttccca cgttacgtca cttcccattt taagaaaact acaattccca 36300

acacatacaa gttactccgc cctaaaacct acgtcacccg ccccgttccc acgccccgcg 36360

ccacgtcaca aactccaccc cctcattatc atattggctt caatccaaaa taaggtatat 36420

tattgatgat g 36431

<210> 24
<211> 36423
<212> DNA
<213> Artificial Sequence

<220>
<223> pAdk35RF-Spike/E4orf6(mPGK)-E4dl355(E4re#19)

<400> 24
ttaattaaca tcatcaataa tataccttat tttggattga agccaatatg ataatgaggg 60

ggtggagttt gtgacgtggc gcggggcgtg ggaacggggc gggtgacgta gtagtgtggc 120

ggaagtgtga tgttgcaagt gtggcggaac acatgtaagc gacggatgtg gcaaaagtga 180

cgtttttggt gtgcgccggt gtacacagga agtgacaatt ttcgcgcggt tttaggcgga 240

tgttgtagta aatttgggcg taaccgagta agatttggcc attttcgcgg gaaaactgaa 300

taagaggaag tgaaatctga ataattttgt gttactcata gcgcgtaata atttgatccg 360

cgttaagata cattgatgag tttggacaaa ccacaactag aatgcagtga aaaaaatgct 420

ttatttgtga aatttgtgat gctattgctt tatttgtaac cattataagc tgcaataaac 480

aagttaacaa caacaattgc attcatttta tgtttcaggt tcaggggggag gtgtgggagg 540

ttttttaaag caagtaaaac ctctacaaat gtggtatggc tgattatgat caattttcat 600

ggccacttga tgtattgttc atatttgccc agttcttgga ggtcaatcag ggactcattc 660

aggttcttag ccacctcatt cagtctgtca atctccttct ggatgttcac cacagaggca 720

ttgatgccag agatgtctcc caggtccaca tcagggctgg tgtggttctt gaagtatttg 780

tccagttcct ccttgaagga gtccagttca ggttggagtg ggtcatagac tgtgttgttc 840

acaatgccaa tcaccacatc acagttgcca gacacaaagg tgttgtctgt ggtgataatc 900

tgtggttcat agaagttcct ctgggtcaca aaccagtggg tgccattgct cacaaacact 960

ccctcccttg gaaagtgagc cttgccatca tggcagatgg caggggctgt ggtgaagttc 1020

ttctcctggg caggcacata ggtcacatgc aggaacacca ctccatgagg ggcagactgt 1080

ggaaaactca tcaggtggta gcccttgcca cagaagtcca ccctcttgct ttgtcccagc 1140

acacactcac tcatcttggt ggcagccagg ttggcagatg ccctaatctc agcagccctg 1200

ataagttgtt gggtcacata ggtttggagg gattggagtc tgcctgtaat cagtctgtca 1260

atctggacct cagcctccac cttgtccagt ctgctcagga tgtcattcag cacagaggag 1320

atggctccaa agttgctgga aagttgcttc accagggtgt tcagagcctg ggcattctgg 1380

ttcaccacat cttggagttt gcccagggca gaggctgtgc tggacaggga gtcctgaatc 1440

ttgccaatgg cagagttgaa ctggttggca atcagtttct ggttctcata gagcacattc 1500

tgggtcactc caatgccatt gaacctgtaa gccatctgca tagcaaatgg gatttggagg 1560

gctgctcctg ctccaaaggt ccagccagag gtgatggtgc cagccagcag ggcagaggtg 1620

tattgggcaa tcatctcatc tgtcagcagt ggaggcagca ctgtcagtcc attgaacttc 1680

tgggcacaaa tcaggtccct ggcagcaatg tctcccagac agtctccata ttgcttgatg 1740

aagccagcat cagccagggt caccttgttg aacagcaggt cctcaatgaa ggacctcttg 1800

cttggcttgc ttgggtcagg cagaatctgg ctgaagttga agcctccaaa gtccttgatt 1860

ggaggtgtct tgtaaatctg cttcacctgg gcaaacacct cctgggtgtt cttgtcctgt 1920

tccacagcaa tgcctgtcag agccctgtta agttgggtac agaaggagcc atattggagc 1980

agcaggttgc tacactctgt gctgtctcca cagatataca ttgtacagtc cacagaggtc 2040

ttggtcatac tcacaggcag aatctctgtg gtcacagaga tggtgaagtt ggttgggatg 2100

gcaatgctgt tgttgctgta agccacagag ttctctgctc ccagactcat tgtgtaggca 2160

atgatgctct ggcttgccac agacctcgac ccaccgccac cggtctgggt ctggtaggag 2220

gcacagatgc ctgctccaat tgggatgtca cactcatagg agttgttcac atgctctgct 2280

ccaatcagac agccagccct ggtctggaac acattgctgc ctgtgctgta gaccctccag 2340

gttggtgtaa gttggtcagc atggatagcc acaggcacct cagtacagtt cacatcctgg 2400

tagagcacag ccacctggtt gctggtgttg gtgccaggtg taatcacaga cactcctcca 2460

aaggaacatg gtgtgatgtc cagaatctcc aaggtctgtg ggtccctcac agcatctgtg 2520

gtgtcagcaa tgtccctgcc aaactgttgg aatggcagga acttcttgtt gctctctgtc 2580

agcactcctg tgcctgtcag tccattgaag ttgaagttca cacacttgtt cttcaccagg 2640

ttggtgctct tctttggtcc acacactgtg gcaggggcat ggagcagttc aaaggacagc 2700

accaccaccc tgtatggttg gtagcccact ccattggttg gttggaagcc ataggattgg 2760

agtggaaagt aacagttgaa gccctccact ccattacatg gtgtgctgcc agcctggtaa 2820

atctctgtgc tgatgtccct ctcaaatggt ttcaggttgc tcttcctgaa cagtctgtag 2880

aggtagttgt agttgcctcc caccttgctg tccaggttgt tgctgttcca ggcaatcaca 2940

cagcctgtga agtcatcagg cagtttgtag ttgtagtcag caatcttgcc tgtttgtcca 3000

ggggcaatct gtctcacctc atctccccta atcacaaagg agtcagcata gacattggtg 3060

aaacacaggt cattcagttt ggttgggctc actccataac acttgaaggt gctgaaggag 3120

gcagagttgt agagcacaga gtagtcagcc acacagttgc taatcctctt cctgttccag 3180

gcatagacag aggcaaacct ggtggcattg aacacctctc caaatggaca caggttggtg 3240

atgtttggaa acctcacaat gctctctgtt ggttggaccc tgaagttgct ggtctggtag 3300

atgcccttct ccactgtgaa ggatttcagg gtacacttgg tctcagacag tgggtccagg 3360

gcacagtcca cagcatctgt gatggtgcca ttctcattgt atttcagcag gaaggtcctt 3420

ggttggaggt agcccacata gtaggctgct gctcctgctg tccagccaga ggaggagtct 3480

ccaggtgtca ggtaggacct gtgcagagcc agcagggtct ggaacctggt gatgttgatg 3540

ccaattggca ggtccaccag tggttccaag gcagagaagc cctgtggcag gtccctcacc 3600

aggttgattg gtgtgtgttt gctgtaaatc ttgaagtagc catcaatgtt cttgaacaca 3660

aactccctca ggttcttgaa gttgccctgc ttgccctcca agtccatcag gaatggttgg 3720

ctcacatatt caaaggtaca gttgttggca gaggagtaga ccctgaactc agactccatc 3780

caggacttgt tgttcttgtg gtagtagact cccaggaatg ggtcattaca gaactggaac 3840

tcacacacct taatcaccac attggtggca ttgttcacaa tcagcaggga ctgggtcttg 3900

ctgtccaggg tggtgccaaa aatccagccc ctgatgatgt tgctcttctc tgtgctggca 3960

aagtagactc catcattgaa tggcagcaca gggttgtcaa acctcttggt gccattggtg 4020

ccagacacat ggatggcatg gaaccaggtc acattgctga agaatggcag gaacaggtcc 4080

tgggtgctgt gcagcacaga ggacctgaac accttgtcag ggtagtagac tcccctggtg 4140

aaggagttgg tgtaggcagg aggaagttgg gtcctggtgg tcaggttcac acactggctg 4200

gacaccagtg gcagcagcac caggaacaca aacatggtgg caaatcggag gctggatcgg 4260

tcccggtgtc ttctatggag gtcaaaacag cgtggatggc gtctccaggc gatctgacgg 4320

ttcactaaac gagctcgtcg acgatctcta tcactgatag ggagatctct atcactgata 4380

gggagagctc tgcttatata gacctcccac cgtacacgcc taccgcccat ttgcgtcaat 4440

ggggcggagt tgttacgaca ttttggaaag tcccgttgat tttggtgcca aaacaaactc 4500

ccattgacgt caatggggtg gagacttgga aatccccgtg agtcaaaccg ctatccacgc 4560

ccattgatgt actgccaaaa ccgcatcacc atggtaatag cgatgactaa tacgtagatg 4620

tactgccaag taggaaagtc ccataaggtc atgtactggg cataatgcca ggcgggccat 4680

ttaccgtcat tgacgtcaat agggggcgta cttggcatat gatacacttg atgtactgcc 4740

aagtgggcag tttaccgtaa atactccacc cattgacgtc aatggaaagt ccctattggc 4800

gttactatgg gaacatacgt cattattgac gtcaatgggc gggggtcgtt gggcggtcag 4860

ccaggcgggc catttaccgt aagttatgta acgcggaact ccatatatgg gctatgaact 4920

aatgaccccg taattgatta ctattacagg ggtaggggag gcgcttttcc caaggcagtc 4980

tggagcatgc gctttagcag ccccgctggg cacttggcgc tacacaagtg gcctctggcc 5040

tcgcacacat tccacatcca ccggtaggcg ccaaccggct ccgttctttg gtggcccctt 5100

cgcgccacct tctactcctc ccctagtcag gaagttcccc cccgccccgc agctcgcgtc 5160

gtgcaggacg tgacaaatgg aagtagcacg tctcactagt ctcgtgcaga tggacagcac 5220

cgctgagcaa tggaagcggg taggcctttg gggcagcggc caatagcagc tttgctcctt 5280

cgctttctgg gctcagaggc tgggaagggg tgggtccggg ggcgggctca ggggcgggct 5340

caggggcggg gcgggcgccc gaaggtcctc cggaggcccg gcattctgca cgcttcaaaa 5400

gcgcacgtct gccgcgctgt tctcctcttc ctcatctccg ggcctttcga aactacccca 5460

agctggccac catgactacg tccggcgttc catttggcat gacactacga ccaacacgat 5520

ctcggttgtc tcggcgcact ccgtacagta gggatcgtct acctcctttt gagacagaaa 5580

cccgcgctac catactggag gatcatccgc tgctgcccga atgtaacact ttgacaatgc 5640

acaacgtgag ttacgtgcga ggtcttccct gcagtgtggg atttacgctg attcaggaat 5700

gggttgttcc ctgggatatg gttctaacgc gggaggagct tgtaatcctg aggaagtgta 5760

tgcacgtgtg cctgtgttgt gccaacattg atatcatgac gagcatgatg atccatggtt 5820

acgagtcctg ggctctccac tgtcattgtt ccagtcccgg ttccctgcag tgtatagccg 5880

gcgggcaggt tttggccagc tggtttagga tggtggtgga tggcgccatg tttaatcaga 5940

ggtttatatg gtaccgggag gtggtgaatt acaacatgcc aaaagaggta atgtttatgt 6000

ccagcgtgtt tatgaggggt cgccacttaa tctacctgcg cttgtggtat gatggccacg 6060

tgggttctgt ggtccccgcc atgagctttg gatacagcgc cttgcactgt gggattttga 6120

acaatattgt ggtgctgtgc tgcagttact gtgctgattt aagtgagatc agggtgcgct 6180

gctgtgcccg gaggacaagg cgccttatgc tgcgggcggt gcgaatcatc gctgaggaga 6240

ccactgccat gttgtattcc tgcaggacgg agcggcggcg gcagcagttt attcgcgcgc 6300

tgctgcagca ccaccgccct atcctgatgc acgattatga ctctaccccc atgtagaagc 6360

ttggggatca attctctaga gctcgctgat cagcctcgac tgtgccttct agttgccagc 6420

catctgttgt ttgcccctcc cccgtgcctt ccttgaccct ggaaggtgcc actcccactg 6480

tcctttccta ataaaatgag gaaattgcat cgcattgtct gagtaggtgt cattctattc 6540

tgggggggtgg ggtggggcag gacagcaagg gggaggattg ggaagacaat agcaggcatg 6600

ctggggatgc ggtgggctct atggcttctg aggaaattgg gcgtggctta agggtgggaa 6660

agaatatata aggtgggggt cttatgtagt tttgtatctg ttttgcagca gccgccgccg 6720

ccatgagcac caactcgttt gatggaagca ttgtgagctc atatttgaca acgcgcatgc 6780

ccccatgggc cggggtgcgt cagaatgtga tgggctccag cattgatggt cgccccgtcc 6840

tgcccgcaaa ctctactacc ttgacctacg agaccgtgtc tggaacgccg ttggagactg 6900

cagcctccgc cgccgcttca gccgctgcag ccaccgcccg cgggattgtg actgactttg 6960

ctttcctgag cccgcttgca agcagtgcag cttcccgttc atccgcccgc gatgacaagt 7020

tgacggctct tttggcacaa ttggattctt tgacccggga acttaatgtc gtttctcagc 7080

agctgttgga tctgcgccag caggtttctg ccctgaaggc ttcctcccct cccaatgcgg 7140

tttaaaacat aaataaaaaa ccagactctg tttggatttg gatcaagcaa gtgtcttgct 7200

gtctttattt aggggttttg cgcgcgcggt aggcccggga ccagcggtct cggtcgttga 7260

gggtcctgtg tatttttcc aggacgtggt aaaggtgact ctggatgttc agatacatgg 7320

gcataagccc gtctctgggg tggaggtagc accactgcag agcttcatgc tgcggggtgg 7380

tgttgtagat gatccagtcg tagcaggagc gctgggcgtg gtgcctaaaa atgtctttca 7440

gtagcaagct gattgccagg ggcaggccct tggtgtaagt gtttacaaag cggttaagct 7500

gggatgggtg catacgtggg gatatgagat gcatcttgga ctgtattttt aggttggcta 7560

tgttcccagc catatccctc cggggattca tgttgtgcag aaccaccagc acagtgtatc 7620

cggtgcactt gggaaatttg tcatgtagct tagaaggaaa tgcgtggaag aacttggaga 7680

cgcccttgtg acctccaaga ttttccatgc attcgtccat aatgatggca atgggcccac 7740

gggcggcggc ctgggcgaag atatttctgg gatcactaac gtcatagttg tgttccagga 7800

tgagatcgtc ataggccatt tttacaaagc gcgggcggag ggtgccagac tgcggtataa 7860

tggttccatc cggcccaggg gcgtagttac cctcacagat ttgcatttcc cacgctttga 7920

gttcagatgg ggggatcatg tctacctgcg gggcgatgaa gaaaacggtt tccggggtag 7980

gggagatcag ctgggaagaa agcaggttcc tgagcagctg cgacttaccg cagccggtgg 8040

gcccgtaaat cacacctatt accgggtgca actggtagtt aagagagctg cagctgccgt 8100

catccctgag cagggggggcc acttcgttaa gcatgtccct gactcgcatg ttttccctga 8160

ccaaatccgc cagaaggcgc tcgccgccca gcgatagcag ttcttgcaag gaagcaaagt 8220

ttttcaacgg tttgagaccg tccgccgtag gcatgctttt gagcgtttga ccaagcagtt 8280

ccaggcggtc ccacagctcg gtcacctgct ctacggcatc tcgatccagc atatctcctc 8340

gtttcgcggg ttggggcggc tttcgctgta cggcagtagt cggtgctcgt ccagacgggc 8400

cagggtcatg tctttccacg ggcgcagggt cctcgtcagc gtagtctggg tcacggtgaa 8460

ggggtgcgct ccgggctgcg cgctggccag ggtgcgcttg aggctggtcc tgctggtgct 8520

gaagcgctgc cggtcttcgc cctgcgcgtc ggccaggtag catttgacca tggtgtcata 8580

gtccagcccc tccgcggcgt ggcccttggc gcgcagcttg cccttggagg aggcgccgca 8640

cgaggggcag tgcagacttt tgagggcgta gagcttgggc gcgagaaata ccgattccgg 8700

ggagtaggca tccgcgccgc aggccccgca gacggtctcg cattccacga gccaggtgag 8760

ctctggccgt tcggggtcaa aaaccaggtt tcccccatgc tttttgatgc gtttcttacc 8820

tctggtttcc atgagccggt gtccacgctc ggtgacgaaa aggctgtccg tgtccccgta 8880

tacagacttg agaggcctgt cctcgagcgg tgttccgcgg tcctcctcgt atagaaactc 8940

ggaccactct gagacaaagg ctcgcgtcca ggccagcacg aaggaggcta agtgggaggg 9000

gtagcggtcg ttgtccacta gggggtccac tcgctccagg gtgtgaagac acatgtcgcc 9060

ctcttcggca tcaaggaagg tgattggttt gtaggtgtag gccacgtgac cgggtgttcc 9120

tgaaggggggg ctataaaagg gggtgggggc gcgttcgtcc tcactctctt ccgcatcgct 9180

gtctgcgagg gccagctgtt ggggtgagta ctccctctga aaagcgggca tgacttctgc 9240

gctaagattg tcagtttcca aaaacgagga ggatttgata ttcacctggc ccgcggtgat 9300

gcctttgagg gtggccgcat ccatctggtc agaaaagaca atctttttgt tgtcaagctt 9360

ggtggcaaac gacccgtaga gggcgttgga cagcaacttg gcgatggagc gcagggtttg 9420

gtttttgtcg cgatcggcgc gctccttggc cgcgatgttt agctgcacgt attcgcgcgc 9480

aacgcaccgc cattcgggaa agacggtggt gcgctcgtcg ggcaccaggt gcacgcgcca 9540

accgcggttg tgcagggtga caaggtcaac gctggtggct acctctccgc gtaggcgctc 9600

gttggtccag cagaggcggc cgcccttgcg cgagcagaat ggcggtaggg ggtctagctg 9660

cgtctcgtcc ggggggtctg cgtccacggt aaagaccccg ggcagcaggc gcgcgtcgaa 9720

gtagtctatc ttgcatcctt gcaagtctag cgcctgctgc catgcgcggg cggcaagcgc 9780

gcgctcgtat gggttgagtg ggggacccca tggcatgggg tgggtgagcg cggaggcgta 9840

catgccgcaa atgtcgtaaa cgtagagggg ctctctgagt attccaagat atgtagggta 9900

gcatcttcca ccgcggatgc tggcgcgcac gtaatcgtat agttcgtgcg agggagcgag 9960

gaggtcggga ccgaggttgc tacgggcggg ctgctctgct cggaagacta tctgcctgaa 10020

gatggcatgt gagttggatg atatggttgg acgctggaag acgttgaagc tggcgtctgt 10080

gagacctacc gcgtcacgca cgaaggaggc gtaggagtcg cgcagcttgt tgaccagctc 10140

ggcggtgacc tgcacgtcta gggcgcagta gtccagggtt tccttgatga tgtcatactt 10200

atcctgtccc ttttttttcc acagctcgcg gttgaggaca aactcttcgc ggtctttcca 10260

gtactcttgg atcggaaacc cgtcggcctc cgaacggtaa gagcctagca tgtagaactg 10320

gttgacggcc tggtaggcgc agcatccctt ttctacgggt agcgcgtatg cctgcgcggc 10380

cttccggagc gaggtgtggg tgagcgcaaa ggtgtccctg accatgactt tgaggtactg 10440

gtatttgaag tcagtgtcgt cgcatccgcc ctgctcccag agcaaaaagt ccgtgcgctt 10500

tttggaacgc ggatttggca gggcgaaggt gacatcgttg aagagtatct ttcccgcgcg 10560

aggcataaag ttgcgtgtga tgcggaaggg tcccggcacc tcggaacggt tgttaattac 10620

ctgggcggcg agcacgatct cgtcaaagcc gttgatgttg tggcccacaa tgtaaagttc 10680

caagaagcgc gggatgccct tgatggaagg caatttttta agttcctcgt aggtgagctc 10740

ttcaggggag ctgagcccgt gctctgaaag ggcccagtct gcaagatgag ggttggaagc 10800

gacgaatgag ctccacaggt cacgggccat tagcatttgc aggtggtcgc gaaaggtcct 10860

aaactggcga cctatggcca ttttttctgg ggtgatgcag tagaaggtaa gcgggtcttg 10920

ttcccagcgg tcccatccaa ggttcgcggc taggtctcgc gcggcagtca ctagaggctc 10980

atctccgccg aacttcatga ccagcatgaa gggcacgagc tgcttcccaa aggcccccat 11040

ccaagtatag gtctctacat cgtaggtgac aaagagacgc tcggtgcgag gatgcgagcc 11100

gatcgggaag aactggatct cccgccacca attggaggag tggctattga tgtggtgaaa 11160

gtagaagtcc ctgcgacggg ccgaacactc gtgctggctt ttgtaaaaac gtgcgcagta 11220

ctggcagcgg tgcacgggct gtacatcctg cacgaggttg acctgacgac cgcgcacaag 11280

gaagcagagt gggaatttga gcccctcgcc tggcgggttt ggctggtggt cttctacttc 11340

ggctgcttgt ccttgaccgt ctggctgctc gaggggagtt acggtggatc ggaccaccac 11400

gccgcgcgag cccaaagtcc agatgtccgc gcgcggcggt cggagcttga tgacaacatc 11460

gcgcagatgg gagctgtcca tggtctggag ctcccgcggc gtcaggtcag gcgggagctc 11520

ctgcaggttt acctcgcata gacgggtcag ggcgcgggct agatccaggt gatacctaat 11580

ttccaggggc tggttggtgg cggcgtcgat ggcttgcaag aggccgcatc cccgcggcgc 11640

gactacggta ccgcgcggcg ggcggtgggc cgcgggggtg tccttggatg atgcatctaa 11700

aagcggtgac gcgggcgagc ccccggaggt agggggggct ccggacccgc cgggagaggg 11760

ggcaggggca cgtcggcgcc gcgcgcgggc aggagctggt gctgcgcgcg taggttgctg 11820

gcgaacgcga cgacgcggcg gttgatctcc tgaatctggc gcctctgcgt gaagacgacg 11880

ggcccggtga gcttgaacct gaaagagagt tcgacagaat caatttcggt gtcgttgacg 11940

gcggcctggc gcaaaatctc ctgcacgtct cctgagttgt cttgataggc gatctcggcc 12000

atgaactgct cgatctcttc ctcctggaga tctccgcgtc cggctcgctc cacggtggcg 12060

gcgaggtcgt tggaaatgcg ggccatgagc tgcgagaagg cgttgaggcc tccctcgttc 12120

cagacgcggc tgtagaccac gccccccttcg gcatcgcggg cgcgcatgac cacctgcgcg 12180

agattgagct ccacgtgccg ggcgaagacg gcgtagtttc gcaggcgctg aaagaggtag 12240

ttgagggtgg tggcggtgtg ttctgccacg aagaagtaca taacccagcg tcgcaacgtg 12300

gattcgttga tatcccccaa ggcctcaagg cgctccatgg cctcgtagaa gtccacggcg 12360

aagttgaaaa actgggagtt gcgcgccgac acggttaact cctcctccag aagacggatg 12420

agctcggcga cagtgtcgcg cacctcgcgc tcaaaggcta caggggcctc ttcttcttct 12480

tcaatctcct cttccataag ggcctcccct tcttcttctt ctggcggcgg tgggggaggg 12540

gggacacggc ggcgacgacg gcgcaccggg aggcggtcga caaagcgctc gatcatctcc 12600

ccgcggcgac ggcgcatggt ctcggtgacg gcgcggccgt tctcgcgggg gcgcagttgg 12660

aagacgccgc ccgtcatgtc ccggttatgg gttggcgggg ggctgccatg cggcagggat 12720

acggcgctaa cgatgcatct caacaattgt tgtgtaggta ctccgccgcc gagggacctg 12780

agcgagtccg catcgaccgg atcggaaaac ctctcgagaa aggcgtctaa ccagtcacag 12840

tcgcaaggta ggctgagcac cgtggcgggc ggcagcgggc ggcggtcggg gttgtttctg 12900

gcggaggtgc tgctgatgat gtaattaaag taggcggtct tgagacggcg gatggtcgac 12960

agaagcacca tgtccttggg tccggcctgc tgaatgcgca ggcggtcggc catgccccag 13020

gcttcgtttt gacatcggcg caggtctttg tagtagtctt gcatgagcct ttctaccggc 13080

acttcttctt ctccttcctc ttgtcctgca tctcttgcat ctatcgctgc ggcggcggcg 13140

gagtttggcc gtaggtggcg ccctcttcct cccatgcgtg tgaccccgaa gcccctcatc 13200

ggctgaagca gggctaggtc ggcgacaacg cgctcggcta atatggcctg ctgcacctgc 13260

gtgagggtag actggaagtc atccatgtcc acaaagcggt ggtatgcgcc cgtgttgatg 13320

gtgtaagtgc agttggccat aacggaccag ttaacggtct ggtgacccgg ctgcgagagc 13380

tcggtgtacc tgagacgcga gtaagccctc gagtcaaata cgtagtcgtt gcaagtccgc 13440

accaggtact ggtatcccac caaaaagtgc ggcggcggct ggcggtagag gggccagcgt 13500

agggtggccg gggctccggg ggcgagatct tccaacataa ggcgatgata tccgtagatg 13560

tacctggaca tccaggtgat gccggcggcg gtggtggagg cgcgcggaaa gtcgcggacg 13620

cggttccaga tgttgcgcag cggcaaaaag tgctccatgg tcgggacgct ctggccggtc 13680

aggcgcgcgc aatcgttgac gctctagcgt gcaaaaggag agcctgtaag cgggcactct 13740

tccgtggtct ggtggataaa ttcgcaaggg tatcatggcg gacgaccggg gttcgagccc 13800

cgtatccggc cgtccgccgt gatccatgcg gttaccgccc gcgtgtcgaa cccaggtgtg 13860

cgacgtcaga caacggggga gtgctccttt tggcttcctt ccaggcgcgg cggctgctgc 13920

gctagctttt ttggccactg gccgcgcgca gcgtaagcgg ttaggctgga aagcgaaagc 13980

attaagtggc tcgctccctg tagccggagg gttattttcc aagggttgag tcgcgggacc 14040

cccggttcga gtctcggacc ggccggactg cggcgaacgg gggtttgcct ccccgtcatg 14100

caagaccccg cttgcaaatt cctccggaaa cagggacgag ccccttttt gcttttccca 14160

gatgcatccg gtgctgcggc agatgcgccc ccctcctcag cagcggcaag agcaagagca 14220

gcggcagaca tgcagggcac cctcccctcc tcctaccgcg tcaggagggg cgacatccgc 14280

ggttgacgcg gcagcagatg gtgattacga acccccgcgg cgccgggccc ggcactacct 14340

ggacttggag gagggcgagg gcctggcgcg gctaggagcg ccctctcctg agcggcaccc 14400

aagggtgcag ctgaagcgtg atacgcgtga ggcgtacgtg ccgcggcaga acctgtttcg 14460

cgaccgcgag ggagaggagc ccgaggagat gcgggatcga aagttccacg cagggcgcga 14520

gctgcggcat ggcctgaatc gcgagcggtt gctgcgcgag gaggactttg agcccgacgc 14580

gcgaaccggg attagtcccg cgcgcgcaca cgtggcggcc gccgacctgg taaccgcata 14640

cgagcagacg gtgaaccagg agattaactt tcaaaaaagc tttaacaacc acgtgcgtac 14700

gcttgtggcg cgcgaggagg tggctatagg actgatgcat ctgtgggact ttgtaagcgc 14760

gctggagcaa aacccaaata gcaagccgct catggcgcag ctgttcctta tagtgcagca 14820

cagcagggac aacgaggcat tcagggatgc gctgctaaac atagtagagc ccgagggccg 14880

ctggctgctc gatttgataa acatcctgca gagcatagtg gtgcaggagc gcagcttgag 14940

cctggctgac aaggtggccg ccatcaacta ttccatgctt agcctgggca agttttacgc 15000

ccgcaagata taccataccc cttacgttcc catagacaag gaggtaaaga tcgaggggtt 15060

ctacatgcgc atggcgctga aggtgcttac cttgagcgac gacctgggcg tttatcgcaa 15120

cgagcgcatc cacaaggccg tgagcgtgag ccggcggcgc gagctcagcg accgcgagct 15180

gatgcacagc ctgcaaaggg ccctggctgg cacgggcagc ggcgatagag aggccgagtc 15240

ctactttgac gcgggcgctg acctgcgctg ggccccaagc cgacgcgccc tggaggcagc 15300

tggggccgga cctgggctgg cggtggcacc cgcgcgcgct ggcaacgtcg gcggcgtgga 15360

ggaatatgac gaggacgatg agtacgagcc agaggacggc gagtactaag cggtgatgtt 15420

tctgatcaga tgatgcaaga cgcaacggac ccggcggtgc gggcggcgct gcagagccag 15480

ccgtccggcc ttaactccac ggacgactgg cgccaggtca tggaccgcat catgtcgctg 15540

actgcgcgca atcctgacgc gttccggcag cagccgcagg ccaaccggct ctccgcaatt 15600

ctggaagcgg tggtcccggc gcgcgcaaac cccacgcacg agaaggtgct ggcgatcgta 15660

aacgcgctgg ccgaaaacag ggccatccgg cccgacgagg ccggcctggt ctacgacgcg 15720

ctgcttcagc gcgtggctcg ttacaacagc ggcaacgtgc agaccaacct ggaccggctg 15780

gtgggggatg tgcgcgaggc cgtggcgcag cgtgagcgcg cgcagcagca gggcaacctg 15840

ggctccatgg ttgcactaaa cgccttcctg agtacacagc ccgccaacgt gccgcgggga 15900

caggaggact acaccaactt tgtgagcgca ctgcggctaa tggtgactga gacaccgcaa 15960

agtgaggtgt accagtctgg gccagactat tttttccaga ccagtagaca aggcctgcag 16020

accgtaaacc tgagccaggc tttcaaaaac ttgcaggggc tgtgggggggt gcgggctccc 16080

acaggcgacc gcgcgaccgt gtctagcttg ctgacgccca actcgcgcct gttgctgctg 16140

ctaatagcgc ccttcacgga cagtggcagc gtgtcccggg acacatacct aggtcacttg 16200

ctgacactgt accgcgaggc cataggtcag gcgcatgtgg acgagcatac tttccaggag 16260

attacaagtg tcagccgcgc gctggggcag gaggacacgg gcagcctgga ggcaacccta 16320

aactacctgc tgaccaaccg gcggcagaag atcccctcgt tgcacagttt aaacagcgag 16380

gaggagcgca ttttgcgcta cgtgcagcag agcgtgagcc ttaacctgat gcgcgacggg 16440

gtaacgccca gcgtggcgct ggacatgacc gcgcgcaaca tggaaccggg catgtatgcc 16500

tcaaaccggc cgtttatcaa ccgcctaatg gactacttgc atcgcgcggc cgccgtgaac 16560

cccgagtatt tcaccaatgc catcttgaac ccgcactggc taccgccccc tggtttctac 16620

accgggggat tcgaggtgcc cgagggtaac gatggattcc tctgggacga catagacgac 16680

agcgtgtttt ccccgcaacc gcagaccctg ctagagttgc aacagcgcga gcaggcagag 16740

gcggcgctgc gaaaggaaag cttccgcagg ccaagcagct tgtccgatct aggcgctgcg 16800

gccccgcggt cagatgctag tagcccattt ccaagcttga tagggtctct taccagcact 16860

cgcaccaccc gcccgcgcct gctgggcgag gaggagtacc taaacaactc gctgctgcag 16920

ccgcagcgcg aaaaaaacct gcctccggca tttcccaaca acgggataga gagcctagtg 16980

gacaagatga gtagatggaa gacgtacgcg caggagcaca gggacgtgcc aggcccgcgc 17040

ccgcccaccc gtcgtcaaag gcacgaccgt cagcggggtc tggtgtggga ggacgatgac 17100

tcggcagacg acagcagcgt cctggatttg ggagggagtg gcaacccgtt tgcgcacctt 17160

cgccccaggc tggggagaat gttttaaaaa aaaaaaagca tgatgcaaaa taaaaaactc 17220

accaaggcca tggcaccgag cgttggtttt cttgtattcc ccttagtatg cggcgcgcgg 17280

cgatgtatga ggaaggtcct cctccctcct acgagagtgt ggtgagcgcg gcgccagtgg 17340

cggcggcgct gggttctccc ttcgatgctc ccctggaccc gccgtttgtg cctccgcggt 17400

acctgcggcc taccgggggg agaaacagca tccgttactc tgagttggca cccctattcg 17460

acaccacccg tgtgtacctg gtggacaaca agtcaacgga tgtggcatcc ctgaactacc 17520

agaacgacca cagcaacttt ctgaccacgg tcattcaaaa caatgactac agcccggggg 17580

aggcaagcac acagaccatc aatcttgacg accggtcgca ctggggcggc gacctgaaaa 17640

ccatcctgca taccaacatg ccaaatgtga acgagttcat gtttaccaat aagtttaagg 17700

cgcgggtgat ggtgtcgcgc ttgcctacta aggacaatca ggtggagctg aaatacgagt 17760

gggtggagtt cacgctgccc gagggcaact actccgagac catgaccata gaccttatga 17820

acaacgcgat cgtggagcac tacttgaaag tgggcagaca gaacggggtt ctggaaagcg 17880

acatcggggt aaagtttgac acccgcaact tcagactggg gtttgacccc gtcactggtc 17940

ttgtcatgcc tggggtatat acaaacgaag ccttccatcc agacatcatt ttgctgccag 18000

gatgcggggt ggacttcacc cacagccgcc tgagcaactt gttgggcatc cgcaagcggc 18060

aacccttcca ggagggcttt aggatcacct acgatgatct ggagggtggt aacattcccg 18120

cactgttgga tgtggacgcc taccaggcga gcttgaaaga tgacaccgaa cagggcgggg 18180

gtggcgcagg cggcagcaac agcagtggca gcggcgcgga agagaactcc aacgcggcag 18240

ccgcggcaat gcagccggtg gaggacatga acgatcatgc cattcgcggc gacacctttg 18300

ccacacgggc tgaggagaag cgcgctgagg ccgaagcagc ggccgaagct gccgcccccg 18360

ctgcgcaacc cgaggtcgag aagcctcaga agaaaccggt gatcaaaccc ctgacagagg 18420

acagcaagaa acgcagttac aacctaataa gcaatgacag caccttcacc cagtaccgca 18480

gctggtacct tgcatacaac tacggcgacc ctcagaccgg aatccgctca tggaccctgc 18540

tttgcactcc tgacgtaacc tgcggctcgg agcaggtcta ctggtcgttg ccagacatga 18600

tgcaagaccc cgtgaccttc cgctccacgc gccagatcag caactttccg gtggtgggcg 18660

ccgagctgtt gcccgtgcac tccaagagct tctacaacga ccaggccgtc tactcccaac 18720

tcatccgcca gtttacctct ctgacccacg tgttcaatcg ctttcccgag aaccagattt 18780

tggcgcgccc gccagccccc accatcacca ccgtcagtga aaacgttcct gctctcacag 18840

atcacgggac gctaccgctg cgcaacagca tcggaggagt ccagcgagtg accattactg 18900

acgccagacg ccgcacctgc ccctacgttt acaaggccct gggcatagtc tcgccgcgcg 18960

tcctatcgag ccgcactttt tgagcaagca tgtccatcct tatatcgccc agcaataaca 19020

caggctgggg cctgcgcttc ccaagcaaga tgtttggcgg ggccaagaag cgctccgacc 19080

aacacccagt gcgcgtgcgc gggcactacc gcgcgccctg gggcgcgcac aaacgcggcc 19140

gcactgggcg caccaccgtc gatgacgcca tcgacgcggt ggtggaggag gcgcgcaact 19200

acacgcccac gccgccacca gtgtccacag tggacgcggc cattcagacc gtggtgcgcg 19260

gagcccggcg ctatgctaaa atgaagagac ggcggaggcg cgtagcacgt cgccaccgcc 19320

gccgacccgg cactgccgcc caacgcgcgg cggcggccct gcttaaccgc gcacgtcgca 19380

ccggccgacg ggcggccatg cgggccgctc gaaggctggc cgcgggtatt gtcactgtgc 19440

cccccaggtc caggcgacga gcggccgccg cagcagccgc ggccattagt gctatgactc 19500

agggtcgcag gggcaacgtg tattgggtgc gcgactcggt tagcggcctg cgcgtgcccg 19560

tgcgcacccg ccccccgcgc aactagattg caagaaaaaa ctacttagac tcgtactgtt 19620

gtatgtatcc agcggcggcg gcgcgcaacg aagctatgtc caagcgcaaa atcaaagaag 19680

agatgctcca ggtcatcgcg ccggagatct atggcccccc gaagaaggaa gagcaggatt 19740

acaagccccg aaagctaaag cgggtcaaaa agaaaaagaa agatgatgat gatgaacttg 19800

acgacgaggt ggaactgctg cacgctaccg cgcccaggcg acgggtacag tggaaaggtc 19860

gacgcgtaaa acgtgttttg cgacccggca ccaccgtagt ctttacgccc ggtgagcgct 19920

ccacccgcac ctacaagcgc gtgtatgatg aggtgtacgg cgacgaggac ctgcttgagc 19980

aggccaacga gcgcctcggg gagtttgcct acggaaagcg gcataaggac atgctggcgt 20040

tgccgctgga cgagggcaac ccaacaccta gcctaaagcc cgtaacactg cagcaggtgc 20100

tgcccgcgct tgcaccgtcc gaagaaaagc gcggcctaaa gcgcgagtct ggtgacttgg 20160

cacccaccgt gcagctgatg gtacccaagc gccagcgact ggaagatgtc ttggaaaaaa 20220

tgaccgtgga acctgggctg gagcccgagg tccgcgtgcg gccaatcaag caggtggcgc 20280

cgggactggg cgtgcagacc gtggacgttc agatacccac taccagtagc accagtattg 20340

ccaccgccac agagggcatg gagacacaaa cgtccccggt tgcctcagcg gtggcggatg 20400

ccgcggtgca ggcggtcgct gcggccgcgt ccaagacctc tacggaggtg caaacggacc 20460

cgtggatgtt tcgcgtttca gccccccggc gcccgcgccg ttcgaggaag tacggcgccg 20520

ccagcgcgct actgcccgaa tatgccctac atccttccat tgcgcctacc cccggctatc 20580

gtggctacac ctaccgcccc agaagacgag caactacccg acgccgaacc accactggaa 20640

cccgccgccg ccgtcgccgt cgccagcccg tgctggcccc gatttccgtg cgcagggtgg 20700

ctcgcgaagg aggcaggacc ctggtgctgc caacagcgcg ctaccacccc agcatcgttt 20760

aaaagccggt ctttgtggtt cttgcagata tggccctcac ctgccgcctc cgtttcccgg 20820

tgccgggatt ccgaggaaga atgcaccgta ggaggggcat ggccggccac ggcctgacgg 20880

gcggcatgcg tcgtgcgcac caccggcggc ggcgcgcgtc gcaccgtcgc atgcgcggcg 20940

gtatcctgcc cctccttatt ccactgatcg ccgcggcgat tggcgccgtg cccggaattg 21000

catccgtggc cttgcaggcg cagagacact gattaaaaac aagttgcatg tggaaaaatc 21060

aaaataaaaa gtctggactc tcacgctcgc ttggtcctgt aactattttg tagaatggaa 21120

gacatcaact ttgcgtctct ggccccgcga cacggctcgc gcccgttcat gggaaactgg 21180

caagatatcg gcaccagcaa tatgagcggt ggcgccttca gctggggctc gctgtggagc 21240

ggcattaaaa atttcggttc caccgttaag aactatggca gcaaggcctg gaacagcagc 21300

acaggccaga tgctgaggga taagttgaaa gagcaaaatt tccaacaaaa ggtggtagat 21360

ggcctggcct ctggcattag cggggtggtg gacctggcca accaggcagt gcaaaataag 21420

attaacagta agcttgatcc ccgccctccc gtagaggagc ctccaccggc cgtggagaca 21480

gtgtctccag aggggcgtgg cgaaaagcgt ccgcgccccg acagggaaga aactctggtg 21540

acgcaaatag acgagcctcc ctcgtacgag gaggcactaa agcaaggcct gcccaccacc 21600

cgtcccatcg cgcccatggc taccggagtg ctgggccagc acacacccgt aacgctggac 21660

ctgcctcccc ccgccgacac ccagcagaaa cctgtgctgc caggcccgac cgccgttgtt 21720

gtaacccgtc ctagccgcgc gtccctgcgc cgcgccgcca gcggtccgcg atcgttgcgg 21780

cccgtagcca gtggcaactg gcaaagcaca ctgaacagca tcgtgggtct gggggtgcaa 21840

tccctgaagc gccgacgatg cttctgatag ctaacgtgtc gtatgtgtgt catgtatgcg 21900

tccatgtcgc cgccagagga gctgctgagc cgccgcgcgc ccgctttcca agatggctac 21960

cccttcgatg atgccgcagt ggtcttacat gcacatctcg ggccaggacg cctcggagta 22020

cctgagcccc gggctggtgc agtttgcccg cgccaccgag acgtacttca gcctgaataa 22080

caagtttaga aaccccacgg tggcgcctac gcacgacgtg accacagacc ggtcccagcg 22140

tttgacgctg cggttcatcc ctgtggaccg tgaggatact gcgtactcgt acaaggcgcg 22200

gttcacccta gctgtgggtg ataaccgtgt gctggacatg gcttccacgt actttgacat 22260

ccgcggcgtg ctggacaggg gccctacttt taagccctac tctggcactg cctacaacgc 22320

cctggctccc aagggtgccc caaatccttg cgaatgggat gaagctgcta ctgctcttga 22380

aataaaccta gaagaagagg acgatgacaa cgaagacgaa gtagacgagc aagctgagca 22440

gcaaaaaact cacgtatttg ggcaggcgcc ttattctggt ataaatatta caaaggaggg 22500

tattcaaata ggtgtcgaag gtcaaacacc taaatatgcc gataaaacat ttcaacctga 22560

acctcaaata ggagaatctc agtggtacga aacagaaatt aatcatgcag ctgggagagt 22620

cctaaaaaag actaccccaa tgaaaccatg ttacggttca tatgcaaaac ccacaaatga 22680

aaatggaggg caaggcattc ttgtaaagca acaaaatgga aagctagaaa gtcaagtgga 22740

aatgcaattt ttctcaacta ctgaggcagc cgcaggcaat ggtgataact tgactcctaa 22800

agtggtattg tacagtgaag atgtagatat agaaacccca gacactcata tttcttacat 22860

gcccactatt aaggaaggta actcacgaga actaatgggc caacaatcta tgcccaacag 22920

gcctaattac attgctttta gggacaattt tattggtcta atgtattaca acagcacggg 22980

taatatgggt gttctggcgg gccaagcatc gcagttgaat gctgttgtag atttgcaaga 23040

cagaaacaca gagctttcat accagctttt gcttgattcc attggtgata gaaccaggta 23100

cttttctatg tggaatcagg ctgttgacag ctatgatcca gatgttagaa ttattgaaaa 23160

tcatggaact gaagatgaac ttccaaatta ctgctttcca ctgggaggtg tgattaatac 23220

agagactctt accaaggtaa aacctaaaac aggtcaggaa aatggatggg aaaaagatgc 23280

tacagaattt tcagataaaa atgaaataag agttggaaat aattttgcca tggaaatcaa 23340

tctaaatgcc aacctgtgga gaaatttcct gtactccaac atagcgctgt atttgcccga 23400

caagctaaag tacagtcctt ccaacgtaaa aatttctgat aacccaaaca cctacgacta 23460

catgaacaag cgagtggtgg ctcccgggct agtggactgc tacattaacc ttggagcacg 23520

ctggtccctt gactatatgg acaacgtcaa cccatttaac caccaccgca atgctggcct 23580

gcgctaccgc tcaatgttgc tgggcaatgg tcgctatgtg cccttccaca tccaggtgcc 23640

tcagaagttc tttgccatta aaaacctcct tctcctgccg ggctcataca cctacgagtg 23700

gaacttcagg aaggatgtta acatggttct gcagagctcc ctaggaaatg acctaagggt 23760

tgacggagcc agcattaagt ttgatagcat ttgcctttac gccaccttct tccccatggc 23820

ccacaacacc gcctccacgc ttgaggccat gcttagaaac gacaccaacg accagtcctt 23880

taacgactat ctctccgccg ccaacatgct ctaccctata cccgccaacg ctaccaacgt 23940

gcccatatcc atcccctccc gcaactgggc ggctttccgc ggctgggcct tcacgcgcct 24000

taagactaag gaaaccccat cactgggctc gggctacgac ccttattaca cctactctgg 24060

ctctataccc tacctagatg gaacctttta cctcaaccac acctttaaga aggtggccat 24120

tacctttgac tcttctgtca gctggcctgg caatgaccgc ctgcttaccc ccaacgagtt 24180

tgaaattaag cgctcagttg acggggaggg ttacaacgtt gcccagtgta acatgaccaa 24240

agactggttc ctggtacaaa tgctagctaa ctataacatt ggctaccagg gcttctatat 24300

cccagagagc tacaaggacc gcatgtactc cttctttaga aacttccagc ccatgagccg 24360

tcaggtggtg gatgatacta aatacaagga ctaccaacag gtgggcatcc tacaccaaca 24420

caacaactct ggatttgttg gctaccttgc ccccaccatg cgcgaaggac aggcctaccc 24480

tgctaacttc ccctatccgc ttataggcaa gaccgcagtt gacagcatta cccagaaaaa 24540

gtttctttgc gatcgcaccc tttggcgcat cccattctcc agtaacttta tgtccatggg 24600

cgcactcaca gacctgggcc aaaaccttct ctacgccaac tccgcccacg cgctagacat 24660

gacttttgag gtggatccca tggacgagcc cacccttctt tatgttttgt ttgaagtctt 24720

tgacgtggtc cgtgtgcacc agccgcaccg cggcgtcatc gaaaccgtgt acctgcgcac 24780

gcccttctcg gccggcaacg ccacaacata aagaagcaag caacatcaac aacagctgcc 24840

gccatgggct ccagtgagca ggaactgaaa gccattgtca aagatcttgg ttgtgggcca 24900

tatttttgg gcacctatga caagcgcttt ccaggctttg tttctccaca caagctcgcc 24960

tgcgccatag tcaatacggc cggtcgcgag actgggggcg tacactggat ggcctttgcc 25020

tggaacccgc actcaaaaac atgctacctc tttgagccct ttggcttttc tgaccagcga 25080

ctcaagcagg tttaccagtt tgagtacgag tcactcctgc gccgtagcgc cattgcttct 25140

tcccccgacc gctgtataac gctggaaaag tccacccaaa gcgtacaggg gcccaactcg 25200

gccgcctgtg gactattctg ctgcatgttt ctccacgcct ttgccaactg gccccaaact 25260

cccatggatc acaaccccac catgaacctt attaccgggg tacccaactc catgctcaac 25320

agtccccagg tacagcccac cctgcgtcgc aaccaggaac agctctacag cttcctggag 25380

cgccactcgc cctacttccg cagccacagt gcgcagatta ggagcgccac ttctttttgt 25440

cacttgaaaa acatgtaaaa ataatgtact agagacactt tcaataaagg caaatgcttt 25500

tatttgtaca ctctcgggtg attatttacc cccacccttg ccgtctgcgc cgtttaaaaa 25560

tcaaaggggt tctgccgcgc atcgctatgc gccactggca gggacacgtt gcgatactgg 25620

tgtttagtgc tccacttaaa ctcaggcaca accatccgcg gcagctcggt gaagttttca 25680

ctccacaggc tgcgcaccat caccaacgcg tttagcaggt cgggcgccga tatcttgaag 25740

tcgcagttgg ggcctccgcc ctgcgcgcgc gagttgcgat acacagggtt gcagcactgg 25800

aacactatca gcgccgggtg gtgcacgctg gccagcacgc tcttgtcgga gatcagatcc 25860

gcgtccaggt cctccgcgtt gctcagggcg aacggagtca actttggtag ctgccttccc 25920

aaaaagggcg cgtgcccagg ctttgagttg cactcgcacc gtagtggcat caaaaggtga 25980

ccgtgcccgg tctgggcgtt aggatacagc gcctgcataa aagccttgat ctgcttaaaa 26040

gccacctgag cctttgcgcc ttcagagaag aacatgccgc aagacttgcc ggaaaactga 26100

ttggccggac aggccgcgtc gtgcacgcag caccttgcgt cggtgttgga gatctgcacc 26160

acatttcggc cccaccggtt cttcacgatc ttggccttgc tagactgctc cttcagcgcg 26220

cgctgcccgt tttcgctcgt cacatccatt tcaatcacgt gctccttatt tatcataatg 26280

cttccgtgta gacacttaag ctcgccttcg atctcagcgc agcggtgcag ccacaacgcg 26340

cagcccgtgg gctcgtgatg cttgtaggtc acctctgcaa acgactgcag gtacgcctgc 26400

aggaatcgcc ccatcatcgt cacaaaggtc ttgttgctgg tgaaggtcag ctgcaacccg 26460

cggtgctcct cgttcagcca ggtcttgcat acggccgcca gagcttccac ttggtcaggc 26520

agtagtttga agttcgcctt tagatcgtta tccacgtggt acttgtccat cagcgcgcgc 26580

gcagcctcca tgcccttctc ccacgcagac acgatcggca cactcagcgg gttcatcacc 26640

gtaatttcac tttccgcttc gctgggctct tcctcttcct cttgcgtccg cataccacgc 26700

gccactgggt cgtcttcatt cagccgccgc actgtgcgct tacctccttt gccatgcttg 26760

attagcaccg gtgggttgct gaaacccacc atttgtagcg ccacatcttc tctttcttcc 26820

tcgctgtcca cgattacctc tggtgatggc gggcgctcgg gcttgggaga agggcgcttc 26880

tttttcttct tgggcgcaat ggccaaatcc gccgccgagg tcgatggccg cgggctgggt 26940

gtgcgcggca ccagcgcgtc ttgtgatgag tcttcctcgt cctcggactc gatacgccgc 27000

ctcatccgct tttttggggg cgcccgggga ggcggcggcg acggggacgg ggacgacacg 27060

tcctccatgg ttgggggacg tcgcgccgca ccgcgtccgc gctcgggggt ggtttcgcgc 27120

tgctcctctt cccgactggc catttccttc tcctataggc agaaaaagat catggagtca 27180

gtcgagaaga aggacagcct aaccgccccc tctgagttcg ccaccaccgc ctccaccgat 27240

gccgccaacg cgcctaccac cttccccgtc gaggcacccc cgcttgagga ggaggaagtg 27300

attatcgagc aggacccagg ttttgtaagc gaagacgacg aggaccgctc agtaccaaca 27360

gaggataaaa agcaagacca ggacaacgca gaggcaaacg aggaacaagt cgggcggggg 27420

gacgaaaggc atggcgacta cctagatgtg ggagacgacg tgctgttgaa gcatctgcag 27480

cgccagtgcg ccattatctg cgacgcgttg caagagcgca gcgatgtgcc cctcgccata 27540

gcggatgtca gccttgccta cgaacgccac ctattctcac cgcgcgtacc ccccaaacgc 27600

caagaaaacg gcacatgcga gcccaacccg cgcctcaact tctaccccgt atttgccgtg 27660

ccagaggtgc ttgccaccta tcacatcttt ttccaaaact gcaagatacc cctatcctgc 27720

cgtgccaacc gcagccgagc ggacaagcag ctggccttgc ggcagggcgc tgtcatacct 27780

gatatcgcct cgctcaacga agtgccaaaa atctttgagg gtcttggacg cgacgagaag 27840

cgcgcggcaa acgctctgca acaggaaaac agcgaaaatg aaagtcactc tggagtgttg 27900

gtggaactcg agggtgacaa cgcgcgccta gccgtactaa aacgcagcat cgaggtcacc 27960

cactttgcct acccggcact taacctaccc cccaaggtca tgagcacagt catgagtgag 28020

ctgatcgtgc gccgtgcgca gcccctggag agggatgcaa atttgcaaga acaaacagag 28080

gagggcctac ccgcagttgg cgacgagcag ctagcgcgct ggcttcaaac gcgcgagcct 28140

gccgacttgg aggagcgacg caaactaatg atggccgcag tgctcgttac cgtggagctt 28200

gagtgcatgc agcggttctt tgctgacccg gagatgcagc gcaagctaga ggaaacattg 28260

cactacacct ttcgacaggg ctacgtacgc caggcctgca agatctccaa cgtggagctc 28320

tgcaacctgg tctcctacct tggaattttg cacgaaaacc gccttgggca aaacgtgctt 28380

cattccacgc tcaagggcga ggcgcgccgc gactacgtcc gcgactgcgt ttacttattt 28440

ctatgctaca cctggcagac ggccatgggc gtttggcagc agtgcttgga ggagtgcaac 28500

ctcaaggagc tgcagaaact gctaaagcaa aacttgaagg acctatggac ggccttcaac 28560

gagcgctccg tggccgcgca cctggcggac atcattttcc ccgaacgcct gcttaaaacc 28620

ctgcaacagg gtctgccaga cttcaccagt caaagcatgt tgcagaactt taggaacttt 28680

atcctagagc gctcaggaat cttgcccgcc acctgctgtg cacttcctag cgactttgtg 28740

cccattaagt accgcgaatg ccctccgccg ctttggggcc actgctacct tctgcagcta 28800

gccaactacc ttgcctacca ctctgacata atggaagacg tgagcggtga cggtctactg 28860

gagtgtcact gtcgctgcaa cctatgcacc ccgcaccgct ccctggtttg caattcgcag 28920

ctgcttaacg aaagtcaaat tatcggtacc tttgagctgc agggtccctc gcctgacgaa 28980

aagtccgcgg ctccggggtt gaaactcact ccggggctgt ggacgtcggc ttaccttcgc 29040

aaatttgtac ctgaggacta ccacgcccac gagattaggt tctacgaaga ccaatcccgc 29100

ccgcctaatg cggagcttac cgcctgcgtc attacccagg gccacattct tggccaattg 29160

caagccatca acaaagcccg ccaagagttt ctgctacgaa agggacgggg ggtttacttg 29220

gacccccagt ccggcgagga gctcaaccca atccccccgc cgccgcagcc ctatcagcag 29280

cagccgcggg cccttgcttc ccaggatggc acccaaaaag aagctgcagc tgccgccgcc 29340

acccacggac gaggaggaat actgggacag tcaggcagag gaggttttgg acgaggagga 29400

ggaggacatg atggaagact gggagagcct agacgaggaa gcttccgagg tcgaagaggt 29460

gtcagacgaa acaccgtcac cctcggtcgc attcccctcg ccggcgcccc agaaatcggc 29520

aaccggttcc agcatggcta caacctccgc tcctcaggcg ccgccggcac tgcccgttcg 29580

ccgacccaac cgtagatggg acaccactgg aaccagggcc ggtaagtcca agcagccgcc 29640

gccgttagcc caagagcaac aacagcgcca aggctaccgc tcatggcgcg ggcacaagaa 29700

cgccatagtt gcttgcttgc aagactgtgg gggcaacatc tccttcgccc gccgctttct 29760

tctctaccat cacggcgtgg ccttcccccg taacatcctg cattactacc gtcatctcta 29820

cagcccatac tgcaccggcg gcagcggcag caacagcagc ggccacacag aagcaaaggc 29880

gaccggatag caagactctg acaaagccca agaaatccac agcggcggca gcagcaggag 29940

gaggagcgct gcgtctggcg cccaacgaac ccgtatcgac ccgcgagctt agaaacagga 30000

tttttcccac tctgtatgct atatttcaac agagcagggg ccaagaacaa gagctgaaaa 30060

taaaaaacag gtctctgcga tccctcaccc gcagctgcct gtatcacaaa agcgaagatc 30120

agcttcggcg cacgctggaa gacgcggagg ctctcttcag taaatactgc gcgctgactc 30180

ttaaggacta gtttcgcgcc ctttctcaaa tttaagcgcg aaaactacgt catctccagc 30240

ggccacaccc ggcgccagca cctgttgtca gcgccattat gagcaaggaa attcccacgc 30300

cctacatgtg gagttaccag ccacaaatgg gacttgcggc tggagctgcc caagactact 30360

caacccgaat aaactacatg agcgcgggac cccacatgat atcccgggtc aacggaatac 30420

gcgcccaccg aaaccgaatt ctcctggaac aggcggctat taccaccaca cctcgtaata 30480

accttaatcc ccgtagttgg cccgctgccc tggtgtacca ggaaagtccc gctcccacca 30540

ctgtggtact tcccagagac gcccaggccg aagttcagat gactaactca ggggcgcagc 30600

ttgcgggcgg ctttcgtcac agggtgcggt cgcccgggca gggtataact cacctgacaa 30660

tcagagggcg aggtattcag ctcaacgacg agtcggtgag ctcctcgctt ggtctccgtc 30720

cggacgggac atttcagatc ggcggcgccg gccgctcttc attcacgcct cgtcaggcaa 30780

tcctaactct gcagacctcg tcctctgagc cgcgctctgg aggcattgga actctgcaat 30840

ttattgagga gtttgtgcca tcggtctact ttaacccctt ctcgggacct cccggccact 30900

atccggatca atttattcct aactttgacg cggtaaagga ctcggcggac ggctacgact 30960

gaatgttaag tggagaggca gagcaactgc gcctgaaaca cctggtccac tgtcgccgcc 31020

acaagtgctt tgcccgcgac tccggtgagt tttgctactt tgaattgccc gaggatcata 31080

tcgagggccc ggcgcacggc gtccggctta ccgcccaggg agagcttgcc cgtagcctga 31140

ttcgggagtt tacccagcgc cccctgctag ttgagcggga caggggaccc tgtgttctca 31200

ctgtgatttg caactgtcct aaccctggat tacatcaaga tcctctagtt aatgtcaggt 31260

cgcctaagtc gattaactag agtacccggg gatcttattc cctttaacta ataaaaaaaa 31320

ataataaagc atcacttact taaaatcagt tagcaaattt ctgtccagtt tattcagcag 31380

cacctccttg ccctcctccc agctctggta ttgcagcttc ctcctggctg caaactttct 31440

ccacaatcta aatggaatgt cagtttcctc ctgttcctgt ccatccgcac ccactatctt 31500

catgttgttg cagatgaagc gcgcaagacc gtctgaagat accttcaacc ccgtgtatcc 31560

atatgacacg gaaaccggtc ctccaactgt gccttttctt actcctccct ttgtatcccc 31620

caatgggttt caagagagtc cccctggggt actctctttg cgcctatccg aacctctagt 31680

tacctccaat ggcatgcttg cgctcaaaat gggcaacggc ctctctctgg acgaggccgg 31740

caaccttacc tcccaaaatg taaccactgt gagcccacct ctcaaaaaaa ccaagtcaaa 31800

cataaacctg gaaatatctg cacccctcac agttacctca gaagccctaa ctgtggctgc 31860

cgccgcacct ctaatggtcg cgggcaacac actcaccatg caatcacagg ccccgctaac 31920

cgtgcacgac tccaaactta gcattgccac ccaaggaccc ctcacagtgt cagaaggaaa 31980

gctagccctg caaacatcag gccccctcac caccaccgat agcagtaccc ttactatcac 32040

tgcctcaccc cctctaacta ctgccactgg tagcttgggc attgacttga aagagcccat 32100

ttatacacaa aatggaaaac taggactaaa gtacggggct cctttgcatg taacagacga 32160

cctaaacact ttgaccgtag caactggtcc aggtgtgact attaataata cttccttgca 32220

aactaaagtt actggagcct tgggttttga ttcacaaggc aatatgcaac ttaatgtagc 32280

aggaggacta aggattgatt ctcaaaacag acgccttata cttgatgtta gttatccgtt 32340

tgatgctcaa aaccaactaa atctaagact aggacagggc cctcttttta taaactcagc 32400

ccacaacttg gatattaact acaacaaagg cctttacttg tttacagctt caaacaattc 32460

caaaaagctt gaggttaacc taagcactgc caaggggttg atgtttgacg ctacagccat 32520

agccattaat gcaggagatg ggcttgaatt tggttcacct aatgcaccaa acacaaatcc 32580

cctcaaaaca aaaattggcc atggcctaga atttgattca aacaaggcta tggttcctaa 32640

actaggaact ggccttagtt ttgacagcac aggtgccatt acagtaggaa acaaaaataa 32700

tgataagcta actttgtgga ccggaataaa ccctccacct aactgtcaaa ttgtggaaaa 32760

cactaataca aatgatggca aacttacttt agtattagta aaaaatggag ggcttgttaa 32820

tggctacgtg tctctagttg gtgtatcaga cactgtgaac caaatgttca cacaaaagac 32880

agcaaacatc caattaagat tatattttga ctcttctgga aatctattaa ctgaggaatc 32940

agacttaaaa attccactta aaaataaatc ttctacagcg accagtgaaa ctgtagccag 33000

cagcaaagcc tttatgccaa gtactacagc ttatcccttc aacaccacta ctagggatag 33060

tgaaaactac attcatggaa tatgttacta catgactagt tatgatagaa gtctatttcc 33120

cttgaacatt tctataatgc taaacagccg tatgatttct tccaatgttg cctatgccat 33180

acaatttgaa tggaatctaa atgcaagtga atctccagaa agcaacatag ctacgctgac 33240

cacatccccc tttttctttt cttacattac agaagacgac aactaaagaa tcgtttgtgt 33300

tatgtttcaa cgtgtttatt tttcaattgc agaaaatttc aagtcatttt tcattcagta 33360

gtatagcccc accaccacat agcttataca gatcaccgta ccttaatcaa actcacagaa 33420

ccctagtatt caacctgcca cctccctccc aacacacaga gtacacagtc ctttctcccc 33480

ggctggcctt aaaaagcatc atatcatggg taacagacat attcttaggt gttatattcc 33540

acacggtttc ctgtcgagcc aaacgctcat cagtgatatt aataaactcc ccgggcagct 33600

cacttaagtt catgtcgctg tccagctgct gagccacagg ctgctgtcca acttgcggtt 33660

gcttaacggg cggcgaagga gaagtccacg cctacatggg ggtagagtca taatcgtgca 33720

tcaggatagg gcggtggtgc tgcagcagcg cgcgaataaa ctgctgccgc cgccgctccg 33780

tcctgcagga atacaacatg gcagtggtct cctcagcgat gattcgcacc gcccgcagca 33840

taaggcgcct tgtcctccgg gcacagcagc gcaccctgat ctcacttaaa tcagcacagt 33900

aactgcagca cagcaccaca atattgttca aaatcccaca gtgcaaggcg ctgtatccaa 33960

agctcatggc ggggaccaca gaacccacgt ggccatcata ccacaagcgc aggtagatta 34020

agtggcgacc cctcataaac acgctggaca taaacattac ctcttttggc atgttgtaat 34080

tcaccacctc ccctctgatt aaacatggcg ccatccacca ccatcctaaa ccagctggcc 34140

aaaacctgcc cgccggctat acactgcagg gaaccgggac tggaacaatg acagtggaga 34200

gcccaggact cgtaaccatg gatcatcatg ctcgtcatga tatcaatgtt ggcacaacac 34260

aggcacacgt gcatacactt cctcaggatt acaagctcct cccgcgttag aaccatatcc 34320

cagggaacaa cccattcctg aatcagcgta aatcccacac tgcagggaag acctcgcacg 34380

taactcacgt tgtgcattgt caaagtgtta cattcgggca gcagcggatg atcctccagt 34440

atggtagcgc gggtttctgt ctcaaaagga ggtagacgat ccctactgta cggagtgcgc 34500

cgagacaacc gagatcgtgt tggtcgtagt gtcatgccaa atggaacgcc ggacgtagtc 34560

atatttcctg aagcaaaacc aggtgcgggc gtgacaaaca gatctgcgtc tccggtctcg 34620

ccgcttagat cgctctgtgt agtagttgta gtatatccac tctctcaaag catccaggcg 34680

ccccctggct tcgggttcta tgtaaactcc ttcatgcgcc gctgccctga taacatccac 34740

caccgcagaa taagccacac ccagccaacc tacacattcg ttctgcgagt cacacacggg 34800

aggagcggga agagctggaa gaaccatgtt ttttttttta ttccaaaaga ttatccaaaa 34860

cctcaaaatg aagatctatt aagtgaacgc gctcccctcc ggtggcgtgg tcaaactcta 34920

cagccaaaga acagataatg gcatttgtaa gatgttgcac aatggcttcc aaaaggcaaa 34980

cggccctcac gtccaagtgg acgtaaaggc taaacccttc agggtgaatc tcctctataa 35040

acattccagc accttcaacc atgcccaaat aattctcatc tcgccacctt ctcaatatat 35100

ctctaagcaa atcccgaata ttaagtccgg ccattgtaaa aatctgctcc agagcgccct 35160

ccaccttcag cctcaagcag cgaatcatga ttgcaaaaat tcaggttcct cacagacctg 35220

tataagattc aaaagcggaa cattaacaaa aataccgcga tcccgtaggt cccttcgcag 35280

ggccagctga acataatcgt gcaggtctgc acggaccagc gcggccactt ccccgccagg 35340

aaccatgaca aaagaaccca cactgattat gacacgcata ctcggagcta tgctaaccag 35400

cgtagccccg atgtaagctt gttgcatggg cggcgatata aaatgcaagg tgctgctcaa 35460

aaaatcaggc aaagcctcgc gcaaaaaaga aagcacatcg tagtcatgct catgcagata 35520

aaggcaggta agctccggaa ccaccacaga aaaagacacc atttttctct caaacatgtc 35580

tgcgggtttc tgcataaaca caaaataaaa taacaaaaaa acatttaaac attagaagcc 35640

tgtcttacaa caggaaaaac aacccttata agcataagac ggactacggc catgccggcg 35700

tgaccgtaaa aaaactggtc accgtgatta aaaagcacca ccgacagctc ctcggtcatg 35760

tccggagtca taatgtaaga ctcggtaaac acatcaggtt gattcacatc ggtcagtgct 35820

aaaaagcgac cgaaatagcc cgggggaata catacccgca ggcgtagaga caacattaca 35880

gcccccatag gaggtataac aaaattaata ggagagaaaa acacataaac acctgaaaaa 35940

ccctcctgcc taggcaaaat agcaccctcc cgctccagaa caacatacag cgcttccaca 36000

gcggcagcca taacagtcag ccttaccagt aaaaaagaaa acctattaaa aaaacaccac 36060

tcgacacggc accagctcaa tcagtcacag tgtaaaaaag ggccaagtgc agagcgagta 36120

tatataggac taaaaaatga cgtaacggtt aaagtccaca aaaaacaccc agaaaaccgc 36180

acgcgaacct acgcccagaa acgaaagcca aaaaacccac aacttcctca aatcgtcact 36240

tccgttttcc cacgttacgt cacttcccat tttaagaaaa ctacaattcc caacacatac 36300

aagttactcc gccctaaaac ctacgtcacc cgccccgttc ccacgccccg cgccacgtca 36360

caaactccac cccctcatta tcatattggc ttcaatccaa aataaggtat attattgatg 36420

atg 36423

<210> 25
<211> 36150
<212> DNA
<213> Artificial Sequence

<220>
<223> pAdk35RF-Spike/E4orf6(RSV)-E4dl355(E4re#20)

<400> 25
ttaattaaca tcatcaataa tataccttat tttggattga agccaatatg ataatgaggg 60

ggtggagttt gtgacgtggc gcggggcgtg ggaacggggc gggtgacgta gtagtgtggc 120

ggaagtgtga tgttgcaagt gtggcggaac acatgtaagc gacggatgtg gcaaaagtga 180

cgtttttggt gtgcgccggt gtacacagga agtgacaatt ttcgcgcggt tttaggcgga 240

tgttgtagta aatttgggcg taaccgagta agatttggcc attttcgcgg gaaaactgaa 300

taagaggaag tgaaatctga ataattttgt gttactcata gcgcgtaata atttgatccg 360

cgttaagata cattgatgag tttggacaaa ccacaactag aatgcagtga aaaaaatgct 420

ttatttgtga aatttgtgat gctattgctt tatttgtaac cattataagc tgcaataaac 480

aagttaacaa caacaattgc attcatttta tgtttcaggt tcaggggggag gtgtgggagg 540

ttttttaaag caagtaaaac ctctacaaat gtggtatggc tgattatgat caattttcat 600

ggccacttga tgtattgttc atatttgccc agttcttgga ggtcaatcag ggactcattc 660

aggttcttag ccacctcatt cagtctgtca atctccttct ggatgttcac cacagaggca 720

ttgatgccag agatgtctcc caggtccaca tcagggctgg tgtggttctt gaagtatttg 780

tccagttcct ccttgaagga gtccagttca ggttggagtg ggtcatagac tgtgttgttc 840

acaatgccaa tcaccacatc acagttgcca gacacaaagg tgttgtctgt ggtgataatc 900

tgtggttcat agaagttcct ctgggtcaca aaccagtggg tgccattgct cacaaacact 960

ccctcccttg gaaagtgagc cttgccatca tggcagatgg caggggctgt ggtgaagttc 1020

ttctcctggg caggcacata ggtcacatgc aggaacacca ctccatgagg ggcagactgt 1080

ggaaaactca tcaggtggta gcccttgcca cagaagtcca ccctcttgct ttgtcccagc 1140

acacactcac tcatcttggt ggcagccagg ttggcagatg ccctaatctc agcagccctg 1200

ataagttgtt gggtcacata ggtttggagg gattggagtc tgcctgtaat cagtctgtca 1260

atctggacct cagcctccac cttgtccagt ctgctcagga tgtcattcag cacagaggag 1320

atggctccaa agttgctgga aagttgcttc accagggtgt tcagagcctg ggcattctgg 1380

ttcaccacat cttggagttt gcccagggca gaggctgtgc tggacaggga gtcctgaatc 1440

ttgccaatgg cagagttgaa ctggttggca atcagtttct ggttctcata gagcacattc 1500

tgggtcactc caatgccatt gaacctgtaa gccatctgca tagcaaatgg gatttggagg 1560

gctgctcctg ctccaaaggt ccagccagag gtgatggtgc cagccagcag ggcagaggtg 1620

tattgggcaa tcatctcatc tgtcagcagt ggaggcagca ctgtcagtcc attgaacttc 1680

tgggcacaaa tcaggtccct ggcagcaatg tctcccagac agtctccata ttgcttgatg 1740

aagccagcat cagccagggt caccttgttg aacagcaggt cctcaatgaa ggacctcttg 1800

cttggcttgc ttgggtcagg cagaatctgg ctgaagttga agcctccaaa gtccttgatt 1860

ggaggtgtct tgtaaatctg cttcacctgg gcaaacacct cctgggtgtt cttgtcctgt 1920

tccacagcaa tgcctgtcag agccctgtta agttgggtac agaaggagcc atattggagc 1980

agcaggttgc tacactctgt gctgtctcca cagatataca ttgtacagtc cacagaggtc 2040

ttggtcatac tcacaggcag aatctctgtg gtcacagaga tggtgaagtt ggttgggatg 2100

gcaatgctgt tgttgctgta agccacagag ttctctgctc ccagactcat tgtgtaggca 2160

atgatgctct ggcttgccac agacctcgac ccaccgccac cggtctgggt ctggtaggag 2220

gcacagatgc ctgctccaat tgggatgtca cactcatagg agttgttcac atgctctgct 2280

ccaatcagac agccagccct ggtctggaac acattgctgc ctgtgctgta gaccctccag 2340

gttggtgtaa gttggtcagc atggatagcc acaggcacct cagtacagtt cacatcctgg 2400

tagagcacag ccacctggtt gctggtgttg gtgccaggtg taatcacaga cactcctcca 2460

aaggaacatg gtgtgatgtc cagaatctcc aaggtctgtg ggtccctcac agcatctgtg 2520

gtgtcagcaa tgtccctgcc aaactgttgg aatggcagga acttcttgtt gctctctgtc 2580

agcactcctg tgcctgtcag tccattgaag ttgaagttca cacacttgtt cttcaccagg 2640

ttggtgctct tctttggtcc acacactgtg gcaggggcat ggagcagttc aaaggacagc 2700

accaccaccc tgtatggttg gtagcccact ccattggttg gttggaagcc ataggattgg 2760

agtggaaagt aacagttgaa gccctccact ccattacatg gtgtgctgcc agcctggtaa 2820

atctctgtgc tgatgtccct ctcaaatggt ttcaggttgc tcttcctgaa cagtctgtag 2880

aggtagttgt agttgcctcc caccttgctg tccaggttgt tgctgttcca ggcaatcaca 2940

cagcctgtga agtcatcagg cagtttgtag ttgtagtcag caatcttgcc tgtttgtcca 3000

ggggcaatct gtctcacctc atctccccta atcacaaagg agtcagcata gacattggtg 3060

aaacacaggt cattcagttt ggttgggctc actccataac acttgaaggt gctgaaggag 3120

gcagagttgt agagcacaga gtagtcagcc acacagttgc taatcctctt cctgttccag 3180

gcatagacag aggcaaacct ggtggcattg aacacctctc caaatggaca caggttggtg 3240

atgtttggaa acctcacaat gctctctgtt ggttggaccc tgaagttgct ggtctggtag 3300

atgcccttct ccactgtgaa ggatttcagg gtacacttgg tctcagacag tgggtccagg 3360

gcacagtcca cagcatctgt gatggtgcca ttctcattgt atttcagcag gaaggtcctt 3420

ggttggaggt agcccacata gtaggctgct gctcctgctg tccagccaga ggaggagtct 3480

ccaggtgtca ggtaggacct gtgcagagcc agcagggtct ggaacctggt gatgttgatg 3540

ccaattggca ggtccaccag tggttccaag gcagagaagc cctgtggcag gtccctcacc 3600

aggttgattg gtgtgtgttt gctgtaaatc ttgaagtagc catcaatgtt cttgaacaca 3660

aactccctca ggttcttgaa gttgccctgc ttgccctcca agtccatcag gaatggttgg 3720

ctcacatatt caaaggtaca gttgttggca gaggagtaga ccctgaactc agactccatc 3780

caggacttgt tgttcttgtg gtagtagact cccaggaatg ggtcattaca gaactggaac 3840

tcacacacct taatcaccac attggtggca ttgttcacaa tcagcaggga ctgggtcttg 3900

ctgtccaggg tggtgccaaa aatccagccc ctgatgatgt tgctcttctc tgtgctggca 3960

aagtagactc catcattgaa tggcagcaca gggttgtcaa acctcttggt gccattggtg 4020

ccagacacat ggatggcatg gaaccaggtc acattgctga agaatggcag gaacaggtcc 4080

tgggtgctgt gcagcacaga ggacctgaac accttgtcag ggtagtagac tcccctggtg 4140

aaggagttgg tgtaggcagg aggaagttgg gtcctggtgg tcaggttcac acactggctg 4200

gacaccagtg gcagcagcac caggaacaca aacatggtgg caaatcggag gctggatcgg 4260

tcccggtgtc ttctatggag gtcaaaacag cgtggatggc gtctccaggc gatctgacgg 4320

ttcactaaac gagctcgtcg acgatctcta tcactgatag ggagatctct atcactgata 4380

gggagagctc tgcttatata gacctcccac cgtacacgcc taccgcccat ttgcgtcaat 4440

ggggcggagt tgttacgaca ttttggaaag tcccgttgat tttggtgcca aaacaaactc 4500

ccattgacgt caatggggtg gagacttgga aatccccgtg agtcaaaccg ctatccacgc 4560

ccattgatgt actgccaaaa ccgcatcacc atggtaatag cgatgactaa tacgtagatg 4620

tactgccaag taggaaagtc ccataaggtc atgtactggg cataatgcca ggcgggccat 4680

ttaccgtcat tgacgtcaat agggggcgta cttggcatat gatacacttg atgtactgcc 4740

aagtgggcag tttaccgtaa atactccacc cattgacgtc aatggaaagt ccctattggc 4800

gttactatgg gaacatacgt cattattgac gtcaatgggc gggggtcgtt gggcggtcag 4860

ccaggcgggc catttaccgt aagttatgta acgcggaact ccatatatgg gctatgaact 4920

aatgaccccg taattgatta ctattacagt gtagtcttat gcaatactct tgtagtcttg 4980

caacatggta acgatgagtt agcaacatgc cttacaagga gagaaaaagc accgtgcatg 5040

ccgattggtg gaagtaaggt ggtacgatcg tgccttatta ggaaggcaac agacgggtct 5100

gacatggatt ggacgaacca ctgaattgcc gcattgcaga gatattgtat ttaagtgcct 5160

agctcgatac ataaacaaac taccccaagc tggccaccat gactacgtcc ggcgttccat 5220

ttggcatgac actacgacca acacgatctc ggttgtctcg gcgcactccg tacagtaggg 5280

atcgtctacc tccttttgag acagaaaccc gcgctaccat actggaggat catccgctgc 5340

tgcccgaatg taacactttg acaatgcaca acgtgagtta cgtgcgaggt cttccctgca 5400

gtgtgggatt tacgctgatt caggaatggg ttgttccctg ggatatggtt ctaacgcggg 5460

aggagcttgt aatcctgagg aagtgtatgc acgtgtgcct gtgttgtgcc aacattgata 5520

tcatgacgag catgatgatc catggttacg agtcctgggc tctccactgt cattgttcca 5580

gtcccggttc cctgcagtgt atagccggcg ggcaggtttt ggccagctgg tttaggatgg 5640

tggtggatgg cgccatgttt aatcagaggt ttatatggta ccgggaggtg gtgaattaca 5700

acatgccaaa agaggtaatg tttatgtcca gcgtgtttat gaggggtcgc cacttaatct 5760

acctgcgctt gtggtatgat ggccacgtgg gttctgtggt ccccgccatg agctttggat 5820

acagcgcctt gcactgtggg attttgaaca atattgtggt gctgtgctgc agttactgtg 5880

ctgatttaag tgagatcagg gtgcgctgct gtgcccggag gacaaggcgc cttatgctgc 5940

gggcggtgcg aatcatcgct gaggagacca ctgccatgtt gtattcctgc aggacggagc 6000

ggcggcggca gcagtttatt cgcgcgctgc tgcagcacca ccgccctatc ctgatgcacg 6060

attatgactc tacccccatg tagaagcttg gggatcaatt ctctagagct cgctgatcag 6120

cctcgactgt gccttctagt tgccagccat ctgttgtttg cccctccccc gtgccttcct 6180

tgaccctgga aggtgccact cccactgtcc tttcctaata aaatgaggaa attgcatcgc 6240

attgtctgag taggtgtcat tctattctgg ggggtggggt ggggcaggac agcaaggggg 6300

aggattggga agacaatagc aggcatgctg gggatgcggt gggctctatg gcttctgagg 6360

aaattgggcg tggcttaagg gtgggaaaga atatataagg tgggggtctt atgtagtttt 6420

gtatctgttt tgcagcagcc gccgccgcca tgagcaccaa ctcgtttgat ggaagcattg 6480

tgagctcata tttgacaacg cgcatgcccc catgggccgg ggtgcgtcag aatgtgatgg 6540

gctccagcat tgatggtcgc cccgtcctgc ccgcaaactc tactaccttg acctacgaga 6600

ccgtgtctgg aacgccgttg gagactgcag cctccgccgc cgcttcagcc gctgcagcca 6660

ccgcccgcgg gattgtgact gactttgctt tcctgagccc gcttgcaagc agtgcagctt 6720

cccgttcatc cgcccgcgat gacaagttga cggctctttt ggcacaattg gattctttga 6780

cccgggaact taatgtcgtt tctcagcagc tgttggatct gcgccagcag gtttctgccc 6840

tgaaggcttc ctcccctccc aatgcggttt aaaacataaa taaaaaacca gactctgttt 6900

ggatttggat caagcaagtg tcttgctgtc tttatttagg ggttttgcgc gcgcggtagg 6960

cccgggacca gcggtctcgg tcgttgaggg tcctgtgtat tttttccagg acgtggtaaa 7020

ggtgactctg gatgttcaga tacatgggca taagcccgtc tctggggtgg aggtagcacc 7080

actgcagagc ttcatgctgc ggggtggtgt tgtagatgat ccagtcgtag caggagcgct 7140

gggcgtggtg cctaaaaatg tctttcagta gcaagctgat tgccaggggc aggcccttgg 7200

tgtaagtgtt tacaaagcgg ttaagctggg atgggtgcat acgtggggat atgagatgca 7260

tcttggactg tatttttagg ttggctatgt tcccagccat atccctccgg ggattcatgt 7320

tgtgcagaac caccagcaca gtgtatccgg tgcacttggg aaatttgtca tgtagcttag 7380

aaggaaatgc gtggaagaac ttggagacgc ccttgtgacc tccaagattt tccatgcatt 7440

cgtccataat gatggcaatg ggcccacggg cggcggcctg ggcgaagata tttctgggat 7500

cactaacgtc atagttgtgt tccaggatga gatcgtcata ggccattttt acaaagcgcg 7560

ggcggagggt gccagactgc ggtataatgg ttccatccgg cccaggggcg tagttaccct 7620

cacagatttg catttcccac gctttgagtt cagatggggg gatcatgtct acctgcgggg 7680

cgatgaagaa aacggtttcc ggggtagggg agatcagctg ggaagaaagc aggttcctga 7740

gcagctgcga cttaccgcag ccggtgggcc cgtaaatcac acctattacc gggtgcaact 7800

ggtagttaag agagctgcag ctgccgtcat ccctgagcag gggggccact tcgttaagca 7860

tgtccctgac tcgcatgttt tccctgacca aatccgccag aaggcgctcg ccgcccagcg 7920

atagcagttc ttgcaaggaa gcaaagtttt tcaacggttt gagaccgtcc gccgtaggca 7980

tgcttttgag cgtttgacca agcagttcca ggcggtccca cagctcggtc acctgctcta 8040

cggcatctcg atccagcata tctcctcgtt tcgcgggttg gggcggcttt cgctgtacgg 8100

cagtagtcgg tgctcgtcca gacgggccag ggtcatgtct ttccacgggc gcagggtcct 8160

cgtcagcgta gtctgggtca cggtgaaggg gtgcgctccg ggctgcgcgc tggccagggt 8220

gcgcttgagg ctggtcctgc tggtgctgaa gcgctgccgg tcttcgccct gcgcgtcggc 8280

caggtagcat ttgaccatgg tgtcatagtc cagcccctcc gcggcgtggc ccttggcgcg 8340

cagcttgccc ttggaggagg cgccgcacga ggggcagtgc agacttttga gggcgtagag 8400

cttgggcgcg agaaataccg attccgggga gtaggcatcc gcgccgcagg ccccgcagac 8460

ggtctcgcat tccacgagcc aggtgagctc tggccgttcg gggtcaaaaa ccaggtttcc 8520

cccatgcttt ttgatgcgtt tcttacctct ggtttccatg agccggtgtc cacgctcggt 8580

gacgaaaagg ctgtccgtgt ccccgtatac agacttgaga ggcctgtcct cgagcggtgt 8640

tccgcggtcc tcctcgtata gaaactcgga ccactctgag acaaaggctc gcgtccaggc 8700

cagcacgaag gaggctaagt gggaggggta gcggtcgttg tccactaggg ggtccactcg 8760

ctccagggtg tgaagacaca tgtcgccctc ttcggcatca aggaaggtga ttggtttgta 8820

ggtgtaggcc acgtgaccgg gtgttcctga ggggggggcta taaaaggggg tgggggcgcg 8880

ttcgtcctca ctctcttccg catcgctgtc tgcgagggcc agctgttggg gtgagtactc 8940

cctctgaaaa gcgggcatga cttctgcgct aagattgtca gtttccaaaa acgaggagga 9000

tttgatattc acctggcccg cggtgatgcc tttgagggtg gccgcatcca tctggtcaga 9060

aaagacaatc tttttgttgt caagcttggt ggcaaacgac ccgtagaggg cgttggacag 9120

caacttggcg atggagcgca gggtttggtt tttgtcgcga tcggcgcgct ccttggccgc 9180

gatgtttagc tgcacgtatt cgcgcgcaac gcaccgccat tcgggaaaga cggtggtgcg 9240

ctcgtcgggc accaggtgca cgcgccaacc gcggttgtgc agggtgacaa ggtcaacgct 9300

ggtggctacc tctccgcgta ggcgctcgtt ggtccagcag aggcggccgc ccttgcgcga 9360

gcagaatggc ggtagggggt ctagctgcgt ctcgtccggg gggtctgcgt ccacggtaaa 9420

gaccccgggc agcaggcgcg cgtcgaagta gtctatcttg catccttgca agtctagcgc 9480

ctgctgccat gcgcgggcgg caagcgcgcg ctcgtatggg ttgagtgggg gaccccatgg 9540

catggggtgg gtgagcgcgg aggcgtacat gccgcaaatg tcgtaaacgt agaggggctc 9600

tctgagtatt ccaagatatg tagggtagca tcttccaccg cggatgctgg cgcgcacgta 9660

atcgtatagt tcgtgcgagg gagcgaggag gtcgggaccg aggttgctac gggcgggctg 9720

ctctgctcgg aagactatct gcctgaagat ggcatgtgag ttggatgata tggttggacg 9780

ctggaagacg ttgaagctgg cgtctgtgag acctaccgcg tcacgcacga aggaggcgta 9840

ggagtcgcgc agcttgttga ccagctcggc ggtgacctgc acgtctaggg cgcagtagtc 9900

cagggtttcc ttgatgatgt catacttatc ctgtcccttt tttttccaca gctcgcggtt 9960

gaggacaaac tcttcgcggt ctttccagta ctcttggatc ggaaacccgt cggcctccga 10020

acggtaagag cctagcatgt agaactggtt gacggcctgg taggcgcagc atccctttc 10080

tacgggtagc gcgtatgcct gcgcggcctt ccggagcgag gtgtgggtga gcgcaaaggt 10140

gtccctgacc atgactttga ggtactggta tttgaagtca gtgtcgtcgc atccgccctg 10200

ctcccagagc aaaaagtccg tgcgcttttt ggaacgcgga tttggcaggg cgaaggtgac 10260

atcgttgaag agtatctttc ccgcgcgagg cataaagttg cgtgtgatgc ggaagggtcc 10320

cggcacctcg gaacggttgt taattacctg ggcggcgagc acgatctcgt caaagccgtt 10380

gatgttgtgg cccacaatgt aaagttccaa gaagcgcggg atgcccttga tggaaggcaa 10440

tttttaagt tcctcgtagg tgagctcttc aggggagctg agcccgtgct ctgaaagggc 10500

ccagtctgca agatgagggt tggaagcgac gaatgagctc cacaggtcac gggccattag 10560

catttgcagg tggtcgcgaa aggtcctaaa ctggcgacct atggccattt tttctggggt 10620

gatgcagtag aaggtaagcg ggtcttgttc ccagcggtcc catccaaggt tcgcggctag 10680

gtctcgcgcg gcagtcacta gaggctcatc tccgccgaac ttcatgacca gcatgaaggg 10740

cacgagctgc ttcccaaagg cccccatcca agtataggtc tctacatcgt aggtgacaaa 10800

gagacgctcg gtgcgaggat gcgagccgat cgggaagaac tggatctccc gccaccaatt 10860

ggaggagtgg ctattgatgt ggtgaaagta gaagtccctg cgacgggccg aacactcgtg 10920

ctggcttttg taaaaacgtg cgcagtactg gcagcggtgc acgggctgta catcctgcac 10980

gaggttgacc tgacgaccgc gcacaaggaa gcagagtggg aatttgagcc cctcgcctgg 11040

cgggtttggc tggtggtctt ctacttcggc tgcttgtcct tgaccgtctg gctgctcgag 11100

gggagttacg gtggatcgga ccaccacgcc gcgcgagccc aaagtccaga tgtccgcgcg 11160

cggcggtcgg agcttgatga caacatcgcg cagatgggag ctgtccatgg tctggagctc 11220

ccgcggcgtc aggtcaggcg ggagctcctg caggtttacc tcgcatagac gggtcagggc 11280

gcgggctaga tccaggtgat acctaatttc caggggctgg ttggtggcgg cgtcgatggc 11340

ttgcaagagg ccgcatcccc gcggcgcgac tacggtaccg cgcggcgggc ggtgggccgc 11400

gggggtgtcc ttggatgatg catctaaaag cggtgacgcg ggcgagcccc cggaggtagg 11460

gggggctccg gacccgccgg gagaggggggc aggggcacgt cggcgccgcg cgcgggcagg 11520

agctggtgct gcgcgcgtag gttgctggcg aacgcgacga cgcggcggtt gatctcctga 11580

atctggcgcc tctgcgtgaa gacgacgggc ccggtgagct tgaacctgaa agagagttcg 11640

acagaatcaa tttcggtgtc gttgacggcg gcctggcgca aaatctcctg cacgtctcct 11700

gagttgtctt gataggcgat ctcggccatg aactgctcga tctcttcctc ctggagatct 11760

ccgcgtccgg ctcgctccac ggtggcggcg aggtcgttgg aaatgcgggc catgagctgc 11820

gagaaggcgt tgaggcctcc ctcgttccag acgcggctgt agaccacgcc cccttcggca 11880

tcgcgggcgc gcatgaccac ctgcgcgaga ttgagctcca cgtgccgggc gaagacggcg 11940

tagtttcgca ggcgctgaaa gaggtagttg agggtggtgg cggtgtgttc tgccacgaag 12000

aagtacataa cccagcgtcg caacgtggat tcgttgatat cccccaaggc ctcaaggcgc 12060

tccatggcct cgtagaagtc cacggcgaag ttgaaaaact gggagttgcg cgccgacacg 12120

gttaactcct cctccagaag acggatgagc tcggcgacag tgtcgcgcac ctcgcgctca 12180

aaggctacag gggcctcttc ttcttcttca atctcctctt ccataagggc ctccccttct 12240

tcttcttctg gcggcggtgg gggaggggcg acacggcggc gacgacggcg caccgggagg 12300

cggtcgacaa agcgctcgat catctccccg cggcgacggc gcatggtctc ggtgacggcg 12360

cggccgttct cgcgggggcg cagttggaag acgccgcccg tcatgtcccg gttatgggtt 12420

ggcgggggcg tgccatgcgg cagggatacg gcgctaacga tgcatctcaa caattgttgt 12480

gtaggtactc cgccgccgag ggacctgagc gagtccgcat cgaccggatc ggaaaacctc 12540

tcgagaaagg cgtctaacca gtcacagtcg caaggtaggc tgagcaccgt ggcgggcggc 12600

agcgggcggc ggtcggggtt gtttctggcg gaggtgctgc tgatgatgta attaaagtag 12660

gcggtcttga gacggcggat ggtcgacaga agcaccatgt ccttgggtcc ggcctgctga 12720

atgcgcaggc ggtcggccat gccccaggct tcgttttgac atcggcgcag gtctttgtag 12780

tagtcttgca tgagcctttc taccggcact tcttcttctc cttcctcttg tcctgcatct 12840

cttgcatcta tcgctgcggc ggcggcggag tttggccgta ggtggcgccc tcttcctccc 12900

atgcgtgtga ccccgaagcc cctcatcggc tgaagcaggg ctaggtcggc gacaacgcgc 12960

tcggctaata tggcctgctg cacctgcgtg agggtagact ggaagtcatc catgtccaca 13020

aagcggtggt atgcgcccgt gttgatggtg taagtgcagt tggccataac ggaccagtta 13080

acggtctggt gacccggctg cgagagctcg gtgtacctga gacgcgagta agccctcgag 13140

tcaaatacgt agtcgttgca agtccgcacc aggtactggt atcccaccaa aaagtgcggc 13200

ggcggctggc ggtagagggg ccagcgtagg gtggccgggg ctccgggggc gagatcttcc 13260

aacataaggc gatgatatcc gtagatgtac ctggacatcc aggtgatgcc ggcggcggtg 13320

gtggaggcgc gcggaaagtc gcggacgcgg ttccagatgt tgcgcagcgg caaaaagtgc 13380

tccatggtcg ggacgctctg gccggtcagg cgcgcgcaat cgttgacgct ctagcgtgca 13440

aaaggagagc ctgtaagcgg gcactcttcc gtggtctggt ggataaattc gcaagggtat 13500

catggcggac gaccggggtt cgagccccgt atccggccgt ccgccgtgat ccatgcggtt 13560

accgcccgcg tgtcgaaccc aggtgtgcga cgtcagacaa cgggggagtg ctccttttgg 13620

cttccttcca ggcgcggcgg ctgctgcgct agctttttg gccactggcc gcgcgcagcg 13680

taagcggtta ggctggaaag cgaaagcatt aagtggctcg ctccctgtag ccggagggtt 13740

attttccaag ggttgagtcg cgggaccccc ggttcgagtc tcggaccggc cggactgcgg 13800

cgaacggggg tttgcctccc cgtcatgcaa gaccccgctt gcaaattcct ccggaaacag 13860

ggacgagccc ctttttgct tttcccagat gcatccggtg ctgcggcaga tgcgcccccc 13920

tcctcagcag cggcaagagc aagagcagcg gcagacatgc agggcaccct cccctcctcc 13980

taccgcgtca ggaggggcga catccgcggt tgacgcggca gcagatggtg attacgaacc 14040

cccgcggcgc cgggcccggc actacctgga cttggaggag ggcgagggcc tggcgcggct 14100

aggagcgccc tctcctgagc ggcacccaag ggtgcagctg aagcgtgata cgcgtgaggc 14160

gtacgtgccg cggcagaacc tgtttcgcga ccgcgaggga gaggagcccg aggagatgcg 14220

ggatcgaaag ttccacgcag ggcgcgagct gcggcatggc ctgaatcgcg agcggttgct 14280

gcgcgaggag gactttgagc ccgacgcgcg aaccgggatt agtcccgcgc gcgcacacgt 14340

ggcggccgcc gacctggtaa ccgcatacga gcagacggtg aaccaggaga ttaactttca 14400

aaaaagcttt aacaaccacg tgcgtacgct tgtggcgcgc gaggaggtgg ctataggact 14460

gatgcatctg tgggactttg taagcgcgct ggagcaaaac ccaaatagca agccgctcat 14520

ggcgcagctg ttccttatag tgcagcacag cagggacaac gaggcattca gggatgcgct 14580

gctaaacata gtagagcccg agggccgctg gctgctcgat ttgataaaca tcctgcagag 14640

catagtggtg caggagcgca gcttgagcct ggctgacaag gtggccgcca tcaactattc 14700

catgcttagc ctgggcaagt tttacgcccg caagatatac catacccctt acgttcccat 14760

agacaaggag gtaaagatcg aggggttcta catgcgcatg gcgctgaagg tgcttacctt 14820

gagcgacgac ctgggcgttt atcgcaacga gcgcatccac aaggccgtga gcgtgagccg 14880

gcggcgcgag ctcagcgacc gcgagctgat gcacagcctg caaagggccc tggctggcac 14940

gggcagcggc gatagagagg ccgagtccta ctttgacgcg ggcgctgacc tgcgctgggc 15000

cccaagccga cgcgccctgg aggcagctgg ggccggacct gggctggcgg tggcacccgc 15060

gcgcgctggc aacgtcggcg gcgtggagga atatgacgag gacgatgagt acgagccaga 15120

ggacggcgag tactaagcgg tgatgtttct gatcagatga tgcaagacgc aacggacccg 15180

gcggtgcggg cggcgctgca gagccagccg tccggcctta actccacgga cgactggcgc 15240

caggtcatgg accgcatcat gtcgctgact gcgcgcaatc ctgacgcgtt ccggcagcag 15300

ccgcaggcca accggctctc cgcaattctg gaagcggtgg tcccggcgcg cgcaaacccc 15360

acgcacgaga aggtgctggc gatcgtaaac gcgctggccg aaaacagggc catccggccc 15420

gacgaggccg gcctggtcta cgacgcgctg cttcagcgcg tggctcgtta caacagcggc 15480

aacgtgcaga ccaacctgga ccggctggtg ggggatgtgc gcgaggccgt ggcgcagcgt 15540

gagcgcgcgc agcagcaggg caacctgggc tccatggttg cactaaacgc cttcctgagt 15600

acacagcccg ccaacgtgcc gcggggacag gaggactaca ccaactttgt gagcgcactg 15660

cggctaatgg tgactgagac accgcaaagt gaggtgtacc agtctgggcc agactatttt 15720

ttccagacca gtagacaagg cctgcagacc gtaaacctga gccaggcttt caaaaacttg 15780

caggggctgt ggggggtgcg ggctcccaca ggcgaccgcg cgaccgtgtc tagcttgctg 15840

acgcccaact cgcgcctgtt gctgctgcta atagcgccct tcacggacag tggcagcgtg 15900

tcccgggaca catacctagg tcacttgctg acactgtacc gcgaggccat aggtcaggcg 15960

catgtggacg agcatacttt ccaggagatt acaagtgtca gccgcgcgct ggggcaggag 16020

gacacgggca gcctggaggc aaccctaaac tacctgctga ccaaccggcg gcagaagatc 16080

ccctcgttgc acagtttaaa cagcgaggag gagcgcattt tgcgctacgt gcagcagagc 16140

gtgagcctta acctgatgcg cgacggggta acgcccagcg tggcgctgga catgaccgcg 16200

cgcaacatgg aaccgggcat gtatgcctca aaccggccgt ttatcaaccg cctaatggac 16260

tacttgcatc gcgcggccgc cgtgaacccc gagtatttca ccaatgccat cttgaacccg 16320

cactggctac cgccccctgg tttctacacc gggggattcg aggtgcccga gggtaacgat 16380

ggattcctct gggacgacat agacgacagc gtgttttccc cgcaaccgca gaccctgcta 16440

gagttgcaac agcgcgagca ggcagaggcg gcgctgcgaa aggaaagctt ccgcaggcca 16500

agcagcttgt ccgatctagg cgctgcggcc ccgcggtcag atgctagtag cccatttcca 16560

agcttgatag ggtctcttac cagcactcgc accacccgcc cgcgcctgct gggcgaggag 16620

gagtacctaa acaactcgct gctgcagccg cagcgcgaaa aaaacctgcc tccggcattt 16680

cccaacaacg ggatagagag cctagtggac aagatgagta gatggaagac gtacgcgcag 16740

gagcacaggg acgtgccagg cccgcgcccg cccacccgtc gtcaaaggca cgaccgtcag 16800

cggggtctgg tgtgggagga cgatgactcg gcagacgaca gcagcgtcct ggatttggga 16860

gggagtggca acccgtttgc gcaccttcgc cccaggctgg ggagaatgtt ttaaaaaaaa 16920

aaaagcatga tgcaaaataa aaaactcacc aaggccatgg caccgagcgt tggttttctt 16980

gtattcccct tagtatgcgg cgcgcggcga tgtatgagga aggtcctcct ccctcctacg 17040

agagtgtggt gagcgcggcg ccagtggcgg cggcgctggg ttctcccttc gatgctcccc 17100

tggacccgcc gtttgtgcct ccgcggtacc tgcggcctac cgggggggaga aacagcatcc 17160

gttactctga gttggcaccc ctattcgaca ccacccgtgt gtacctggtg gacaacaagt 17220

caacggatgt ggcatccctg aactaccaga acgaccacag caactttctg accacggtca 17280

ttcaaaacaa tgactacagc ccgggggagg caagcacaca gaccatcaat cttgacgacc 17340

ggtcgcactg gggcggcgac ctgaaaacca tcctgcatac caacatgcca aatgtgaacg 17400

agttcatgtt taccaataag tttaaggcgc gggtgatggt gtcgcgcttg cctactaagg 17460

acaatcaggt ggagctgaaa tacgagtggg tggagttcac gctgcccgag ggcaactact 17520

ccgagaccat gaccatagac cttatgaaca acgcgatcgt ggagcactac ttgaaagtgg 17580

gcagacagaa cggggttctg gaaagcgaca tcggggtaaa gtttgacacc cgcaacttca 17640

gactggggtt tgaccccgtc actggtcttg tcatgcctgg ggtatataca aacgaagcct 17700

tccatccaga catcattttg ctgccaggat gcggggtgga cttcacccac agccgcctga 17760

gcaacttgtt gggcatccgc aagcggcaac ccttccagga gggctttagg atcacctacg 17820

atgatctgga gggtggtaac attcccgcac tgttggatgt ggacgcctac caggcgagct 17880

tgaaagatga caccgaacag ggcgggggtg gcgcaggcgg cagcaacagc agtggcagcg 17940

gcgcggaaga gaactccaac gcggcagccg cggcaatgca gccggtggag gacatgaacg 18000

atcatgccat tcgcggcgac acctttgcca cacgggctga ggagaagcgc gctgaggccg 18060

aagcagcggc cgaagctgcc gcccccgctg cgcaacccga ggtcgagaag cctcagaaga 18120

aaccggtgat caaacccctg acagaggaca gcaagaaacg cagttacaac ctaataagca 18180

atgacagcac cttcacccag taccgcagct ggtaccttgc atacaactac ggcgaccctc 18240

agaccggaat ccgctcatgg accctgcttt gcactcctga cgtaacctgc ggctcggagc 18300

aggtctactg gtcgttgcca gacatgatgc aagaccccgt gaccttccgc tccacgcgcc 18360

agatcagcaa ctttccggtg gtgggcgccg agctgttgcc cgtgcactcc aagagcttct 18420

acaacgacca ggccgtctac tcccaactca tccgccagtt tacctctctg acccacgtgt 18480

tcaatcgctt tcccgagaac cagattttgg cgcgcccgcc agcccccacc atcaccaccg 18540

tcagtgaaaa cgttcctgct ctcacagatc acgggacgct accgctgcgc aacagcatcg 18600

gaggagtcca gcgagtgacc attactgacg ccagacgccg cacctgcccc tacgtttaca 18660

aggccctggg catagtctcg ccgcgcgtcc tatcgagccg cacttttga gcaagcatgt 18720

ccatccttat atcgcccagc aataacacag gctggggcct gcgcttccca agcaagatgt 18780

ttggcggggc caagaagcgc tccgaccaac acccagtgcg cgtgcgcggg cactaccgcg 18840

cgccctgggg cgcgcacaaa cgcggccgca ctgggcgcac caccgtcgat gacgccatcg 18900

acgcggtggt ggaggaggcg cgcaactaca cgcccacgcc gccaccagtg tccacagtgg 18960

acgcggccat tcagaccgtg gtgcgcggag cccggcgcta tgctaaaatg aagagacggc 19020

ggaggcgcgt agcacgtcgc caccgccgcc gacccggcac tgccgcccaa cgcgcggcgg 19080

cggccctgct taaccgcgca cgtcgcaccg gccgacgggc ggccatgcgg gccgctcgaa 19140

ggctggccgc gggtattgtc actgtgcccc ccaggtccag gcgacgagcg gccgccgcag 19200

cagccgcggc cattagtgct atgactcagg gtcgcagggg caacgtgtat tgggtgcgcg 19260

actcggttag cggcctgcgc gtgcccgtgc gcacccgccc cccgcgcaac tagattgcaa 19320

gaaaaaacta cttagactcg tactgttgta tgtatccagc ggcggcggcg cgcaacgaag 19380

ctatgtccaa gcgcaaaatc aaagaagaga tgctccaggt catcgcgccg gagatctatg 19440

gccccccgaa gaaggaagag caggattaca agccccgaaa gctaaagcgg gtcaaaaaga 19500

aaaagaaaga tgatgatgat gaacttgacg acgaggtgga actgctgcac gctaccgcgc 19560

ccaggcgacg ggtacagtgg aaaggtcgac gcgtaaaacg tgttttgcga cccggcacca 19620

ccgtagtctt tacgcccggt gagcgctcca cccgcaccta caagcgcgtg tatgatgagg 19680

tgtacggcga cgaggacctg cttgagcagg ccaacgagcg cctcggggag tttgcctacg 19740

gaaagcggca taaggacatg ctggcgttgc cgctggacga gggcaaccca acacctagcc 19800

taaagcccgt aacactgcag caggtgctgc ccgcgcttgc accgtccgaa gaaaagcgcg 19860

gcctaaagcg cgagtctggt gacttggcac ccaccgtgca gctgatggta cccaagcgcc 19920

agcgactgga agatgtcttg gaaaaaatga ccgtggaacc tgggctggag cccgaggtcc 19980

gcgtgcggcc aatcaagcag gtggcgccgg gactgggcgt gcagaccgtg gacgttcaga 20040

tacccactac cagtagcacc agtattgcca ccgccacaga gggcatggag acacaaacgt 20100

ccccggttgc ctcagcggtg gcggatgccg cggtgcaggc ggtcgctgcg gccgcgtcca 20160

agacctctac ggaggtgcaa acggacccgt ggatgtttcg cgtttcagcc ccccggcgcc 20220

cgcgccgttc gaggaagtac ggcgccgcca gcgcgctact gcccgaatat gccctacatc 20280

cttccattgc gcctaccccc ggctatcgtg gctacaccta ccgccccaga agacgagcaa 20340

ctacccgacg ccgaaccacc actggaaccc gccgccgccg tcgccgtcgc cagcccgtgc 20400

tggccccgat ttccgtgcgc agggtggctc gcgaaggagg caggaccctg gtgctgccaa 20460

cagcgcgcta ccaccccagc atcgtttaaa agccggtctt tgtggttctt gcagatatgg 20520

ccctcacctg ccgcctccgt ttcccggtgc cgggattccg aggaagaatg caccgtagga 20580

ggggcatggc cggccacggc ctgacgggcg gcatgcgtcg tgcgcaccac cggcggcggc 20640

gcgcgtcgca ccgtcgcatg cgcggcggta tcctgcccct ccttattcca ctgatcgccg 20700

cggcgattgg cgccgtgccc ggaattgcat ccgtggcctt gcaggcgcag agacactgat 20760

taaaaacaag ttgcatgtgg aaaaatcaaa ataaaaagtc tggactctca cgctcgcttg 20820

gtcctgtaac tattttgtag aatggaagac atcaactttg cgtctctggc cccgcgacac 20880

ggctcgcgcc cgttcatggg aaactggcaa gatatcggca ccagcaatat gagcggtggc 20940

gccttcagct ggggctcgct gtggagcggc attaaaaatt tcggttccac cgttaagaac 21000

tatggcagca aggcctggaa cagcagcaca ggccagatgc tgagggataa gttgaaagag 21060

caaaatttcc aacaaaaggt ggtagatggc ctggcctctg gcattagcgg ggtggtggac 21120

ctggccaacc aggcagtgca aaataagatt aacagtaagc ttgatccccg ccctcccgta 21180

gaggagcctc caccggccgt ggagacagtg tctccagagg ggcgtggcga aaagcgtccg 21240

cgccccgaca gggaagaaac tctggtgacg caaatagacg agcctccctc gtacgaggag 21300

gcactaaagc aaggcctgcc caccacccgt cccatcgcgc ccatggctac cggagtgctg 21360

ggccagcaca cacccgtaac gctggacctg cctccccccg ccgacaccca gcagaaacct 21420

gtgctgccag gcccgaccgc cgttgttgta acccgtccta gccgcgcgtc cctgcgccgc 21480

gccgccagcg gtccgcgatc gttgcggccc gtagccagtg gcaactggca aagcacactg 21540

aacagcatcg tgggtctggg ggtgcaatcc ctgaagcgcc gacgatgctt ctgatagcta 21600

acgtgtcgta tgtgtgtcat gtatgcgtcc atgtcgccgc cagaggagct gctgagccgc 21660

cgcgcgcccg ctttccaaga tggctacccc ttcgatgatg ccgcagtggt cttacatgca 21720

catctcgggc caggacgcct cggagtacct gagccccggg ctggtgcagt ttgcccgcgc 21780

caccgagacg tacttcagcc tgaataacaa gtttagaaac cccacggtgg cgcctacgca 21840

cgacgtgacc acagaccggt cccagcgttt gacgctgcgg ttcatccctg tggaccgtga 21900

ggatactgcg tactcgtaca aggcgcggtt caccctagct gtgggtgata accgtgtgct 21960

ggacatggct tccacgtact ttgacatccg cggcgtgctg gacaggggcc ctacttttaa 22020

gccctactct ggcactgcct acaacgccct ggctcccaag ggtgccccaa atccttgcga 22080

atgggatgaa gctgctactg ctcttgaaat aaacctagaa gaagaggacg atgacaacga 22140

agacgaagta gacgagcaag ctgagcagca aaaaactcac gtatttgggc aggcgcctta 22200

ttctggtata aatattacaa aggagggtat tcaaataggt gtcgaaggtc aaacacctaa 22260

atatgccgat aaaacatttc aacctgaacc tcaaatagga gaatctcagt ggtacgaaac 22320

agaaattaat catgcagctg ggagagtcct aaaaaagact accccaatga aaccatgtta 22380

cggttcatat gcaaaaccca caaatgaaaa tggagggcaa ggcattcttg taaagcaaca 22440

aaatggaaag ctagaaagtc aagtggaaat gcaatttttc tcaactactg aggcagccgc 22500

aggcaatggt gataacttga ctcctaaagt ggtattgtac agtgaagatg tagatataga 22560

aaccccagac actcatattt cttacatgcc cactattaag gaaggtaact cacgagaact 22620

aatgggccaa caatctatgc ccaacaggcc taattacatt gcttttaggg acaattttat 22680

tggtctaatg tattacaaca gcacgggtaa tatgggtgtt ctggcgggcc aagcatcgca 22740

gttgaatgct gttgtagatt tgcaagacag aaacacagag ctttcatacc agcttttgct 22800

tgattccatt ggtgatagaa ccaggtactt ttctatgtgg aatcaggctg ttgacagcta 22860

tgatccagat gttagaatta ttgaaaatca tggaactgaa gatgaacttc caaattactg 22920

ctttccactg ggaggtgtga ttaatacaga gactcttacc aaggtaaaac ctaaaacagg 22980

tcaggaaaat ggatgggaaa aagatgctac agaattttca gataaaaatg aaataagagt 23040

tggaaataat tttgccatgg aaatcaatct aaatgccaac ctgtggagaa atttcctgta 23100

ctccaacata gcgctgtatt tgcccgacaa gctaaagtac agtccttcca acgtaaaaat 23160

ttctgataac ccaaacacct acgactacat gaacaagcga gtggtggctc ccgggctagt 23220

ggactgctac attaaccttg gagcacgctg gtcccttgac tatatggaca acgtcaaccc 23280

atttaaccac caccgcaatg ctggcctgcg ctaccgctca atgttgctgg gcaatggtcg 23340

ctatgtgccc ttccacatcc aggtgcctca gaagttcttt gccattaaaa acctccttct 23400

cctgccgggc tcatacacct acgagtggaa cttcaggaag gatgttaaca tggttctgca 23460

gagctcccta ggaaatgacc taagggttga cggagccagc attaagtttg atagcatttg 23520

cctttacgcc accttcttcc ccatggccca caacaccgcc tccacgcttg aggccatgct 23580

tagaaacgac accaacgacc agtcctttaa cgactatctc tccgccgcca acatgctcta 23640

ccctataccc gccaacgcta ccaacgtgcc catatccatc ccctcccgca actgggcggc 23700

tttccgcggc tgggccttca cgcgccttaa gactaaggaa accccatcac tgggctcggg 23760

ctacgaccct tattacacct actctggctc tataccctac ctagatggaa ccttttacct 23820

caaccacacc tttaagaagg tggccattac ctttgactct tctgtcagct ggcctggcaa 23880

tgaccgcctg cttaccccca acgagtttga aattaagcgc tcagttgacg gggagggtta 23940

caacgttgcc cagtgtaaca tgaccaaaga ctggttcctg gtacaaatgc tagctaacta 24000

taacattggc taccagggct tctatatccc agagagctac aaggaccgca tgtactcctt 24060

ctttagaaac ttccagccca tgagccgtca ggtggtggat gatactaaat acaaggacta 24120

ccaacaggtg ggcatcctac accaacacaa caactctgga tttgttggct accttgcccc 24180

caccatgcgc gaaggacagg cctaccctgc taacttcccc tatccgctta taggcaagac 24240

cgcagttgac agcattaccc agaaaaagtt tctttgcgat cgcacccttt ggcgcatccc 24300

attctccagt aactttatgt ccatgggcgc actcacagac ctgggccaaa accttctcta 24360

cgccaactcc gcccacgcgc tagacatgac ttttgaggtg gatcccatgg acgagcccac 24420

ccttctttat gttttgtttg aagtctttga cgtggtccgt gtgcaccagc cgcaccgcgg 24480

cgtcatcgaa accgtgtacc tgcgcacgcc cttctcggcc ggcaacgcca caacataaag 24540

aagcaagcaa catcaacaac agctgccgcc atgggctcca gtgagcagga actgaaagcc 24600

attgtcaaag atcttggttg tgggccatat tttttgggca cctatgacaa gcgctttcca 24660

ggctttgttt ctccacacaa gctcgcctgc gccatagtca atacggccgg tcgcgagact 24720

gggggcgtac actggatggc ctttgcctgg aacccgcact caaaaacatg ctacctcttt 24780

gagccctttg gcttttctga ccagcgactc aagcaggttt accagtttga gtacgagtca 24840

ctcctgcgcc gtagcgccat tgcttcttcc cccgaccgct gtataacgct ggaaaagtcc 24900

acccaaagcg tacaggggcc caactcggcc gcctgtggac tattctgctg catgtttctc 24960

cacgcctttg ccaactggcc ccaaactccc atggatcaca accccaccat gaaccttatt 25020

accggggtac ccaactccat gctcaacagt ccccaggtac agcccaccct gcgtcgcaac 25080

caggaacagc tctacagctt cctggagcgc cactcgccct acttccgcag ccacagtgcg 25140

cagattagga gcgccacttc tttttgtcac ttgaaaaaca tgtaaaaata atgtactaga 25200

gacactttca ataaaggcaa atgcttttat ttgtacactc tcgggtgatt atttaccccc 25260

acccttgccg tctgcgccgt ttaaaaatca aaggggttct gccgcgcatc gctatgcgcc 25320

actggcaggg acacgttgcg atactggtgt ttagtgctcc acttaaactc aggcacaacc 25380

atccgcggca gctcggtgaa gttttcactc cacaggctgc gcaccatcac caacgcgttt 25440

agcaggtcgg gcgccgatat cttgaagtcg cagttggggc ctccgccctg cgcgcgcgag 25500

ttgcgataca cagggttgca gcactggaac actatcagcg ccgggtggtg cacgctggcc 25560

agcacgctct tgtcggagat cagatccgcg tccaggtcct ccgcgttgct cagggcgaac 25620

ggagtcaact ttggtagctg ccttcccaaa aagggcgcgt gcccaggctt tgagttgcac 25680

tcgcaccgta gtggcatcaa aaggtgaccg tgcccggtct gggcgttagg atacagcgcc 25740

tgcataaaag ccttgatctg cttaaaagcc acctgagcct ttgcgccttc agagaagaac 25800

atgccgcaag acttgccgga aaactgattg gccggacagg ccgcgtcgtg cacgcagcac 25860

cttgcgtcgg tgttggagat ctgcaccaca tttcggcccc accggttctt cacgatcttg 25920

gccttgctag actgctcctt cagcgcgcgc tgcccgtttt cgctcgtcac atccatttca 25980

atcacgtgct ccttatttat cataatgctt ccgtgtagac acttaagctc gccttcgatc 26040

tcagcgcagc ggtgcagcca caacgcgcag cccgtgggct cgtgatgctt gtaggtcacc 26100

tctgcaaacg actgcaggta cgcctgcagg aatcgcccca tcatcgtcac aaaggtcttg 26160

ttgctggtga aggtcagctg caacccgcgg tgctcctcgt tcagccaggt cttgcatacg 26220

gccgccagag cttccacttg gtcaggcagt agtttgaagt tcgcctttag atcgttatcc 26280

acgtggtact tgtccatcag cgcgcgcgca gcctccatgc ccttctccca cgcagacacg 26340

atcggcacac tcagcgggtt catcaccgta atttcacttt ccgcttcgct gggctcttcc 26400

tcttcctctt gcgtccgcat accacgcgcc actgggtcgt cttcattcag ccgccgcact 26460

gtgcgcttac ctcctttgcc atgcttgatt agcaccggtg ggttgctgaa acccaccatt 26520

tgtagcgcca catcttctct ttcttcctcg ctgtccacga ttacctctgg tgatggcggg 26580

cgctcgggct tgggagaagg gcgcttcttt ttcttcttgg gcgcaatggc caaatccgcc 26640

gccgaggtcg atggccgcgg gctgggtgtg cgcggcacca gcgcgtcttg tgatgagtct 26700

tcctcgtcct cggactcgat acgccgcctc atccgctttt ttgggggcgc ccggggaggc 26760

ggcggcgacg gggacgggga cgacacgtcc tccatggttg ggggacgtcg cgccgcaccg 26820

cgtccgcgct cgggggtggt ttcgcgctgc tcctcttccc gactggccat ttccttctcc 26880

tataggcaga aaaagatcat ggagtcagtc gagaagaagg acagcctaac cgccccctct 26940

gagttcgcca ccaccgcctc caccgatgcc gccaacgcgc ctaccacctt ccccgtcgag 27000

gcacccccgc ttgaggagga ggaagtgatt atcgagcagg acccaggttt tgtaagcgaa 27060

gacgacgagg accgctcagt accaacagag gataaaaagc aagaccagga caacgcagag 27120

gcaaacgagg aacaagtcgg gcgggggggac gaaaggcatg gcgactacct agatgtggga 27180

gacgacgtgc tgttgaagca tctgcagcgc cagtgcgcca ttatctgcga cgcgttgcaa 27240

gagcgcagcg atgtgcccct cgccatagcg gatgtcagcc ttgcctacga acgccaccta 27300

ttctcaccgc gcgtaccccc caaacgccaa gaaaacggca catgcgagcc caacccgcgc 27360

ctcaacttct accccgtatt tgccgtgcca gaggtgcttg ccacctatca catcttttc 27420

caaaactgca agataccccct atcctgccgt gccaaccgca gccgagcgga caagcagctg 27480

gccttgcggc agggcgctgt catacctgat atcgcctcgc tcaacgaagt gccaaaaatc 27540

tttgagggtc ttggacgcga cgagaagcgc gcggcaaacg ctctgcaaca ggaaaacagc 27600

gaaaatgaaa gtcactctgg agtgttggtg gaactcgagg gtgacaacgc gcgcctagcc 27660

gtactaaaac gcagcatcga ggtcacccac tttgcctacc cggcacttaa cctacccccc 27720

aaggtcatga gcacagtcat gagtgagctg atcgtgcgcc gtgcgcagcc cctggagagg 27780

gatgcaaatt tgcaagaaca aacagaggag ggcctacccg cagttggcga cgagcagcta 27840

gcgcgctggc ttcaaacgcg cgagcctgcc gacttggagg agcgacgcaa actaatgatg 27900

gccgcagtgc tcgttaccgt ggagcttgag tgcatgcagc ggttctttgc tgacccggag 27960

atgcagcgca agctagagga aacattgcac tacacctttc gacagggcta cgtacgccag 28020

gcctgcaaga tctccaacgt ggagctctgc aacctggtct cctaccttgg aattttgcac 28080

gaaaaccgcc ttgggcaaaa cgtgcttcat tccacgctca agggcgaggc gcgccgcgac 28140

tacgtccgcg actgcgttta cttatttcta tgctacacct ggcagacggc catgggcgtt 28200

tggcagcagt gcttggagga gtgcaacctc aaggagctgc agaaactgct aaagcaaaac 28260

ttgaaggacc tatggacggc cttcaacgag cgctccgtgg ccgcgcacct ggcggacatc 28320

attttccccg aacgcctgct taaaaccctg caacagggtc tgccagactt caccagtcaa 28380

agcatgttgc agaactttag gaactttatc ctagagcgct caggaatctt gcccgccacc 28440

tgctgtgcac ttcctagcga ctttgtgccc attaagtacc gcgaatgccc tccgccgctt 28500

tggggccact gctaccttct gcagctagcc aactaccttg cctaccactc tgacataatg 28560

gaagacgtga gcggtgacgg tctactggag tgtcactgtc gctgcaacct atgcaccccg 28620

caccgctccc tggtttgcaa ttcgcagctg cttaacgaaa gtcaaattat cggtaccttt 28680

gagctgcagg gtccctcgcc tgacgaaaag tccgcggctc cggggttgaa actcactccg 28740

gggctgtgga cgtcggctta ccttcgcaaa tttgtacctg aggactacca cgcccacgag 28800

attaggttct acgaagacca atcccgcccg cctaatgcgg agcttaccgc ctgcgtcatt 28860

acccagggcc acattcttgg ccaattgcaa gccatcaaca aagcccgcca agagtttctg 28920

ctacgaaagg gacgggggggt ttacttggac ccccagtccg gcgaggagct caacccaatc 28980

cccccgccgc cgcagcccta tcagcagcag ccgcgggccc ttgcttccca ggatggcacc 29040

caaaaagaag ctgcagctgc cgccgccacc cacggacgag gaggaatact gggacagtca 29100

ggcagaggag gttttggacg aggaggagga ggacatgatg gaagactggg agagcctaga 29160

cgaggaagct tccgaggtcg aagaggtgtc agacgaaaca ccgtcaccct cggtcgcatt 29220

cccctcgccg gcgccccaga aatcggcaac cggttccagc atggctacaa cctccgctcc 29280

tcaggcgccg ccggcactgc ccgttcgccg acccaaccgt agatgggaca ccactggaac 29340

cagggccggt aagtccaagc agccgccgcc gttagcccaa gagcaacaac agcgccaagg 29400

ctaccgctca tggcgcgggc acaagaacgc catagttgct tgcttgcaag actgtggggg 29460

caacatctcc ttcgcccgcc gctttcttct ctaccatcac ggcgtggcct tcccccgtaa 29520

catcctgcat tactaccgtc atctctacag cccatactgc accggcggca gcggcagcaa 29580

cagcagcggc cacacagaag caaaggcgac cggatagcaa gactctgaca aagcccaaga 29640

aatccacagc ggcggcagca gcaggaggag gagcgctgcg tctggcgccc aacgaacccg 29700

tatcgacccg cgagcttaga aacaggattt ttcccactct gtatgctata tttcaacaga 29760

gcaggggcca agaacaagag ctgaaaataa aaaacaggtc tctgcgatcc ctcacccgca 29820

gctgcctgta tcacaaaagc gaagatcagc ttcggcgcac gctggaagac gcggaggctc 29880

tcttcagtaa atactgcgcg ctgactctta aggactagtt tcgcgccctt tctcaaattt 29940

aagcgcgaaa actacgtcat ctccagcggc cacacccggc gccagcacct gttgtcagcg 30000

ccattatgag caaggaaatt cccacgccct acatgtggag ttaccagcca caaatgggac 30060

ttgcggctgg agctgcccaa gactactcaa cccgaataaa ctacatgagc gcgggacccc 30120

acatgatatc ccgggtcaac ggaatacgcg cccaccgaaa ccgaattctc ctggaacagg 30180

cggctattac caccacacct cgtaataacc ttaatccccg tagttggccc gctgccctgg 30240

tgtaccagga aagtcccgct cccaccactg tggtacttcc cagagacgcc caggccgaag 30300

ttcagatgac taactcaggg gcgcagcttg cgggcggctt tcgtcacagg gtgcggtcgc 30360

ccgggcaggg tataactcac ctgacaatca gagggcgagg tattcagctc aacgacgagt 30420

cggtgagctc ctcgcttggt ctccgtccgg acgggacatt tcagatcggc ggcgccggcc 30480

gctcttcatt cacgcctcgt caggcaatcc taactctgca gacctcgtcc tctgagccgc 30540

gctctggagg cattggaact ctgcaattta ttgaggagtt tgtgccatcg gtctacttta 30600

acccccttctc gggacctccc ggccactatc cggatcaatt tattcctaac tttgacgcgg 30660

taaaggactc ggcggacggc tacgactgaa tgttaagtgg agaggcagag caactgcgcc 30720

tgaaacacct ggtccactgt cgccgccaca agtgctttgc ccgcgactcc ggtgagtttt 30780

gctactttga attgcccgag gatcatatcg agggcccggc gcacggcgtc cggcttaccg 30840

cccagggaga gcttgcccgt agcctgattc gggagtttac ccagcgcccc ctgctagttg 30900

agcgggacag gggaccctgt gttctcactg tgatttgcaa ctgtcctaac cctggattac 30960

atcaagatcc tctagttaat gtcaggtcgc ctaagtcgat taactagagt acccggggat 31020

cttattccct ttaactaata aaaaaaaata ataaagcatc acttacttaa aatcagttag 31080

caaatttctg tccagtttat tcagcagcac ctccttgccc tcctcccagc tctggtattg 31140

cagcttcctc ctggctgcaa actttctcca caatctaaat ggaatgtcag tttcctcctg 31200

ttcctgtcca tccgcaccca ctatcttcat gttgttgcag atgaagcgcg caagaccgtc 31260

tgaagatacc ttcaaccccg tgtatccata tgacacggaa accggtcctc caactgtgcc 31320

ttttcttact cctccctttg tatcccccaa tgggtttcaa gagagtcccc ctggggtact 31380

ctctttgcgc ctatccgaac ctctagttac ctccaatggc atgcttgcgc tcaaaatggg 31440

caacggcctc tctctggacg aggccggcaa ccttacctcc caaaatgtaa ccactgtgag 31500

cccacctctc aaaaaaacca agtcaaacat aaacctggaa atatctgcac ccctcacagt 31560

tacctcagaa gccctaactg tggctgccgc cgcacctcta atggtcgcgg gcaacacact 31620

caccatgcaa tcacaggccc cgctaaccgt gcacgactcc aaacttagca ttgccaccca 31680

aggacccctc acagtgtcag aaggaaagct agccctgcaa acatcaggcc ccctcaccac 31740

caccgatagc agtaccctta ctatcactgc ctcaccccct ctaactactg ccactggtag 31800

cttgggcatt gacttgaaag agcccattta tacacaaaat ggaaaactag gactaaagta 31860

cggggctcct ttgcatgtaa cagacgacct aaacactttg accgtagcaa ctggtccagg 31920

tgtgactatt aataatactt ccttgcaaac taaagttact ggagccttgg gttttgattc 31980

acaaggcaat atgcaactta atgtagcagg aggactaagg attgattctc aaaacagacg 32040

ccttatactt gatgttagtt atccgtttga tgctcaaaac caactaaatc taagactagg 32100

acagggccct ctttttataa actcagccca caacttggat attaactaca acaaaggcct 32160

ttacttgttt acagcttcaa acaattccaa aaagcttgag gttaacctaa gcactgccaa 32220

ggggttgatg tttgacgcta cagccatagc cattaatgca ggagatgggc ttgaatttgg 32280

ttcacctaat gcaccaaaca caaatcccct caaaacaaaa attggccatg gcctagaatt 32340

tgattcaaac aaggctatgg ttcctaaact aggaactggc cttagttttg acagcacagg 32400

tgccattaca gtaggaaaca aaaataatga taagctaact ttgtggaccg gaataaaccc 32460

tccacctaac tgtcaaattg tggaaaacac taatacaaat gatggcaaac ttactttagt 32520

attagtaaaa aatggagggc ttgttaatgg ctacgtgtct ctagttggtg tatcagacac 32580

tgtgaaccaa atgttcacac aaaagacagc aaacatccaa ttaagattat attttgactc 32640

ttctggaaat ctattaactg aggaatcaga cttaaaaatt ccacttaaaa ataaatcttc 32700

tacagcgacc agtgaaactg tagccagcag caaagccttt atgccaagta ctacagctta 32760

tcccttcaac accactacta gggatagtga aaactacatt catggaatat gttactacat 32820

gactagttat gatagaagtc tatttccctt gaacatttct ataatgctaa acagccgtat 32880

gatttcttcc aatgttgcct atgccataca atttgaatgg aatctaaatg caagtgaatc 32940

tccagaaagc aacatagcta cgctgaccac atcccccttt ttcttttctt acattacaga 33000

agacgacaac taaagaatcg tttgtgttat gtttcaacgt gtttattttt caattgcaga 33060

aaatttcaag tcatttttca ttcagtagta tagccccacc accacatagc ttatacagat 33120

caccgtacct taatcaaact cacagaaccc tagtattcaa cctgccacct ccctcccaac 33180

acacagagta cacagtcctt tctccccggc tggccttaaa aagcatcata tcatgggtaa 33240

cagacatatt cttaggtgtt atattccaca cggtttcctg tcgagccaaa cgctcatcag 33300

tgatattaat aaactccccg ggcagctcac ttaagttcat gtcgctgtcc agctgctgag 33360

ccacaggctg ctgtccaact tgcggttgct taacgggcgg cgaaggagaa gtccacgcct 33420

acatgggggt agagtcataa tcgtgcatca ggatagggcg gtggtgctgc agcagcgcgc 33480

gaataaactg ctgccgccgc cgctccgtcc tgcaggaata caacatggca gtggtctcct 33540

cagcgatgat tcgcaccgcc cgcagcataa ggcgccttgt cctccgggca cagcagcgca 33600

ccctgatctc acttaaatca gcacagtaac tgcagcacag caccacaata ttgttcaaaa 33660

tcccacagtg caaggcgctg tatccaaagc tcatggcggg gaccacagaa cccacgtggc 33720

catcatacca caagcgcagg tagattaagt ggcgacccct cataaacacg ctggacataa 33780

acattacctc ttttggcatg ttgtaattca ccacctcccc tctgattaaa catggcgcca 33840

tccaccacca tcctaaacca gctggccaaa acctgcccgc cggctataca ctgcagggaa 33900

ccgggactgg aacaatgaca gtggagagcc caggactcgt aaccatggat catcatgctc 33960

gtcatgatat caatgttggc acaacacagg cacacgtgca tacacttcct caggattaca 34020

agctcctccc gcgttagaac catatcccag ggaacaaccc attcctgaat cagcgtaaat 34080

cccacactgc agggaagacc tcgcacgtaa ctcacgttgt gcattgtcaa agtgttacat 34140

tcgggcagca gcggatgatc ctccagtatg gtagcgcggg tttctgtctc aaaaggaggt 34200

agacgatccc tactgtacgg agtgcgccga gacaaccgag atcgtgttgg tcgtagtgtc 34260

atgccaaatg gaacgccgga cgtagtcata tttcctgaag caaaaccagg tgcgggcgtg 34320

acaaacagat ctgcgtctcc ggtctcgccg cttagatcgc tctgtgtagt agttgtagta 34380

tatccactct ctcaaagcat ccaggcgccc cctggcttcg ggttctatgt aaactccttc 34440

atgcgccgct gccctgataa catccaccac cgcagaataa gccacaccca gccaacctac 34500

acattcgttc tgcgagtcac acacgggagg agcgggaaga gctggaagaa ccatgttttt 34560

ttttttattc caaaagatta tccaaaacct caaaatgaag atctattaag tgaacgcgct 34620

cccctccggt ggcgtggtca aactctacag ccaaagaaca gataatggca tttgtaagat 34680

gttgcacaat ggcttccaaa aggcaaacgg ccctcacgtc caagtggacg taaaggctaa 34740

acccttcagg gtgaatctcc tctataaaca ttccagcacc ttcaaccatg cccaaataat 34800

tctcatctcg ccaccttctc aatatatctc taagcaaatc ccgaatatta agtccggcca 34860

ttgtaaaaat ctgctccaga gcgccctcca ccttcagcct caagcagcga atcatgattg 34920

caaaaattca ggttcctcac agacctgtat aagattcaaa agcggaacat taacaaaaat 34980

accgcgatcc cgtaggtccc ttcgcagggc cagctgaaca taatcgtgca ggtctgcacg 35040

gaccagcgcg gccacttccc cgccaggaac catgacaaaa gaacccacac tgattatgac 35100

acgcatactc ggagctatgc taaccagcgt agccccgatg taagcttgtt gcatgggcgg 35160

cgatataaaa tgcaaggtgc tgctcaaaaa atcaggcaaa gcctcgcgca aaaaagaaag 35220

cacatcgtag tcatgctcat gcagataaag gcaggtaagc tccggaacca ccacagaaaa 35280

agacaccatt tttctctcaa acatgtctgc gggtttctgc ataaacacaa aataaaataa 35340

caaaaaaaca tttaaacatt agaagcctgt cttacaacag gaaaaacaac ccttataagc 35400

ataagacgga ctacggccat gccggcgtga ccgtaaaaaa actggtcacc gtgattaaaa 35460

agcaccaccg acagctcctc ggtcatgtcc ggagtcataa tgtaagactc ggtaaacaca 35520

tcaggttgat tcacatcggt cagtgctaaa aagcgaccga aatagcccgg gggaatacat 35580

acccgcaggc gtagagacaa cattacagcc cccataggag gtataacaaa attaatagga 35640

gagaaaaaca cataaacacc tgaaaaaccc tcctgcctag gcaaaatagc accctcccgc 35700

tccagaacaa catacagcgc ttccacagcg gcagccataa cagtcagcct taccagtaaa 35760

aaagaaaacc tattaaaaaa acaccactcg acacggcacc agctcaatca gtcacagtgt 35820

aaaaaagggc caagtgcaga gcgagtatat ataggactaa aaaatgacgt aacggttaaa 35880

gtccacaaaa aacacccaga aaaccgcacg cgaacctacg cccagaaacg aaagccaaaa 35940

aacccacaac ttcctcaaat cgtcacttcc gttttcccac gttacgtcac ttcccatttt 36000

aagaaaacta caattcccaa cacatacaag ttactccgcc ctaaaaccta cgtcacccgc 36060

cccgttccca cgccccgcgc cacgtcacaa actccacccc ctcattatca tattggcttc 36120

aatccaaaat aaggtatatt attgatgatg 36150

<210> 26
<211> 36431
<212> DNA
<213> Artificial Sequence

<220>
<223> pAdk35RF-Spike/E4orf6(-0.25kb)-E4dl355(E4re#21)

<400> 26
ttaattaaca tcatcaataa tataccttat tttggattga agccaatatg ataatgaggg 60

ggtggagttt gtgacgtggc gcggggcgtg ggaacggggc gggtgacgta gtagtgtggc 120

ggaagtgtga tgttgcaagt gtggcggaac acatgtaagc gacggatgtg gcaaaagtga 180

cgtttttggt gtgcgccggt gtacacagga agtgacaatt ttcgcgcggt tttaggcgga 240

tgttgtagta aatttgggcg taaccgagta agatttggcc attttcgcgg gaaaactgaa 300

taagaggaag tgaaatctga ataattttgt gttactcata gcgcgtaata atttgatccg 360

cgttaagata cattgatgag tttggacaaa ccacaactag aatgcagtga aaaaaatgct 420

ttatttgtga aatttgtgat gctattgctt tatttgtaac cattataagc tgcaataaac 480

aagttaacaa caacaattgc attcatttta tgtttcaggt tcaggggggag gtgtgggagg 540

ttttttaaag caagtaaaac ctctacaaat gtggtatggc tgattatgat caattttcat 600

ggccacttga tgtattgttc atatttgccc agttcttgga ggtcaatcag ggactcattc 660

aggttcttag ccacctcatt cagtctgtca atctccttct ggatgttcac cacagaggca 720

ttgatgccag agatgtctcc caggtccaca tcagggctgg tgtggttctt gaagtatttg 780

tccagttcct ccttgaagga gtccagttca ggttggagtg ggtcatagac tgtgttgttc 840

acaatgccaa tcaccacatc acagttgcca gacacaaagg tgttgtctgt ggtgataatc 900

tgtggttcat agaagttcct ctgggtcaca aaccagtggg tgccattgct cacaaacact 960

ccctcccttg gaaagtgagc cttgccatca tggcagatgg caggggctgt ggtgaagttc 1020

ttctcctggg caggcacata ggtcacatgc aggaacacca ctccatgagg ggcagactgt 1080

ggaaaactca tcaggtggta gcccttgcca cagaagtcca ccctcttgct ttgtcccagc 1140

acacactcac tcatcttggt ggcagccagg ttggcagatg ccctaatctc agcagccctg 1200

ataagttgtt gggtcacata ggtttggagg gattggagtc tgcctgtaat cagtctgtca 1260

atctggacct cagcctccac cttgtccagt ctgctcagga tgtcattcag cacagaggag 1320

atggctccaa agttgctgga aagttgcttc accagggtgt tcagagcctg ggcattctgg 1380

ttcaccacat cttggagttt gcccagggca gaggctgtgc tggacaggga gtcctgaatc 1440

ttgccaatgg cagagttgaa ctggttggca atcagtttct ggttctcata gagcacattc 1500

tgggtcactc caatgccatt gaacctgtaa gccatctgca tagcaaatgg gatttggagg 1560

gctgctcctg ctccaaaggt ccagccagag gtgatggtgc cagccagcag ggcagaggtg 1620

tattgggcaa tcatctcatc tgtcagcagt ggaggcagca ctgtcagtcc attgaacttc 1680

tgggcacaaa tcaggtccct ggcagcaatg tctcccagac agtctccata ttgcttgatg 1740

aagccagcat cagccagggt caccttgttg aacagcaggt cctcaatgaa ggacctcttg 1800

cttggcttgc ttgggtcagg cagaatctgg ctgaagttga agcctccaaa gtccttgatt 1860

ggaggtgtct tgtaaatctg cttcacctgg gcaaacacct cctgggtgtt cttgtcctgt 1920

tccacagcaa tgcctgtcag agccctgtta agttgggtac agaaggagcc atattggagc 1980

agcaggttgc tacactctgt gctgtctcca cagatataca ttgtacagtc cacagaggtc 2040

ttggtcatac tcacaggcag aatctctgtg gtcacagaga tggtgaagtt ggttgggatg 2100

gcaatgctgt tgttgctgta agccacagag ttctctgctc ccagactcat tgtgtaggca 2160

atgatgctct ggcttgccac agacctcgac ccaccgccac cggtctgggt ctggtaggag 2220

gcacagatgc ctgctccaat tgggatgtca cactcatagg agttgttcac atgctctgct 2280

ccaatcagac agccagccct ggtctggaac acattgctgc ctgtgctgta gaccctccag 2340

gttggtgtaa gttggtcagc atggatagcc acaggcacct cagtacagtt cacatcctgg 2400

tagagcacag ccacctggtt gctggtgttg gtgccaggtg taatcacaga cactcctcca 2460

aaggaacatg gtgtgatgtc cagaatctcc aaggtctgtg ggtccctcac agcatctgtg 2520

gtgtcagcaa tgtccctgcc aaactgttgg aatggcagga acttcttgtt gctctctgtc 2580

agcactcctg tgcctgtcag tccattgaag ttgaagttca cacacttgtt cttcaccagg 2640

ttggtgctct tctttggtcc acacactgtg gcaggggcat ggagcagttc aaaggacagc 2700

accaccaccc tgtatggttg gtagcccact ccattggttg gttggaagcc ataggattgg 2760

agtggaaagt aacagttgaa gccctccact ccattacatg gtgtgctgcc agcctggtaa 2820

atctctgtgc tgatgtccct ctcaaatggt ttcaggttgc tcttcctgaa cagtctgtag 2880

aggtagttgt agttgcctcc caccttgctg tccaggttgt tgctgttcca ggcaatcaca 2940

cagcctgtga agtcatcagg cagtttgtag ttgtagtcag caatcttgcc tgtttgtcca 3000

ggggcaatct gtctcacctc atctccccta atcacaaagg agtcagcata gacattggtg 3060

aaacacaggt cattcagttt ggttgggctc actccataac acttgaaggt gctgaaggag 3120

gcagagttgt agagcacaga gtagtcagcc acacagttgc taatcctctt cctgttccag 3180

gcatagacag aggcaaacct ggtggcattg aacacctctc caaatggaca caggttggtg 3240

atgtttggaa acctcacaat gctctctgtt ggttggaccc tgaagttgct ggtctggtag 3300

atgcccttct ccactgtgaa ggatttcagg gtacacttgg tctcagacag tgggtccagg 3360

gcacagtcca cagcatctgt gatggtgcca ttctcattgt atttcagcag gaaggtcctt 3420

ggttggaggt agcccacata gtaggctgct gctcctgctg tccagccaga ggaggagtct 3480

ccaggtgtca ggtaggacct gtgcagagcc agcagggtct ggaacctggt gatgttgatg 3540

ccaattggca ggtccaccag tggttccaag gcagagaagc cctgtggcag gtccctcacc 3600

aggttgattg gtgtgtgttt gctgtaaatc ttgaagtagc catcaatgtt cttgaacaca 3660

aactccctca ggttcttgaa gttgccctgc ttgccctcca agtccatcag gaatggttgg 3720

ctcacatatt caaaggtaca gttgttggca gaggagtaga ccctgaactc agactccatc 3780

caggacttgt tgttcttgtg gtagtagact cccaggaatg ggtcattaca gaactggaac 3840

tcacacacct taatcaccac attggtggca ttgttcacaa tcagcaggga ctgggtcttg 3900

ctgtccaggg tggtgccaaa aatccagccc ctgatgatgt tgctcttctc tgtgctggca 3960

aagtagactc catcattgaa tggcagcaca gggttgtcaa acctcttggt gccattggtg 4020

ccagacacat ggatggcatg gaaccaggtc acattgctga agaatggcag gaacaggtcc 4080

tgggtgctgt gcagcacaga ggacctgaac accttgtcag ggtagtagac tcccctggtg 4140

aaggagttgg tgtaggcagg aggaagttgg gtcctggtgg tcaggttcac acactggctg 4200

gacaccagtg gcagcagcac caggaacaca aacatggtgg caaatcggag gctggatcgg 4260

tcccggtgtc ttctatggag gtcaaaacag cgtggatggc gtctccaggc gatctgacgg 4320

ttcactaaac gagctcgtcg acgatctcta tcactgatag ggagatctct atcactgata 4380

gggagagctc tgcttatata gacctcccac cgtacacgcc taccgcccat ttgcgtcaat 4440

ggggcggagt tgttacgaca ttttggaaag tcccgttgat tttggtgcca aaacaaactc 4500

ccattgacgt caatggggtg gagacttgga aatccccgtg agtcaaaccg ctatccacgc 4560

ccattgatgt actgccaaaa ccgcatcacc atggtaatag cgatgactaa tacgtagatg 4620

tactgccaag taggaaagtc ccataaggtc atgtactggg cataatgcca ggcgggccat 4680

ttaccgtcat tgacgtcaat agggggcgta cttggcatat gatacacttg atgtactgcc 4740

aagtgggcag tttaccgtaa atactccacc cattgacgtc aatggaaagt ccctattggc 4800

gttactatgg gaacatacgt cattattgac gtcaatgggc gggggtcgtt gggcggtcag 4860

ccaggcgggc catttaccgt aagttatgta acgcggaact ccatatatgg gctatgaact 4920

aatgaccccg taattgatta ctattacagc gttacataac ttacggtaaa tggcccgcct 4980

ggctgaccgc ccaacgaccc ccgcccattg acgtcaataa tgacgtatgt tcccatagta 5040

acgccaatag ggactttcca ttgacgtcaa tgggtggagt atttacggta aactgcccac 5100

ttggcagtac atcaagtgta tcatatgcca agtacgcccc ctattgacgt caatgacggt 5160

aaatggcccg cctggcatta tgcccagtac atgaccttat gggactttcc tacttggcag 5220

tacatctacg tattagtcat cgctattacc atggtgatgc ggttttggca gtacatcaat 5280

gggcgtggat agcggtttga ctcacgggga tttccaagtc tccaccccat tgacgtcaat 5340

gggagtttgt tttggcacca aaatcaacgg gactttccaa aatgtcgtaa caactccgcc 5400

ccattgacgc aaatgggcgg taggcgtgta cggtgggagg tctatataag cagagctaaa 5460

ctaccccaag ctggccacca tgactacgtc cggcgttcca tttggcatga cactacgacc 5520

aacacgatct cggttgtctc ggcgcactcc gtacagtagg gatcgtctac ctccttttga 5580

gacagaaacc cgcgctacca tactggagga tcatccgctg ctgcccgaat gtaacacttt 5640

gacaatgcac aacgtgagtt acgtgcgagg tcttccctgc agtgtgggat ttacgctgat 5700

tcaggaatgg gttgttccct gggatatggt tctaacgcgg gaggagcttg taatcctgag 5760

gaagtgtatg cacgtgtgcc tgtgttgtgc caacattgat atcatgacga gcatgatgat 5820

ccatggttac gagtcctggg ctctccactg tcattgttcc agtcccggtt ccctgcagtg 5880

tatagccggc gggcaggttt tggccagctg gtttaggatg gtggtggatg gcgccatgtt 5940

taatcagagg tttatatggt accgggaggt ggtgaattac aacatgccaa aagaggtaat 6000

gtttatgtcc agcgtgttta tgaggggtcg ccacttaatc tacctgcgct tgtggtatga 6060

tggccacgtg ggttctgtgg tccccgccat gagctttgga tacagcgcct tgcactgtgg 6120

gattttgaac aatattgtgg tgctgtgctg cagttactgt gctgatttaa gtgagatcag 6180

ggtgcgctgc tgtgcccgga ggacaaggcg ccttatgctg cgggcggtgc gaatcatcgc 6240

tgaggagacc actgccatgt tgtattcctg caggacggag cggcggcggc agcagtttat 6300

tcgcgcgctg ctgcagcacc accgccctat cctgatgcac gattatgact ctacccccat 6360

gtagaagctt ggggatcaat tctctagagc tcgctgatca gcctcgactg tgccttctag 6420

ttgccagcca tctgttgttt gcccctcccc cgtgccttcc ttgaccctgg aaggtgccac 6480

tcccactgtc ctttcctaat aaaatgagga aattgcatcg cattgtctga gtaggtgtca 6540

ttctattctg gggggtgggg tggggcagga cagcaagggg gaggattggg aagacaatag 6600

caggcatgct ggggatgcgg tgggctctat ggcttctgag gaaattgggc gtggcttaag 6660

ggtgggaaag aatatataag gtgggggtct tatgtagttt tgtatctgtt ttgcagcagc 6720

cgccgccgcc atgagcacca actcgtttga tggaagcatt gtgagctcat atttgacaac 6780

gcgcatgccc ccatgggccg gggtgcgtca gaatgtgatg ggctccagca ttgatggtcg 6840

ccccgtcctg cccgcaaact ctactacctt gacctacgag accgtgtctg gaacgccgtt 6900

ggagactgca gcctccgccg ccgcttcagc cgctgcagcc accgcccgcg ggattgtgac 6960

tgactttgct ttcctgagcc cgcttgcaag cagtgcagct tcccgttcat ccgcccgcga 7020

tgacaagttg acggctcttt tggcacaatt ggattctttg acccgggaac ttaatgtcgt 7080

ttctcagcag ctgttggatc tgcgccagca ggtttctgcc ctgaaggctt cctcccctcc 7140

caatgcggtt taaaacataa ataaaaaacc agactctgtt tggatttgga tcaagcaagt 7200

gtcttgctgt ctttatttag gggttttgcg cgcgcggtag gcccgggacc agcggtctcg 7260

gtcgttgagg gtcctgtgta ttttttccag gacgtggtaa aggtgactct ggatgttcag 7320

atacatgggc ataagcccgt ctctggggtg gaggtagcac cactgcagag cttcatgctg 7380

cggggtggtg ttgtagatga tccagtcgta gcaggagcgc tgggcgtggt gcctaaaaat 7440

gtctttcagt agcaagctga ttgccagggg caggcccttg gtgtaagtgt ttacaaagcg 7500

gttaagctgg gatgggtgca tacgtgggga tatgagatgc atcttggact gtatttttag 7560

gttggctatg ttcccagcca tatccctccg gggattcatg ttgtgcagaa ccaccagcac 7620

agtgtatccg gtgcacttgg gaaatttgtc atgtagctta gaaggaaatg cgtggaagaa 7680

cttggagacg cccttgtgac ctccaagatt ttccatgcat tcgtccataa tgatggcaat 7740

gggcccacgg gcggcggcct gggcgaagat atttctggga tcactaacgt catagttgtg 7800

ttccaggatg agatcgtcat aggccatttt tacaaagcgc gggcggaggg tgccagactg 7860

cggtataatg gttccatccg gcccaggggc gtagttaccc tcacagattt gcatttccca 7920

cgctttgagt tcagatgggg ggatcatgtc tacctgcggg gcgatgaaga aaacggtttc 7980

cggggtaggg gagatcagct gggaagaaag caggttcctg agcagctgcg acttaccgca 8040

gccggtgggc ccgtaaatca cacctattac cgggtgcaac tggtagttaa gagagctgca 8100

gctgccgtca tccctgagca ggggggccac ttcgttaagc atgtccctga ctcgcatgtt 8160

ttccctgacc aaatccgcca gaaggcgctc gccgcccagc gatagcagtt cttgcaagga 8220

agcaaagttt ttcaacggtt tgagaccgtc cgccgtaggc atgcttttga gcgtttgacc 8280

aagcagttcc aggcggtccc acagctcggt cacctgctct acggcatctc gatccagcat 8340

atctcctcgt ttcgcgggtt ggggcggctt tcgctgtacg gcagtagtcg gtgctcgtcc 8400

agacgggcca gggtcatgtc tttccacggg cgcagggtcc tcgtcagcgt agtctgggtc 8460

acggtgaagg ggtgcgctcc gggctgcgcg ctggccaggg tgcgcttgag gctggtcctg 8520

ctggtgctga agcgctgccg gtcttcgccc tgcgcgtcgg ccaggtagca tttgaccatg 8580

gtgtcatagt ccagcccctc cgcggcgtgg cccttggcgc gcagcttgcc cttggaggag 8640

gcgccgcacg aggggcagtg cagacttttg agggcgtaga gcttgggcgc gagaaatacc 8700

gattccgggg agtaggcatc cgcgccgcag gccccgcaga cggtctcgca ttccacgagc 8760

caggtgagct ctggccgttc ggggtcaaaa accaggtttc ccccatgctt tttgatgcgt 8820

ttcttacctc tggtttccat gagccggtgt ccacgctcgg tgacgaaaag gctgtccgtg 8880

tccccgtata cagacttgag aggcctgtcc tcgagcggtg ttccgcggtc ctcctcgtat 8940

agaaactcgg accactctga gacaaaggct cgcgtccagg ccagcacgaa ggaggctaag 9000

tgggaggggt agcggtcgtt gtccactagg gggtccactc gctccagggt gtgaagacac 9060

atgtcgccct cttcggcatc aaggaaggtg attggtttgt aggtgtaggc cacgtgaccg 9120

ggtgttcctg aaggggggct ataaaagggg gtgggggcgc gttcgtcctc actctcttcc 9180

gcatcgctgt ctgcgagggc cagctgttgg ggtgagtact ccctctgaaa agcgggcatg 9240

acttctgcgc taagattgtc agtttccaaa aacgaggagg atttgatatt cacctggccc 9300

gcggtgatgc ctttgagggt ggccgcatcc atctggtcag aaaagacaat ctttttgttg 9360

tcaagcttgg tggcaaacga cccgtagagg gcgttggaca gcaacttggc gatggagcgc 9420

agggtttggt ttttgtcgcg atcggcgcgc tccttggccg cgatgtttag ctgcacgtat 9480

tcgcgcgcaa cgcaccgcca ttcgggaaag acggtggtgc gctcgtcggg caccaggtgc 9540

acgcgccaac cgcggttgtg cagggtgaca aggtcaacgc tggtggctac ctctccgcgt 9600

aggcgctcgt tggtccagca gaggcggccg cccttgcgcg agcagaatgg cggtaggggg 9660

tctagctgcg tctcgtccgg ggggtctgcg tccacggtaa agaccccggg cagcaggcgc 9720

gcgtcgaagt agtctatctt gcatccttgc aagtctagcg cctgctgcca tgcgcgggcg 9780

gcaagcgcgc gctcgtatgg gttgagtggg ggaccccatg gcatggggtg ggtgagcgcg 9840

gaggcgtaca tgccgcaaat gtcgtaaacg tagaggggct ctctgagtat tccaagatat 9900

gtagggtagc atcttccacc gcggatgctg gcgcgcacgt aatcgtatag ttcgtgcgag 9960

ggagcgagga ggtcgggacc gaggttgcta cgggcgggct gctctgctcg gaagactatc 10020

tgcctgaaga tggcatgtga gttggatgat atggttggac gctggaagac gttgaagctg 10080

gcgtctgtga gacctaccgc gtcacgcacg aaggaggcgt aggagtcgcg cagcttgttg 10140

accagctcgg cggtgacctg cacgtctagg gcgcagtagt ccagggtttc cttgatgatg 10200

tcatacttat cctgtccctt ttttttccac agctcgcggt tgaggacaaa ctcttcgcgg 10260

tctttccagt actcttggat cggaaacccg tcggcctccg aacggtaaga gcctagcatg 10320

tagaactggt tgacggcctg gtaggcgcag catccctttt ctacgggtag cgcgtatgcc 10380

tgcgcggcct tccggagcga ggtgtgggtg agcgcaaagg tgtccctgac catgactttg 10440

aggtactggt atttgaagtc agtgtcgtcg catccgccct gctcccagag caaaaagtcc 10500

gtgcgctttt tggaacgcgg atttggcagg gcgaaggtga catcgttgaa gagtatcttt 10560

cccgcgcgag gcataaagtt gcgtgtgatg cggaagggtc ccggcacctc ggaacggttg 10620

ttaattacct gggcggcgag cacgatctcg tcaaagccgt tgatgttgtg gcccacaatg 10680

taaagttcca agaagcgcgg gatgcccttg atggaaggca atttttaag ttcctcgtag 10740

gtgagctctt caggggagct gagcccgtgc tctgaaaggg cccagtctgc aagatgaggg 10800

ttggaagcga cgaatgagct ccacaggtca cgggccatta gcatttgcag gtggtcgcga 10860

aaggtcctaa actggcgacc tatggccatt ttttctgggg tgatgcagta gaaggtaagc 10920

gggtcttgtt cccagcggtc ccatccaagg ttcgcggcta ggtctcgcgc ggcagtcact 10980

agaggctcat ctccgccgaa cttcatgacc agcatgaagg gcacgagctg cttcccaaag 11040

gcccccatcc aagtataggt ctctacatcg taggtgacaa agagacgctc ggtgcgagga 11100

tgcgagccga tcgggaagaa ctggatctcc cgccaccaat tggaggagtg gctattgatg 11160

tggtgaaagt agaagtccct gcgacgggcc gaacactcgt gctggctttt gtaaaaacgt 11220

gcgcagtact ggcagcggtg cacgggctgt acatcctgca cgaggttgac ctgacgaccg 11280

cgcacaagga agcagagtgg gaatttgagc ccctcgcctg gcgggtttgg ctggtggtct 11340

tctacttcgg ctgcttgtcc ttgaccgtct ggctgctcga ggggagttac ggtggatcgg 11400

accaccacgc cgcgcgagcc caaagtccag atgtccgcgc gcggcggtcg gagcttgatg 11460

acaacatcgc gcagatggga gctgtccatg gtctggagct cccgcggcgt caggtcaggc 11520

gggagctcct gcaggtttac ctcgcataga cgggtcaggg cgcgggctag atccaggtga 11580

tacctaattt ccaggggctg gttggtggcg gcgtcgatgg cttgcaagag gccgcatccc 11640

cgcggcgcga ctacggtacc gcgcggcggg cggtgggccg cgggggtgtc cttggatgat 11700

gcatctaaaa gcggtgacgc gggcgagccc ccggaggtag ggggggctcc ggacccgccg 11760

ggagaggggg caggggcacg tcggcgccgc gcgcgggcag gagctggtgc tgcgcgcgta 11820

ggttgctggc gaacgcgacg acgcggcggt tgatctcctg aatctggcgc ctctgcgtga 11880

agacgacggg cccggtgagc ttgaacctga aagagagttc gacagaatca atttcggtgt 11940

cgttgacggc ggcctggcgc aaaatctcct gcacgtctcc tgagttgtct tgataggcga 12000

tctcggccat gaactgctcg atctcttcct cctggagatc tccgcgtccg gctcgctcca 12060

cggtggcggc gaggtcgttg gaaatgcggg ccatgagctg cgagaaggcg ttgaggcctc 12120

cctcgttcca gacgcggctg tagaccacgc ccccttcggc atcgcgggcg cgcatgacca 12180

cctgcgcgag attgagctcc acgtgccggg cgaagacggc gtagtttcgc aggcgctgaa 12240

agaggtagtt gagggtggtg gcggtgtgtt ctgccacgaa gaagtacata acccagcgtc 12300

gcaacgtgga ttcgttgata tcccccaagg cctcaaggcg ctccatggcc tcgtagaagt 12360

ccacggcgaa gttgaaaaac tgggagttgc gcgccgacac ggttaactcc tcctccagaa 12420

gacggatgag ctcggcgaca gtgtcgcgca cctcgcgctc aaaggctaca ggggcctctt 12480

cttcttcttc aatctcctct tccataaggg cctccccttc ttcttcttct ggcggcggtg 12540

ggggaggggg gacacggcgg cgacgacggc gcaccgggag gcggtcgaca aagcgctcga 12600

tcatctcccc gcggcgacgg cgcatggtct cggtgacggc gcggccgttc tcgcgggggc 12660

gcagttggaa gacgccgccc gtcatgtccc ggttatgggt tggcgggggg ctgccatgcg 12720

gcagggatac ggcgctaacg atgcatctca acaattgttg tgtaggtact ccgccgccga 12780

gggacctgag cgagtccgca tcgaccggat cggaaaacct ctcgagaaag gcgtctaacc 12840

agtcacagtc gcaaggtagg ctgagcaccg tggcgggcgg cagcgggcgg cggtcggggt 12900

tgtttctggc ggaggtgctg ctgatgatgt aattaaagta ggcggtcttg agacggcgga 12960

tggtcgacag aagcaccatg tccttgggtc cggcctgctg aatgcgcagg cggtcggcca 13020

tgccccaggc ttcgttttga catcggcgca ggtctttgta gtagtcttgc atgagccttt 13080

ctaccggcac ttcttcttct ccttcctctt gtcctgcatc tcttgcatct atcgctgcgg 13140

cggcggcgga gtttggccgt aggtggcgcc ctcttcctcc catgcgtgtg accccgaagc 13200

ccctcatcgg ctgaagcagg gctaggtcgg cgacaacgcg ctcggctaat atggcctgct 13260

gcacctgcgt gagggtagac tggaagtcat ccatgtccac aaagcggtgg tatgcgcccg 13320

tgttgatggt gtaagtgcag ttggccataa cggaccagtt aacggtctgg tgacccggct 13380

gcgagagctc ggtgtacctg agacgcgagt aagccctcga gtcaaatacg tagtcgttgc 13440

aagtccgcac caggtactgg tatcccacca aaaagtgcgg cggcggctgg cggtagaggg 13500

gccagcgtag ggtggccggg gctccggggg cgagatcttc caacataagg cgatgatatc 13560

cgtagatgta cctggacatc caggtgatgc cggcggcggt ggtggaggcg cgcggaaagt 13620

cgcggacgcg gttccagatg ttgcgcagcg gcaaaaagtg ctccatggtc gggacgctct 13680

ggccggtcag gcgcgcgcaa tcgttgacgc tctagcgtgc aaaaggagag cctgtaagcg 13740

ggcactcttc cgtggtctgg tggataaatt cgcaagggta tcatggcgga cgaccggggt 13800

tcgagccccg tatccggccg tccgccgtga tccatgcggt taccgcccgc gtgtcgaacc 13860

caggtgtgcg acgtcagaca acgggggagt gctccttttg gcttccttcc aggcgcggcg 13920

gctgctgcgc tagcttttt ggccactggc cgcgcgcagc gtaagcggtt aggctggaaa 13980

gcgaaagcat taagtggctc gctccctgta gccggagggt tattttccaa gggttgagtc 14040

gcgggacccc cggttcgagt ctcggaccgg ccggactgcg gcgaacgggg gtttgcctcc 14100

ccgtcatgca agaccccgct tgcaaattcc tccggaaaca gggacgagcc ccttttttgc 14160

ttttcccaga tgcatccggt gctgcggcag atgcgccccc ctcctcagca gcggcaagag 14220

caagagcagc ggcagacatg cagggcaccc tcccctcctc ctaccgcgtc aggaggggcg 14280

acatccgcgg ttgacgcggc agcagatggt gattacgaac ccccgcggcg ccgggcccgg 14340

cactacctgg acttggagga gggcgagggc ctggcgcggc taggagcgcc ctctcctgag 14400

cggcacccaa gggtgcagct gaagcgtgat acgcgtgagg cgtacgtgcc gcggcagaac 14460

ctgtttcgcg accgcgaggg agaggagccc gaggagatgc gggatcgaaa gttccacgca 14520

gggcgcgagc tgcggcatgg cctgaatcgc gagcggttgc tgcgcgagga ggactttgag 14580

cccgacgcgc gaaccgggat tagtcccgcg cgcgcacacg tggcggccgc cgacctggta 14640

accgcatacg agcagacggt gaaccaggag attaactttc aaaaaagctt taacaaccac 14700

gtgcgtacgc ttgtggcgcg cgaggaggtg gctataggac tgatgcatct gtgggacttt 14760

gtaagcgcgc tggagcaaaa cccaaatagc aagccgctca tggcgcagct gttccttata 14820

gtgcagcaca gcagggacaa cgaggcattc agggatgcgc tgctaaacat agtagagccc 14880

gagggccgct ggctgctcga tttgataaac atcctgcaga gcatagtggt gcaggagcgc 14940

agcttgagcc tggctgacaa ggtggccgcc atcaactatt ccatgcttag cctgggcaag 15000

ttttacgccc gcaagatata ccataccct tacgttccca tagacaagga ggtaaagatc 15060

gaggggttct acatgcgcat ggcgctgaag gtgcttacct tgagcgacga cctgggcgtt 15120

tatcgcaacg agcgcatcca caaggccgtg agcgtgagcc ggcggcgcga gctcagcgac 15180

cgcgagctga tgcacagcct gcaaagggcc ctggctggca cgggcagcgg cgatagagag 15240

gccgagtcct actttgacgc gggcgctgac ctgcgctggg ccccaagccg acgcgccctg 15300

gaggcagctg gggccggacc tgggctggcg gtggcacccg cgcgcgctgg caacgtcggc 15360

ggcgtggagg aatatgacga ggacgatgag tacgagccag aggacggcga gtactaagcg 15420

gtgatgtttc tgatcagatg atgcaagacg caacggaccc ggcggtgcgg gcggcgctgc 15480

agagccagcc gtccggcctt aactccacgg acgactggcg ccaggtcatg gaccgcatca 15540

tgtcgctgac tgcgcgcaat cctgacgcgt tccggcagca gccgcaggcc aaccggctct 15600

ccgcaattct ggaagcggtg gtcccggcgc gcgcaaaccc cacgcacgag aaggtgctgg 15660

cgatcgtaaa cgcgctggcc gaaaacaggg ccatccggcc cgacgaggcc ggcctggtct 15720

acgacgcgct gcttcagcgc gtggctcgtt acaacagcgg caacgtgcag accaacctgg 15780

accggctggt gggggatgtg cgcgaggccg tggcgcagcg tgagcgcgcg cagcagcagg 15840

gcaacctggg ctccatggtt gcactaaacg ccttcctgag tacacagccc gccaacgtgc 15900

cgcggggaca ggaggactac accaactttg tgagcgcact gcggctaatg gtgactgaga 15960

caccgcaaag tgaggtgtac cagtctgggc cagactattt tttccagacc agtagacaag 16020

gcctgcagac cgtaaacctg agccaggctt tcaaaaactt gcaggggctg tgggggtgc 16080

gggctcccac aggcgaccgc gcgaccgtgt ctagcttgct gacgcccaac tcgcgcctgt 16140

tgctgctgct aatagcgccc ttcacggaca gtggcagcgt gtcccgggac acatacctag 16200

gtcacttgct gacactgtac cgcgaggcca taggtcaggc gcatgtggac gagcatactt 16260

tccaggagat tacaagtgtc agccgcgcgc tggggcagga ggacacgggc agcctggagg 16320

caaccctaaa ctacctgctg accaaccggc ggcagaagat cccctcgttg cacagtttaa 16380

acagcgagga ggagcgcatt ttgcgctacg tgcagcagag cgtgagcctt aacctgatgc 16440

gcgacggggt aacgcccagc gtggcgctgg acatgaccgc gcgcaacatg gaaccgggca 16500

tgtatgcctc aaaccggccg tttatcaacc gcctaatgga ctacttgcat cgcgcggccg 16560

ccgtgaaccc cgagtatttc accaatgcca tcttgaaccc gcactggcta ccgccccctg 16620

gtttctacac cgggggattc gaggtgcccg agggtaacga tggattcctc tgggacgaca 16680

tagacgacag cgtgttttcc ccgcaaccgc agaccctgct agagttgcaa cagcgcgagc 16740

aggcagaggc ggcgctgcga aaggaaagct tccgcaggcc aagcagcttg tccgatctag 16800

gcgctgcggc cccgcggtca gatgctagta gcccatttcc aagcttgata gggtctctta 16860

ccagcactcg caccacccgc ccgcgcctgc tgggcgagga ggagtaccta aacaactcgc 16920

tgctgcagcc gcagcgcgaa aaaaacctgc ctccggcatt tcccaacaac gggatagaga 16980

gcctagtgga caagatgagt agatggaaga cgtacgcgca ggagcacagg gacgtgccag 17040

gcccgcgccc gcccacccgt cgtcaaaggc acgaccgtca gcggggtctg gtgtgggagg 17100

acgatgactc ggcagacgac agcagcgtcc tggatttggg agggagtggc aacccgtttg 17160

cgcaccttcg ccccaggctg gggagaatgt tttaaaaaaa aaaaagcatg atgcaaaata 17220

aaaaactcac caaggccatg gcaccgagcg ttggttttct tgtattcccc ttagtatgcg 17280

gcgcgcggcg atgtatgagg aaggtcctcc tccctcctac gagagtgtgg tgagcgcggc 17340

gccagtggcg gcggcgctgg gttctccctt cgatgctccc ctggacccgc cgtttgtgcc 17400

tccgcggtac ctgcggccta ccgggggggag aaacagcatc cgttactctg agttggcacc 17460

cctattcgac accacccgtg tgtacctggt ggacaacaag tcaacggatg tggcatccct 17520

gaactaccag aacgaccaca gcaactttct gaccacggtc attcaaaaca atgactacag 17580

cccgggggag gcaagcacac agaccatcaa tcttgacgac cggtcgcact ggggcggcga 17640

cctgaaaacc atcctgcata ccaacatgcc aaatgtgaac gagttcatgt ttaccaataa 17700

gtttaaggcg cgggtgatgg tgtcgcgctt gcctactaag gacaatcagg tggagctgaa 17760

atacgagtgg gtggagttca cgctgcccga gggcaactac tccgagacca tgaccataga 17820

ccttatgaac aacgcgatcg tggagcacta cttgaaagtg ggcagacaga acggggttct 17880

ggaaagcgac atcggggtaa agtttgacac ccgcaacttc agactggggt ttgaccccgt 17940

cactggtctt gtcatgcctg gggtatatac aaacgaagcc ttccatccag acatcatttt 18000

gctgccagga tgcggggtgg acttcaccca cagccgcctg agcaacttgt tgggcatccg 18060

caagcggcaa cccttccagg agggctttag gatcacctac gatgatctgg agggtggtaa 18120

cattcccgca ctgttggatg tggacgccta ccaggcgagc ttgaaagatg acaccgaaca 18180

gggcgggggt ggcgcaggcg gcagcaacag cagtggcagc ggcgcggaag agaactccaa 18240

cgcggcagcc gcggcaatgc agccggtgga ggacatgaac gatcatgcca ttcgcggcga 18300

cacctttgcc acacgggctg aggagaagcg cgctgaggcc gaagcagcgg ccgaagctgc 18360

cgcccccgct gcgcaacccg aggtcgagaa gcctcagaag aaaccggtga tcaaacccct 18420

gacagaggac agcaagaaac gcagttacaa cctaataagc aatgacagca ccttcaccca 18480

gtaccgcagc tggtaccttg catacaacta cggcgaccct cagaccggaa tccgctcatg 18540

gaccctgctt tgcactcctg acgtaacctg cggctcggag caggtctact ggtcgttgcc 18600

agacatgatg caagaccccg tgaccttccg ctccacgcgc cagatcagca actttccggt 18660

ggtgggcgcc gagctgttgc ccgtgcactc caagagcttc tacaacgacc aggccgtcta 18720

ctcccaactc atccgccagt ttacctctct gacccacgtg ttcaatcgct ttcccgagaa 18780

ccagattttg gcgcgcccgc cagcccccac catcaccacc gtcagtgaaa acgttcctgc 18840

tctcacagat cacgggacgc taccgctgcg caacagcatc ggaggagtcc agcgagtgac 18900

cattactgac gccagacgcc gcacctgccc ctacgtttac aaggccctgg gcatagtctc 18960

gccgcgcgtc ctatcgagcc gcacttttg agcaagcatg tccatcctta tatcgcccag 19020

caataacaca ggctggggcc tgcgcttccc aagcaagatg tttggcgggg ccaagaagcg 19080

ctccgaccaa cacccagtgc gcgtgcgcgg gcactaccgc gcgccctggg gcgcgcacaa 19140

acgcggccgc actgggcgca ccaccgtcga tgacgccatc gacgcggtgg tggaggaggc 19200

gcgcaactac acgcccacgc cgccaccagt gtccacagtg gacgcggcca ttcagaccgt 19260

ggtgcgcgga gcccggcgct atgctaaaat gaagagacgg cggaggcgcg tagcacgtcg 19320

ccaccgccgc cgacccggca ctgccgccca acgcgcggcg gcggccctgc ttaaccgcgc 19380

acgtcgcacc ggccgacggg cggccatgcg ggccgctcga aggctggccg cgggtattgt 19440

cactgtgccc cccaggtcca ggcgacgagc ggccgccgca gcagccgcgg ccattagtgc 19500

tatgactcag ggtcgcaggg gcaacgtgta ttgggtgcgc gactcggtta gcggcctgcg 19560

cgtgcccgtg cgcacccgcc ccccgcgcaa ctagattgca agaaaaaact acttagactc 19620

gtactgttgt atgtatccag cggcggcggc gcgcaacgaa gctatgtcca agcgcaaaat 19680

caaagaagag atgctccagg tcatcgcgcc ggagatctat ggccccccga agaaggaaga 19740

gcaggattac aagccccgaa agctaaagcg ggtcaaaaag aaaaagaaag atgatgatga 19800

tgaacttgac gacgaggtgg aactgctgca cgctaccgcg cccaggcgac gggtacagtg 19860

gaaaggtcga cgcgtaaaac gtgttttgcg acccggcacc accgtagtct ttacgcccgg 19920

tgagcgctcc acccgcacct acaagcgcgt gtatgatgag gtgtacggcg acgaggacct 19980

gcttgagcag gccaacgagc gcctcgggga gtttgcctac ggaaagcggc ataaggacat 20040

gctggcgttg ccgctggacg agggcaaccc aacacctagc ctaaagcccg taacactgca 20100

gcaggtgctg cccgcgcttg caccgtccga agaaaagcgc ggcctaaagc gcgagtctgg 20160

tgacttggca cccaccgtgc agctgatggt acccaagcgc cagcgactgg aagatgtctt 20220

ggaaaaaatg accgtggaac ctgggctgga gcccgaggtc cgcgtgcggc caatcaagca 20280

ggtggcgccg ggactgggcg tgcagaccgt ggacgttcag atacccacta ccagtagcac 20340

cagtattgcc accgccacag agggcatgga gacacaaacg tccccggttg cctcagcggt 20400

ggcggatgcc gcggtgcagg cggtcgctgc ggccgcgtcc aagacctcta cggaggtgca 20460

aacggacccg tggatgtttc gcgtttcagc cccccggcgc ccgcgccgtt cgaggaagta 20520

cggcgccgcc agcgcgctac tgcccgaata tgccctacat ccttccattg cgcctacccc 20580

cggctatcgt ggctacacct accgccccag aagacgagca actacccgac gccgaaccac 20640

cactggaacc cgccgccgcc gtcgccgtcg ccagcccgtg ctggccccga tttccgtgcg 20700

cagggtggct cgcgaaggag gcaggaccct ggtgctgcca acagcgcgct accaccccag 20760

catcgtttaa aagccggtct ttgtggttct tgcagatatg gccctcacct gccgcctccg 20820

tttcccggtg ccgggattcc gaggaagaat gcaccgtagg aggggcatgg ccggccacgg 20880

cctgacgggc ggcatgcgtc gtgcgcacca ccggcggcgg cgcgcgtcgc accgtcgcat 20940

gcgcggcggt atcctgcccc tccttattcc actgatcgcc gcggcgattg gcgccgtgcc 21000

cggaattgca tccgtggcct tgcaggcgca gagacactga ttaaaaacaa gttgcatgtg 21060

gaaaaatcaa aataaaaagt ctggactctc acgctcgctt ggtcctgtaa ctattttgta 21120

gaatggaaga catcaacttt gcgtctctgg ccccgcgaca cggctcgcgc ccgttcatgg 21180

gaaactggca agatatcggc accagcaata tgagcggtgg cgccttcagc tggggctcgc 21240

tgtggagcgg cattaaaaat ttcggttcca ccgttaagaa ctatggcagc aaggcctgga 21300

acagcagcac aggccagatg ctgagggata agttgaaaga gcaaaatttc caacaaaagg 21360

tggtagatgg cctggcctct ggcattagcg gggtggtgga cctggccaac caggcagtgc 21420

aaaataagat taacagtaag cttgatcccc gccctcccgt agaggagcct ccaccggccg 21480

tggagacagt gtctccagag gggcgtggcg aaaagcgtcc gcgccccgac agggaagaaa 21540

ctctggtgac gcaaatagac gagcctccct cgtacgagga ggcactaaag caaggcctgc 21600

ccaccacccg tcccatcgcg cccatggcta ccggagtgct gggccagcac acacccgtaa 21660

cgctggacct gcctcccccc gccgacaccc agcagaaacc tgtgctgcca ggcccgaccg 21720

ccgttgttgt aacccgtcct agccgcgcgt ccctgcgccg cgccgccagc ggtccgcgat 21780

cgttgcggcc cgtagccagt ggcaactggc aaagcacact gaacagcatc gtgggtctgg 21840

gggtgcaatc cctgaagcgc cgacgatgct tctgatagct aacgtgtcgt atgtgtgtca 21900

tgtatgcgtc catgtcgccg ccagaggagc tgctgagccg ccgcgcgccc gctttccaag 21960

atggctaccc cttcgatgat gccgcagtgg tcttacatgc acatctcggg ccaggacgcc 22020

tcggagtacc tgagccccgg gctggtgcag tttgcccgcg ccaccgagac gtacttcagc 22080

ctgaataaca agtttagaaa ccccacggtg gcgcctacgc acgacgtgac cacagaccgg 22140

tcccagcgtt tgacgctgcg gttcatccct gtggaccgtg aggatactgc gtactcgtac 22200

aaggcgcggt tcaccctagc tgtgggtgat aaccgtgtgc tggacatggc ttccacgtac 22260

tttgacatcc gcggcgtgct ggacaggggc cctactttta agccctactc tggcactgcc 22320

tacaacgccc tggctcccaa gggtgcccca aatccttgcg aatgggatga agctgctact 22380

gctcttgaaa taaacctaga agaagaggac gatgacaacg aagacgaagt agacgagcaa 22440

gctgagcagc aaaaaactca cgtatttggg caggcgcctt attctggtat aaatattaca 22500

aaggagggta ttcaaatagg tgtcgaaggt caaacaccta aatatgccga taaaacattt 22560

caacctgaac ctcaaatagg agaatctcag tggtacgaaa cagaaattaa tcatgcagct 22620

gggagagtcc taaaaaagac taccccaatg aaaccatgtt acggttcata tgcaaaaccc 22680

acaaatgaaa atggagggca aggcattctt gtaaagcaac aaaatggaaa gctagaaagt 22740

caagtggaaa tgcaattttt ctcaactact gaggcagccg caggcaatgg tgataacttg 22800

actcctaaag tggtattgta cagtgaagat gtagatatag aaaccccaga cactcatatt 22860

tcttacatgc ccactattaa ggaaggtaac tcacgagaac taatgggcca acaatctatg 22920

cccaacaggc ctaattacat tgcttttagg gacaatttta ttggtctaat gtattacaac 22980

agcacgggta atatgggtgt tctggcgggc caagcatcgc agttgaatgc tgttgtagat 23040

ttgcaagaca gaaacacaga gctttcatac cagcttttgc ttgattccat tggtgataga 23100

accaggtact tttctatgtg gaatcaggct gttgacagct atgatccaga tgttagaatt 23160

attgaaaatc atggaactga agatgaactt ccaaattact gctttccact gggaggtgtg 23220

attaatacag agactcttac caaggtaaaa cctaaaacag gtcaggaaaa tggatgggaa 23280

aaagatgcta cagaattttc agataaaaat gaaataagag ttggaaataa ttttgccatg 23340

gaaatcaatc taaatgccaa cctgtggaga aatttcctgt actccaacat agcgctgtat 23400

ttgcccgaca agctaaagta cagtccttcc aacgtaaaaa tttctgataa cccaaacacc 23460

tacgactaca tgaacaagcg agtggtggct cccgggctag tggactgcta cattaacctt 23520

ggagcacgct ggtcccttga ctatatggac aacgtcaacc catttaacca ccaccgcaat 23580

gctggcctgc gctaccgctc aatgttgctg ggcaatggtc gctatgtgcc cttccacatc 23640

caggtgcctc agaagttctt tgccattaaa aacctccttc tcctgccggg ctcatacacc 23700

tacgagtgga acttcaggaa ggatgttaac atggttctgc agagctccct aggaaatgac 23760

ctaagggttg acggagccag cattaagttt gatagcattt gcctttacgc caccttcttc 23820

cccatggccc acaacaccgc ctccacgctt gaggccatgc ttagaaacga caccaacgac 23880

cagtccttta acgactatct ctccgccgcc aacatgctct accctatacc cgccaacgct 23940

accaacgtgc ccatatccat cccctcccgc aactgggcgg ctttccgcgg ctgggccttc 24000

acgcgcctta agactaagga aaccccatca ctgggctcgg gctacgaccc ttattacacc 24060

tactctggct ctatacccta cctagatgga acctttacc tcaaccacac ctttaagaag 24120

gtggccatta cctttgactc ttctgtcagc tggcctggca atgaccgcct gcttaccccc 24180

aacgagtttg aaattaagcg ctcagttgac ggggagggtt acaacgttgc ccagtgtaac 24240

atgaccaaag actggttcct ggtacaaatg ctagctaact ataacattgg ctaccagggc 24300

ttctatatcc cagagagcta caaggaccgc atgtactcct tctttagaaa cttccagccc 24360

atgagccgtc aggtggtgga tgatactaaa tacaaggact accaacaggt gggcatccta 24420

caccaacaca acaactctgg atttgttggc taccttgccc ccaccatgcg cgaaggacag 24480

gcctaccctg ctaacttccc ctatccgctt ataggcaaga ccgcagttga cagcattacc 24540

cagaaaaagt ttctttgcga tcgcaccctt tggcgcatcc cattctccag taactttatg 24600

tccatgggcg cactcacaga cctgggccaa aaccttctct acgccaactc cgcccacgcg 24660

ctagacatga cttttgaggt ggatcccatg gacgagccca cccttcttta tgttttgttt 24720

gaagtctttg acgtggtccg tgtgcaccag ccgcaccgcg gcgtcatcga aaccgtgtac 24780

ctgcgcacgc ccttctcggc cggcaacgcc acaacataaa gaagcaagca acatcaacaa 24840

cagctgccgc catgggctcc agtgagcagg aactgaaagc cattgtcaaa gatcttggtt 24900

gtgggccata ttttttgggc acctatgaca agcgctttcc aggctttgtt tctccacaca 24960

agctcgcctg cgccatagtc aatacggccg gtcgcgagac tgggggcgta cactggatgg 25020

cctttgcctg gaacccgcac tcaaaaacat gctacctctt tgagcccttt ggcttttctg 25080

accagcgact caagcaggtt taccagtttg agtacgagtc actcctgcgc cgtagcgcca 25140

ttgcttcttc ccccgaccgc tgtataacgc tggaaaagtc cacccaaagc gtacaggggc 25200

ccaactcggc cgcctgtgga ctattctgct gcatgtttct ccacgccttt gccaactggc 25260

cccaaactcc catggatcac aaccccacca tgaaccttat taccggggta cccaactcca 25320

tgctcaacag tccccaggta cagcccaccc tgcgtcgcaa ccaggaacag ctctacagct 25380

tcctggagcg ccactcgccc tacttccgca gccacagtgc gcagattagg agcgccactt 25440

ctttttgtca cttgaaaaac atgtaaaaat aatgtactag agacactttc aataaaggca 25500

aatgctttta tttgtacact ctcgggtgat tatttacccc cacccttgcc gtctgcgccg 25560

tttaaaaatc aaaggggttc tgccgcgcat cgctatgcgc cactggcagg gacacgttgc 25620

gatactggtg tttagtgctc cacttaaact caggcacaac catccgcggc agctcggtga 25680

agttttcact ccacaggctg cgcaccatca ccaacgcgtt tagcaggtcg ggcgccgata 25740

tcttgaagtc gcagttgggg cctccgccct gcgcgcgcga gttgcgatac acagggttgc 25800

agcactggaa cactatcagc gccgggtggt gcacgctggc cagcacgctc ttgtcggaga 25860

tcagatccgc gtccaggtcc tccgcgttgc tcagggcgaa cggagtcaac tttggtagct 25920

gccttcccaa aaagggcgcg tgcccaggct ttgagttgca ctcgcaccgt agtggcatca 25980

aaaggtgacc gtgcccggtc tgggcgttag gatacagcgc ctgcataaaa gccttgatct 26040

gcttaaaagc cacctgagcc tttgcgcctt cagagaagaa catgccgcaa gacttgccgg 26100

aaaactgatt ggccggacag gccgcgtcgt gcacgcagca ccttgcgtcg gtgttggaga 26160

tctgcaccac atttcggccc caccggttct tcacgatctt ggccttgcta gactgctcct 26220

tcagcgcgcg ctgcccgttt tcgctcgtca catccatttc aatcacgtgc tccttattta 26280

tcataatgct tccgtgtaga cacttaagct cgccttcgat ctcagcgcag cggtgcagcc 26340

acaacgcgca gcccgtgggc tcgtgatgct tgtaggtcac ctctgcaaac gactgcaggt 26400

acgcctgcag gaatcgcccc atcatcgtca caaaggtctt gttgctggtg aaggtcagct 26460

gcaacccgcg gtgctcctcg ttcagccagg tcttgcatac ggccgccaga gcttccactt 26520

ggtcaggcag tagtttgaag ttcgccttta gatcgttatc cacgtggtac ttgtccatca 26580

gcgcgcgcgc agcctccatg cccttctccc acgcagacac gatcggcaca ctcagcgggt 26640

tcatcaccgt aatttcactt tccgcttcgc tgggctcttc ctcttcctct tgcgtccgca 26700

taccacgcgc cactgggtcg tcttcattca gccgccgcac tgtgcgctta cctcctttgc 26760

catgcttgat tagcaccggt gggttgctga aacccaccat ttgtagcgcc acatcttctc 26820

tttcttcctc gctgtccacg attacctctg gtgatggcgg gcgctcgggc ttgggagaag 26880

ggcgcttctt tttcttcttg ggcgcaatgg ccaaatccgc cgccgaggtc gatggccgcg 26940

ggctgggtgt gcgcggcacc agcgcgtctt gtgatgagtc ttcctcgtcc tcggactcga 27000

tacgccgcct catccgcttt tttgggggcg cccggggagg cggcggcgac ggggacgggg 27060

acgacacgtc ctccatggtt gggggacgtc gcgccgcacc gcgtccgcgc tcgggggtgg 27120

tttcgcgctg ctcctcttcc cgactggcca tttccttctc ctataggcag aaaaagatca 27180

tggagtcagt cgagaagaag gacagcctaa ccgccccctc tgagttcgcc accaccgcct 27240

ccaccgatgc cgccaacgcg cctaccacct tccccgtcga ggcacccccg cttgaggagg 27300

aggaagtgat tatcgagcag gacccaggtt ttgtaagcga agacgacgag gaccgctcag 27360

taccaacaga ggataaaaag caagaccagg acaacgcaga ggcaaacgag gaacaagtcg 27420

ggcgggggga cgaaaggcat ggcgactacc tagatgtggg agacgacgtg ctgttgaagc 27480

atctgcagcg ccagtgcgcc attatctgcg acgcgttgca agagcgcagc gatgtgcccc 27540

tcgccatagc ggatgtcagc cttgcctacg aacgccacct attctcaccg cgcgtacccc 27600

ccaaacgcca agaaaacggc acatgcgagc ccaacccgcg cctcaacttc taccccgtat 27660

ttgccgtgcc agaggtgctt gccacctatc acatcttttt ccaaaactgc aagatacccc 27720

tatcctgccg tgccaaccgc agccgagcgg acaagcagct ggccttgcgg cagggcgctg 27780

tcatacctga tatcgcctcg ctcaacgaag tgccaaaaat ctttgagggt cttggacgcg 27840

acgagaagcg cgcggcaaac gctctgcaac aggaaaacag cgaaaatgaa agtcactctg 27900

gagtgttggt ggaactcgag ggtgacaacg cgcgcctagc cgtactaaaa cgcagcatcg 27960

aggtcaccca ctttgcctac ccggcactta acctaccccc caaggtcatg agcacagtca 28020

tgagtgagct gatcgtgcgc cgtgcgcagc ccctggagag ggatgcaaat ttgcaagaac 28080

aaacagagga gggcctaccc gcagttggcg acgagcagct agcgcgctgg cttcaaacgc 28140

gcgagcctgc cgacttggag gagcgacgca aactaatgat ggccgcagtg ctcgttaccg 28200

tggagcttga gtgcatgcag cggttctttg ctgacccgga gatgcagcgc aagctagagg 28260

aaacattgca ctacaccttt cgacagggct acgtacgcca ggcctgcaag atctccaacg 28320

tggagctctg caacctggtc tcctaccttg gaattttgca cgaaaaccgc cttgggcaaa 28380

acgtgcttca ttccacgctc aagggcgagg cgcgccgcga ctacgtccgc gactgcgttt 28440

acttatttct atgctacacc tggcagacgg ccatgggcgt ttggcagcag tgcttggagg 28500

agtgcaacct caaggagctg cagaaactgc taaagcaaaa cttgaaggac ctatggacgg 28560

ccttcaacga gcgctccgtg gccgcgcacc tggcggacat cattttcccc gaacgcctgc 28620

ttaaaaccct gcaacagggt ctgccagact tcaccagtca aagcatgttg cagaacttta 28680

ggaactttat cctagagcgc tcaggaatct tgcccgccac ctgctgtgca cttcctagcg 28740

actttgtgcc cattaagtac cgcgaatgcc ctccgccgct ttggggccac tgctaccttc 28800

tgcagctagc caactacctt gcctaccact ctgacataat ggaagacgtg agcggtgacg 28860

gtctactgga gtgtcactgt cgctgcaacc tatgcacccc gcaccgctcc ctggtttgca 28920

attcgcagct gcttaacgaa agtcaaatta tcggtacctt tgagctgcag ggtccctcgc 28980

ctgacgaaaa gtccgcggct ccggggttga aactcactcc ggggctgtgg acgtcggctt 29040

accttcgcaa atttgtacct gaggactacc acgcccacga gattaggttc tacgaagacc 29100

aatcccgccc gcctaatgcg gagcttaccg cctgcgtcat tacccagggc cacattcttg 29160

gccaattgca agccatcaac aaagcccgcc aagagtttct gctacgaaag ggacgggggg 29220

tttacttgga cccccagtcc ggcgaggagc tcaacccaat ccccccgccg ccgcagccct 29280

atcagcagca gccgcgggcc cttgcttccc aggatggcac ccaaaaagaa gctgcagctg 29340

ccgccgccac ccacggacga ggaggaatac tgggacagtc aggcagagga ggttttggac 29400

gaggaggagg aggacatgat ggaagactgg gagagcctag acgaggaagc ttccgaggtc 29460

gaagaggtgt cagacgaaac accgtcaccc tcggtcgcat tcccctcgcc ggcgccccag 29520

aaatcggcaa ccggttccag catggctaca acctccgctc ctcaggcgcc gccggcactg 29580

cccgttcgcc gacccaaccg tagatgggac accactggaa ccagggccgg taagtccaag 29640

cagccgccgc cgttagccca agagcaacaa cagcgccaag gctaccgctc atggcgcggg 29700

cacaagaacg ccatagttgc ttgcttgcaa gactgtgggg gcaacatctc cttcgcccgc 29760

cgctttcttc tctaccatca cggcgtggcc ttcccccgta acatcctgca ttactaccgt 29820

catctctaca gcccatactg caccggcggc agcggcagca acagcagcgg ccacacagaa 29880

gcaaaggcga ccggatagca agactctgac aaagcccaag aaatccacag cggcggcagc 29940

agcaggagga ggagcgctgc gtctggcgcc caacgaaccc gtatcgaccc gcgagcttag 30000

aaacaggatt tttcccactc tgtatgctat atttcaacag agcaggggcc aagaacaaga 30060

gctgaaaata aaaaacaggt ctctgcgatc cctcacccgc agctgcctgt atcacaaaag 30120

cgaagatcag cttcggcgca cgctggaaga cgcggaggct ctcttcagta aatactgcgc 30180

gctgactctt aaggactagt ttcgcgccct ttctcaaatt taagcgcgaa aactacgtca 30240

tctccagcgg ccacacccgg cgccagcacc tgttgtcagc gccattatga gcaaggaaat 30300

tcccacgccc tacatgtgga gttaccagcc acaaatggga cttgcggctg gagctgccca 30360

agactactca acccgaataa actacatgag cgcgggaccc cacatgatat cccgggtcaa 30420

cggaatacgc gcccaccgaa accgaattct cctggaacag gcggctatta ccaccacacc 30480

tcgtaataac cttaatcccc gtagttggcc cgctgccctg gtgtaccagg aaagtcccgc 30540

tcccaccact gtggtacttc ccagagacgc ccaggccgaa gttcagatga ctaactcagg 30600

ggcgcagctt gcgggcggct ttcgtcacag ggtgcggtcg cccgggcagg gtataactca 30660

cctgacaatc agagggcgag gtattcagct caacgacgag tcggtgagct cctcgcttgg 30720

tctccgtccg gacgggacat ttcagatcgg cggcgccggc cgctcttcat tcacgcctcg 30780

tcaggcaatc ctaactctgc agacctcgtc ctctgagccg cgctctggag gcattggaac 30840

tctgcaattt attgaggagt ttgtgccatc ggtctacttt aacccccttct cgggacctcc 30900

cggccactat ccggatcaat ttattcctaa ctttgacgcg gtaaaggact cggcggacgg 30960

ctacgactga atgttaagtg gagaggcaga gcaactgcgc ctgaaacacc tggtccactg 31020

tcgccgccac aagtgctttg cccgcgactc cggtgagttt tgctactttg aattgcccga 31080

ggatcatatc gagggcccgg cgcacggcgt ccggcttacc gcccagggag agcttgcccg 31140

tagcctgatt cgggagttta cccagcgccc cctgctagtt gagcgggaca ggggaccctg 31200

tgttctcact gtgatttgca actgtcctaa ccctggatta catcaagatc ctctagttaa 31260

tgtcaggtcg cctaagtcga ttaactagag tacccgggga tcttattccc tttaactaat 31320

aaaaaaaaat aataaagcat cacttactta aaatcagtta gcaaatttct gtccagttta 31380

ttcagcagca cctccttgcc ctcctcccag ctctggtatt gcagcttcct cctggctgca 31440

aactttctcc acaatctaaa tggaatgtca gtttcctcct gttcctgtcc atccgcaccc 31500

actatcttca tgttgttgca gatgaagcgc gcaagaccgt ctgaagatac cttcaacccc 31560

gtgtatccat atgacacgga aaccggtcct ccaactgtgc cttttcttac tcctcccttt 31620

gtatccccca atgggtttca agagagtccc cctggggtac tctctttgcg cctatccgaa 31680

cctctagtta cctccaatgg catgcttgcg ctcaaaatgg gcaacggcct ctctctggac 31740

gaggccggca accttacctc ccaaaatgta accactgtga gcccacctct caaaaaaacc 31800

aagtcaaaca taaacctgga aatatctgca cccctcacag ttacctcaga agccctaact 31860

gtggctgccg ccgcacctct aatggtcgcg ggcaacacac tcaccatgca atcacaggcc 31920

ccgctaaccg tgcacgactc caaacttagc attgccaccc aaggacccct cacagtgtca 31980

gaaggaaagc tagccctgca aacatcaggc cccctcacca ccaccgatag cagtaccctt 32040

actatcactg cctcaccccc tctaactact gccactggta gcttgggcat tgacttgaaa 32100

gagcccattt atacacaaaa tggaaaacta ggactaaagt acggggctcc tttgcatgta 32160

acagacgacc taaacacttt gaccgtagca actggtccag gtgtgactat taataatact 32220

tccttgcaaa ctaaagttac tggagccttg ggttttgatt cacaaggcaa tatgcaactt 32280

aatgtagcag gaggactaag gattgattct caaaacagac gccttatact tgatgttagt 32340

tatccgtttg atgctcaaaa ccaactaaat ctaagactag gacagggccc tctttttata 32400

aactcagccc acaacttgga tattaactac aacaaaggcc tttacttgtt tacagcttca 32460

aacaattcca aaaagcttga ggttaaccta agcactgcca aggggttgat gtttgacgct 32520

acagccatag ccattaatgc aggagatggg cttgaatttg gttcacctaa tgcaccaaac 32580

acaaatcccc tcaaaacaaa aattggccat ggcctagaat ttgattcaaa caaggctatg 32640

gttcctaaac taggaactgg ccttagtttt gacagcacag gtgccattac agtaggaaac 32700

aaaaataatg ataagctaac tttgtggacc ggaataaacc ctccacctaa ctgtcaaatt 32760

gtggaaaaca ctaatacaaa tgatggcaaa cttactttag tattagtaaa aaatggaggg 32820

cttgttaatg gctacgtgtc tctagttggt gtatcagaca ctgtgaacca aatgttcaca 32880

caaaagacag caaacatcca attaagatta tattttgact cttctggaaa tctattaact 32940

gaggaatcag acttaaaaat tccacttaaa aataaatctt ctacagcgac cagtgaaact 33000

gtagccagca gcaaagcctt tatgccaagt actacagctt atcccttcaa caccactact 33060

agggatagtg aaaactacat tcatggaata tgttactaca tgactagtta tgatagaagt 33120

ctatttccct tgaacatttc tataatgcta aacagccgta tgatttcttc caatgttgcc 33180

tatgccatac aatttgaatg gaatctaaat gcaagtgaat ctccagaaag caacatagct 33240

acgctgacca catccccctt tttcttttct tacattacag aagacgacaa ctaaagaatc 33300

gtttgtgtta tgtttcaacg tgtttatttt tcaattgcag aaaatttcaa gtcatttttc 33360

attcagtagt atagccccac caccacatag cttatacaga tcaccgtacc ttaatcaaac 33420

tcacagaacc ctagtattca acctgccacc tccctcccaa cacacagagt acacagtcct 33480

ttctccccgg ctggccttaa aaagcatcat atcatgggta acagacatat tcttaggtgt 33540

tatattccac acggtttcct gtcgagccaa acgctcatca gtgatattaa taaactcccc 33600

gggcagctca cttaagttca tgtcgctgtc cagctgctga gccacaggct gctgtccaac 33660

ttgcggttgc ttaacgggcg gcgaaggaga agtccacgcc tacatggggg tagagtcata 33720

atcgtgcatc aggatagggc ggtggtgctg cagcagcgcg cgaataaact gctgccgccg 33780

ccgctccgtc ctgcaggaat acaacatggc agtggtctcc tcagcgatga ttcgcaccgc 33840

ccgcagcata aggcgccttg tcctccgggc acagcagcgc accctgatct cacttaaatc 33900

agcacagtaa ctgcagcaca gcaccacaat attgttcaaa atcccacagt gcaaggcgct 33960

gtatccaaag ctcatggcgg ggaccacaga acccacgtgg ccatcatacc acaagcgcag 34020

gtagattaag tggcgacccc tcataaacac gctggacata aacattacct cttttggcat 34080

gttgtaattc accacctccc ctctgattaa acatggcgcc atccaccacc atcctaaacc 34140

agctggccaa aacctgcccg ccggctatac actgcaggga accgggactg gaacaatgac 34200

agtggagagc ccaggactcg taaccatgga tcatcatgct cgtcatgata tcaatgttgg 34260

cacaacacag gcacacgtgc atacacttcc tcaggattac aagctcctcc cgcgttagaa 34320

ccatatccca gggaacaacc cattcctgaa tcagcgtaaa tcccacactg cagggaagac 34380

ctcgcacgta actcacgttg tgcattgtca aagtgttaca ttcgggcagc agcggatgat 34440

cctccagtat ggtagcgcgg gtttctgtct caaaaggagg tagacgatcc ctactgtacg 34500

gagtgcgccg agacaaccga gatcgtgttg gtcgtagtgt catgccaaat ggaacgccgg 34560

acgtagtcat atttcctgaa gcaaaaccag gtgcgggcgt gacaaacaga tctgcgtctc 34620

cggtctcgcc gcttagatcg ctctgtgtag tagttgtagt atatccactc tctcaaagca 34680

tccaggcgcc ccctggcttc gggttctatg taaactcctt catgcgccgc tgccctgata 34740

acatccacca ccgcagaata agccacaccc agccaaccta cacattcgtt ctgcgagtca 34800

cacacgggag gagcgggaag agctggaaga accatgtttt ttttttatt ccaaaagatt 34860

atccaaaacc tcaaaatgaa gatctattaa gtgaacgcgc tcccctccgg tggcgtggtc 34920

aaactctaca gccaaagaac agataatggc atttgtaaga tgttgcacaa tggcttccaa 34980

aaggcaaacg gccctcacgt ccaagtggac gtaaaggcta aacccttcag ggtgaatctc 35040

ctctataaac attccagcac cttcaaccat gcccaaataa ttctcatctc gccaccttct 35100

caatatatct ctaagcaaat cccgaatatt aagtccggcc attgtaaaaa tctgctccag 35160

agcgccctcc accttcagcc tcaagcagcg aatcatgatt gcaaaaattc aggttcctca 35220

cagacctgta taagattcaa aagcggaaca ttaacaaaaa taccgcgatc ccgtaggtcc 35280

cttcgcaggg ccagctgaac ataatcgtgc aggtctgcac ggaccagcgc ggccacttcc 35340

ccgccaggaa ccatgacaaa agaacccaca ctgattatga cacgcatact cggagctatg 35400

ctaaccagcg tagccccgat gtaagcttgt tgcatgggcg gcgatataaa atgcaaggtg 35460

ctgctcaaaa aatcaggcaa agcctcgcgc aaaaaagaaa gcacatcgta gtcatgctca 35520

tgcagataaa ggcaggtaag ctccggaacc accacagaaa aagacaccat ttttctctca 35580

aacatgtctg cgggtttctg cataaacaca aaataaaata acaaaaaaac atttaaacat 35640

tagaagcctg tcttacaaca ggaaaaacaa cccttataag cataagacgg actacggcca 35700

tgccggcgtg accgtaaaaa aactggtcac cgtgattaaa aagcaccacc gacagctcct 35760

cggtcatgtc cggagtcata atgtaagact cggtaaacac atcaggttga ttcacatcgg 35820

tcagtgctaa aaagcgaccg aaatagcccg ggggaataca tacccgcagg cgtagagaca 35880

acattacagc ccccatagga ggtataacaa aattaatagg agagaaaaac acataaacac 35940

ctgaaaaacc ctcctgccta ggcaaaatag caccctcccg ctccagaaca acatacagcg 36000

cttccacagc ggcagccata acagtcagcc ttaccagtaa aaaagaaaac ctattaaaaa 36060

aacaccactc gacacggcac cagctcaatc agtcacagtg taaaaaaggg ccaagtgcag 36120

agcgagtata tataggacta aaaaatgacg taacggttaa agtccacaaa aaacacccag 36180

aaaaccgcac gcgaacctac gcccagaaac gaaagccaaa aaacccacaa cttcctcaaa 36240

tcgtcacttc cgttttccca cgttacgtca cttcccattt taagaaaact acaattccca 36300

acacatacaa gttactccgc cctaaaacct acgtcacccg ccccgttccc acgccccgcg 36360

ccacgtcaca aactccaccc cctcattatc atattggctt caatccaaaa taaggtatat 36420

tattgatgat g 36431

<210> 27
<211> 36151
<212> DNA
<213> Artificial Sequence

<220>
<223> pAdk35RF-Spike/E4orf6(-0.5kb)-E4dl355(E4re#22)

<400> 27
ttaattaaca tcatcaataa tataccttat tttggattga agccaatatg ataatgaggg 60

ggtggagttt gtgacgtggc gcggggcgtg ggaacggggc gggtgacgta gtagtgtggc 120

ggaagtgtga tgttgcaagt gtggcggaac acatgtaagc gacggatgtg gcaaaagtga 180

cgtttttggt gtgcgccggt gtacacagga agtgacaatt ttcgcgcggt tttaggcgga 240

tgttgtagta aatttgggcg taaccgagta agatttggcc attttcgcgg gaaaactgaa 300

taagaggaag tgaaatctga ataattttgt gttactcata gcgcgtaata atttgatccg 360

cgttaagata cattgatgag tttggacaaa ccacaactag aatgcagtga aaaaaatgct 420

ttatttgtga aatttgtgat gctattgctt tatttgtaac cattataagc tgcaataaac 480

aagttaacaa caacaattgc attcatttta tgtttcaggt tcaggggggag gtgtgggagg 540

ttttttaaag caagtaaaac ctctacaaat gtggtatggc tgattatgat caattttcat 600

ggccacttga tgtattgttc atatttgccc agttcttgga ggtcaatcag ggactcattc 660

aggttcttag ccacctcatt cagtctgtca atctccttct ggatgttcac cacagaggca 720

ttgatgccag agatgtctcc caggtccaca tcagggctgg tgtggttctt gaagtatttg 780

tccagttcct ccttgaagga gtccagttca ggttggagtg ggtcatagac tgtgttgttc 840

acaatgccaa tcaccacatc acagttgcca gacacaaagg tgttgtctgt ggtgataatc 900

tgtggttcat agaagttcct ctgggtcaca aaccagtggg tgccattgct cacaaacact 960

ccctcccttg gaaagtgagc cttgccatca tggcagatgg caggggctgt ggtgaagttc 1020

ttctcctggg caggcacata ggtcacatgc aggaacacca ctccatgagg ggcagactgt 1080

ggaaaactca tcaggtggta gcccttgcca cagaagtcca ccctcttgct ttgtcccagc 1140

acacactcac tcatcttggt ggcagccagg ttggcagatg ccctaatctc agcagccctg 1200

ataagttgtt gggtcacata ggtttggagg gattggagtc tgcctgtaat cagtctgtca 1260

atctggacct cagcctccac cttgtccagt ctgctcagga tgtcattcag cacagaggag 1320

atggctccaa agttgctgga aagttgcttc accagggtgt tcagagcctg ggcattctgg 1380

ttcaccacat cttggagttt gcccagggca gaggctgtgc tggacaggga gtcctgaatc 1440

ttgccaatgg cagagttgaa ctggttggca atcagtttct ggttctcata gagcacattc 1500

tgggtcactc caatgccatt gaacctgtaa gccatctgca tagcaaatgg gatttggagg 1560

gctgctcctg ctccaaaggt ccagccagag gtgatggtgc cagccagcag ggcagaggtg 1620

tattgggcaa tcatctcatc tgtcagcagt ggaggcagca ctgtcagtcc attgaacttc 1680

tgggcacaaa tcaggtccct ggcagcaatg tctcccagac agtctccata ttgcttgatg 1740

aagccagcat cagccagggt caccttgttg aacagcaggt cctcaatgaa ggacctcttg 1800

cttggcttgc ttgggtcagg cagaatctgg ctgaagttga agcctccaaa gtccttgatt 1860

ggaggtgtct tgtaaatctg cttcacctgg gcaaacacct cctgggtgtt cttgtcctgt 1920

tccacagcaa tgcctgtcag agccctgtta agttgggtac agaaggagcc atattggagc 1980

agcaggttgc tacactctgt gctgtctcca cagatataca ttgtacagtc cacagaggtc 2040

ttggtcatac tcacaggcag aatctctgtg gtcacagaga tggtgaagtt ggttgggatg 2100

gcaatgctgt tgttgctgta agccacagag ttctctgctc ccagactcat tgtgtaggca 2160

atgatgctct ggcttgccac agacctcgac ccaccgccac cggtctgggt ctggtaggag 2220

gcacagatgc ctgctccaat tgggatgtca cactcatagg agttgttcac atgctctgct 2280

ccaatcagac agccagccct ggtctggaac acattgctgc ctgtgctgta gaccctccag 2340

gttggtgtaa gttggtcagc atggatagcc acaggcacct cagtacagtt cacatcctgg 2400

tagagcacag ccacctggtt gctggtgttg gtgccaggtg taatcacaga cactcctcca 2460

aaggaacatg gtgtgatgtc cagaatctcc aaggtctgtg ggtccctcac agcatctgtg 2520

gtgtcagcaa tgtccctgcc aaactgttgg aatggcagga acttcttgtt gctctctgtc 2580

agcactcctg tgcctgtcag tccattgaag ttgaagttca cacacttgtt cttcaccagg 2640

ttggtgctct tctttggtcc acacactgtg gcaggggcat ggagcagttc aaaggacagc 2700

accaccaccc tgtatggttg gtagcccact ccattggttg gttggaagcc ataggattgg 2760

agtggaaagt aacagttgaa gccctccact ccattacatg gtgtgctgcc agcctggtaa 2820

atctctgtgc tgatgtccct ctcaaatggt ttcaggttgc tcttcctgaa cagtctgtag 2880

aggtagttgt agttgcctcc caccttgctg tccaggttgt tgctgttcca ggcaatcaca 2940

cagcctgtga agtcatcagg cagtttgtag ttgtagtcag caatcttgcc tgtttgtcca 3000

ggggcaatct gtctcacctc atctccccta atcacaaagg agtcagcata gacattggtg 3060

aaacacaggt cattcagttt ggttgggctc actccataac acttgaaggt gctgaaggag 3120

gcagagttgt agagcacaga gtagtcagcc acacagttgc taatcctctt cctgttccag 3180

gcatagacag aggcaaacct ggtggcattg aacacctctc caaatggaca caggttggtg 3240

atgtttggaa acctcacaat gctctctgtt ggttggaccc tgaagttgct ggtctggtag 3300

atgcccttct ccactgtgaa ggatttcagg gtacacttgg tctcagacag tgggtccagg 3360

gcacagtcca cagcatctgt gatggtgcca ttctcattgt atttcagcag gaaggtcctt 3420

ggttggaggt agcccacata gtaggctgct gctcctgctg tccagccaga ggaggagtct 3480

ccaggtgtca ggtaggacct gtgcagagcc agcagggtct ggaacctggt gatgttgatg 3540

ccaattggca ggtccaccag tggttccaag gcagagaagc cctgtggcag gtccctcacc 3600

aggttgattg gtgtgtgttt gctgtaaatc ttgaagtagc catcaatgtt cttgaacaca 3660

aactccctca ggttcttgaa gttgccctgc ttgccctcca agtccatcag gaatggttgg 3720

ctcacatatt caaaggtaca gttgttggca gaggagtaga ccctgaactc agactccatc 3780

caggacttgt tgttcttgtg gtagtagact cccaggaatg ggtcattaca gaactggaac 3840

tcacacacct taatcaccac attggtggca ttgttcacaa tcagcaggga ctgggtcttg 3900

ctgtccaggg tggtgccaaa aatccagccc ctgatgatgt tgctcttctc tgtgctggca 3960

aagtagactc catcattgaa tggcagcaca gggttgtcaa acctcttggt gccattggtg 4020

ccagacacat ggatggcatg gaaccaggtc acattgctga agaatggcag gaacaggtcc 4080

tgggtgctgt gcagcacaga ggacctgaac accttgtcag ggtagtagac tcccctggtg 4140

aaggagttgg tgtaggcagg aggaagttgg gtcctggtgg tcaggttcac acactggctg 4200

gacaccagtg gcagcagcac caggaacaca aacatggtgg caaatcggag gctggatcgg 4260

tcccggtgtc ttctatggag gtcaaaacag cgtggatggc gtctccaggc gatctgacgg 4320

ttcactaaac gagctcgtcg acgatctcta tcactgatag ggagatctct atcactgata 4380

gggagagctc tgcttatata gacctcccac cgtacacgcc taccgcccat ttgcgtcaat 4440

ggggcggagt tgttacgaca ttttggaaag tcccgttgat tttggtgcca aaacaaactc 4500

ccattgacgt caatggggtg gagacttgga aatccccgtg agtcaaaccg ctatccacgc 4560

ccattgatgt actgccaaaa ccgcatcacc atggtaatag cgatgactaa tacgtagatg 4620

tactgccaag taggaaagtc ccataaggtc atgtactggg cataatgcca ggcgggccat 4680

ttaccgtcat tgacgtcaat agggggcgta cttggcatat gatacacttg atgtactgcc 4740

aagtgggcag tttaccgtaa atactccacc cattgacgtc aatggaaagt ccctattggc 4800

gttactatgg gaacatacgt cattattgac gtcaatgggc gggggtcgtt gggcggtcag 4860

ccaggcgggc catttaccgt aagttatgta acgcggaact ccatatatgg gctatgaact 4920

aatgaccccg taattgatta ctattacagc ttcccgctcc tcccgtgtgt gactcgcaga 4980

acgaatgtgt aggttggctg ggtgtggctt attctgcggt ggtggatgtt atcagggcag 5040

cggcgcatga aggagtttac atagaacccg aagccagggg gcgcctggat gctttgagag 5100

agtggatata ctacaactac tacacagagc gatctaagcg gcgagaccgg agacgcagat 5160

ctgtttgtca cgcccgcacc tggttttgct tcaggaaata tgactacgtc cggcgttcca 5220

tttggcatga cactacgacc aacacgatct cggttgtctc ggcgcactcc gtacagtagg 5280

gatcgtctac ctccttttga gacagaaacc cgcgctacca tactggagga tcatccgctg 5340

ctgcccgaat gtaacacttt gacaatgcac aacgtgagtt acgtgcgagg tcttccctgc 5400

agtgtgggat ttacgctgat tcaggaatgg gttgttccct gggatatggt tctaacgcgg 5460

gaggagcttg taatcctgag gaagtgtatg cacgtgtgcc tgtgttgtgc caacattgat 5520

atcatgacga gcatgatgat ccatggttac gagtcctggg ctctccactg tcattgttcc 5580

agtcccggtt ccctgcagtg tatagccggc gggcaggttt tggccagctg gtttaggatg 5640

gtggtggatg gcgccatgtt taatcagagg tttatatggt accgggaggt ggtgaattac 5700

aacatgccaa aagaggtaat gtttatgtcc agcgtgttta tgaggggtcg ccacttaatc 5760

tacctgcgct tgtggtatga tggccacgtg ggttctgtgg tccccgccat gagctttgga 5820

tacagcgcct tgcactgtgg gattttgaac aatattgtgg tgctgtgctg cagttactgt 5880

gctgatttaa gtgagatcag ggtgcgctgc tgtgcccgga ggacaaggcg ccttatgctg 5940

cgggcggtgc gaatcatcgc tgaggagacc actgccatgt tgtattcctg caggacggag 6000

cggcggcggc agcagtttat tcgcgcgctg ctgcagcacc accgccctat cctgatgcac 6060

gattatgact ctacccccat gtagaagctt ggggatcaat tctctagagc tcgctgatca 6120

gcctcgactg tgccttctag ttgccagcca tctgttgttt gcccctcccc cgtgccttcc 6180

ttgaccctgg aaggtgccac tcccactgtc ctttcctaat aaaatgagga aattgcatcg 6240

cattgtctga gtaggtgtca ttctattctg gggggtgggg tggggcagga cagcaagggg 6300

gaggattggg aagacaatag caggcatgct ggggatgcgg tgggctctat ggcttctgag 6360

gaaattgggc gtggcttaag ggtgggaaag aatatataag gtgggggtct tatgtagttt 6420

tgtatctgtt ttgcagcagc cgccgccgcc atgagcacca actcgtttga tggaagcatt 6480

gtgagctcat atttgacaac gcgcatgccc ccatgggccg gggtgcgtca gaatgtgatg 6540

ggctccagca ttgatggtcg ccccgtcctg cccgcaaact ctactacctt gacctacgag 6600

accgtgtctg gaacgccgtt ggagactgca gcctccgccg ccgcttcagc cgctgcagcc 6660

accgcccgcg ggattgtgac tgactttgct ttcctgagcc cgcttgcaag cagtgcagct 6720

tcccgttcat ccgcccgcga tgacaagttg acggctcttt tggcacaatt ggattctttg 6780

acccgggaac ttaatgtcgt ttctcagcag ctgttggatc tgcgccagca ggtttctgcc 6840

ctgaaggctt cctcccctcc caatgcggtt taaaacataa ataaaaaacc agactctgtt 6900

tggatttgga tcaagcaagt gtcttgctgt ctttatttag gggttttgcg cgcgcggtag 6960

gcccgggacc agcggtctcg gtcgttgagg gtcctgtgta ttttttccag gacgtggtaa 7020

aggtgactct ggatgttcag atacatgggc ataagcccgt ctctggggtg gaggtagcac 7080

cactgcagag cttcatgctg cggggtggtg ttgtagatga tccagtcgta gcaggagcgc 7140

tgggcgtggt gcctaaaaat gtctttcagt agcaagctga ttgccagggg caggcccttg 7200

gtgtaagtgt ttacaaagcg gttaagctgg gatgggtgca tacgtgggga tatgagatgc 7260

atcttggact gtatttttag gttggctatg ttcccagcca tatccctccg gggattcatg 7320

ttgtgcagaa ccaccagcac agtgtatccg gtgcacttgg gaaatttgtc atgtagctta 7380

gaaggaaatg cgtggaagaa cttggagacg cccttgtgac ctccaagatt ttccatgcat 7440

tcgtccataa tgatggcaat gggcccacgg gcggcggcct gggcgaagat atttctggga 7500

tcactaacgt catagttgtg ttccaggatg agatcgtcat aggccatttt tacaaagcgc 7560

gggcggaggg tgccagactg cggtataatg gttccatccg gcccaggggc gtagttaccc 7620

tcacagattt gcatttccca cgctttgagt tcagatgggg ggatcatgtc tacctgcggg 7680

gcgatgaaga aaacggtttc cggggtaggg gagatcagct gggaagaaag caggttcctg 7740

agcagctgcg acttaccgca gccggtgggc ccgtaaatca cacctattac cgggtgcaac 7800

tggtagttaa gagagctgca gctgccgtca tccctgagca ggggggccac ttcgttaagc 7860

atgtccctga ctcgcatgtt ttccctgacc aaatccgcca gaaggcgctc gccgcccagc 7920

gatagcagtt cttgcaagga agcaaagttt ttcaacggtt tgagaccgtc cgccgtaggc 7980

atgcttttga gcgtttgacc aagcagttcc aggcggtccc acagctcggt cacctgctct 8040

acggcatctc gatccagcat atctcctcgt ttcgcgggtt ggggcggctt tcgctgtacg 8100

gcagtagtcg gtgctcgtcc agacgggcca gggtcatgtc tttccacggg cgcagggtcc 8160

tcgtcagcgt agtctgggtc acggtgaagg ggtgcgctcc gggctgcgcg ctggccaggg 8220

tgcgcttgag gctggtcctg ctggtgctga agcgctgccg gtcttcgccc tgcgcgtcgg 8280

ccaggtagca tttgaccatg gtgtcatagt ccagcccctc cgcggcgtgg cccttggcgc 8340

gcagcttgcc cttggaggag gcgccgcacg aggggcagtg cagacttttg agggcgtaga 8400

gcttgggcgc gagaaatacc gattccgggg agtaggcatc cgcgccgcag gccccgcaga 8460

cggtctcgca ttccacgagc caggtgagct ctggccgttc ggggtcaaaa accaggtttc 8520

ccccatgctt tttgatgcgt ttcttacctc tggtttccat gagccggtgt ccacgctcgg 8580

tgacgaaaag gctgtccgtg tccccgtata cagacttgag aggcctgtcc tcgagcggtg 8640

ttccgcggtc ctcctcgtat agaaactcgg accactctga gacaaaggct cgcgtccagg 8700

ccagcacgaa ggaggctaag tgggaggggt agcggtcgtt gtccactagg gggtccactc 8760

gctccagggt gtgaagacac atgtcgccct cttcggcatc aaggaaggtg attggtttgt 8820

aggtgtaggc cacgtgaccg ggtgttcctg aaggggggct ataaaagggg gtgggggcgc 8880

gttcgtcctc actctcttcc gcatcgctgt ctgcgagggc cagctgttgg ggtgagtact 8940

ccctctgaaa agcgggcatg acttctgcgc taagattgtc agtttccaaa aacgaggagg 9000

atttgatatt cacctggccc gcggtgatgc ctttgagggt ggccgcatcc atctggtcag 9060

aaaagacaat ctttttgttg tcaagcttgg tggcaaacga cccgtagagg gcgttggaca 9120

gcaacttggc gatggagcgc agggtttggt ttttgtcgcg atcggcgcgc tccttggccg 9180

cgatgtttag ctgcacgtat tcgcgcgcaa cgcaccgcca ttcgggaaag acggtggtgc 9240

gctcgtcggg caccaggtgc acgcgccaac cgcggttgtg cagggtgaca aggtcaacgc 9300

tggtggctac ctctccgcgt aggcgctcgt tggtccagca gaggcggccg cccttgcgcg 9360

agcagaatgg cggtaggggg tctagctgcg tctcgtccgg ggggtctgcg tccacggtaa 9420

agaccccggg cagcaggcgc gcgtcgaagt agtctatctt gcatccttgc aagtctagcg 9480

cctgctgcca tgcgcgggcg gcaagcgcgc gctcgtatgg gttgagtggg ggaccccatg 9540

gcatggggtg ggtgagcgcg gaggcgtaca tgccgcaaat gtcgtaaacg tagaggggct 9600

ctctgagtat tccaagatat gtagggtagc atcttccacc gcggatgctg gcgcgcacgt 9660

aatcgtatag ttcgtgcgag ggagcgagga ggtcgggacc gaggttgcta cgggcgggct 9720

gctctgctcg gaagactatc tgcctgaaga tggcatgtga gttggatgat atggttggac 9780

gctggaagac gttgaagctg gcgtctgtga gacctaccgc gtcacgcacg aaggaggcgt 9840

aggagtcgcg cagcttgttg accagctcgg cggtgacctg cacgtctagg gcgcagtagt 9900

ccagggtttc cttgatgatg tcatacttat cctgtccctt ttttttccac agctcgcggt 9960

tgaggacaaa ctcttcgcgg tctttccagt actcttggat cggaaacccg tcggcctccg 10020

aacggtaaga gcctagcatg tagaactggt tgacggcctg gtaggcgcag catccctttt 10080

ctacgggtag cgcgtatgcc tgcgcggcct tccggagcga ggtgtgggtg agcgcaaagg 10140

tgtccctgac catgactttg aggtactggt atttgaagtc agtgtcgtcg catccgccct 10200

gctcccagag caaaaagtcc gtgcgctttt tggaacgcgg atttggcagg gcgaaggtga 10260

catcgttgaa gagtatcttt cccgcgcgag gcataaagtt gcgtgtgatg cggaagggtc 10320

ccggcacctc ggaacggttg ttaattacct gggcggcgag cacgatctcg tcaaagccgt 10380

tgatgttgtg gcccacaatg taaagttcca agaagcgcgg gatgcccttg atggaaggca 10440

atttttaag ttcctcgtag gtgagctctt caggggagct gagcccgtgc tctgaaaggg 10500

cccagtctgc aagatgaggg ttggaagcga cgaatgagct ccacaggtca cgggccatta 10560

gcatttgcag gtggtcgcga aaggtcctaa actggcgacc tatggccatt ttttctgggg 10620

tgatgcagta gaaggtaagc gggtcttgtt cccagcggtc ccatccaagg ttcgcggcta 10680

ggtctcgcgc ggcagtcact agaggctcat ctccgccgaa cttcatgacc agcatgaagg 10740

gcacgagctg cttcccaaag gcccccatcc aagtataggt ctctacatcg taggtgacaa 10800

agagacgctc ggtgcgagga tgcgagccga tcgggaagaa ctggatctcc cgccaccaat 10860

tggaggagtg gctattgatg tggtgaaagt agaagtccct gcgacgggcc gaacactcgt 10920

gctggctttt gtaaaaacgt gcgcagtact ggcagcggtg cacgggctgt acatcctgca 10980

cgaggttgac ctgacgaccg cgcacaagga agcagagtgg gaatttgagc ccctcgcctg 11040

gcgggtttgg ctggtggtct tctacttcgg ctgcttgtcc ttgaccgtct ggctgctcga 11100

ggggagttac ggtggatcgg accaccacgc cgcgcgagcc caaagtccag atgtccgcgc 11160

gcggcggtcg gagcttgatg acaacatcgc gcagatggga gctgtccatg gtctggagct 11220

cccgcggcgt caggtcaggc gggagctcct gcaggtttac ctcgcataga cgggtcaggg 11280

cgcgggctag atccaggtga tacctaattt ccaggggctg gttggtggcg gcgtcgatgg 11340

cttgcaagag gccgcatccc cgcggcgcga ctacggtacc gcgcggcggg cggtgggccg 11400

cgggggtgtc cttggatgat gcatctaaaa gcggtgacgc gggcgagccc ccggaggtag 11460

gggggctcc ggacccgccg ggagaggggg caggggcacg tcggcgccgc gcgcgggcag 11520

gagctggtgc tgcgcgcgta ggttgctggc gaacgcgacg acgcggcggt tgatctcctg 11580

aatctggcgc ctctgcgtga agacgacggg cccggtgagc ttgaacctga aagagagttc 11640

gacagaatca atttcggtgt cgttgacggc ggcctggcgc aaaatctcct gcacgtctcc 11700

tgagttgtct tgataggcga tctcggccat gaactgctcg atctcttcct cctggagatc 11760

tccgcgtccg gctcgctcca cggtggcggc gaggtcgttg gaaatgcggg ccatgagctg 11820

cgagaaggcg ttgaggcctc cctcgttcca gacgcggctg tagaccacgc ccccttcggc 11880

atcgcgggcg cgcatgacca cctgcgcgag attgagctcc acgtgccggg cgaagacggc 11940

gtagtttcgc aggcgctgaa agaggtagtt gagggtggtg gcggtgtgtt ctgccacgaa 12000

gaagtacata acccagcgtc gcaacgtgga ttcgttgata tcccccaagg cctcaaggcg 12060

ctccatggcc tcgtagaagt ccacggcgaa gttgaaaaac tgggagttgc gcgccgacac 12120

ggttaactcc tcctccagaa gacggatgag ctcggcgaca gtgtcgcgca cctcgcgctc 12180

aaaggctaca ggggcctctt cttcttcttc aatctcctct tccataaggg cctccccttc 12240

ttcttcttct ggcggcggtg ggggaggggg gacacggcgg cgacgacggc gcaccgggag 12300

gcggtcgaca aagcgctcga tcatctcccc gcggcgacgg cgcatggtct cggtgacggc 12360

gcggccgttc tcgcgggggc gcagttggaa gacgccgccc gtcatgtccc ggttatgggt 12420

tggcgggggg ctgccatgcg gcagggatac ggcgctaacg atgcatctca acaattgttg 12480

tgtaggtact ccgccgccga gggacctgag cgagtccgca tcgaccggat cggaaaacct 12540

ctcgagaaag gcgtctaacc agtcacagtc gcaaggtagg ctgagcaccg tggcgggcgg 12600

cagcgggcgg cggtcggggt tgtttctggc ggaggtgctg ctgatgatgt aattaaagta 12660

ggcggtcttg agacggcgga tggtcgacag aagcaccatg tccttgggtc cggcctgctg 12720

aatgcgcagg cggtcggcca tgccccaggc ttcgttttga catcggcgca ggtctttgta 12780

gtagtcttgc atgagccttt ctaccggcac ttcttcttct ccttcctctt gtcctgcatc 12840

tcttgcatct atcgctgcgg cggcggcgga gtttggccgt aggtggcgcc ctcttcctcc 12900

catgcgtgtg accccgaagc ccctcatcgg ctgaagcagg gctaggtcgg cgacaacgcg 12960

ctcggctaat atggcctgct gcacctgcgt gagggtagac tggaagtcat ccatgtccac 13020

aaagcggtgg tatgcgcccg tgttgatggt gtaagtgcag ttggccataa cggaccagtt 13080

aacggtctgg tgacccggct gcgagagctc ggtgtacctg agacgcgagt aagccctcga 13140

gtcaaatacg tagtcgttgc aagtccgcac caggtactgg tatcccacca aaaagtgcgg 13200

cggcggctgg cggtagaggg gccagcgtag ggtggccggg gctccggggg cgagatcttc 13260

caacataagg cgatgatatc cgtagatgta cctggacatc caggtgatgc cggcggcggt 13320

ggtggaggcg cgcggaaagt cgcggacgcg gttccagatg ttgcgcagcg gcaaaaagtg 13380

ctccatggtc gggacgctct ggccggtcag gcgcgcgcaa tcgttgacgc tctagcgtgc 13440

aaaaggagag cctgtaagcg ggcactcttc cgtggtctgg tggataaatt cgcaagggta 13500

tcatggcgga cgaccggggt tcgagccccg tatccggccg tccgccgtga tccatgcggt 13560

taccgcccgc gtgtcgaacc caggtgtgcg acgtcagaca acgggggagt gctccttttg 13620

gcttccttcc aggcgcggcg gctgctgcgc tagcttttt ggccactggc cgcgcgcagc 13680

gtaagcggtt aggctggaaa gcgaaagcat taagtggctc gctccctgta gccggagggt 13740

tattttccaa gggttgagtc gcgggacccc cggttcgagt ctcggaccgg ccggactgcg 13800

gcgaacgggg gtttgcctcc ccgtcatgca agaccccgct tgcaaattcc tccggaaaca 13860

gggacgagcc ccttttttgc ttttcccaga tgcatccggt gctgcggcag atgcgccccc 13920

ctcctcagca gcggcaagag caagagcagc ggcagacatg cagggcaccc tcccctcctc 13980

ctaccgcgtc aggaggggcg acatccgcgg ttgacgcggc agcagatggt gattacgaac 14040

ccccgcggcg ccgggcccgg cactacctgg acttggagga gggcgagggc ctggcgcggc 14100

taggagcgcc ctctcctgag cggcacccaa gggtgcagct gaagcgtgat acgcgtgagg 14160

cgtacgtgcc gcggcagaac ctgtttcgcg accgcgaggg agaggagccc gaggagatgc 14220

gggatcgaaa gttccacgca gggcgcgagc tgcggcatgg cctgaatcgc gagcggttgc 14280

tgcgcgagga ggactttgag cccgacgcgc gaaccgggat tagtcccgcg cgcgcacacg 14340

tggcggccgc cgacctggta accgcatacg agcagacggt gaaccaggag attaactttc 14400

aaaaaagctt taacaaccac gtgcgtacgc ttgtggcgcg cgaggaggtg gctataggac 14460

tgatgcatct gtgggacttt gtaagcgcgc tggagcaaaa cccaaatagc aagccgctca 14520

tggcgcagct gttccttata gtgcagcaca gcagggacaa cgaggcattc agggatgcgc 14580

tgctaaacat agtagagccc gagggccgct ggctgctcga tttgataaac atcctgcaga 14640

gcatagtggt gcaggagcgc agcttgagcc tggctgacaa ggtggccgcc atcaactatt 14700

ccatgcttag cctgggcaag ttttacgccc gcaagatata ccatacccct tacgttccca 14760

tagacaagga ggtaaagatc gaggggttct acatgcgcat ggcgctgaag gtgcttacct 14820

tgagcgacga cctgggcgtt tatcgcaacg agcgcatcca caaggccgtg agcgtgagcc 14880

ggcggcgcga gctcagcgac cgcgagctga tgcacagcct gcaaagggcc ctggctggca 14940

cgggcagcgg cgatagagag gccgagtcct actttgacgc gggcgctgac ctgcgctggg 15000

ccccaagccg acgcgccctg gaggcagctg gggccggacc tgggctggcg gtggcacccg 15060

cgcgcgctgg caacgtcggc ggcgtggagg aatatgacga ggacgatgag tacgagccag 15120

aggacggcga gtactaagcg gtgatgtttc tgatcagatg atgcaagacg caacggaccc 15180

ggcggtgcgg gcggcgctgc agagccagcc gtccggcctt aactccacgg acgactggcg 15240

ccaggtcatg gaccgcatca tgtcgctgac tgcgcgcaat cctgacgcgt tccggcagca 15300

gccgcaggcc aaccggctct ccgcaattct ggaagcggtg gtcccggcgc gcgcaaaccc 15360

cacgcacgag aaggtgctgg cgatcgtaaa cgcgctggcc gaaaacaggg ccatccggcc 15420

cgacgaggcc ggcctggtct acgacgcgct gcttcagcgc gtggctcgtt acaacagcgg 15480

caacgtgcag accaacctgg accggctggt gggggatgtg cgcgaggccg tggcgcagcg 15540

tgagcgcgcg cagcagcagg gcaacctggg ctccatggtt gcactaaacg ccttcctgag 15600

tacacagccc gccaacgtgc cgcggggaca ggaggactac accaactttg tgagcgcact 15660

gcggctaatg gtgactgaga caccgcaaag tgaggtgtac cagtctgggc cagactattt 15720

tttccagacc agtagacaag gcctgcagac cgtaaacctg agccaggctt tcaaaaactt 15780

gcaggggctg tggggggtgc gggctcccac aggcgaccgc gcgaccgtgt ctagcttgct 15840

gacgcccaac tcgcgcctgt tgctgctgct aatagcgccc ttcacggaca gtggcagcgt 15900

gtcccgggac acatacctag gtcacttgct gacactgtac cgcgaggcca taggtcaggc 15960

gcatgtggac gagcatactt tccaggagat tacaagtgtc agccgcgcgc tggggcagga 16020

ggacacgggc agcctggagg caaccctaaa ctacctgctg accaaccggc ggcagaagat 16080

cccctcgttg cacagtttaa acagcgagga ggagcgcatt ttgcgctacg tgcagcagag 16140

cgtgagcctt aacctgatgc gcgacggggt aacgcccagc gtggcgctgg acatgaccgc 16200

gcgcaacatg gaaccgggca tgtatgcctc aaaccggccg tttatcaacc gcctaatgga 16260

ctacttgcat cgcgcggccg ccgtgaaccc cgagtatttc accaatgcca tcttgaaccc 16320

gcactggcta ccgcccccctg gtttctacac cgggggattc gaggtgcccg agggtaacga 16380

tggattcctc tgggacgaca tagacgacag cgtgttttcc ccgcaaccgc agaccctgct 16440

agagttgcaa cagcgcgagc aggcagaggc ggcgctgcga aaggaaagct tccgcaggcc 16500

aagcagcttg tccgatctag gcgctgcggc cccgcggtca gatgctagta gcccatttcc 16560

aagcttgata gggtctctta ccagcactcg caccacccgc ccgcgcctgc tgggcgagga 16620

ggagtaccta aacaactcgc tgctgcagcc gcagcgcgaa aaaaacctgc ctccggcatt 16680

tcccaacaac gggatagaga gcctagtgga caagatgagt agatggaaga cgtacgcgca 16740

ggagcacagg gacgtgccag gcccgcgccc gcccacccgt cgtcaaaggc acgaccgtca 16800

gcggggtctg gtgtgggagg acgatgactc ggcagacgac agcagcgtcc tggatttggg 16860

agggagtggc aacccgtttg cgcaccttcg ccccaggctg gggagaatgt tttaaaaaaa 16920

aaaaagcatg atgcaaaata aaaaactcac caaggccatg gcaccgagcg ttggttttct 16980

tgtattcccc ttagtatgcg gcgcgcggcg atgtatgagg aaggtcctcc tccctcctac 17040

gagagtgtgg tgagcgcggc gccagtggcg gcggcgctgg gttctccctt cgatgctccc 17100

ctggacccgc cgtttgtgcc tccgcggtac ctgcggccta ccgggggggag aaacagcatc 17160

cgttactctg agttggcacc cctattcgac accacccgtg tgtacctggt ggacaacaag 17220

tcaacggatg tggcatccct gaactaccag aacgaccaca gcaactttct gaccacggtc 17280

attcaaaaca atgactacag cccgggggag gcaagcacac agaccatcaa tcttgacgac 17340

cggtcgcact ggggcggcga cctgaaaacc atcctgcata ccaacatgcc aaatgtgaac 17400

gagttcatgt ttaccaataa gtttaaggcg cgggtgatgg tgtcgcgctt gcctactaag 17460

gacaatcagg tggagctgaa atacgagtgg gtggagttca cgctgcccga gggcaactac 17520

tccgagacca tgaccataga ccttatgaac aacgcgatcg tggagcacta cttgaaagtg 17580

ggcagacaga acggggttct ggaaagcgac atcggggtaa agtttgacac ccgcaacttc 17640

agactggggt ttgaccccgt cactggtctt gtcatgcctg gggtatatac aaacgaagcc 17700

ttccatccag acatcatttt gctgccagga tgcggggtgg acttcaccca cagccgcctg 17760

agcaacttgt tgggcatccg caagcggcaa cccttccagg agggctttag gatcacctac 17820

gatgatctgg agggtggtaa cattcccgca ctgttggatg tggacgccta ccaggcgagc 17880

ttgaaagatg acaccgaaca gggcgggggt ggcgcaggcg gcagcaacag cagtggcagc 17940

ggcgcggaag agaactccaa cgcggcagcc gcggcaatgc agccggtgga ggacatgaac 18000

gatcatgcca ttcgcggcga cacctttgcc acacgggctg aggagaagcg cgctgaggcc 18060

gaagcagcgg ccgaagctgc cgcccccgct gcgcaacccg aggtcgagaa gcctcagaag 18120

aaaccggtga tcaaacccct gacagaggac agcaagaaac gcagttacaa cctaataagc 18180

aatgacagca ccttcaccca gtaccgcagc tggtaccttg catacaacta cggcgaccct 18240

cagaccggaa tccgctcatg gaccctgctt tgcactcctg acgtaacctg cggctcggag 18300

caggtctact ggtcgttgcc agacatgatg caagaccccg tgaccttccg ctccacgcgc 18360

cagatcagca actttccggt ggtgggcgcc gagctgttgc ccgtgcactc caagagcttc 18420

tacaacgacc aggccgtcta ctcccaactc atccgccagt ttacctctct gacccacgtg 18480

ttcaatcgct ttcccgagaa ccagattttg gcgcgcccgc cagcccccac catcaccacc 18540

gtcagtgaaa acgttcctgc tctcacagat cacgggacgc taccgctgcg caacagcatc 18600

ggaggagtcc agcgagtgac cattactgac gccagacgcc gcacctgccc ctacgtttac 18660

aaggccctgg gcatagtctc gccgcgcgtc ctatcgagcc gcacttttg agcaagcatg 18720

tccatcctta tatcgcccag caataacaca ggctggggcc tgcgcttccc aagcaagatg 18780

tttggcgggg ccaagaagcg ctccgaccaa cacccagtgc gcgtgcgcgg gcactaccgc 18840

gcgccctggg gcgcgcacaa acgcggccgc actgggcgca ccaccgtcga tgacgccatc 18900

gacgcggtgg tggaggaggc gcgcaactac acgcccacgc cgccaccagt gtccacagtg 18960

gacgcggcca ttcagaccgt ggtgcgcgga gcccggcgct atgctaaaat gaagagacgg 19020

cggaggcgcg tagcacgtcg ccaccgccgc cgacccggca ctgccgccca acgcgcggcg 19080

gcggccctgc ttaaccgcgc acgtcgcacc ggccgacggg cggccatgcg ggccgctcga 19140

aggctggccg cgggtattgt cactgtgccc cccaggtcca ggcgacgagc ggccgccgca 19200

gcagccgcgg ccattagtgc tatgactcag ggtcgcaggg gcaacgtgta ttgggtgcgc 19260

gactcggtta gcggcctgcg cgtgcccgtg cgcacccgcc ccccgcgcaa ctagattgca 19320

agaaaaaact acttagactc gtactgttgt atgtatccag cggcggcggc gcgcaacgaa 19380

gctatgtcca agcgcaaaat caaagaagag atgctccagg tcatcgcgcc ggagatctat 19440

ggcccccga agaaggaaga gcaggattac aagccccgaa agctaaagcg ggtcaaaaag 19500

aaaaagaaag atgatgatga tgaacttgac gacgaggtgg aactgctgca cgctaccgcg 19560

cccaggcgac gggtacagtg gaaaggtcga cgcgtaaaac gtgttttgcg acccggcacc 19620

accgtagtct ttacgcccgg tgagcgctcc acccgcacct acaagcgcgt gtatgatgag 19680

gtgtacggcg acgaggacct gcttgagcag gccaacgagc gcctcgggga gtttgcctac 19740

ggaaagcggc ataaggacat gctggcgttg ccgctggacg agggcaaccc aacacctagc 19800

ctaaagcccg taacactgca gcaggtgctg cccgcgcttg caccgtccga agaaaagcgc 19860

ggcctaaagc gcgagtctgg tgacttggca cccaccgtgc agctgatggt acccaagcgc 19920

cagcgactgg aagatgtctt ggaaaaaatg accgtggaac ctgggctgga gcccgaggtc 19980

cgcgtgcggc caatcaagca ggtggcgccg ggactgggcg tgcagaccgt ggacgttcag 20040

atacccacta ccagtagcac cagtattgcc accgccacag agggcatgga gacacaaacg 20100

tccccggttg cctcagcggt ggcggatgcc gcggtgcagg cggtcgctgc ggccgcgtcc 20160

aagacctcta cggaggtgca aacggacccg tggatgtttc gcgtttcagc cccccggcgc 20220

ccgcgccgtt cgaggaagta cggcgccgcc agcgcgctac tgcccgaata tgccctacat 20280

ccttccattg cgcctacccc cggctatcgt ggctacacct accgccccag aagacgagca 20340

actacccgac gccgaaccac cactggaacc cgccgccgcc gtcgccgtcg ccagcccgtg 20400

ctggccccga tttccgtgcg cagggtggct cgcgaaggag gcaggaccct ggtgctgcca 20460

acagcgcgct accaccccag catcgtttaa aagccggtct ttgtggttct tgcagatatg 20520

gccctcacct gccgcctccg tttcccggtg ccgggattcc gaggaagaat gcaccgtagg 20580

aggggcatgg ccggccacgg cctgacgggc ggcatgcgtc gtgcgcacca ccggcggcgg 20640

cgcgcgtcgc accgtcgcat gcgcggcggt atcctgcccc tccttattcc actgatcgcc 20700

gcggcgattg gcgccgtgcc cggaattgca tccgtggcct tgcaggcgca gagacactga 20760

ttaaaaacaa gttgcatgtg gaaaaatcaa aataaaaagt ctggactctc acgctcgctt 20820

ggtcctgtaa ctattttgta gaatggaaga catcaacttt gcgtctctgg ccccgcgaca 20880

cggctcgcgc ccgttcatgg gaaactggca agatatcggc accagcaata tgagcggtgg 20940

cgccttcagc tggggctcgc tgtggagcgg cattaaaaat ttcggttcca ccgttaagaa 21000

ctatggcagc aaggcctgga acagcagcac aggccagatg ctgagggata agttgaaaga 21060

gcaaaatttc caacaaaagg tggtagatgg cctggcctct ggcattagcg gggtggtgga 21120

cctggccaac caggcagtgc aaaataagat taacagtaag cttgatcccc gccctcccgt 21180

agaggagcct ccaccggccg tggagacagt gtctccagag gggcgtggcg aaaagcgtcc 21240

gcgccccgac agggaagaaa ctctggtgac gcaaatagac gagcctccct cgtacgagga 21300

ggcactaaag caaggcctgc ccaccacccg tcccatcgcg cccatggcta ccggagtgct 21360

gggccagcac acacccgtaa cgctggacct gcctcccccc gccgacaccc agcagaaacc 21420

tgtgctgcca ggcccgaccg ccgttgttgt aacccgtcct agccgcgcgt ccctgcgccg 21480

cgccgccagc ggtccgcgat cgttgcggcc cgtagccagt ggcaactggc aaagcacact 21540

gaacagcatc gtgggtctgg gggtgcaatc cctgaagcgc cgacgatgct tctgatagct 21600

aacgtgtcgt atgtgtgtca tgtatgcgtc catgtcgccg ccagaggagc tgctgagccg 21660

ccgcgcgccc gctttccaag atggctaccc cttcgatgat gccgcagtgg tcttacatgc 21720

acatctcggg ccaggacgcc tcggagtacc tgagccccgg gctggtgcag tttgcccgcg 21780

ccaccgagac gtacttcagc ctgaataaca agtttagaaa ccccacggtg gcgcctacgc 21840

acgacgtgac cacagaccgg tcccagcgtt tgacgctgcg gttcatccct gtggaccgtg 21900

aggatactgc gtactcgtac aaggcgcggt tcaccctagc tgtgggtgat aaccgtgtgc 21960

tggacatggc ttccacgtac tttgacatcc gcggcgtgct ggacaggggc cctactttta 22020

agccctactc tggcactgcc tacaacgccc tggctcccaa gggtgcccca aatccttgcg 22080

aatgggatga agctgctact gctcttgaaa taaacctaga agaagaggac gatgacaacg 22140

aagacgaagt agacgagcaa gctgagcagc aaaaaactca cgtatttggg caggcgcctt 22200

attctggtat aaatattaca aaggagggta ttcaaatagg tgtcgaaggt caaacaccta 22260

aatatgccga taaaacattt caacctgaac ctcaaatagg agaatctcag tggtacgaaa 22320

cagaaattaa tcatgcagct gggagagtcc taaaaaagac taccccaatg aaaccatgtt 22380

acggttcata tgcaaaaccc acaaatgaaa atggagggca aggcattctt gtaaagcaac 22440

aaaatggaaa gctagaaagt caagtggaaa tgcaattttt ctcaactact gaggcagccg 22500

caggcaatgg tgataacttg actcctaaag tggtattgta cagtgaagat gtagatatag 22560

aaaccccaga cactcatatt tcttacatgc ccactattaa ggaaggtaac tcacgagaac 22620

taatgggcca acaatctatg cccaacaggc ctaattacat tgcttttagg gacaatttta 22680

ttggtctaat gtattacaac agcacgggta atatgggtgt tctggcgggc caagcatcgc 22740

agttgaatgc tgttgtagat ttgcaagaca gaaacacaga gctttcatac cagcttttgc 22800

ttgattccat tggtgataga accaggtact tttctatgtg gaatcaggct gttgacagct 22860

atgatccaga tgttagaatt attgaaaatc atggaactga agatgaactt ccaaattact 22920

gctttccact gggaggtgtg attaatacag agactcttac caaggtaaaa cctaaaacag 22980

gtcaggaaaa tggatgggaa aaagatgcta cagaattttc agataaaaat gaaataagag 23040

ttggaaataa ttttgccatg gaaatcaatc taaatgccaa cctgtggaga aatttcctgt 23100

actccaacat agcgctgtat ttgcccgaca agctaaagta cagtccttcc aacgtaaaaa 23160

tttctgataa cccaaacacc tacgactaca tgaacaagcg agtggtggct cccgggctag 23220

tggactgcta cattaacctt ggagcacgct ggtcccttga ctatatggac aacgtcaacc 23280

catttaacca ccaccgcaat gctggcctgc gctaccgctc aatgttgctg ggcaatggtc 23340

gctatgtgcc cttccacatc caggtgcctc agaagttctt tgccattaaa aacctccttc 23400

tcctgccggg ctcatacacc tacgagtgga acttcaggaa ggatgttaac atggttctgc 23460

agagctccct aggaaatgac ctaagggttg acggagccag cattaagttt gatagcattt 23520

gcctttacgc caccttcttc cccatggccc acaacaccgc ctccacgctt gaggccatgc 23580

ttagaaacga caccaacgac cagtccttta acgactatct ctccgccgcc aacatgctct 23640

accctatacc cgccaacgct accaacgtgc ccatatccat cccctcccgc aactgggcgg 23700

ctttccgcgg ctgggccttc acgcgcctta agactaagga aaccccatca ctgggctcgg 23760

gctacgaccc ttattacacc tactctggct ctatacccta cctagatgga acctttacc 23820

tcaaccacac ctttaagaag gtggccatta cctttgactc ttctgtcagc tggcctggca 23880

atgaccgcct gcttaccccc aacgagtttg aaattaagcg ctcagttgac ggggagggtt 23940

acaacgttgc ccagtgtaac atgaccaaag actggttcct ggtacaaatg ctagctaact 24000

ataacattgg ctaccagggc ttctatatcc cagagagcta caaggaccgc atgtactcct 24060

tctttagaaa cttccagccc atgagccgtc aggtggtgga tgatactaaa tacaaggact 24120

accaacaggt gggcatccta caccaacaca acaactctgg atttgttggc taccttgccc 24180

ccaccatgcg cgaaggacag gcctaccctg ctaacttccc ctatccgctt ataggcaaga 24240

ccgcagttga cagcattacc cagaaaaagt ttctttgcga tcgcaccctt tggcgcatcc 24300

cattctccag taactttatg tccatgggcg cactcacaga cctgggccaa aaccttctct 24360

acgccaactc cgcccacgcg ctagacatga cttttgaggt ggatcccatg gacgagccca 24420

cccttcttta tgttttgttt gaagtctttg acgtggtccg tgtgcaccag ccgcaccgcg 24480

gcgtcatcga aaccgtgtac ctgcgcacgc ccttctcggc cggcaacgcc acaacataaa 24540

gaagcaagca acatcaacaa cagctgccgc catgggctcc agtgagcagg aactgaaagc 24600

cattgtcaaa gatcttggtt gtgggccata ttttttgggc acctatgaca agcgctttcc 24660

aggctttgtt tctccacaca agctcgcctg cgccatagtc aatacggccg gtcgcgagac 24720

tgggggcgta cactggatgg cctttgcctg gaacccgcac tcaaaaacat gctacctctt 24780

tgagcccttt ggcttttctg accagcgact caagcaggtt taccagtttg agtacgagtc 24840

actcctgcgc cgtagcgcca ttgcttcttc ccccgaccgc tgtataacgc tggaaaagtc 24900

cacccaaagc gtacaggggc ccaactcggc cgcctgtgga ctattctgct gcatgtttct 24960

ccacgccttt gccaactggc cccaaactcc catggatcac aaccccacca tgaaccttat 25020

taccggggta cccaactcca tgctcaacag tccccaggta cagcccaccc tgcgtcgcaa 25080

ccaggaacag ctctacagct tcctggagcg ccactcgccc tacttccgca gccacagtgc 25140

gcagattagg agcgccactt ctttttgtca cttgaaaaac atgtaaaaat aatgtactag 25200

agacactttc aataaaggca aatgctttta tttgtacact ctcgggtgat tatttacccc 25260

caccttgcc gtctgcgccg tttaaaaatc aaaggggttc tgccgcgcat cgctatgcgc 25320

cactggcagg gacacgttgc gatactggtg tttagtgctc cacttaaact caggcacaac 25380

catccgcggc agctcggtga agttttcact ccacaggctg cgcaccatca ccaacgcgtt 25440

tagcaggtcg ggcgccgata tcttgaagtc gcagttgggg cctccgccct gcgcgcgcga 25500

gttgcgatac acagggttgc agcactggaa cactatcagc gccgggtggt gcacgctggc 25560

cagcacgctc ttgtcggaga tcagatccgc gtccaggtcc tccgcgttgc tcagggcgaa 25620

cggagtcaac tttggtagct gccttcccaa aaagggcgcg tgcccaggct ttgagttgca 25680

ctcgcaccgt agtggcatca aaaggtgacc gtgcccggtc tgggcgttag gatacagcgc 25740

ctgcataaaa gccttgatct gcttaaaagc cacctgagcc tttgcgcctt cagagaagaa 25800

catgccgcaa gacttgccgg aaaactgatt ggccggacag gccgcgtcgt gcacgcagca 25860

ccttgcgtcg gtgttggaga tctgcaccac atttcggccc caccggttct tcacgatctt 25920

ggccttgcta gactgctcct tcagcgcgcg ctgcccgttt tcgctcgtca catccatttc 25980

aatcacgtgc tccttattta tcataatgct tccgtgtaga cacttaagct cgccttcgat 26040

ctcagcgcag cggtgcagcc acaacgcgca gcccgtgggc tcgtgatgct tgtaggtcac 26100

ctctgcaaac gactgcaggt acgcctgcag gaatcgcccc atcatcgtca caaaggtctt 26160

gttgctggtg aaggtcagct gcaacccgcg gtgctcctcg ttcagccagg tcttgcatac 26220

ggccgccaga gcttccactt ggtcaggcag tagtttgaag ttcgccttta gatcgttatc 26280

cacgtggtac ttgtccatca gcgcgcgcgc agcctccatg cccttctccc acgcagacac 26340

gatcggcaca ctcagcgggt tcatcaccgt aatttcactt tccgcttcgc tgggctcttc 26400

ctcttcctct tgcgtccgca taccacgcgc cactgggtcg tcttcattca gccgccgcac 26460

tgtgcgctta cctcctttgc catgcttgat tagcaccggt gggttgctga aacccaccat 26520

ttgtagcgcc acatcttctc tttcttcctc gctgtccacg attacctctg gtgatggcgg 26580

gcgctcgggc ttgggagaag ggcgcttctt tttcttcttg ggcgcaatgg ccaaatccgc 26640

cgccgaggtc gatggccgcg ggctgggtgt gcgcggcacc agcgcgtctt gtgatgagtc 26700

ttcctcgtcc tcggactcga tacgccgcct catccgcttt tttgggggcg cccggggagg 26760

cggcggcgac ggggacgggg acgacacgtc ctccatggtt gggggacgtc gcgccgcacc 26820

gcgtccgcgc tcgggggtgg tttcgcgctg ctcctcttcc cgactggcca tttccttctc 26880

ctataggcag aaaaagatca tggagtcagt cgagaagaag gacagcctaa ccgccccctc 26940

tgagttcgcc accaccgcct ccaccgatgc cgccaacgcg cctaccacct tccccgtcga 27000

ggcacccccg cttgaggagg aggaagtgat tatcgagcag gacccaggtt ttgtaagcga 27060

agacgacgag gaccgctcag taccaacaga ggataaaaag caagaccagg acaacgcaga 27120

ggcaaacgag gaacaagtcg ggcgggggga cgaaaggcat ggcgactacc tagatgtggg 27180

agacgacgtg ctgttgaagc atctgcagcg ccagtgcgcc attatctgcg acgcgttgca 27240

agagcgcagc gatgtgcccc tcgccatagc ggatgtcagc cttgcctacg aacgccacct 27300

attctcaccg cgcgtacccc ccaaacgcca agaaaacggc acatgcgagc ccaacccgcg 27360

cctcaacttc taccccgtat ttgccgtgcc agaggtgctt gccacctatc acatcttttt 27420

ccaaaactgc aagatacccc tatcctgccg tgccaaccgc agccgagcgg acaagcagct 27480

ggccttgcgg cagggcgctg tcatacctga tatcgcctcg ctcaacgaag tgccaaaaat 27540

ctttgagggt cttggacgcg acgagaagcg cgcggcaaac gctctgcaac aggaaaacag 27600

cgaaaatgaa agtcactctg gagtgttggt ggaactcgag ggtgacaacg cgcgcctagc 27660

cgtactaaaa cgcagcatcg aggtcaccca ctttgcctac ccggcactta acctaccccc 27720

caaggtcatg agcacagtca tgagtgagct gatcgtgcgc cgtgcgcagc ccctggagag 27780

ggatgcaaat ttgcaagaac aaacagagga gggcctaccc gcagttggcg acgagcagct 27840

agcgcgctgg cttcaaacgc gcgagcctgc cgacttggag gagcgacgca aactaatgat 27900

ggccgcagtg ctcgttaccg tggagcttga gtgcatgcag cggttctttg ctgacccgga 27960

gatgcagcgc aagctagagg aaacattgca ctacaccttt cgacagggct acgtacgcca 28020

ggcctgcaag atctccaacg tggagctctg caacctggtc tcctaccttg gaattttgca 28080

cgaaaaccgc cttgggcaaa acgtgcttca ttccacgctc aagggcgagg cgcgccgcga 28140

ctacgtccgc gactgcgttt acttatttct atgctacacc tggcagacgg ccatgggcgt 28200

ttggcagcag tgcttggagg agtgcaacct caaggagctg cagaaactgc taaagcaaaa 28260

cttgaaggac ctatggacgg ccttcaacga gcgctccgtg gccgcgcacc tggcggacat 28320

cattttcccc gaacgcctgc ttaaaaccct gcaacagggt ctgccagact tcaccagtca 28380

aagcatgttg cagaacttta ggaactttat cctagagcgc tcaggaatct tgcccgccac 28440

ctgctgtgca cttcctagcg actttgtgcc cattaagtac cgcgaatgcc ctccgccgct 28500

ttggggccac tgctaccttc tgcagctagc caactacctt gcctaccact ctgacataat 28560

ggaagacgtg agcggtgacg gtctactgga gtgtcactgt cgctgcaacc tatgcacccc 28620

gcaccgctcc ctggtttgca attcgcagct gcttaacgaa agtcaaatta tcggtacctt 28680

tgagctgcag ggtccctcgc ctgacgaaaa gtccgcggct ccggggttga aactcactcc 28740

ggggctgtgg acgtcggctt accttcgcaa atttgtacct gaggactacc acgcccacga 28800

gattaggttc tacgaagacc aatcccgccc gcctaatgcg gagcttaccg cctgcgtcat 28860

tacccagggc cacattcttg gccaattgca agccatcaac aaagcccgcc aagagtttct 28920

gctacgaaag ggacgggggg tttacttgga cccccagtcc ggcgaggagc tcaacccaat 28980

ccccccgccg ccgcagccct atcagcagca gccgcgggcc cttgcttccc aggatggcac 29040

ccaaaaagaa gctgcagctg ccgccgccac ccacggacga ggaggaatac tgggacagtc 29100

aggcagagga ggttttggac gaggaggagg aggacatgat ggaagactgg gagagcctag 29160

acgaggaagc ttccgaggtc gaagaggtgt cagacgaaac accgtcaccc tcggtcgcat 29220

tcccctcgcc ggcgccccag aaatcggcaa ccggttccag catggctaca acctccgctc 29280

ctcaggcgcc gccggcactg cccgttcgcc gacccaaccg tagatgggac accactggaa 29340

ccagggccgg taagtccaag cagccgccgc cgttagccca agagcaacaa cagcgccaag 29400

gctaccgctc atggcgcggg cacaagaacg ccatagttgc ttgcttgcaa gactgtgggg 29460

gcaacatctc cttcgcccgc cgctttcttc tctaccatca cggcgtggcc ttcccccgta 29520

acatcctgca ttactaccgt catctctaca gcccatactg caccggcggc agcggcagca 29580

acagcagcgg ccacacagaa gcaaaggcga ccggatagca agactctgac aaagcccaag 29640

aaatccacag cggcggcagc agcaggagga ggagcgctgc gtctggcgcc caacgaaccc 29700

gtatcgaccc gcgagcttag aaacaggatt tttcccactc tgtatgctat atttcaacag 29760

agcaggggcc aagaacaaga gctgaaaata aaaaacaggt ctctgcgatc cctcacccgc 29820

agctgcctgt atcacaaaag cgaagatcag cttcggcgca cgctggaaga cgcggaggct 29880

ctcttcagta aatactgcgc gctgactctt aaggactagt ttcgcgccct ttctcaaatt 29940

taagcgcgaa aactacgtca tctccagcgg ccacacccgg cgccagcacc tgttgtcagc 30000

gccattatga gcaaggaaat tcccacgccc tacatgtgga gttaccagcc acaaatggga 30060

cttgcggctg gagctgccca agactactca acccgaataa actacatgag cgcgggaccc 30120

cacatgatat cccgggtcaa cggaatacgc gcccaccgaa accgaattct cctggaacag 30180

gcggctatta ccaccacacc tcgtaataac cttaatcccc gtagttggcc cgctgccctg 30240

gtgtaccagg aaagtcccgc tcccaccact gtggtacttc ccagagacgc ccaggccgaa 30300

gttcagatga ctaactcagg ggcgcagctt gcgggcggct ttcgtcacag ggtgcggtcg 30360

cccgggcagg gtataactca cctgacaatc agagggcgag gtattcagct caacgacgag 30420

tcggtgagct cctcgcttgg tctccgtccg gacgggacat ttcagatcgg cggcgccggc 30480

cgctcttcat tcacgcctcg tcaggcaatc ctaactctgc agacctcgtc ctctgagccg 30540

cgctctggag gcattggaac tctgcaattt attgaggagt ttgtgccatc ggtctacttt 30600

aaccccttct cgggacctcc cggccactat ccggatcaat ttattcctaa ctttgacgcg 30660

gtaaaggact cggcggacgg ctacgactga atgttaagtg gagaggcaga gcaactgcgc 30720

ctgaaacacc tggtccactg tcgccgccac aagtgctttg cccgcgactc cggtgagttt 30780

tgctactttg aattgcccga ggatcatatc gagggcccgg cgcacggcgt ccggcttacc 30840

gcccagggag agcttgcccg tagcctgatt cgggagttta cccagcgccc cctgctagtt 30900

gagcgggaca ggggaccctg tgttctcact gtgatttgca actgtcctaa ccctggatta 30960

catcaagatc ctctagttaa tgtcaggtcg cctaagtcga ttaactagag tacccgggga 31020

tcttattccc tttaactaat aaaaaaaaat aataaagcat cacttactta aaatcagtta 31080

gcaaatttct gtccagttta ttcagcagca cctccttgcc ctcctcccag ctctggtatt 31140

gcagcttcct cctggctgca aactttctcc acaatctaaa tggaatgtca gtttcctcct 31200

gttcctgtcc atccgcaccc actatcttca tgttgttgca gatgaagcgc gcaagaccgt 31260

ctgaagatac cttcaacccc gtgtatccat atgacacgga aaccggtcct ccaactgtgc 31320

cttttcttac tcctcccttt gtatccccca atgggtttca agagagtccc cctggggtac 31380

tctctttgcg cctatccgaa cctctagtta cctccaatgg catgcttgcg ctcaaaatgg 31440

gcaacggcct ctctctggac gaggccggca accttacctc ccaaaatgta accactgtga 31500

gcccacctct caaaaaaacc aagtcaaaca taaacctgga aatatctgca cccctcacag 31560

ttacctcaga agccctaact gtggctgccg ccgcacctct aatggtcgcg ggcaacacac 31620

tcaccatgca atcacaggcc ccgctaaccg tgcacgactc caaacttagc attgccaccc 31680

aaggacccct cacagtgtca gaaggaaagc tagccctgca aacatcaggc cccctcacca 31740

ccaccgatag cagtaccctt actatcactg cctcaccccc tctaactact gccactggta 31800

gcttgggcat tgacttgaaa gagcccattt atacacaaaa tggaaaacta ggactaaagt 31860

acggggctcc tttgcatgta acagacgacc taaacacttt gaccgtagca actggtccag 31920

gtgtgactat taataatact tccttgcaaa ctaaagttac tggagccttg ggttttgatt 31980

cacaaggcaa tatgcaactt aatgtagcag gaggactaag gattgattct caaaacagac 32040

gccttatact tgatgttagt tatccgtttg atgctcaaaa ccaactaaat ctaagactag 32100

gacagggccc tctttttata aactcagccc acaacttgga tattaactac aacaaaggcc 32160

tttacttgtt tacagcttca aacaattcca aaaagcttga ggttaaccta agcactgcca 32220

aggggttgat gtttgacgct acagccatag ccattaatgc aggagatggg cttgaatttg 32280

gttcacctaa tgcaccaaac acaaatcccc tcaaaacaaa aattggccat ggcctagaat 32340

ttgattcaaa caaggctatg gttcctaaac taggaactgg ccttagtttt gacagcacag 32400

gtgccattac agtaggaaac aaaaataatg ataagctaac tttgtggacc ggaataaacc 32460

ctccacctaa ctgtcaaatt gtggaaaaca ctaatacaaa tgatggcaaa cttactttag 32520

tattagtaaa aaatggaggg cttgttaatg gctacgtgtc tctagttggt gtatcagaca 32580

ctgtgaacca aatgttcaca caaaagacag caaacatcca attaagatta tattttgact 32640

cttctggaaa tctattaact gaggaatcag acttaaaaat tccacttaaa aataaatctt 32700

ctacagcgac cagtgaaact gtagccagca gcaaagcctt tatgccaagt actacagctt 32760

atcccttcaa caccactact agggatagtg aaaactacat tcatggaata tgttactaca 32820

tgactagtta tgatagaagt ctatttccct tgaacatttc tataatgcta aacagccgta 32880

tgatttcttc caatgttgcc tatgccatac aatttgaatg gaatctaaat gcaagtgaat 32940

ctccagaaag caacatagct acgctgacca catccccctt tttcttttct tacattacag 33000

aagacgacaa ctaaagaatc gtttgtgtta tgtttcaacg tgtttatttt tcaattgcag 33060

aaaatttcaa gtcatttttc attcagtagt atagccccac caccacatag cttatacaga 33120

tcaccgtacc ttaatcaaac tcacagaacc ctagtattca acctgccacc tccctcccaa 33180

cacacagagt acacagtcct ttctccccgg ctggccttaa aaagcatcat atcatgggta 33240

acagacatat tcttaggtgt tatattccac acggtttcct gtcgagccaa acgctcatca 33300

gtgatattaa taaactcccc gggcagctca cttaagttca tgtcgctgtc cagctgctga 33360

gccacaggct gctgtccaac ttgcggttgc ttaacgggcg gcgaaggaga agtccacgcc 33420

tacatggggg tagagtcata atcgtgcatc aggatagggc ggtggtgctg cagcagcgcg 33480

cgaataaact gctgccgccg ccgctccgtc ctgcaggaat acaacatggc agtggtctcc 33540

tcagcgatga ttcgcaccgc ccgcagcata aggcgccttg tcctccgggc acagcagcgc 33600

accctgatct cacttaaatc agcacagtaa ctgcagcaca gcaccacaat attgttcaaa 33660

atcccacagt gcaaggcgct gtatccaaag ctcatggcgg ggaccacaga acccacgtgg 33720

ccatcatacc acaagcgcag gtagattaag tggcgacccc tcataaacac gctggacata 33780

aacattacct cttttggcat gttgtaattc accacctccc ctctgattaa acatggcgcc 33840

atccaccacc atcctaaacc agctggccaa aacctgcccg ccggctatac actgcaggga 33900

accgggactg gaacaatgac agtggagagc ccaggactcg taaccatgga tcatcatgct 33960

cgtcatgata tcaatgttgg cacaacacag gcacacgtgc atacacttcc tcaggattac 34020

aagctcctcc cgcgttagaa ccatatccca gggaacaacc cattcctgaa tcagcgtaaa 34080

tcccacactg cagggaagac ctcgcacgta actcacgttg tgcattgtca aagtgttaca 34140

ttcgggcagc agcggatgat cctccagtat ggtagcgcgg gtttctgtct caaaaggagg 34200

tagacgatcc ctactgtacg gagtgcgccg agacaaccga gatcgtgttg gtcgtagtgt 34260

catgccaaat ggaacgccgg acgtagtcat atttcctgaa gcaaaaccag gtgcgggcgt 34320

gacaaacaga tctgcgtctc cggtctcgcc gcttagatcg ctctgtgtag tagttgtagt 34380

atatccactc tctcaaagca tccaggcgcc ccctggcttc gggttctatg taaactcctt 34440

catgcgccgc tgccctgata acatccacca ccgcagaata agccacaccc agccaaccta 34500

cacattcgtt ctgcgagtca cacacgggag gagcgggaag agctggaaga accatgtttt 34560

ttttttatt ccaaaagatt atccaaaacc tcaaaatgaa gatctattaa gtgaacgcgc 34620

tcccctccgg tggcgtggtc aaactctaca gccaaagaac agataatggc atttgtaaga 34680

tgttgcacaa tggcttccaa aaggcaaacg gccctcacgt ccaagtggac gtaaaggcta 34740

aacccttcag ggtgaatctc ctctataaac attccagcac cttcaaccat gcccaaataa 34800

ttctcatctc gccaccttct caatatatct ctaagcaaat cccgaatatt aagtccggcc 34860

attgtaaaaa tctgctccag agcgccctcc accttcagcc tcaagcagcg aatcatgatt 34920

gcaaaaattc aggttcctca cagacctgta taagattcaa aagcggaaca ttaacaaaaa 34980

taccgcgatc ccgtaggtcc cttcgcaggg ccagctgaac ataatcgtgc aggtctgcac 35040

ggaccagcgc ggccacttcc ccgccaggaa ccatgacaaa agaacccaca ctgattatga 35100

cacgcatact cggagctatg ctaaccagcg tagccccgat gtaagcttgt tgcatgggcg 35160

gcgatataaa atgcaaggtg ctgctcaaaa aatcaggcaa agcctcgcgc aaaaaagaaa 35220

gcacatcgta gtcatgctca tgcagataaa ggcaggtaag ctccggaacc accacagaaa 35280

aagacaccat ttttctctca aacatgtctg cgggtttctg cataaacaca aaataaaata 35340

acaaaaaaac atttaaacat tagaagcctg tcttacaaca ggaaaaacaa cccttataag 35400

cataagacgg actacggcca tgccggcgtg accgtaaaaa aactggtcac cgtgattaaa 35460

aagcaccacc gacagctcct cggtcatgtc cggagtcata atgtaagact cggtaaacac 35520

atcaggttga ttcacatcgg tcagtgctaa aaagcgaccg aaatagcccg ggggaataca 35580

tacccgcagg cgtagagaca acattacagc ccccatagga ggtataacaa aattaatagg 35640

agagaaaaac acataaacac ctgaaaaacc ctcctgccta ggcaaaatag caccctcccg 35700

ctccagaaca acatacagcg cttccacagc ggcagccata acagtcagcc ttaccagtaa 35760

aaaagaaaac ctattaaaaa aacaccactc gacacggcac cagctcaatc agtcacagtg 35820

taaaaaaggg ccaagtgcag agcgagtata tataggacta aaaaatgacg taacggttaa 35880

agtccacaaa aaacacccag aaaaccgcac gcgaacctac gcccagaaac gaaagccaaa 35940

aaacccacaa cttcctcaaa tcgtcacttc cgttttccca cgttacgtca cttcccattt 36000

taagaaaact acaattccca acacatacaa gttactccgc cctaaaacct acgtcacccg 36060

ccccgttccc acgccccgcg ccacgtcaca aactccaccc cctcattatc atattggctt 36120

caatccaaaa taaggtatat tattgatgat g 36151

<210> 28
<211> 36401
<212> DNA
<213> Artificial Sequence

<220>
<223> pAdk35RF-Spike/E4orf6(-1kb)-E4dl355(E4re#23)

<400> 28
ttaattaaca tcatcaataa tataccttat tttggattga agccaatatg ataatgaggg 60

ggtggagttt gtgacgtggc gcggggcgtg ggaacggggc gggtgacgta gtagtgtggc 120

ggaagtgtga tgttgcaagt gtggcggaac acatgtaagc gacggatgtg gcaaaagtga 180

cgtttttggt gtgcgccggt gtacacagga agtgacaatt ttcgcgcggt ttaggcgga 240

tgttgtagta aatttgggcg taaccgagta agatttggcc attttcgcgg gaaaactgaa 300

taagaggaag tgaaatctga ataattttgt gttactcata gcgcgtaata atttgatccg 360

cgttaagata cattgatgag tttggacaaa ccacaactag aatgcagtga aaaaaatgct 420

ttatttgtga aatttgtgat gctattgctt tatttgtaac cattataagc tgcaataaac 480

aagttaacaa caacaattgc attcatttta tgtttcaggt tcaggggggag gtgtgggagg 540

tttttaaag caagtaaaac ctctacaaat gtggtatggc tgattatgat caattttcat 600

ggccacttga tgtattgttc atatttgccc agttcttgga ggtcaatcag ggactcattc 660

aggttcttag ccacctcatt cagtctgtca atctccttct ggatgttcac cacagaggca 720

ttgatgccag agatgtctcc caggtccaca tcagggctgg tgtggttctt gaagtatttg 780

tccagttcct ccttgaagga gtccagttca ggttggagtg ggtcatagac tgtgttgttc 840

acaatgccaa tcaccacatc acagttgcca gacacaaagg tgttgtctgt ggtgataatc 900

tgtggttcat agaagttcct ctgggtcaca aaccagtggg tgccattgct cacaaacact 960

ccctcccttg gaaagtgagc cttgccatca tggcagatgg caggggctgt ggtgaagttc 1020

ttctcctggg caggcacata ggtcacatgc aggaacacca ctccatgagg ggcagactgt 1080

ggaaaactca tcaggtggta gcccttgcca cagaagtcca ccctcttgct ttgtcccagc 1140

acacactcac tcatcttggt ggcagccagg ttggcagatg ccctaatctc agcagccctg 1200

ataagttgtt gggtcacata ggtttggagg gattggagtc tgcctgtaat cagtctgtca 1260

atctggacct cagcctccac cttgtccagt ctgctcagga tgtcattcag cacagaggag 1320

atggctccaa agttgctgga aagttgcttc accagggtgt tcagagcctg ggcattctgg 1380

ttcaccacat cttggagttt gcccagggca gaggctgtgc tggacaggga gtcctgaatc 1440

ttgccaatgg cagagttgaa ctggttggca atcagtttct ggttctcata gagcacattc 1500

tgggtcactc caatgccatt gaacctgtaa gccatctgca tagcaaatgg gatttggagg 1560

gctgctcctg ctccaaaggt ccagccagag gtgatggtgc cagccagcag ggcagaggtg 1620

tattgggcaa tcatctcatc tgtcagcagt ggaggcagca ctgtcagtcc attgaacttc 1680

tgggcacaaa tcaggtccct ggcagcaatg tctcccagac agtctccata ttgcttgatg 1740

aagccagcat cagccagggt caccttgttg aacagcaggt cctcaatgaa ggacctcttg 1800

cttggcttgc ttgggtcagg cagaatctgg ctgaagttga agcctccaaa gtccttgatt 1860

ggaggtgtct tgtaaatctg cttcacctgg gcaaacacct cctgggtgtt cttgtcctgt 1920

tccacagcaa tgcctgtcag agccctgtta agttgggtac agaaggagcc atattggagc 1980

agcaggttgc tacactctgt gctgtctcca cagatataca ttgtacagtc cacagaggtc 2040

ttggtcatac tcacaggcag aatctctgtg gtcacagaga tggtgaagtt ggttgggatg 2100

gcaatgctgt tgttgctgta agccacagag ttctctgctc ccagactcat tgtgtaggca 2160

atgatgctct ggcttgccac agacctcgac ccaccgccac cggtctgggt ctggtaggag 2220

gcacagatgc ctgctccaat tgggatgtca cactcatagg agttgttcac atgctctgct 2280

ccaatcagac agccagccct ggtctggaac acattgctgc ctgtgctgta gaccctccag 2340

gttggtgtaa gttggtcagc atggatagcc acaggcacct cagtacagtt cacatcctgg 2400

tagagcacag ccacctggtt gctggtgttg gtgccaggtg taatcacaga cactcctcca 2460

aaggaacatg gtgtgatgtc cagaatctcc aaggtctgtg ggtccctcac agcatctgtg 2520

gtgtcagcaa tgtccctgcc aaactgttgg aatggcagga acttcttgtt gctctctgtc 2580

agcactcctg tgcctgtcag tccattgaag ttgaagttca cacacttgtt cttcaccagg 2640

ttggtgctct tctttggtcc acacactgtg gcaggggcat ggagcagttc aaaggacagc 2700

accaccaccc tgtatggttg gtagcccact ccattggttg gttggaagcc ataggattgg 2760

agtggaaagt aacagttgaa gccctccact ccattacatg gtgtgctgcc agcctggtaa 2820

atctctgtgc tgatgtccct ctcaaatggt ttcaggttgc tcttcctgaa cagtctgtag 2880

aggtagttgt agttgcctcc caccttgctg tccaggttgt tgctgttcca ggcaatcaca 2940

cagcctgtga agtcatcagg cagtttgtag ttgtagtcag caatcttgcc tgtttgtcca 3000

ggggcaatct gtctcacctc atctccccta atcacaaagg agtcagcata gacattggtg 3060

aaacacaggt cattcagttt ggttgggctc actccataac acttgaaggt gctgaaggag 3120

gcagagttgt agagcacaga gtagtcagcc acacagttgc taatcctctt cctgttccag 3180

gcatagacag aggcaaacct ggtggcattg aacacctctc caaatggaca caggttggtg 3240

atgtttggaa acctcacaat gctctctgtt ggttggaccc tgaagttgct ggtctggtag 3300

atgcccttct ccactgtgaa ggatttcagg gtacacttgg tctcagacag tgggtccagg 3360

gcacagtcca cagcatctgt gatggtgcca ttctcattgt atttcagcag gaaggtcctt 3420

ggttggaggt agcccacata gtaggctgct gctcctgctg tccagccaga ggaggagtct 3480

ccaggtgtca ggtaggacct gtgcagagcc agcagggtct ggaacctggt gatgttgatg 3540

ccaattggca ggtccaccag tggttccaag gcagagaagc cctgtggcag gtccctcacc 3600

aggttgattg gtgtgtgttt gctgtaaatc ttgaagtagc catcaatgtt cttgaacaca 3660

aactccctca ggttcttgaa gttgccctgc ttgccctcca agtccatcag gaatggttgg 3720

ctcacatatt caaaggtaca gttgttggca gaggagtaga ccctgaactc agactccatc 3780

caggacttgt tgttcttgtg gtagtagact cccaggaatg ggtcattaca gaactggaac 3840

tcacacacct taatcaccac attggtggca ttgttcacaa tcagcaggga ctgggtcttg 3900

ctgtccaggg tggtgccaaa aatccagccc ctgatgatgt tgctcttctc tgtgctggca 3960

aagtagactc catcattgaa tggcagcaca gggttgtcaa acctcttggt gccattggtg 4020

ccagacacat ggatggcatg gaaccaggtc acattgctga agaatggcag gaacaggtcc 4080

tgggtgctgt gcagcacaga ggacctgaac accttgtcag ggtagtagac tcccctggtg 4140

aaggagttgg tgtaggcagg aggaagttgg gtcctggtgg tcaggttcac acactggctg 4200

gacaccagtg gcagcagcac caggaacaca aacatggtgg caaatcggag gctggatcgg 4260

tcccggtgtc ttctatggag gtcaaaacag cgtggatggc gtctccaggc gatctgacgg 4320

ttcactaaac gagctcgtcg acgatctcta tcactgatag ggagatctct atcactgata 4380

gggagagctc tgcttatata gacctcccac cgtacacgcc taccgcccat ttgcgtcaat 4440

ggggcggagt tgttacgaca ttttggaaag tcccgttgat tttggtgcca aaacaaactc 4500

ccattgacgt caatggggtg gagacttgga aatccccgtg agtcaaaccg ctatccacgc 4560

ccattgatgt actgccaaaa ccgcatcacc atggtaatag cgatgactaa tacgtagatg 4620

tactgccaag taggaaagtc ccataaggtc atgtactggg cataatgcca ggcgggccat 4680

ttaccgtcat tgacgtcaat aggggggcgta cttggcatat gatacacttg atgtactgcc 4740

aagtgggcag tttaccgtaa atactccacc cattgacgtc aatggaaagt ccctattggc 4800

gttactatgg gaacatacgt cattattgac gtcaatgggc gggggtcgtt gggcggtcag 4860

ccaggcgggc catttaccgt aagttatgta acgcggaact ccatatatgg gctatgaact 4920

aatgaccccg taattgatta ctattacaga tggttgaagg tgctggaatg tttatagagg 4980

agattcaccc tgaagggttt agcctttacg tccacttgga cgtgagggcc gtttgccttt 5040

tggaagccat tgtgcaacat cttacaaatg ccattatctg ttctttggct gtagagtttg 5100

accacgccac cggaggggag cgcgttcact taatagatct tcattttgag gttttggata 5160

atcttttgga ataaaaaaaa aaacatggtt cttccagctc ttcccgctcc tcccgtgtgt 5220

gactcgcaga acgaatgtgt aggttggctg ggtgtggctt attctgcggt ggtggatgtt 5280

atcagggcag cggcgcatga aggagtttac atagaacccg aagccagggg gcgcctggat 5340

gctttgagag agtggatata ctacaactac tacacagagc gatctaagcg gcgagaccgg 5400

agacgcagat ctgtttgtca cgcccgcacc tggttttgct tcaggaaata tgactacgtc 5460

cggcgttcca tttggcatga cactacgacc aacacgatct cggttgtctc ggcgcactcc 5520

gtacagtagg gatcgtctac ctccttttga gacagaaacc cgcgctacca tactggagga 5580

tcatccgctg ctgcccgaat gtaacacttt gacaatgcac aacgtgagtt acgtgcgagg 5640

tcttccctgc agtgtgggat ttacgctgat tcaggaatgg gttgttccct gggatatggt 5700

tctaacgcgg gaggagcttg taatcctgag gaagtgtatg cacgtgtgcc tgtgttgtgc 5760

caacattgat atcatgacga gcatgatgat ccatggttac gagtcctggg ctctccactg 5820

tcattgttcc agtcccggtt ccctgcagtg tatagccggc gggcaggttt tggccagctg 5880

gtttaggatg gtggtggatg gcgccatgtt taatcagagg tttatatggt accgggaggt 5940

ggtgaattac aacatgccaa aagaggtaat gtttatgtcc agcgtgttta tgaggggtcg 6000

ccacttaatc tacctgcgct tgtggtatga tggccacgtg ggttctgtgg tccccgccat 6060

gagctttgga tacagcgcct tgcactgtgg gattttgaac aatattgtgg tgctgtgctg 6120

cagttactgt gctgatttaa gtgagatcag ggtgcgctgc tgtgcccgga ggacaaggcg 6180

ccttatgctg cgggcggtgc gaatcatcgc tgaggagacc actgccatgt tgtattcctg 6240

caggacggag cggcggcggc agcagtttat tcgcgcgctg ctgcagcacc accgccctat 6300

cctgatgcac gattatgact ctacccccat gtagaagctt ggggatcaat tctctagagc 6360

tcgctgatca gcctcgactg tgccttctag ttgccagcca tctgttgttt gcccctcccc 6420

cgtgccttcc ttgaccctgg aaggtgccac tcccactgtc ctttcctaat aaaatgagga 6480

aattgcatcg cattgtctga gtaggtgtca ttctattctg gggggtgggg tggggcagga 6540

cagcaagggg gaggattggg aagacaatag caggcatgct ggggatgcgg tgggctctat 6600

ggcttctgag gaaattgggc gtggcttaag ggtgggaaag aatatataag gtgggggtct 6660

tatgtagttt tgtatctgtt ttgcagcagc cgccgccgcc atgagcacca actcgtttga 6720

tggaagcatt gtgagctcat atttgacaac gcgcatgccc ccatgggccg gggtgcgtca 6780

gaatgtgatg ggctccagca ttgatggtcg ccccgtcctg cccgcaaact ctactacctt 6840

gacctacgag accgtgtctg gaacgccgtt ggagactgca gcctccgccg ccgcttcagc 6900

cgctgcagcc accgcccgcg ggattgtgac tgactttgct ttcctgagcc cgcttgcaag 6960

cagtgcagct tcccgttcat ccgcccgcga tgacaagttg acggctcttt tggcacaatt 7020

ggattctttg acccgggaac ttaatgtcgt ttctcagcag ctgttggatc tgcgccagca 7080

ggtttctgcc ctgaaggctt cctcccctcc caatgcggtt taaaacataa ataaaaaacc 7140

agactctgtt tggatttgga tcaagcaagt gtcttgctgt ctttatttag gggttttgcg 7200

cgcgcggtag gcccgggacc agcggtctcg gtcgttgagg gtcctgtgta ttttttccag 7260

gacgtggtaa aggtgactct ggatgttcag atacatgggc ataagcccgt ctctggggtg 7320

gaggtagcac cactgcagag cttcatgctg cggggtggtg ttgtagatga tccagtcgta 7380

gcaggagcgc tgggcgtggt gcctaaaaat gtctttcagt agcaagctga ttgccagggg 7440

caggcccttg gtgtaagtgt ttacaaagcg gttaagctgg gatgggtgca tacgtgggga 7500

tatgagatgc atcttggact gtatttttag gttggctatg ttcccagcca tatccctccg 7560

gggattcatg ttgtgcagaa ccaccagcac agtgtatccg gtgcacttgg gaaatttgtc 7620

atgtagctta gaaggaaatg cgtggaagaa cttggagacg cccttgtgac ctccaagatt 7680

ttccatgcat tcgtccataa tgatggcaat gggcccacgg gcggcggcct gggcgaagat 7740

atttctggga tcactaacgt catagttgtg ttccaggatg agatcgtcat aggccatttt 7800

tacaaagcgc gggcggaggg tgccagactg cggtataatg gttccatccg gcccaggggc 7860

gtagttaccc tcacagattt gcatttccca cgctttgagt tcagatgggg ggatcatgtc 7920

tacctgcggg gcgatgaaga aaacggtttc cggggtaggg gagatcagct gggaagaaag 7980

caggttcctg agcagctgcg acttaccgca gccggtgggc ccgtaaatca cacctattac 8040

cgggtgcaac tggtagttaa gagagctgca gctgccgtca tccctgagca gggggggccac 8100

ttcgttaagc atgtccctga ctcgcatgtt ttccctgacc aaatccgcca gaaggcgctc 8160

gccgcccagc gatagcagtt cttgcaagga agcaaagttt ttcaacggtt tgagaccgtc 8220

cgccgtaggc atgcttttga gcgtttgacc aagcagttcc aggcggtccc acagctcggt 8280

cacctgctct acggcatctc gatccagcat atctcctcgt ttcgcgggtt ggggcggctt 8340

tcgctgtacg gcagtagtcg gtgctcgtcc agacgggcca gggtcatgtc tttccacggg 8400

cgcagggtcc tcgtcagcgt agtctgggtc acggtgaagg ggtgcgctcc gggctgcgcg 8460

ctggccaggg tgcgcttgag gctggtcctg ctggtgctga agcgctgccg gtcttcgccc 8520

tgcgcgtcgg ccaggtagca tttgaccatg gtgtcatagt ccagcccctc cgcggcgtgg 8580

cccttggcgc gcagcttgcc cttggaggag gcgccgcacg aggggcagtg cagacttttg 8640

agggcgtaga gcttgggcgc gagaaatacc gattccgggg agtaggcatc cgcgccgcag 8700

gccccgcaga cggtctcgca ttccacgagc caggtgagct ctggccgttc ggggtcaaaa 8760

accaggtttc ccccatgctt tttgatgcgt ttcttacctc tggtttccat gagccggtgt 8820

ccacgctcgg tgacgaaaag gctgtccgtg tccccgtata cagacttgag aggcctgtcc 8880

tcgagcggtg ttccgcggtc ctcctcgtat agaaactcgg accactctga gacaaaggct 8940

cgcgtccagg ccagcacgaa ggaggctaag tgggaggggt agcggtcgtt gtccactagg 9000

gggtccactc gctccagggt gtgaagacac atgtcgccct cttcggcatc aaggaaggtg 9060

attggtttgt aggtgtaggc cacgtgaccg ggtgttcctg aaggggggct ataaaagggg 9120

gtgggggcgc gttcgtcctc actctcttcc gcatcgctgt ctgcgagggc cagctgttgg 9180

ggtgagtact ccctctgaaa agcgggcatg acttctgcgc taagattgtc agtttccaaa 9240

aacgaggagg atttgatatt cacctggccc gcggtgatgc ctttgagggt ggccgcatcc 9300

atctggtcag aaaagacaat ctttttgttg tcaagcttgg tggcaaacga cccgtagagg 9360

gcgttggaca gcaacttggc gatggagcgc agggtttggt ttttgtcgcg atcggcgcgc 9420

tccttggccg cgatgtttag ctgcacgtat tcgcgcgcaa cgcaccgcca ttcgggaaag 9480

acggtggtgc gctcgtcggg caccaggtgc acgcgccaac cgcggttgtg cagggtgaca 9540

aggtcaacgc tggtggctac ctctccgcgt aggcgctcgt tggtccagca gaggcggccg 9600

cccttgcgcg agcagaatgg cggtaggggg tctagctgcg tctcgtccgg ggggtctgcg 9660

tccacggtaa agaccccggg cagcaggcgc gcgtcgaagt agtctatctt gcatccttgc 9720

aagtctagcg cctgctgcca tgcgcgggcg gcaagcgcgc gctcgtatgg gttgagtggg 9780

ggaccccatg gcatggggtg ggtgagcgcg gaggcgtaca tgccgcaaat gtcgtaaacg 9840

tagaggggct ctctgagtat tccaagatat gtagggtagc atcttccacc gcggatgctg 9900

gcgcgcacgt aatcgtatag ttcgtgcgag ggagcgagga ggtcgggacc gaggttgcta 9960

cgggcgggct gctctgctcg gaagactatc tgcctgaaga tggcatgtga gttggatgat 10020

atggttggac gctggaagac gttgaagctg gcgtctgtga gacctaccgc gtcacgcacg 10080

aaggaggcgt aggagtcgcg cagcttgttg accagctcgg cggtgacctg cacgtctagg 10140

gcgcagtagt ccagggtttc cttgatgatg tcatacttat cctgtccctt ttttttccac 10200

agctcgcggt tgaggacaaa ctcttcgcgg tctttccagt actcttggat cggaaacccg 10260

tcggcctccg aacggtaaga gcctagcatg tagaactggt tgacggcctg gtaggcgcag 10320

catccctttt ctacgggtag cgcgtatgcc tgcgcggcct tccggagcga ggtgtgggtg 10380

agcgcaaagg tgtccctgac catgactttg aggtactggt atttgaagtc agtgtcgtcg 10440

catccgccct gctcccagag caaaaagtcc gtgcgctttt tggaacgcgg atttggcagg 10500

gcgaaggtga catcgttgaa gagtatcttt cccgcgcgag gcataaagtt gcgtgtgatg 10560

cggaagggtc ccggcacctc ggaacggttg ttaattacct gggcggcgag cacgatctcg 10620

tcaaagccgt tgatgttgtg gcccacaatg taaagttcca agaagcgcgg gatgcccttg 10680

atggaaggca atttttaag ttcctcgtag gtgagctctt caggggagct gagcccgtgc 10740

tctgaaaggg cccagtctgc aagatgaggg ttggaagcga cgaatgagct ccacaggtca 10800

cgggccatta gcatttgcag gtggtcgcga aaggtcctaa actggcgacc tatggccatt 10860

ttttctgggg tgatgcagta gaaggtaagc gggtcttgtt cccagcggtc ccatccaagg 10920

ttcgcggcta ggtctcgcgc ggcagtcact agaggctcat ctccgccgaa cttcatgacc 10980

agcatgaagg gcacgagctg cttcccaaag gcccccatcc aagtataggt ctctacatcg 11040

taggtgacaa agagacgctc ggtgcgagga tgcgagccga tcgggaagaa ctggatctcc 11100

cgccaccaat tggaggagtg gctattgatg tggtgaaagt agaagtccct gcgacgggcc 11160

gaacactcgt gctggctttt gtaaaaacgt gcgcagtact ggcagcggtg cacgggctgt 11220

acatcctgca cgaggttgac ctgacgaccg cgcacaagga agcagagtgg gaatttgagc 11280

ccctcgcctg gcgggtttgg ctggtggtct tctacttcgg ctgcttgtcc ttgaccgtct 11340

ggctgctcga ggggagttac ggtggatcgg accaccacgc cgcgcgagcc caaagtccag 11400

atgtccgcgc gcggcggtcg gagcttgatg acaacatcgc gcagatggga gctgtccatg 11460

gtctggagct cccgcggcgt caggtcaggc gggagctcct gcaggtttac ctcgcataga 11520

cgggtcaggg cgcgggctag atccaggtga tacctaattt ccaggggctg gttggtggcg 11580

gcgtcgatgg cttgcaagag gccgcatccc cgcggcgcga ctacggtacc gcgcggcggg 11640

cggtgggccg cgggggtgtc cttggatgat gcatctaaaa gcggtgacgc gggcgagccc 11700

ccggaggtag gggggctcc ggacccgccg ggagaggggg caggggcacg tcggcgccgc 11760

gcgcgggcag gagctggtgc tgcgcgcgta ggttgctggc gaacgcgacg acgcggcggt 11820

tgatctcctg aatctggcgc ctctgcgtga agacgacggg cccggtgagc ttgaacctga 11880

aagagagttc gacagaatca atttcggtgt cgttgacggc ggcctggcgc aaaatctcct 11940

gcacgtctcc tgagttgtct tgataggcga tctcggccat gaactgctcg atctcttcct 12000

cctggagatc tccgcgtccg gctcgctcca cggtggcggc gaggtcgttg gaaatgcggg 12060

ccatgagctg cgagaaggcg ttgaggcctc cctcgttcca gacgcggctg tagaccacgc 12120

ccccttcggc atcgcgggcg cgcatgacca cctgcgcgag attgagctcc acgtgccggg 12180

cgaagacggc gtagtttcgc aggcgctgaa agaggtagtt gagggtggtg gcggtgtgtt 12240

ctgccacgaa gaagtacata acccagcgtc gcaacgtgga ttcgttgata tcccccaagg 12300

cctcaaggcg ctccatggcc tcgtagaagt ccacggcgaa gttgaaaaac tgggagttgc 12360

gcgccgacac ggttaactcc tcctccagaa gacggatgag ctcggcgaca gtgtcgcgca 12420

cctcgcgctc aaaggctaca ggggcctctt cttcttcttc aatctcctct tccataaggg 12480

cctccccttc ttcttcttct ggcggcggtg ggggaggggg gacacggcgg cgacgacggc 12540

gcaccgggag gcggtcgaca aagcgctcga tcatctcccc gcggcgacgg cgcatggtct 12600

cggtgacggc gcggccgttc tcgcgggggc gcagttggaa gacgccgccc gtcatgtccc 12660

ggttatgggt tggcgggggg ctgccatgcg gcagggatac ggcgctaacg atgcatctca 12720

acaattgttg tgtaggtact ccgccgccga gggacctgag cgagtccgca tcgaccggat 12780

cggaaaacct ctcgagaaag gcgtctaacc agtcacagtc gcaaggtagg ctgagcaccg 12840

tggcgggcgg cagcgggcgg cggtcggggt tgtttctggc ggaggtgctg ctgatgatgt 12900

aattaaagta ggcggtcttg agacggcgga tggtcgacag aagcaccatg tccttgggtc 12960

cggcctgctg aatgcgcagg cggtcggcca tgccccaggc ttcgttttga catcggcgca 13020

ggtctttgta gtagtcttgc atgagccttt ctaccggcac ttcttcttct ccttcctctt 13080

gtcctgcatc tcttgcatct atcgctgcgg cggcggcgga gtttggccgt aggtggcgcc 13140

ctcttcctcc catgcgtgtg accccgaagc ccctcatcgg ctgaagcagg gctaggtcgg 13200

cgacaacgcg ctcggctaat atggcctgct gcacctgcgt gagggtagac tggaagtcat 13260

ccatgtccac aaagcggtgg tatgcgcccg tgttgatggt gtaagtgcag ttggccataa 13320

cggaccagtt aacggtctgg tgacccggct gcgagagctc ggtgtacctg agacgcgagt 13380

aagccctcga gtcaaatacg tagtcgttgc aagtccgcac caggtactgg tatcccacca 13440

aaaagtgcgg cggcggctgg cggtagaggg gccagcgtag ggtggccggg gctccggggg 13500

cgagatcttc caacataagg cgatgatatc cgtagatgta cctggacatc caggtgatgc 13560

cggcggcggt ggtggaggcg cgcggaaagt cgcggacgcg gttccagatg ttgcgcagcg 13620

gcaaaaagtg ctccatggtc gggacgctct ggccggtcag gcgcgcgcaa tcgttgacgc 13680

tctagcgtgc aaaaggagag cctgtaagcg ggcactcttc cgtggtctgg tggataaatt 13740

cgcaagggta tcatggcgga cgaccggggt tcgagccccg tatccggccg tccgccgtga 13800

tccatgcggt taccgcccgc gtgtcgaacc caggtgtgcg acgtcagaca acgggggagt 13860

gctccttttg gcttccttcc aggcgcggcg gctgctgcgc tagcttttt ggccactggc 13920

cgcgcgcagc gtaagcggtt aggctggaaa gcgaaagcat taagtggctc gctccctgta 13980

gccggagggt tattttccaa gggttgagtc gcgggacccc cggttcgagt ctcggaccgg 14040

ccggactgcg gcgaacgggg gtttgcctcc ccgtcatgca agaccccgct tgcaaattcc 14100

tccggaaaca gggacgagcc ccttttttgc ttttcccaga tgcatccggt gctgcggcag 14160

atgcgccccc ctcctcagca gcggcaagag caagagcagc ggcagacatg cagggcaccc 14220

tcccctcctc ctaccgcgtc aggaggggcg acatccgcgg ttgacgcggc agcagatggt 14280

gattacgaac ccccgcggcg ccgggcccgg cactacctgg acttggagga gggcgagggc 14340

ctggcgcggc taggagcgcc ctctcctgag cggcacccaa gggtgcagct gaagcgtgat 14400

acgcgtgagg cgtacgtgcc gcggcagaac ctgtttcgcg accgcgaggg agaggagccc 14460

gaggagatgc gggatcgaaa gttccacgca gggcgcgagc tgcggcatgg cctgaatcgc 14520

gagcggttgc tgcgcgagga ggactttgag cccgacgcgc gaaccgggat tagtcccgcg 14580

cgcgcacacg tggcggccgc cgacctggta accgcatacg agcagacggt gaaccaggag 14640

attaactttc aaaaaagctt taacaaccac gtgcgtacgc ttgtggcgcg cgaggaggtg 14700

gctataggac tgatgcatct gtgggacttt gtaagcgcgc tggagcaaaa cccaaatagc 14760

aagccgctca tggcgcagct gttccttata gtgcagcaca gcagggacaa cgaggcattc 14820

agggatgcgc tgctaaacat agtagagccc gagggccgct ggctgctcga tttgataaac 14880

atcctgcaga gcatagtggt gcaggagcgc agcttgagcc tggctgacaa ggtggccgcc 14940

atcaactatt ccatgcttag cctgggcaag ttttacgccc gcaagatata ccataccct 15000

tacgttccca tagacaagga ggtaaagatc gaggggttct acatgcgcat ggcgctgaag 15060

gtgcttacct tgagcgacga cctgggcgtt tatcgcaacg agcgcatcca caaggccgtg 15120

agcgtgagcc ggcggcgcga gctcagcgac cgcgagctga tgcacagcct gcaaagggcc 15180

ctggctggca cgggcagcgg cgatagagag gccgagtcct actttgacgc gggcgctgac 15240

ctgcgctggg ccccaagccg acgcgccctg gaggcagctg gggccggacc tgggctggcg 15300

gtggcacccg cgcgcgctgg caacgtcggc ggcgtggagg aatatgacga ggacgatgag 15360

tacgagccag aggacggcga gtactaagcg gtgatgtttc tgatcagatg atgcaagacg 15420

caacggaccc ggcggtgcgg gcggcgctgc agagccagcc gtccggcctt aactccacgg 15480

acgactggcg ccaggtcatg gaccgcatca tgtcgctgac tgcgcgcaat cctgacgcgt 15540

tccggcagca gccgcaggcc aaccggctct ccgcaattct ggaagcggtg gtcccggcgc 15600

gcgcaaaccc cacgcacgag aaggtgctgg cgatcgtaaa cgcgctggcc gaaaacaggg 15660

ccatccggcc cgacgaggcc ggcctggtct acgacgcgct gcttcagcgc gtggctcgtt 15720

acaacagcgg caacgtgcag accaacctgg accggctggt gggggatgtg cgcgaggccg 15780

tggcgcagcg tgagcgcgcg cagcagcagg gcaacctggg ctccatggtt gcactaaacg 15840

ccttcctgag tacacagccc gccaacgtgc cgcggggaca ggaggactac accaactttg 15900

tgagcgcact gcggctaatg gtgactgaga caccgcaaag tgaggtgtac cagtctgggc 15960

cagactattt tttccagacc agtagacaag gcctgcagac cgtaaacctg agccaggctt 16020

tcaaaaactt gcaggggctg tggggggtgc gggctcccac aggcgaccgc gcgaccgtgt 16080

ctagcttgct gacgcccaac tcgcgcctgt tgctgctgct aatagcgccc ttcacggaca 16140

gtggcagcgt gtcccgggac acatacctag gtcacttgct gacactgtac cgcgaggcca 16200

taggtcaggc gcatgtggac gagcatactt tccaggagat tacaagtgtc agccgcgcgc 16260

tggggcagga ggacacgggc agcctggagg caaccctaaa ctacctgctg accaaccggc 16320

ggcagaagat cccctcgttg cacagtttaa acagcgagga ggagcgcatt ttgcgctacg 16380

tgcagcagag cgtgagcctt aacctgatgc gcgacggggt aacgcccagc gtggcgctgg 16440

acatgaccgc gcgcaacatg gaaccgggca tgtatgcctc aaaccggccg tttatcaacc 16500

gcctaatgga ctacttgcat cgcgcggccg ccgtgaaccc cgagtatttc accaatgcca 16560

tcttgaaccc gcactggcta ccgccccctg gtttctacac cgggggattc gaggtgcccg 16620

agggtaacga tggattcctc tgggacgaca tagacgacag cgtgttttcc ccgcaaccgc 16680

agaccctgct agagttgcaa cagcgcgagc aggcagaggc ggcgctgcga aaggaaagct 16740

tccgcaggcc aagcagcttg tccgatctag gcgctgcggc cccgcggtca gatgctagta 16800

gcccatttcc aagcttgata gggtctctta ccagcactcg caccacccgc ccgcgcctgc 16860

tgggcgagga ggagtaccta aacaactcgc tgctgcagcc gcagcgcgaa aaaaacctgc 16920

ctccggcatt tcccaacaac gggatagaga gcctagtgga caagatgagt agatggaaga 16980

cgtacgcgca ggagcacagg gacgtgccag gcccgcgccc gcccacccgt cgtcaaaggc 17040

acgaccgtca gcggggtctg gtgtgggagg acgatgactc ggcagacgac agcagcgtcc 17100

tggatttggg agggagtggc aacccgtttg cgcaccttcg ccccaggctg gggagaatgt 17160

tttaaaaaaa aaaaagcatg atgcaaaata aaaaactcac caaggccatg gcaccgagcg 17220

ttggttttct tgtattcccc ttagtatgcg gcgcgcggcg atgtatgagg aaggtcctcc 17280

tccctcctac gagagtgtgg tgagcgcggc gccagtggcg gcggcgctgg gttctccctt 17340

cgatgctccc ctggacccgc cgtttgtgcc tccgcggtac ctgcggccta ccgggggggag 17400

aaacagcatc cgttactctg agttggcacc cctattcgac accacccgtg tgtacctggt 17460

ggacaacaag tcaacggatg tggcatccct gaactaccag aacgaccaca gcaactttct 17520

gaccacggtc attcaaaaca atgactacag cccgggggag gcaagcacac agaccatcaa 17580

tcttgacgac cggtcgcact ggggcggcga cctgaaaacc atcctgcata ccaacatgcc 17640

aaatgtgaac gagttcatgt ttaccaataa gtttaaggcg cgggtgatgg tgtcgcgctt 17700

gcctactaag gacaatcagg tggagctgaa atacgagtgg gtggagttca cgctgcccga 17760

gggcaactac tccgagacca tgaccataga ccttatgaac aacgcgatcg tggagcacta 17820

cttgaaagtg ggcagacaga acggggttct ggaaagcgac atcggggtaa agtttgacac 17880

ccgcaacttc agactggggt ttgaccccgt cactggtctt gtcatgcctg gggtatatac 17940

aaacgaagcc ttccatccag acatcatttt gctgccagga tgcggggtgg acttcaccca 18000

cagccgcctg agcaacttgt tgggcatccg caagcggcaa cccttccagg agggctttag 18060

gatcacctac gatgatctgg agggtggtaa cattcccgca ctgttggatg tggacgccta 18120

ccaggcgagc ttgaaagatg acaccgaaca gggcgggggt ggcgcaggcg gcagcaacag 18180

cagtggcagc ggcgcggaag agaactccaa cgcggcagcc gcggcaatgc agccggtgga 18240

ggacatgaac gatcatgcca ttcgcggcga cacctttgcc acacgggctg aggagaagcg 18300

cgctgaggcc gaagcagcgg ccgaagctgc cgcccccgct gcgcaacccg aggtcgagaa 18360

gcctcagaag aaaccggtga tcaaacccct gacagaggac agcaagaaac gcagttacaa 18420

cctaataagc aatgacagca ccttcaccca gtaccgcagc tggtaccttg catacaacta 18480

cggcgaccct cagaccggaa tccgctcatg gaccctgctt tgcactcctg acgtaacctg 18540

cggctcggag caggtctact ggtcgttgcc agacatgatg caagaccccg tgaccttccg 18600

ctccacgcgc cagatcagca actttccggt ggtgggcgcc gagctgttgc ccgtgcactc 18660

caagagcttc tacaacgacc aggccgtcta ctcccaactc atccgccagt ttacctctct 18720

gacccacgtg ttcaatcgct ttcccgagaa ccagattttg gcgcgcccgc cagcccccac 18780

catcaccacc gtcagtgaaa acgttcctgc tctcacagat cacgggacgc taccgctgcg 18840

caacagcatc ggaggagtcc agcgagtgac cattactgac gccagacgcc gcacctgccc 18900

ctacgtttac aaggccctgg gcatagtctc gccgcgcgtc ctatcgagcc gcacttttg 18960

agcaagcatg tccatcctta tatcgcccag caataacaca ggctggggcc tgcgcttccc 19020

aagcaagatg tttggcgggg ccaagaagcg ctccgaccaa cacccagtgc gcgtgcgcgg 19080

gcactaccgc gcgccctggg gcgcgcacaa acgcggccgc actgggcgca ccaccgtcga 19140

tgacgccatc gacgcggtgg tggaggaggc gcgcaactac acgcccacgc cgccaccagt 19200

gtccacagtg gacgcggcca ttcagaccgt ggtgcgcgga gcccggcgct atgctaaaat 19260

gaagagacgg cggaggcgcg tagcacgtcg ccaccgccgc cgacccggca ctgccgccca 19320

acgcgcggcg gcggccctgc ttaaccgcgc acgtcgcacc ggccgacggg cggccatgcg 19380

ggccgctcga aggctggccg cgggtattgt cactgtgccc cccaggtcca ggcgacgagc 19440

ggccgccgca gcagccgcgg ccattagtgc tatgactcag ggtcgcaggg gcaacgtgta 19500

ttgggtgcgc gactcggtta gcggcctgcg cgtgcccgtg cgcacccgcc ccccgcgcaa 19560

ctagattgca agaaaaaact acttagactc gtactgttgt atgtatccag cggcggcggc 19620

gcgcaacgaa gctatgtcca agcgcaaaat caaagaagag atgctccagg tcatcgcgcc 19680

ggagatctat ggccccccga agaaggaaga gcaggattac aagccccgaa agctaaagcg 19740

ggtcaaaaag aaaaagaaag atgatgatga tgaacttgac gacgaggtgg aactgctgca 19800

cgctaccgcg cccaggcgac gggtacagtg gaaaggtcga cgcgtaaaac gtgttttgcg 19860

acccggcacc accgtagtct ttacgcccgg tgagcgctcc acccgcacct acaagcgcgt 19920

gtatgatgag gtgtacggcg acgaggacct gcttgagcag gccaacgagc gcctcgggga 19980

gtttgcctac ggaaagcggc ataaggacat gctggcgttg ccgctggacg agggcaaccc 20040

aacacctagc ctaaagcccg taacactgca gcaggtgctg cccgcgcttg caccgtccga 20100

agaaaagcgc ggcctaaagc gcgagtctgg tgacttggca cccaccgtgc agctgatggt 20160

acccaagcgc cagcgactgg aagatgtctt ggaaaaaatg accgtggaac ctgggctgga 20220

gcccgaggtc cgcgtgcggc caatcaagca ggtggcgccg ggactgggcg tgcagaccgt 20280

ggacgttcag atacccacta ccagtagcac cagtattgcc accgccacag agggcatgga 20340

gacacaaacg tccccggttg cctcagcggt ggcggatgcc gcggtgcagg cggtcgctgc 20400

ggccgcgtcc aagacctcta cggaggtgca aacggacccg tggatgtttc gcgtttcagc 20460

cccccggcgc ccgcgccgtt cgaggaagta cggcgccgcc agcgcgctac tgcccgaata 20520

tgccctacat ccttccattg cgcctacccc cggctatcgt ggctacacct accgccccag 20580

aagacgagca actacccgac gccgaaccac cactggaacc cgccgccgcc gtcgccgtcg 20640

ccagcccgtg ctggccccga tttccgtgcg cagggtggct cgcgaaggag gcaggaccct 20700

ggtgctgcca acagcgcgct accaccccag catcgtttaa aagccggtct ttgtggttct 20760

tgcagatatg gccctcacct gccgcctccg tttcccggtg ccgggattcc gaggaagaat 20820

gcaccgtagg aggggcatgg ccggccacgg cctgacgggc ggcatgcgtc gtgcgcacca 20880

ccggcggcgg cgcgcgtcgc accgtcgcat gcgcggcggt atcctgcccc tccttattcc 20940

actgatcgcc gcggcgattg gcgccgtgcc cggaattgca tccgtggcct tgcaggcgca 21000

gagacactga ttaaaaacaa gttgcatgtg gaaaaatcaa aataaaaagt ctggactctc 21060

acgctcgctt ggtcctgtaa ctattttgta gaatggaaga catcaacttt gcgtctctgg 21120

ccccgcgaca cggctcgcgc ccgttcatgg gaaactggca agatatcggc accagcaata 21180

tgagcggtgg cgccttcagc tggggctcgc tgtggagcgg cattaaaaat ttcggttcca 21240

ccgttaagaa ctatggcagc aaggcctgga acagcagcac aggccagatg ctgagggata 21300

agttgaaaga gcaaaatttc caacaaaagg tggtagatgg cctggcctct ggcattagcg 21360

gggtggtgga cctggccaac caggcagtgc aaaataagat taacagtaag cttgatcccc 21420

gccctcccgt agaggagcct ccaccggccg tggagacagt gtctccagag gggcgtggcg 21480

aaaagcgtcc gcgccccgac agggaagaaa ctctggtgac gcaaatagac gagcctccct 21540

cgtacgagga ggcactaaag caaggcctgc ccaccacccg tcccatcgcg cccatggcta 21600

ccggagtgct gggccagcac acacccgtaa cgctggacct gcctcccccc gccgacaccc 21660

agcagaaacc tgtgctgcca ggcccgaccg ccgttgttgt aacccgtcct agccgcgcgt 21720

ccctgcgccg cgccgccagc ggtccgcgat cgttgcggcc cgtagccagt ggcaactggc 21780

aaagcacact gaacagcatc gtgggtctgg gggtgcaatc cctgaagcgc cgacgatgct 21840

tctgatagct aacgtgtcgt atgtgtgtca tgtatgcgtc catgtcgccg ccagaggagc 21900

tgctgagccg ccgcgcgccc gctttccaag atggctaccc cttcgatgat gccgcagtgg 21960

tcttacatgc acatctcggg ccaggacgcc tcggagtacc tgagccccgg gctggtgcag 22020

tttgcccgcg ccaccgagac gtacttcagc ctgaataaca agtttagaaa ccccacggtg 22080

gcgcctacgc acgacgtgac cacagaccgg tcccagcgtt tgacgctgcg gttcatccct 22140

gtggaccgtg aggatactgc gtactcgtac aaggcgcggt tcaccctagc tgtgggtgat 22200

aaccgtgtgc tggacatggc ttccacgtac tttgacatcc gcggcgtgct ggacaggggc 22260

cctactttta agccctactc tggcactgcc tacaacgccc tggctcccaa gggtgcccca 22320

aatccttgcg aatgggatga agctgctact gctcttgaaa taaacctaga agaagaggac 22380

gatgacaacg aagacgaagt agacgagcaa gctgagcagc aaaaaactca cgtatttggg 22440

caggcgcctt attctggtat aaatattaca aaggagggta ttcaaatagg tgtcgaaggt 22500

caaacaccta aatatgccga taaaacattt caacctgaac ctcaaatagg agaatctcag 22560

tggtacgaaa cagaaattaa tcatgcagct gggagagtcc taaaaaagac taccccaatg 22620

aaaccatgtt acggttcata tgcaaaaccc acaaatgaaa atggagggca aggcattctt 22680

gtaaagcaac aaaatggaaa gctagaaagt caagtggaaa tgcaattttt ctcaactact 22740

gaggcagccg caggcaatgg tgataacttg actcctaaag tggtattgta cagtgaagat 22800

gtagatatag aaaccccaga cactcatatt tcttacatgc ccactattaa ggaaggtaac 22860

tcacgagaac taatgggcca acaatctatg cccaacaggc ctaattacat tgcttttagg 22920

gacaatttta ttggtctaat gtattacaac agcacgggta atatgggtgt tctggcgggc 22980

caagcatcgc agttgaatgc tgttgtagat ttgcaagaca gaaacacaga gctttcatac 23040

cagcttttgc ttgattccat tggtgataga accaggtact tttctatgtg gaatcaggct 23100

gttgacagct atgatccaga tgttagaatt attgaaaatc atggaactga agatgaactt 23160

ccaaattact gctttccact gggaggtgtg attaatacag agactcttac caaggtaaaa 23220

cctaaaacag gtcaggaaaa tggatgggaa aaagatgcta cagaattttc agataaaaat 23280

gaaataagag ttggaaataa ttttgccatg gaaatcaatc taaatgccaa cctgtggaga 23340

aatttcctgt actccaacat agcgctgtat ttgcccgaca agctaaagta cagtccttcc 23400

aacgtaaaaa tttctgataa cccaaacacc tacgactaca tgaacaagcg agtggtggct 23460

cccgggctag tggactgcta cattaacctt ggagcacgct ggtcccttga ctatatggac 23520

aacgtcaacc catttaacca ccaccgcaat gctggcctgc gctaccgctc aatgttgctg 23580

ggcaatggtc gctatgtgcc cttccacatc caggtgcctc agaagttctt tgccattaaa 23640

aacctccttc tcctgccggg ctcatacacc tacgagtgga acttcaggaa ggatgttaac 23700

atggttctgc agagctccct aggaaatgac ctaagggttg acggagccag cattaagttt 23760

gatagcattt gcctttacgc caccttcttc cccatggccc acaacaccgc ctccacgctt 23820

gaggccatgc ttagaaacga caccaacgac cagtccttta acgactatct ctccgccgcc 23880

aacatgctct accctatacc cgccaacgct accaacgtgc ccatatccat cccctcccgc 23940

aactgggcgg ctttccgcgg ctgggccttc acgcgcctta agactaagga aaccccatca 24000

ctgggctcgg gctacgaccc ttattacacc tactctggct ctatacccta cctagatgga 24060

acctttacc tcaaccacac ctttaagaag gtggccatta cctttgactc ttctgtcagc 24120

tggcctggca atgaccgcct gcttaccccc aacgagtttg aaattaagcg ctcagttgac 24180

ggggagggtt acaacgttgc ccagtgtaac atgaccaaag actggttcct ggtacaaatg 24240

ctagctaact ataacattgg ctaccagggc ttctatatcc cagagagcta caaggaccgc 24300

atgtactcct tctttagaaa cttccagccc atgagccgtc aggtggtgga tgatactaaa 24360

tacaaggact accaacaggt gggcatccta caccaacaca acaactctgg atttgttggc 24420

taccttgccc ccaccatgcg cgaaggacag gcctaccctg ctaacttccc ctatccgctt 24480

ataggcaaga ccgcagttga cagcattacc cagaaaaagt ttctttgcga tcgcaccctt 24540

tggcgcatcc cattctccag taactttatg tccatgggcg cactcacaga cctgggccaa 24600

aaccttctct acgccaactc cgcccacgcg ctagacatga cttttgaggt ggatcccatg 24660

gacgagccca cccttcttta tgttttgttt gaagtctttg acgtggtccg tgtgcaccag 24720

ccgcaccgcg gcgtcatcga aaccgtgtac ctgcgcacgc ccttctcggc cggcaacgcc 24780

acaacataaa gaagcaagca acatcaacaa cagctgccgc catgggctcc agtgagcagg 24840

aactgaaagc cattgtcaaa gatcttggtt gtgggccata ttttttgggc acctatgaca 24900

agcgctttcc aggctttgtt tctccacaca agctcgcctg cgccatagtc aatacggccg 24960

gtcgcgagac tgggggcgta cactggatgg cctttgcctg gaacccgcac tcaaaaacat 25020

gctacctctt tgagcccttt ggcttttctg accagcgact caagcaggtt taccagtttg 25080

agtacgagtc actcctgcgc cgtagcgcca ttgcttcttc ccccgaccgc tgtataacgc 25140

tggaaaagtc cacccaaagc gtacaggggc ccaactcggc cgcctgtgga ctattctgct 25200

gcatgtttct ccacgccttt gccaactggc cccaaactcc catggatcac aaccccacca 25260

tgaaccttat taccggggta cccaactcca tgctcaacag tccccaggta cagcccaccc 25320

tgcgtcgcaa ccaggaacag ctctacagct tcctggagcg ccactcgccc tacttccgca 25380

gccacagtgc gcagattagg agcgccactt ctttttgtca cttgaaaaac atgtaaaaat 25440

aatgtactag agacactttc aataaaggca aatgctttta tttgtacact ctcgggtgat 25500

tatttacccc cacccttgcc gtctgcgccg tttaaaaatc aaaggggttc tgccgcgcat 25560

cgctatgcgc cactggcagg gacacgttgc gatactggtg tttagtgctc cacttaaact 25620

caggcacaac catccgcggc agctcggtga agttttcact ccacaggctg cgcaccatca 25680

ccaacgcgtt tagcaggtcg ggcgccgata tcttgaagtc gcagttgggg cctccgccct 25740

gcgcgcgcga gttgcgatac acagggttgc agcactggaa cactatcagc gccgggtggt 25800

gcacgctggc cagcacgctc ttgtcggaga tcagatccgc gtccaggtcc tccgcgttgc 25860

tcagggcgaa cggagtcaac tttggtagct gccttcccaa aaagggcgcg tgcccaggct 25920

ttgagttgca ctcgcaccgt agtggcatca aaaggtgacc gtgcccggtc tgggcgttag 25980

gatacagcgc ctgcataaaa gccttgatct gcttaaaagc cacctgagcc tttgcgcctt 26040

cagagaagaa catgccgcaa gacttgccgg aaaactgatt ggccggacag gccgcgtcgt 26100

gcacgcagca ccttgcgtcg gtgttggaga tctgcaccac atttcggccc caccggttct 26160

tcacgatctt ggccttgcta gactgctcct tcagcgcgcg ctgcccgttt tcgctcgtca 26220

catccatttc aatcacgtgc tccttattta tcataatgct tccgtgtaga cacttaagct 26280

cgccttcgat ctcagcgcag cggtgcagcc acaacgcgca gcccgtgggc tcgtgatgct 26340

tgtaggtcac ctctgcaaac gactgcaggt acgcctgcag gaatcgcccc atcatcgtca 26400

caaaggtctt gttgctggtg aaggtcagct gcaacccgcg gtgctcctcg ttcagccagg 26460

tcttgcatac ggccgccaga gcttccactt ggtcaggcag tagtttgaag ttcgccttta 26520

gatcgttatc cacgtggtac ttgtccatca gcgcgcgcgc agcctccatg cccttctccc 26580

acgcagacac gatcggcaca ctcagcgggt tcatcaccgt aatttcactt tccgcttcgc 26640

tgggctcttc ctcttcctct tgcgtccgca taccacgcgc cactgggtcg tcttcattca 26700

gccgccgcac tgtgcgctta cctcctttgc catgcttgat tagcaccggt gggttgctga 26760

aacccaccat ttgtagcgcc acatcttctc tttcttcctc gctgtccacg attacctctg 26820

gtgatggcgg gcgctcgggc ttgggagaag ggcgcttctt tttcttcttg ggcgcaatgg 26880

ccaaatccgc cgccgaggtc gatggccgcg ggctgggtgt gcgcggcacc agcgcgtctt 26940

gtgatgagtc ttcctcgtcc tcggactcga tacgccgcct catccgcttt tttgggggcg 27000

cccggggagg cggcggcgac ggggacgggg acgacacgtc ctccatggtt gggggacgtc 27060

gcgccgcacc gcgtccgcgc tcgggggtgg tttcgcgctg ctcctcttcc cgactggcca 27120

tttccttctc ctataggcag aaaaagatca tggagtcagt cgagaagaag gacagcctaa 27180

ccgccccctc tgagttcgcc accaccgcct ccaccgatgc cgccaacgcg cctaccacct 27240

tccccgtcga ggcacccccg cttgaggagg aggaagtgat tatcgagcag gacccaggtt 27300

ttgtaagcga agacgacgag gaccgctcag taccaacaga ggataaaaag caagaccagg 27360

acaacgcaga ggcaaacgag gaacaagtcg ggcgggggga cgaaaggcat ggcgactacc 27420

tagatgtggg agacgacgtg ctgttgaagc atctgcagcg ccagtgcgcc attatctgcg 27480

acgcgttgca agagcgcagc gatgtgcccc tcgccatagc ggatgtcagc cttgcctacg 27540

aacgccacct attctcaccg cgcgtacccc ccaaacgcca agaaaacggc acatgcgagc 27600

ccaacccgcg cctcaacttc taccccgtat ttgccgtgcc agaggtgctt gccacctatc 27660

acatcttttt ccaaaactgc aagatacccc tatcctgccg tgccaaccgc agccgagcgg 27720

acaagcagct ggccttgcgg cagggcgctg tcatacctga tatcgcctcg ctcaacgaag 27780

tgccaaaaat ctttgagggt cttggacgcg acgagaagcg cgcggcaaac gctctgcaac 27840

aggaaaacag cgaaaatgaa agtcactctg gagtgttggt ggaactcgag ggtgacaacg 27900

cgcgcctagc cgtactaaaa cgcagcatcg aggtcaccca ctttgcctac ccggcactta 27960

acctaccccc caaggtcatg agcacagtca tgagtgagct gatcgtgcgc cgtgcgcagc 28020

ccctggagag ggatgcaaat ttgcaagaac aaacagagga gggcctaccc gcagttggcg 28080

acgagcagct agcgcgctgg cttcaaacgc gcgagcctgc cgacttggag gagcgacgca 28140

aactaatgat ggccgcagtg ctcgttaccg tggagcttga gtgcatgcag cggttctttg 28200

ctgacccgga gatgcagcgc aagctagagg aaacattgca ctacaccttt cgacagggct 28260

acgtacgcca ggcctgcaag atctccaacg tggagctctg caacctggtc tcctaccttg 28320

gaattttgca cgaaaaccgc cttgggcaaa acgtgcttca ttccacgctc aagggcgagg 28380

cgcgccgcga ctacgtccgc gactgcgttt acttatttct atgctacacc tggcagacgg 28440

ccatgggcgt ttggcagcag tgcttggagg agtgcaacct caaggagctg cagaaactgc 28500

taaagcaaaa cttgaaggac ctatggacgg ccttcaacga gcgctccgtg gccgcgcacc 28560

tggcggacat cattttcccc gaacgcctgc ttaaaaccct gcaacagggt ctgccagact 28620

tcaccagtca aagcatgttg cagaacttta ggaactttat cctagagcgc tcaggaatct 28680

tgcccgccac ctgctgtgca cttcctagcg actttgtgcc cattaagtac cgcgaatgcc 28740

ctccgccgct ttggggccac tgctaccttc tgcagctagc caactacctt gcctaccact 28800

ctgacataat ggaagacgtg agcggtgacg gtctactgga gtgtcactgt cgctgcaacc 28860

tatgcacccc gcaccgctcc ctggtttgca attcgcagct gcttaacgaa agtcaaatta 28920

tcggtacctt tgagctgcag ggtccctcgc ctgacgaaaa gtccgcggct ccggggttga 28980

aactcactcc ggggctgtgg acgtcggctt accttcgcaa atttgtacct gaggactacc 29040

acgcccacga gattaggttc tacgaagacc aatcccgccc gcctaatgcg gagcttaccg 29100

cctgcgtcat tacccagggc cacattcttg gccaattgca agccatcaac aaagcccgcc 29160

aagagtttct gctacgaaag ggacgggggg tttacttgga cccccagtcc ggcgaggagc 29220

tcaacccaat ccccccgccg ccgcagccct atcagcagca gccgcgggcc cttgcttccc 29280

aggatggcac ccaaaaagaa gctgcagctg ccgccgccac ccacggacga ggaggaatac 29340

tgggacagtc aggcagagga ggttttggac gaggaggagg aggacatgat ggaagactgg 29400

gagagcctag acgaggaagc ttccgaggtc gaagaggtgt cagacgaaac accgtcaccc 29460

tcggtcgcat tcccctcgcc ggcgccccag aaatcggcaa ccggttccag catggctaca 29520

acctccgctc ctcaggcgcc gccggcactg cccgttcgcc gacccaaccg tagatgggac 29580

accactggaa ccagggccgg taagtccaag cagccgccgc cgttagccca agagcaacaa 29640

cagcgccaag gctaccgctc atggcgcggg cacaagaacg ccatagttgc ttgcttgcaa 29700

gactgtgggg gcaacatctc cttcgcccgc cgctttcttc tctaccatca cggcgtggcc 29760

ttcccccgta acatcctgca ttactaccgt catctctaca gcccatactg caccggcggc 29820

agcggcagca acagcagcgg ccacacagaa gcaaaggcga ccggatagca agactctgac 29880

aaagcccaag aaatccacag cggcggcagc agcaggagga ggagcgctgc gtctggcgcc 29940

caacgaaccc gtatcgaccc gcgagcttag aaacaggatt tttcccactc tgtatgctat 30000

atttcaacag agcaggggcc aagaacaaga gctgaaaata aaaaacaggt ctctgcgatc 30060

cctcacccgc agctgcctgt atcacaaaag cgaagatcag cttcggcgca cgctggaaga 30120

cgcggaggct ctcttcagta aatactgcgc gctgactctt aaggactagt ttcgcgccct 30180

ttctcaaatt taagcgcgaa aactacgtca tctccagcgg ccacacccgg cgccagcacc 30240

tgttgtcagc gccattatga gcaaggaaat tcccacgccc tacatgtgga gttaccagcc 30300

acaaatggga cttgcggctg gagctgccca agactactca acccgaataa actacatgag 30360

cgcgggaccc cacatgatat cccgggtcaa cggaatacgc gcccaccgaa accgaattct 30420

cctggaacag gcggctatta ccaccacacc tcgtaataac cttaatcccc gtagttggcc 30480

cgctgccctg gtgtaccagg aaagtcccgc tcccaccact gtggtacttc ccagagacgc 30540

ccaggccgaa gttcagatga ctaactcagg ggcgcagctt gcgggcggct ttcgtcacag 30600

ggtgcggtcg cccgggcagg gtataactca cctgacaatc agagggcgag gtattcagct 30660

caacgacgag tcggtgagct cctcgcttgg tctccgtccg gacgggacat ttcagatcgg 30720

cggcgccggc cgctcttcat tcacgcctcg tcaggcaatc ctaactctgc agacctcgtc 30780

ctctgagccg cgctctggag gcattggaac tctgcaattt attgaggagt ttgtgccatc 30840

ggtctacttt aacccccttct cgggacctcc cggccactat ccggatcaat ttattcctaa 30900

ctttgacgcg gtaaaggact cggcggacgg ctacgactga atgttaagtg gagaggcaga 30960

gcaactgcgc ctgaaacacc tggtccactg tcgccgccac aagtgctttg cccgcgactc 31020

cggtgagttt tgctactttg aattgcccga ggatcatatc gagggcccgg cgcacggcgt 31080

ccggcttacc gcccagggag agcttgcccg tagcctgatt cgggagttta cccagcgccc 31140

cctgctagtt gagcgggaca ggggaccctg tgttctcact gtgatttgca actgtcctaa 31200

ccctggatta catcaagatc ctctagttaa tgtcaggtcg cctaagtcga ttaactagag 31260

tacccgggga tcttattccc tttaactaat aaaaaaaaat aataaagcat cacttactta 31320

aaatcagtta gcaaatttct gtccagttta ttcagcagca cctccttgcc ctcctcccag 31380

ctctggtatt gcagcttcct cctggctgca aactttctcc acaatctaaa tggaatgtca 31440

gtttcctcct gttcctgtcc atccgcaccc actatcttca tgttgttgca gatgaagcgc 31500

gcaagaccgt ctgaagatac cttcaacccc gtgtatccat atgacacgga aaccggtcct 31560

ccaactgtgc cttttcttac tcctcccttt gtatccccca atgggtttca agagagtccc 31620

cctggggtac tctctttgcg cctatccgaa cctctagtta cctccaatgg catgcttgcg 31680

ctcaaaatgg gcaacggcct ctctctggac gaggccggca accttacctc ccaaaatgta 31740

accactgtga gcccacctct caaaaaaacc aagtcaaaca taaacctgga aatatctgca 31800

cccctcacag ttacctcaga agccctaact gtggctgccg ccgcacctct aatggtcgcg 31860

ggcaacacac tcaccatgca atcacaggcc ccgctaaccg tgcacgactc caaacttagc 31920

attgccaccc aaggacccct cacagtgtca gaaggaaagc tagccctgca aacatcaggc 31980

cccctcacca ccaccgatag cagtaccctt actatcactg cctcaccccc tctaactact 32040

gccactggta gcttgggcat tgacttgaaa gagcccattt atacacaaaa tggaaaacta 32100

ggactaaagt acggggctcc tttgcatgta acagacgacc taaacacttt gaccgtagca 32160

actggtccag gtgtgactat taataatact tccttgcaaa ctaaagttac tggagccttg 32220

ggttttgatt cacaaggcaa tatgcaactt aatgtagcag gaggactaag gattgattct 32280

caaaacagac gccttatact tgatgttagt tatccgtttg atgctcaaaa ccaactaaat 32340

ctaagactag gacagggccc tctttttata aactcagccc acaacttgga tattaactac 32400

aacaaaggcc tttacttgtt tacagcttca aacaattcca aaaagcttga ggttaaccta 32460

agcactgcca aggggttgat gtttgacgct acagccatag ccattaatgc aggagatggg 32520

cttgaatttg gttcacctaa tgcaccaaac acaaatcccc tcaaaacaaa aattggccat 32580

ggcctagaat ttgattcaaa caaggctatg gttcctaaac taggaactgg ccttagtttt 32640

gacagcacag gtgccattac agtaggaaac aaaaataatg ataagctaac tttgtggacc 32700

ggaataaacc ctccacctaa ctgtcaaatt gtggaaaaca ctaatacaaa tgatggcaaa 32760

cttactttag tattagtaaa aaatggaggg cttgttaatg gctacgtgtc tctagttggt 32820

gtatcagaca ctgtgaacca aatgttcaca caaaagacag caaacatcca attaagatta 32880

tattttgact cttctggaaa tctattaact gaggaatcag acttaaaaat tccacttaaa 32940

aataaatctt ctacagcgac cagtgaaact gtagccagca gcaaagcctt tatgccaagt 33000

actacagctt atcccttcaa caccactact agggatagtg aaaactacat tcatggaata 33060

tgttactaca tgactagtta tgatagaagt ctatttccct tgaacatttc tataatgcta 33120

aacagccgta tgatttcttc caatgttgcc tatgccatac aatttgaatg gaatctaaat 33180

gcaagtgaat ctccagaaag caacatagct acgctgacca catccccctt tttcttttct 33240

tacattacag aagacgacaa ctaaagaatc gtttgtgtta tgtttcaacg tgtttatttt 33300

tcaattgcag aaaatttcaa gtcatttttc attcagtagt atagccccac caccacatag 33360

cttatacaga tcaccgtacc ttaatcaaac tcacagaacc ctagtattca acctgccacc 33420

tccctcccaa cacacagagt acacagtcct ttctccccgg ctggccttaa aaagcatcat 33480

atcatgggta acagacatat tcttaggtgt tatattccac acggtttcct gtcgagccaa 33540

acgctcatca gtgatattaa taaactcccc gggcagctca cttaagttca tgtcgctgtc 33600

cagctgctga gccacaggct gctgtccaac ttgcggttgc ttaacgggcg gcgaaggaga 33660

agtccacgcc tacatggggg tagagtcata atcgtgcatc aggatagggc ggtggtgctg 33720

cagcagcgcg cgaataaact gctgccgccg ccgctccgtc ctgcaggaat acaacatggc 33780

agtggtctcc tcagcgatga ttcgcaccgc ccgcagcata aggcgccttg tcctccgggc 33840

acagcagcgc accctgatct cacttaaatc agcacagtaa ctgcagcaca gcaccacaat 33900

attgttcaaa atcccacagt gcaaggcgct gtatccaaag ctcatggcgg ggaccacaga 33960

acccacgtgg ccatcatacc acaagcgcag gtagattaag tggcgacccc tcataaacac 34020

gctggacata aacattacct cttttggcat gttgtaattc accacctccc ctctgattaa 34080

acatggcgcc atccaccacc atcctaaacc agctggccaa aacctgcccg ccggctatac 34140

actgcaggga accgggactg gaacaatgac agtggagagc ccaggactcg taaccatgga 34200

tcatcatgct cgtcatgata tcaatgttgg cacaacacag gcacacgtgc atacacttcc 34260

tcaggattac aagctcctcc cgcgttagaa ccatatccca gggaacaacc cattcctgaa 34320

tcagcgtaaa tcccacactg cagggaagac ctcgcacgta actcacgttg tgcattgtca 34380

aagtgttaca ttcgggcagc agcggatgat cctccagtat ggtagcgcgg gtttctgtct 34440

caaaaggagg tagacgatcc ctactgtacg gagtgcgccg agacaaccga gatcgtgttg 34500

gtcgtagtgt catgccaaat ggaacgccgg acgtagtcat atttcctgaa gcaaaaccag 34560

gtgcgggcgt gacaaacaga tctgcgtctc cggtctcgcc gcttagatcg ctctgtgtag 34620

tagttgtagt atatccactc tctcaaagca tccaggcgcc ccctggcttc gggttctatg 34680

taaactcctt catgcgccgc tgccctgata acatccacca ccgcagaata agccacaccc 34740

agccaaccta cacattcgtt ctgcgagtca cacacgggag gagcgggaag agctggaaga 34800

accatgtttt ttttttatt ccaaaagatt atccaaaacc tcaaaatgaa gatctattaa 34860

gtgaacgcgc tcccctccgg tggcgtggtc aaactctaca gccaaagaac agataatggc 34920

atttgtaaga tgttgcacaa tggcttccaa aaggcaaacg gccctcacgt ccaagtggac 34980

gtaaaggcta aacccttcag ggtgaatctc ctctataaac attccagcac cttcaaccat 35040

gcccaaataa ttctcatctc gccaccttct caatatatct ctaagcaaat cccgaatatt 35100

aagtccggcc attgtaaaaa tctgctccag agcgccctcc accttcagcc tcaagcagcg 35160

aatcatgatt gcaaaaattc aggttcctca cagacctgta taagattcaa aagcggaaca 35220

ttaacaaaaa taccgcgatc ccgtaggtcc cttcgcaggg ccagctgaac ataatcgtgc 35280

aggtctgcac ggaccagcgc ggccacttcc ccgccaggaa ccatgacaaa agaacccaca 35340

ctgattatga cacgcatact cggagctatg ctaaccagcg tagccccgat gtaagcttgt 35400

tgcatgggcg gcgatataaa atgcaaggtg ctgctcaaaa aatcaggcaa agcctcgcgc 35460

aaaaaagaaa gcacatcgta gtcatgctca tgcagataaa ggcaggtaag ctccggaacc 35520

accacagaaa aagacaccat ttttctctca aacatgtctg cgggtttctg cataaacaca 35580

aaataaaata acaaaaaaac atttaaacat tagaagcctg tcttacaaca ggaaaaacaa 35640

cccttataag cataagacgg actacggcca tgccggcgtg accgtaaaaa aactggtcac 35700

cgtgattaaa aagcaccacc gacagctcct cggtcatgtc cggagtcata atgtaagact 35760

cggtaaacac atcaggttga ttcacatcgg tcagtgctaa aaagcgaccg aaatagcccg 35820

ggggaataca tacccgcagg cgtagagaca acattacagc ccccatagga ggtataacaa 35880

aattaatagg agagaaaaac acataaacac ctgaaaaacc ctcctgccta ggcaaaatag 35940

caccctcccg ctccagaaca acatacagcg cttccacagc ggcagccata acagtcagcc 36000

ttaccagtaa aaaagaaaac ctattaaaaa aacaccactc gacacggcac cagctcaatc 36060

agtcacagtg taaaaaaggg ccaagtgcag agcgagtata tataggacta aaaaatgacg 36120

taacggttaa agtccacaaa aaacacccag aaaaccgcac gcgaacctac gcccagaaac 36180

gaaagccaaa aaacccacaa cttcctcaaa tcgtcacttc cgttttccca cgttacgtca 36240

cttcccattt taagaaaact acaattccca acacatacaa gttactccgc cctaaaacct 36300

acgtcacccg ccccgttccc acgccccgcg ccacgtcaca aactccaccc cctcattatc 36360

atattggctt caatccaaaa taaggtatat tattgatgat g 36401

<210> 29
<211> 35453
<212> DNA
<213> Artificial Sequence

<220>
<223> Adk35F2-Spike/E4orf6(RSV)-E4dl-711(E4re#27)

<400> 29
ttaattaaca tcatcaataa tataccttat tttggattga agccaatatg ataatgaggg 60

ggtggagttt gtgacgtggc gcggggcgtg ggaacggggc gggtgacgta gtagtgtggc 120

ggaagtgtga tgttgcaagt gtggcggaac acatgtaagc gacggatgtg gcaaaagtga 180

cgtttttggt gtgcgccggt gtacacagga agtgacaatt ttcgcgcggt ttaggcgga 240

tgttgtagta aatttgggcg taaccgagta agatttggcc attttcgcgg gaaaactgaa 300

taagaggaag tgaaatctga ataattttgt gttactcata gcgcgtaata atttctgtaa 360

tagtaatcaa ttacggggtc attagttcat agcccatata tggagttccg cgttacataa 420

cttacggtaa atggcccgcc tggctgaccg cccaacgacc cccgcccatt gacgtcaata 480

atgacgtatg ttcccatagt aacgccaata gggactttcc attgacgtca atgggtggag 540

tatttacggt aaactgccca cttggcagta catcaagtgt atcatatgcc aagtacgccc 600

cctattgacg tcaatgacgg taaatggccc gcctggcatt atgcccagta catgacctta 660

tgggactttc ctacttggca gtacatctac gtattagtca tcgctattac catggtgatg 720

cggttttggc agtacatcaa tgggcgtgga tagcggtttg actcacgggg atttccaagt 780

ctccacccca ttgacgtcaa tgggagtttg ttttggcacc aaaatcaacg ggactttcca 840

aaatgtcgta acaactccgc cccattgacg caaatgggcg gtaggcgtgt acggtgggag 900

gtctatataa gcagagctct ccctatcagt gatagagatc tccctatcag tgatagagat 960

cgtcgacgag ctcgtttagt gaaccgtcag atcgcctgga gacgccatcc acgctgtttt 1020

gacctccata gaagacaccg ggaccgatcc agcctccgat ttgccaccat gtttgtgttc 1080

ctggtgctgc tgccactggt gtccagccag tgtgtgaacc tgaccaccag gacccaactt 1140

cctcctgcct acaccaactc cttcaccagg ggagtctact accctgacaa ggtgttcagg 1200

tcctctgtgc tgcacagcac ccaggacctg ttcctgccat tcttcagcaa tgtgacctgg 1260

ttccatgcca tccatgtgtc tggcaccaat ggcaccaaga ggtttgacaa ccctgtgctg 1320

ccattcaatg atggagtcta ctttgccagc acagagaaga gcaacatcat caggggctgg 1380

atttttggca ccaccctgga cagcaagacc cagtccctgc tgattgtgaa caatgccacc 1440

aatgtggtga ttaaggtgtg tgagttccag ttctgtaatg acccattcct gggagtctac 1500

taccacaaga acaacaagtc ctggatggag tctgagttca gggtctactc ctctgccaac 1560

aactgtacct ttgaatatgt gagccaacca ttcctgatgg acttggaggg caagcagggc 1620

aacttcaaga acctgaggga gtttgtgttc aagaacattg atggctactt caagatttac 1680

agcaaacaca caccaatcaa cctggtgagg gacctgccac agggcttctc tgccttggaa 1740

ccactggtgg acctgccaat tggcatcaac atcaccaggt tccagaccct gctggctctg 1800

cacaggtcct acctgacacc tggagactcc tcctctggct ggacagcagg agcagcagcc 1860

tactatgtgg gctacctcca accaaggacc ttcctgctga aatacaatga gaatggcacc 1920

atcacagatg ctgtggactg tgccctggac ccactgtctg agaccaagtg taccctgaaa 1980

tccttcacag tggagaaggg catctaccag accagcaact tcagggtcca accaacagag 2040

agcattgtga ggtttccaaa catcaccaac ctgtgtccat ttggagaggt gttcaatgcc 2100

accaggtttg cctctgtcta tgcctggaac aggaagagga ttagcaactg tgtggctgac 2160

tactctgtgc tctacaactc tgcctccttc agcaccttca agtgttatgg agtgagccca 2220

accaaactga atgacctgtg tttcaccaat gtctatgctg actcctttgt gattagggga 2280

gatgaggtga gacagattgc ccctggacaa acaggcaaga ttgctgacta caactacaaa 2340

ctgcctgatg acttcacagg ctgtgtgatt gcctggaaca gcaacaacct ggacagcaag 2400

gtgggaggca actacaacta cctctacaga ctgttcagga agagcaacct gaaaccattt 2460

gagagggaca tcagcacaga gatttaccag gctggcagca caccatgtaa tggagtggag 2520

ggcttcaact gttactttcc actccaatcc tatggcttcc aaccaaccaa tggagtgggc 2580

taccaaccat acagggtggt ggtgctgtcc tttgaactgc tccatgcccc tgccacagtg 2640

tgtggaccaa agaagagcac caacctggtg aagaacaagt gtgtgaactt caacttcaat 2700

ggactgacag gcacaggagt gctgacagag agcaacaaga agttcctgcc attccaacag 2760

tttggcaggg acattgctga caccacagat gctgtgaggg acccacagac cttggagatt 2820

ctggacatca caccatgttc ctttggagga gtgtctgtga ttacacctgg caccaacacc 2880

agcaaccagg tggctgtgct ctaccaggat gtgaactgta ctgaggtgcc tgtggctatc 2940

catgctgacc aacttacacc aacctggagg gtctacagca caggcagcaa tgtgttccag 3000

accagggctg gctgtctgat tggagcagag catgtgaaca actcctatga gtgtgacatc 3060

ccaattggag caggcatctg tgcctcctac cagacccaga ccggtggcgg tgggtcgagg 3120

tctgtggcaa gccagagcat cattgcctac acaatgagtc tgggagcaga gaactctgtg 3180

gcttacagca acaacagcat tgccatccca accaacttca ccatctctgt gaccacagag 3240

attctgcctg tgagtatgac caagacctct gtggactgta caatgtatat ctgtggagac 3300

agcacagagt gtagcaacct gctgctccaa tatggctcct tctgtaccca acttaacagg 3360

gctctgacag gcattgctgt ggaacaggac aagaacaccc aggaggtgtt tgcccaggtg 3420

aagcagattt acaagacacc tccaatcaag gactttggag gcttcaactt cagccagatt 3480

ctgcctgacc caagcaagcc aagcaagagg tccttcattg aggacctgct gttcaacaag 3540

gtgaccctgg ctgatgctgg cttcatcaag caatatggag actgtctggg agacattgct 3600

gccagggacc tgatttgtgc ccagaagttc aatggactga cagtgctgcc tccactgctg 3660

acagatgaga tgattgccca atacacctct gccctgctgg ctggcaccat cacctctggc 3720

tggacctttg gagcaggagc agccctccaa atcccatttg ctatgcagat ggcttacagg 3780

ttcaatggca ttggagtgac ccagaatgtg ctctatgaga accagaaact gattgccaac 3840

cagttcaact ctgccattgg caagattcag gactccctgt ccagcacagc ctctgccctg 3900

ggcaaactcc aagatgtggt gaaccagaat gcccaggctc tgaacaccct ggtgaagcaa 3960

ctttccagca actttggagc catctcctct gtgctgaatg acatcctgag cagactggac 4020

aaggtggagg ctgaggtcca gattgacaga ctgattacag gcagactcca atccctccaa 4080

acctatgtga cccaacaact tatcagggct gctgagatta gggcatctgc caacctggct 4140

gccaccaaga tgagtgagtg tgtgctggga caaagcaaga gggtggactt ctgtggcaag 4200

ggctaccacc tgatgagttt tccacagtct gcccctcatg gagtggtgtt cctgcatgtg 4260

acctatgtgc ctgcccagga gaagaacttc accacagccc ctgccatctg ccatgatggc 4320

aaggctcact ttccaaggga gggagtgttt gtgagcaatg gcacccactg gtttgtgacc 4380

cagaggaact tctatgaacc acagattatc accacagaca acacctttgt gtctggcaac 4440

tgtgatgtgg tgattggcat tgtgaacaac acagtctatg acccactcca acctgaactg 4500

gactccttca aggaggaact ggacaaatac ttcaagaacc acaccagccc tgatgtggac 4560

ctgggagaca tctctggcat caatgcctct gtggtgaaca tccagaagga gattgacaga 4620

ctgaatgagg tggctaagaa cctgaatgag tccctgattg acctccaaga actgggcaaa 4680

tatgaacaat acatcaagtg gccatgaaaa ttgatcataa tcagccatac cacatttgta 4740

gaggttttac ttgctttaaa aaacctccca cacctccccc tgaacctgaa acataaaatg 4800

aatgcaattg ttgttgttaa cttgtttatt gcagcttata atggttacaa ataaagcaat 4860

agcatcacaa atttcacaaa taaagcattt ttttcactgc attctagttg tggtttgtcc 4920

aaactcatca atgtatctta acgcggatct gtagtcttat gcaatactct tgtagtcttg 4980

caacatggta acgatgagtt agcaacatgc cttacaagga gagaaaaagc accgtgcatg 5040

ccgattggtg gaagtaaggt ggtacgatcg tgccttatta ggaaggcaac agacgggtct 5100

gacatggatt ggacgaacca ctgaattgcc gcattgcaga gatattgtat ttaagtgcct 5160

agctcgatac ataaacaaac taccccaagc tggccaccat gactacgtcc ggcgttccat 5220

ttggcatgac actacgacca acacgatctc ggttgtctcg gcgcactccg tacagtaggg 5280

atcgtctacc tccttttgag acagaaaccc gcgctaccat actggaggat catccgctgc 5340

tgcccgaatg taacactttg acaatgcaca acgtgagtta cgtgcgaggt cttccctgca 5400

gtgtgggatt tacgctgatt caggaatggg ttgttccctg ggatatggtt ctaacgcggg 5460

aggagcttgt aatcctgagg aagtgtatgc acgtgtgcct gtgttgtgcc aacattgata 5520

tcatgacgag catgatgatc catggttacg agtcctgggc tctccactgt cattgttcca 5580

gtcccggttc cctgcagtgt atagccggcg ggcaggtttt ggccagctgg tttaggatgg 5640

tggtggatgg cgccatgttt aatcagaggt ttatatggta ccgggaggtg gtgaattaca 5700

acatgccaaa agaggtaatg tttatgtcca gcgtgtttat gaggggtcgc cacttaatct 5760

acctgcgctt gtggtatgat ggccacgtgg gttctgtggt ccccgccatg agctttggat 5820

acagcgcctt gcactgtggg attttgaaca atattgtggt gctgtgctgc agttactgtg 5880

ctgatttaag tgagatcagg gtgcgctgct gtgcccggag gacaaggcgc cttatgctgc 5940

gggcggtgcg aatcatcgct gaggagacca ctgccatgtt gtattcctgc aggacggagc 6000

ggcggcggca gcagtttatt cgcgcgctgc tgcagcacca ccgccctatc ctgatgcacg 6060

attatgactc tacccccatg tagaagcttg gggatcaatt ctctagagct cgctgatcag 6120

cctcgactgt gccttctagt tgccagccat ctgttgtttg cccctccccc gtgccttcct 6180

tgaccctgga aggtgccact cccactgtcc tttcctaata aaatgaggaa attgcatcgc 6240

attgtctgag taggtgtcat tctattctgg ggggtggggt ggggcaggac agcaaggggg 6300

aggattggga agacaatagc aggcatgctg gggatgcggt gggctctatg gcttctgagg 6360

aaattgggcg tggcttaagg gtgggaaaga atatataagg tgggggtctt atgtagtttt 6420

gtatctgttt tgcagcagcc gccgccgcca tgagcaccaa ctcgtttgat ggaagcattg 6480

tgagctcata tttgacaacg cgcatgcccc catgggccgg ggtgcgtcag aatgtgatgg 6540

gctccagcat tgatggtcgc cccgtcctgc ccgcaaactc tactaccttg acctacgaga 6600

ccgtgtctgg aacgccgttg gagactgcag cctccgccgc cgcttcagcc gctgcagcca 6660

ccgcccgcgg gattgtgact gactttgctt tcctgagccc gcttgcaagc agtgcagctt 6720

cccgttcatc cgcccgcgat gacaagttga cggctctttt ggcacaattg gattctttga 6780

cccgggaact taatgtcgtt tctcagcagc tgttggatct gcgccagcag gtttctgccc 6840

tgaaggcttc ctcccctccc aatgcggttt aaaacataaa taaaaaacca gactctgttt 6900

ggatttggat caagcaagtg tcttgctgtc tttatttagg ggttttgcgc gcgcggtagg 6960

cccgggacca gcggtctcgg tcgttgaggg tcctgtgtat tttttccagg acgtggtaaa 7020

ggtgactctg gatgttcaga tacatgggca taagcccgtc tctggggtgg aggtagcacc 7080

actgcagagc ttcatgctgc ggggtggtgt tgtagatgat ccagtcgtag caggagcgct 7140

gggcgtggtg cctaaaaatg tctttcagta gcaagctgat tgccaggggc aggcccttgg 7200

tgtaagtgtt tacaaagcgg ttaagctggg atgggtgcat acgtggggat atgagatgca 7260

tcttggactg tatttttagg ttggctatgt tcccagccat atccctccgg ggattcatgt 7320

tgtgcagaac caccagcaca gtgtatccgg tgcacttggg aaatttgtca tgtagcttag 7380

aaggaaatgc gtggaagaac ttggagacgc ccttgtgacc tccaagattt tccatgcatt 7440

cgtccataat gatggcaatg ggcccacggg cggcggcctg ggcgaagata tttctgggat 7500

cactaacgtc atagttgtgt tccaggatga gatcgtcata ggccattttt acaaagcgcg 7560

ggcggagggt gccagactgc ggtataatgg ttccatccgg cccaggggcg tagttaccct 7620

cacagatttg catttcccac gctttgagtt cagatggggg gatcatgtct acctgcgggg 7680

cgatgaagaa aacggtttcc ggggtagggg agatcagctg ggaagaaagc aggttcctga 7740

gcagctgcga cttaccgcag ccggtgggcc cgtaaatcac acctattacc gggtgcaact 7800

ggtagttaag agagctgcag ctgccgtcat ccctgagcag gggggccact tcgttaagca 7860

tgtccctgac tcgcatgttt tccctgacca aatccgccag aaggcgctcg ccgcccagcg 7920

atagcagttc ttgcaaggaa gcaaagtttt tcaacggttt gagaccgtcc gccgtaggca 7980

tgcttttgag cgtttgacca agcagttcca ggcggtccca cagctcggtc acctgctcta 8040

cggcatctcg atccagcata tctcctcgtt tcgcgggttg gggcggcttt cgctgtacgg 8100

cagtagtcgg tgctcgtcca gacgggccag ggtcatgtct ttccacgggc gcagggtcct 8160

cgtcagcgta gtctgggtca cggtgaaggg gtgcgctccg ggctgcgcgc tggccagggt 8220

gcgcttgagg ctggtcctgc tggtgctgaa gcgctgccgg tcttcgccct gcgcgtcggc 8280

caggtagcat ttgaccatgg tgtcatagtc cagcccctcc gcggcgtggc ccttggcgcg 8340

cagcttgccc ttggaggagg cgccgcacga ggggcagtgc agacttttga gggcgtagag 8400

cttgggcgcg agaaataccg attccgggga gtaggcatcc gcgccgcagg ccccgcagac 8460

ggtctcgcat tccacgagcc aggtgagctc tggccgttcg gggtcaaaaa ccaggtttcc 8520

cccatgcttt ttgatgcgtt tcttacctct ggtttccatg agccggtgtc cacgctcggt 8580

gacgaaaagg ctgtccgtgt ccccgtatac agacttgaga ggcctgtcct cgagcggtgt 8640

tccgcggtcc tcctcgtata gaaactcgga ccactctgag acaaaggctc gcgtccaggc 8700

cagcacgaag gaggctaagt gggaggggta gcggtcgttg tccactaggg ggtccactcg 8760

ctccagggtg tgaagacaca tgtcgccctc ttcggcatca aggaaggtga ttggtttgta 8820

ggtgtaggcc acgtgaccgg gtgttcctga agggggggcta taaaaggggg tgggggcgcg 8880

ttcgtcctca ctctcttccg catcgctgtc tgcgagggcc agctgttggg gtgagtactc 8940

cctctgaaaa gcgggcatga cttctgcgct aagattgtca gtttccaaaa acgaggagga 9000

tttgatattc acctggcccg cggtgatgcc tttgagggtg gccgcatcca tctggtcaga 9060

aaagacaatc tttttgttgt caagcttggt ggcaaacgac ccgtagaggg cgttggacag 9120

caacttggcg atggagcgca gggtttggtt tttgtcgcga tcggcgcgct ccttggccgc 9180

gatgtttagc tgcacgtatt cgcgcgcaac gcaccgccat tcgggaaaga cggtggtgcg 9240

ctcgtcgggc accaggtgca cgcgccaacc gcggttgtgc agggtgacaa ggtcaacgct 9300

ggtggctacc tctccgcgta ggcgctcgtt ggtccagcag aggcggccgc ccttgcgcga 9360

gcagaatggc ggtagggggt ctagctgcgt ctcgtccggg gggtctgcgt ccacggtaaa 9420

gaccccgggc agcaggcgcg cgtcgaagta gtctatcttg catccttgca agtctagcgc 9480

ctgctgccat gcgcgggcgg caagcgcgcg ctcgtatggg ttgagtgggg gaccccatgg 9540

catggggtgg gtgagcgcgg aggcgtacat gccgcaaatg tcgtaaacgt agaggggctc 9600

tctgagtatt ccaagatatg tagggtagca tcttccaccg cggatgctgg cgcgcacgta 9660

atcgtatagt tcgtgcgagg gagcgaggag gtcgggaccg aggttgctac gggcgggctg 9720

ctctgctcgg aagactatct gcctgaagat ggcatgtgag ttggatgata tggttggacg 9780

ctggaagacg ttgaagctgg cgtctgtgag acctaccgcg tcacgcacga aggaggcgta 9840

ggagtcgcgc agcttgttga ccagctcggc ggtgacctgc acgtctaggg cgcagtagtc 9900

cagggtttcc ttgatgatgt catacttatc ctgtcccttt tttttccaca gctcgcggtt 9960

gaggacaaac tcttcgcggt ctttccagta ctcttggatc ggaaacccgt cggcctccga 10020

acggtaagag cctagcatgt agaactggtt gacggcctgg taggcgcagc atccctttc 10080

tacgggtagc gcgtatgcct gcgcggcctt ccggagcgag gtgtgggtga gcgcaaaggt 10140

gtccctgacc atgactttga ggtactggta tttgaagtca gtgtcgtcgc atccgccctg 10200

ctcccagagc aaaaagtccg tgcgcttttt ggaacgcgga tttggcaggg cgaaggtgac 10260

atcgttgaag agtatctttc ccgcgcgagg cataaagttg cgtgtgatgc ggaagggtcc 10320

cggcacctcg gaacggttgt taattacctg ggcggcgagc acgatctcgt caaagccgtt 10380

gatgttgtgg cccacaatgt aaagttccaa gaagcgcggg atgcccttga tggaaggcaa 10440

ttttttaagt tcctcgtagg tgagctcttc aggggagctg agcccgtgct ctgaaagggc 10500

ccagtctgca agatgagggt tggaagcgac gaatgagctc cacaggtcac gggccattag 10560

catttgcagg tggtcgcgaa aggtcctaaa ctggcgacct atggccattt tttctggggt 10620

gatgcagtag aaggtaagcg ggtcttgttc ccagcggtcc catccaaggt tcgcggctag 10680

gtctcgcgcg gcagtcacta gaggctcatc tccgccgaac ttcatgacca gcatgaaggg 10740

cacgagctgc ttcccaaagg cccccatcca agtataggtc tctacatcgt aggtgacaaa 10800

gagacgctcg gtgcgaggat gcgagccgat cgggaagaac tggatctccc gccaccaatt 10860

ggaggagtgg ctattgatgt ggtgaaagta gaagtccctg cgacgggccg aacactcgtg 10920

ctggcttttg taaaaacgtg cgcagtactg gcagcggtgc acgggctgta catcctgcac 10980

gaggttgacc tgacgaccgc gcacaaggaa gcagagtggg aatttgagcc cctcgcctgg 11040

cgggtttggc tggtggtctt ctacttcggc tgcttgtcct tgaccgtctg gctgctcgag 11100

gggagttacg gtggatcgga ccaccacgcc gcgcgagccc aaagtccaga tgtccgcgcg 11160

cggcggtcgg agcttgatga caacatcgcg cagatgggag ctgtccatgg tctggagctc 11220

ccgcggcgtc aggtcaggcg ggagctcctg caggtttacc tcgcatagac gggtcagggc 11280

gcgggctaga tccaggtgat acctaatttc caggggctgg ttggtggcgg cgtcgatggc 11340

ttgcaagagg ccgcatcccc gcggcgcgac tacggtaccg cgcggcgggc ggtgggccgc 11400

gggggtgtcc ttggatgatg catctaaaag cggtgacgcg ggcgagcccc cggaggtagg 11460

gggggctccg gacccgccgg gagagggggc aggggcacgt cggcgccgcg cgcgggcagg 11520

agctggtgct gcgcgcgtag gttgctggcg aacgcgacga cgcggcggtt gatctcctga 11580

atctggcgcc tctgcgtgaa gacgacgggc ccggtgagct tgaacctgaa agagagttcg 11640

acagaatcaa tttcggtgtc gttgacggcg gcctggcgca aaatctcctg cacgtctcct 11700

gagttgtctt gataggcgat ctcggccatg aactgctcga tctcttcctc ctggagatct 11760

ccgcgtccgg ctcgctccac ggtggcggcg aggtcgttgg aaatgcgggc catgagctgc 11820

gagaaggcgt tgaggcctcc ctcgttccag acgcggctgt agaccacgcc cccttcggca 11880

tcgcgggcgc gcatgaccac ctgcgcgaga ttgagctcca cgtgccgggc gaagacggcg 11940

tagtttcgca ggcgctgaaa gaggtagttg agggtggtgg cggtgtgttc tgccacgaag 12000

aagtacataa cccagcgtcg caacgtggat tcgttgatat cccccaaggc ctcaaggcgc 12060

tccatggcct cgtagaagtc cacggcgaag ttgaaaaact gggagttgcg cgccgacacg 12120

gttaactcct cctccagaag acggatgagc tcggcgacag tgtcgcgcac ctcgcgctca 12180

aaggctacag gggcctcttc ttcttcttca atctcctctt ccataagggc ctccccttct 12240

tcttcttctg gcggcggtgg gggaggggcg acacggcggc gacgacggcg caccgggagg 12300

cggtcgacaa agcgctcgat catctccccg cggcgacggc gcatggtctc ggtgacggcg 12360

cggccgttct cgcgggggcg cagttggaag acgccgcccg tcatgtcccg gttatgggtt 12420

ggcgggggggc tgccatgcgg cagggatacg gcgctaacga tgcatctcaa caattgttgt 12480

gtaggtactc cgccgccgag ggacctgagc gagtccgcat cgaccggatc ggaaaacctc 12540

tcgagaaagg cgtctaacca gtcacagtcg caaggtaggc tgagcaccgt ggcgggcggc 12600

agcgggcggc ggtcggggtt gtttctggcg gaggtgctgc tgatgatgta attaaagtag 12660

gcggtcttga gacggcggat ggtcgacaga agcaccatgt ccttgggtcc ggcctgctga 12720

atgcgcaggc ggtcggccat gccccaggct tcgttttgac atcggcgcag gtctttgtag 12780

tagtcttgca tgagcctttc taccggcact tcttcttctc cttcctcttg tcctgcatct 12840

cttgcatcta tcgctgcggc ggcggcggag tttggccgta ggtggcgccc tcttcctccc 12900

atgcgtgtga ccccgaagcc cctcatcggc tgaagcaggg ctaggtcggc gacaacgcgc 12960

tcggctaata tggcctgctg cacctgcgtg agggtagact ggaagtcatc catgtccaca 13020

aagcggtggt atgcgcccgt gttgatggtg taagtgcagt tggccataac ggaccagtta 13080

acggtctggt gacccggctg cgagagctcg gtgtacctga gacgcgagta agccctcgag 13140

tcaaatacgt agtcgttgca agtccgcacc aggtactggt atcccaccaa aaagtgcggc 13200

ggcggctggc ggtagagggg ccagcgtagg gtggccgggg ctccgggggc gagatcttcc 13260

aacataaggc gatgatatcc gtagatgtac ctggacatcc aggtgatgcc ggcggcggtg 13320

gtggaggcgc gcggaaagtc gcggacgcgg ttccagatgt tgcgcagcgg caaaaagtgc 13380

tccatggtcg ggacgctctg gccggtcagg cgcgcgcaat cgttgacgct ctagcgtgca 13440

aaaggagagc ctgtaagcgg gcactcttcc gtggtctggt ggataaattc gcaagggtat 13500

catggcggac gaccggggtt cgagccccgt atccggccgt ccgccgtgat ccatgcggtt 13560

accgcccgcg tgtcgaaccc aggtgtgcga cgtcagacaa cgggggagtg ctccttttgg 13620

cttccttcca ggcgcggcgg ctgctgcgct agctttttttg gccactggcc gcgcgcagcg 13680

taagcggtta ggctggaaag cgaaagcatt aagtggctcg ctccctgtag ccggagggtt 13740

attttccaag ggttgagtcg cgggacccccc ggttcgagtc tcggaccggc cggactgcgg 13800

cgaacggggg tttgcctccc cgtcatgcaa gaccccgctt gcaaattcct ccggaaacag 13860

ggacgagccc ctttttgct tttcccagat gcatccggtg ctgcggcaga tgcgcccccc 13920

tcctcagcag cggcaagagc aagagcagcg gcagacatgc agggcaccct cccctcctcc 13980

taccgcgtca ggaggggcga catccgcggt tgacgcggca gcagatggtg attacgaacc 14040

cccgcggcgc cgggcccggc actacctgga cttggaggag ggcgagggcc tggcgcggct 14100

aggagcgccc tctcctgagc ggcacccaag ggtgcagctg aagcgtgata cgcgtgaggc 14160

gtacgtgccg cggcagaacc tgtttcgcga ccgcgaggga gaggagcccg aggagatgcg 14220

ggatcgaaag ttccacgcag ggcgcgagct gcggcatggc ctgaatcgcg agcggttgct 14280

gcgcgaggag gactttgagc ccgacgcgcg aaccgggatt agtcccgcgc gcgcacacgt 14340

ggcggccgcc gacctggtaa ccgcatacga gcagacggtg aaccaggaga ttaactttca 14400

aaaaagcttt aacaaccacg tgcgtacgct tgtggcgcgc gaggaggtgg ctataggact 14460

gatgcatctg tgggactttg taagcgcgct ggagcaaaac ccaaatagca agccgctcat 14520

ggcgcagctg ttccttatag tgcagcacag cagggacaac gaggcattca gggatgcgct 14580

gctaaacata gtagagcccg agggccgctg gctgctcgat ttgataaaca tcctgcagag 14640

catagtggtg caggagcgca gcttgagcct ggctgacaag gtggccgcca tcaactattc 14700

catgcttagc ctgggcaagt tttacgcccg caagatatac catacccctt acgttcccat 14760

agacaaggag gtaaagatcg aggggttcta catgcgcatg gcgctgaagg tgcttacctt 14820

gagcgacgac ctgggcgttt atcgcaacga gcgcatccac aaggccgtga gcgtgagccg 14880

gcggcgcgag ctcagcgacc gcgagctgat gcacagcctg caaagggccc tggctggcac 14940

gggcagcggc gatagagagg ccgagtccta ctttgacgcg ggcgctgacc tgcgctgggc 15000

cccaagccga cgcgccctgg aggcagctgg ggccggacct gggctggcgg tggcacccgc 15060

gcgcgctggc aacgtcggcg gcgtggagga atatgacgag gacgatgagt acgagccaga 15120

ggacggcgag tactaagcgg tgatgtttct gatcagatga tgcaagacgc aacggacccg 15180

gcggtgcggg cggcgctgca gagccagccg tccggcctta actccacgga cgactggcgc 15240

caggtcatgg accgcatcat gtcgctgact gcgcgcaatc ctgacgcgtt ccggcagcag 15300

ccgcaggcca accggctctc cgcaattctg gaagcggtgg tcccggcgcg cgcaaacccc 15360

acgcacgaga aggtgctggc gatcgtaaac gcgctggccg aaaacagggc catccggccc 15420

gacgaggccg gcctggtcta cgacgcgctg cttcagcgcg tggctcgtta caacagcggc 15480

aacgtgcaga ccaacctgga ccggctggtg ggggatgtgc gcgaggccgt ggcgcagcgt 15540

gagcgcgcgc agcagcaggg caacctgggc tccatggttg cactaaacgc cttcctgagt 15600

acacagcccg ccaacgtgcc gcggggacag gaggactaca ccaactttgt gagcgcactg 15660

cggctaatgg tgactgagac accgcaaagt gaggtgtacc agtctgggcc agactatttt 15720

ttccagacca gtagacaagg cctgcagacc gtaaacctga gccaggcttt caaaaacttg 15780

caggggctgt ggggggtgcg ggctcccaca ggcgaccgcg cgaccgtgtc tagcttgctg 15840

acgcccaact cgcgcctgtt gctgctgcta atagcgccct tcacggacag tggcagcgtg 15900

tcccgggaca catacctagg tcacttgctg acactgtacc gcgaggccat aggtcaggcg 15960

catgtggacg agcatacttt ccaggagatt acaagtgtca gccgcgcgct ggggcaggag 16020

gacacgggca gcctggaggc aaccctaaac tacctgctga ccaaccggcg gcagaagatc 16080

ccctcgttgc acagtttaaa cagcgaggag gagcgcattt tgcgctacgt gcagcagagc 16140

gtgagcctta acctgatgcg cgacggggta acgcccagcg tggcgctgga catgaccgcg 16200

cgcaacatgg aaccgggcat gtatgcctca aaccggccgt ttatcaaccg cctaatggac 16260

tacttgcatc gcgcggccgc cgtgaacccc gagtatttca ccaatgccat cttgaacccg 16320

cactggctac cgccccctgg tttctacacc gggggattcg aggtgcccga gggtaacgat 16380

ggattcctct gggacgacat agacgacagc gtgttttccc cgcaaccgca gaccctgcta 16440

gagttgcaac agcgcgagca ggcagaggcg gcgctgcgaa aggaaagctt ccgcaggcca 16500

agcagcttgt ccgatctagg cgctgcggcc ccgcggtcag atgctagtag cccatttcca 16560

agcttgatag ggtctcttac cagcactcgc accacccgcc cgcgcctgct gggcgaggag 16620

gagtacctaa acaactcgct gctgcagccg cagcgcgaaa aaaacctgcc tccggcattt 16680

cccaacaacg ggatagagag cctagtggac aagatgagta gatggaagac gtacgcgcag 16740

gagcacaggg acgtgccagg cccgcgcccg cccacccgtc gtcaaaggca cgaccgtcag 16800

cggggtctgg tgtgggagga cgatgactcg gcagacgaca gcagcgtcct ggatttggga 16860

gggagtggca acccgtttgc gcaccttcgc cccaggctgg ggagaatgtt ttaaaaaaaa 16920

aaaagcatga tgcaaaataa aaaactcacc aaggccatgg caccgagcgt tggttttctt 16980

gtattcccct tagtatgcgg cgcgcggcga tgtatgagga aggtcctcct ccctcctacg 17040

agagtgtggt gagcgcggcg ccagtggcgg cggcgctggg ttctcccttc gatgctcccc 17100

tggacccgcc gtttgtgcct ccgcggtacc tgcggcctac cgggggggaga aacagcatcc 17160

gttactctga gttggcaccc ctattcgaca ccacccgtgt gtacctggtg gacaacaagt 17220

caacggatgt ggcatccctg aactaccaga acgaccacag caactttctg accacggtca 17280

ttcaaaacaa tgactacagc ccgggggagg caagcacaca gaccatcaat cttgacgacc 17340

ggtcgcactg gggcggcgac ctgaaaacca tcctgcatac caacatgcca aatgtgaacg 17400

agttcatgtt taccaataag tttaaggcgc gggtgatggt gtcgcgcttg cctactaagg 17460

acaatcaggt ggagctgaaa tacgagtggg tggagttcac gctgcccgag ggcaactact 17520

ccgagaccat gaccatagac cttatgaaca acgcgatcgt ggagcactac ttgaaagtgg 17580

gcagacagaa cggggttctg gaaagcgaca tcggggtaaa gtttgacacc cgcaacttca 17640

gactggggtt tgaccccgtc actggtcttg tcatgcctgg ggtatataca aacgaagcct 17700

tccatccaga catcattttg ctgccaggat gcggggtgga cttcacccac agccgcctga 17760

gcaacttgtt gggcatccgc aagcggcaac ccttccagga gggctttagg atcacctacg 17820

atgatctgga gggtggtaac attcccgcac tgttggatgt ggacgcctac caggcgagct 17880

tgaaagatga caccgaacag ggcgggggtg gcgcaggcgg cagcaacagc agtggcagcg 17940

gcgcggaaga gaactccaac gcggcagccg cggcaatgca gccggtggag gacatgaacg 18000

atcatgccat tcgcggcgac acctttgcca cacgggctga ggagaagcgc gctgaggccg 18060

aagcagcggc cgaagctgcc gcccccgctg cgcaacccga ggtcgagaag cctcagaaga 18120

aaccggtgat caaacccctg acagaggaca gcaagaaacg cagttacaac ctaataagca 18180

atgacagcac cttcacccag taccgcagct ggtaccttgc atacaactac ggcgaccctc 18240

agaccggaat ccgctcatgg accctgcttt gcactcctga cgtaacctgc ggctcggagc 18300

aggtctactg gtcgttgcca gacatgatgc aagaccccgt gaccttccgc tccacgcgcc 18360

agatcagcaa ctttccggtg gtgggcgccg agctgttgcc cgtgcactcc aagagcttct 18420

acaacgacca ggccgtctac tcccaactca tccgccagtt tacctctctg acccacgtgt 18480

tcaatcgctt tcccgagaac cagattttgg cgcgcccgcc agcccccacc atcaccaccg 18540

tcagtgaaaa cgttcctgct ctcacagatc acgggacgct accgctgcgc aacagcatcg 18600

gaggagtcca gcgagtgacc attactgacg ccagacgccg cacctgcccc tacgtttaca 18660

aggccctggg catagtctcg ccgcgcgtcc tatcgagccg cacttttga gcaagcatgt 18720

ccatccttat atcgcccagc aataacacag gctggggcct gcgcttccca agcaagatgt 18780

ttggcggggc caagaagcgc tccgaccaac acccagtgcg cgtgcgcggg cactaccgcg 18840

cgccctgggg cgcgcacaaa cgcggccgca ctgggcgcac caccgtcgat gacgccatcg 18900

acgcggtggt ggaggaggcg cgcaactaca cgcccacgcc gccaccagtg tccacagtgg 18960

acgcggccat tcagaccgtg gtgcgcggag cccggcgcta tgctaaaatg aagagacggc 19020

ggaggcgcgt agcacgtcgc caccgccgcc gacccggcac tgccgcccaa cgcgcggcgg 19080

cggccctgct taaccgcgca cgtcgcaccg gccgacgggc ggccatgcgg gccgctcgaa 19140

ggctggccgc gggtattgtc actgtgcccc ccaggtccag gcgacgagcg gccgccgcag 19200

cagccgcggc cattagtgct atgactcagg gtcgcagggg caacgtgtat tgggtgcgcg 19260

actcggttag cggcctgcgc gtgcccgtgc gcacccgccc cccgcgcaac tagattgcaa 19320

gaaaaaacta cttagactcg tactgttgta tgtatccagc ggcggcggcg cgcaacgaag 19380

ctatgtccaa gcgcaaaatc aaagaagaga tgctccaggt catcgcgccg gagatctatg 19440

gccccccgaa gaaggaagag caggattaca agccccgaaa gctaaagcgg gtcaaaaaga 19500

aaaagaaaga tgatgatgat gaacttgacg acgaggtgga actgctgcac gctaccgcgc 19560

ccaggcgacg ggtacagtgg aaaggtcgac gcgtaaaacg tgttttgcga cccggcacca 19620

ccgtagtctt tacgcccggt gagcgctcca cccgcaccta caagcgcgtg tatgatgagg 19680

tgtacggcga cgaggacctg cttgagcagg ccaacgagcg cctcggggag tttgcctacg 19740

gaaagcggca taaggacatg ctggcgttgc cgctggacga gggcaaccca acacctagcc 19800

taaagcccgt aacactgcag caggtgctgc ccgcgcttgc accgtccgaa gaaaagcgcg 19860

gcctaaagcg cgagtctggt gacttggcac ccaccgtgca gctgatggta cccaagcgcc 19920

agcgactgga agatgtcttg gaaaaaatga ccgtggaacc tgggctggag cccgaggtcc 19980

gcgtgcggcc aatcaagcag gtggcgccgg gactgggcgt gcagaccgtg gacgttcaga 20040

tacccactac cagtagcacc agtattgcca ccgccacaga gggcatggag acacaaacgt 20100

ccccggttgc ctcagcggtg gcggatgccg cggtgcaggc ggtcgctgcg gccgcgtcca 20160

agacctctac ggaggtgcaa acggacccgt ggatgtttcg cgtttcagcc ccccggcgcc 20220

cgcgccgttc gaggaagtac ggcgccgcca gcgcgctact gcccgaatat gccctacatc 20280

cttccattgc gcctaccccc ggctatcgtg gctacaccta ccgccccaga agacgagcaa 20340

ctacccgacg ccgaaccacc actggaaccc gccgccgccg tcgccgtcgc cagcccgtgc 20400

tggccccgat ttccgtgcgc agggtggctc gcgaaggagg caggaccctg gtgctgccaa 20460

cagcgcgcta ccaccccagc atcgtttaaa agccggtctt tgtggttctt gcagatatgg 20520

ccctcacctg ccgcctccgt ttcccggtgc cgggattccg aggaagaatg caccgtagga 20580

ggggcatggc cggccacggc ctgacgggcg gcatgcgtcg tgcgcaccac cggcggcggc 20640

gcgcgtcgca ccgtcgcatg cgcggcggta tcctgcccct ccttattcca ctgatcgccg 20700

cggcgattgg cgccgtgccc ggaattgcat ccgtggcctt gcaggcgcag agacactgat 20760

taaaaacaag ttgcatgtgg aaaaatcaaa ataaaaagtc tggactctca cgctcgcttg 20820

gtcctgtaac tattttgtag aatggaagac atcaactttg cgtctctggc cccgcgacac 20880

ggctcgcgcc cgttcatggg aaactggcaa gatatcggca ccagcaatat gagcggtggc 20940

gccttcagct ggggctcgct gtggagcggc attaaaaatt tcggttccac cgttaagaac 21000

tatggcagca aggcctggaa cagcagcaca ggccagatgc tgagggataa gttgaaagag 21060

caaaatttcc aacaaaaggt ggtagatggc ctggcctctg gcattagcgg ggtggtggac 21120

ctggccaacc aggcagtgca aaataagatt aacagtaagc ttgatccccg ccctcccgta 21180

gaggagcctc caccggccgt ggagacagtg tctccagagg ggcgtggcga aaagcgtccg 21240

cgccccgaca gggaagaaac tctggtgacg caaatagacg agcctccctc gtacgaggag 21300

gcactaaagc aaggcctgcc caccacccgt cccatcgcgc ccatggctac cggagtgctg 21360

ggccagcaca cacccgtaac gctggacctg cctccccccg ccgacaccca gcagaaacct 21420

gtgctgccag gcccgaccgc cgttgttgta acccgtccta gccgcgcgtc cctgcgccgc 21480

gccgccagcg gtccgcgatc gttgcggccc gtagccagtg gcaactggca aagcacactg 21540

aacagcatcg tgggtctggg ggtgcaatcc ctgaagcgcc gacgatgctt ctgatagcta 21600

acgtgtcgta tgtgtgtcat gtatgcgtcc atgtcgccgc cagaggagct gctgagccgc 21660

cgcgcgcccg ctttccaaga tggctacccc ttcgatgatg ccgcagtggt cttacatgca 21720

catctcgggc caggacgcct cggagtacct gagccccggg ctggtgcagt ttgcccgcgc 21780

caccgagacg tacttcagcc tgaataacaa gtttagaaac cccacggtgg cgcctacgca 21840

cgacgtgacc acagaccggt cccagcgttt gacgctgcgg ttcatccctg tggaccgtga 21900

ggatactgcg tactcgtaca aggcgcggtt caccctagct gtgggtgata accgtgtgct 21960

ggacatggct tccacgtact ttgacatccg cggcgtgctg gacaggggcc ctacttttaa 22020

gccctactct ggcactgcct acaacgccct ggctcccaag ggtgccccaa atccttgcga 22080

atgggatgaa gctgctactg ctcttgaaat aaacctagaa gaagaggacg atgacaacga 22140

agacgaagta gacgagcaag ctgagcagca aaaaactcac gtatttgggc aggcgcctta 22200

ttctggtata aatattacaa aggagggtat tcaaataggt gtcgaaggtc aaacacctaa 22260

atatgccgat aaaacatttc aacctgaacc tcaaatagga gaatctcagt ggtacgaaac 22320

agaaattaat catgcagctg ggagagtcct aaaaaagact accccaatga aaccatgtta 22380

cggttcatat gcaaaaccca caaatgaaaa tggagggcaa ggcattcttg taaagcaaca 22440

aaatggaaag ctagaaagtc aagtggaaat gcaatttttc tcaactactg aggcagccgc 22500

aggcaatggt gataacttga ctcctaaagt ggtattgtac agtgaagatg tagatataga 22560

aaccccagac actcatattt cttacatgcc cactattaag gaaggtaact cacgagaact 22620

aatgggccaa caatctatgc ccaacaggcc taattacatt gcttttaggg acaattttat 22680

tggtctaatg tattacaaca gcacgggtaa tatgggtgtt ctggcgggcc aagcatcgca 22740

gttgaatgct gttgtagatt tgcaagacag aaacacagag ctttcatacc agcttttgct 22800

tgattccatt ggtgatagaa ccaggtactt ttctatgtgg aatcaggctg ttgacagcta 22860

tgatccagat gttagaatta ttgaaaatca tggaactgaa gatgaacttc caaattactg 22920

ctttccactg ggaggtgtga ttaatacaga gactcttacc aaggtaaaac ctaaaacagg 22980

tcaggaaaat ggatgggaaa aagatgctac agaattttca gataaaaatg aaataagagt 23040

tggaaataat tttgccatgg aaatcaatct aaatgccaac ctgtggagaa atttcctgta 23100

ctccaacata gcgctgtatt tgcccgacaa gctaaagtac agtccttcca acgtaaaaat 23160

ttctgataac ccaaacacct acgactacat gaacaagcga gtggtggctc ccgggctagt 23220

ggactgctac attaaccttg gagcacgctg gtcccttgac tatatggaca acgtcaaccc 23280

atttaaccac caccgcaatg ctggcctgcg ctaccgctca atgttgctgg gcaatggtcg 23340

ctatgtgccc ttccacatcc aggtgcctca gaagttcttt gccattaaaa acctccttct 23400

cctgccgggc tcatacacct acgagtggaa cttcaggaag gatgttaaca tggttctgca 23460

gagctcccta ggaaatgacc taagggttga cggagccagc attaagtttg atagcatttg 23520

cctttacgcc accttcttcc ccatggccca caacaccgcc tccacgcttg aggccatgct 23580

tagaaacgac accaacgacc agtcctttaa cgactatctc tccgccgcca acatgctcta 23640

ccctataccc gccaacgcta ccaacgtgcc catatccatc ccctcccgca actgggcggc 23700

tttccgcggc tgggccttca cgcgccttaa gactaaggaa accccatcac tgggctcggg 23760

ctacgaccct tattacacct actctggctc tataccctac ctagatggaa ccttttacct 23820

caaccacacc tttaagaagg tggccattac ctttgactct tctgtcagct ggcctggcaa 23880

tgaccgcctg cttaccccca acgagtttga aattaagcgc tcagttgacg gggagggtta 23940

caacgttgcc cagtgtaaca tgaccaaaga ctggttcctg gtacaaatgc tagctaacta 24000

taacattggc taccagggct tctatatccc agagagctac aaggaccgca tgtactcctt 24060

ctttagaaac ttccagccca tgagccgtca ggtggtggat gatactaaat acaaggacta 24120

ccaacaggtg ggcatcctac accaacacaa caactctgga tttgttggct accttgcccc 24180

caccatgcgc gaaggacagg cctaccctgc taacttcccc tatccgctta taggcaagac 24240

cgcagttgac agcattaccc agaaaaagtt tctttgcgat cgcacccttt ggcgcatccc 24300

attctccagt aactttatgt ccatgggcgc actcacagac ctgggccaaa accttctcta 24360

cgccaactcc gcccacgcgc tagacatgac ttttgaggtg gatcccatgg acgagcccac 24420

ccttctttat gttttgtttg aagtctttga cgtggtccgt gtgcaccagc cgcaccgcgg 24480

cgtcatcgaa accgtgtacc tgcgcacgcc cttctcggcc ggcaacgcca caacataaag 24540

aagcaagcaa catcaacaac agctgccgcc atgggctcca gtgagcagga actgaaagcc 24600

attgtcaaag atcttggttg tgggccatat tttttgggca cctatgacaa gcgctttcca 24660

ggctttgttt ctccacacaa gctcgcctgc gccatagtca atacggccgg tcgcgagact 24720

gggggcgtac actggatggc ctttgcctgg aacccgcact caaaaacatg ctacctcttt 24780

gagccctttg gcttttctga ccagcgactc aagcaggttt accagtttga gtacgagtca 24840

ctcctgcgcc gtagcgccat tgcttcttcc cccgaccgct gtataacgct ggaaaagtcc 24900

acccaaagcg tacaggggcc caactcggcc gcctgtggac tattctgctg catgtttctc 24960

cacgcctttg ccaactggcc ccaaactccc atggatcaca accccaccat gaaccttatt 25020

accggggtac ccaactccat gctcaacagt ccccaggtac agcccaccct gcgtcgcaac 25080

caggaacagc tctacagctt cctggagcgc cactcgccct acttccgcag ccacagtgcg 25140

cagattagga gcgccacttc tttttgtcac ttgaaaaaca tgtaaaaata atgtactaga 25200

gacactttca ataaaggcaa atgcttttat ttgtacactc tcgggtgatt atttaccccc 25260

acccttgccg tctgcgccgt ttaaaaatca aaggggttct gccgcgcatc gctatgcgcc 25320

actggcaggg acacgttgcg atactggtgt ttagtgctcc acttaaactc aggcacaacc 25380

atccgcggca gctcggtgaa gttttcactc cacaggctgc gcaccatcac caacgcgttt 25440

agcaggtcgg gcgccgatat cttgaagtcg cagttggggc ctccgccctg cgcgcgcgag 25500

ttgcgataca cagggttgca gcactggaac actatcagcg ccgggtggtg cacgctggcc 25560

agcacgctct tgtcggagat cagatccgcg tccaggtcct ccgcgttgct cagggcgaac 25620

ggagtcaact ttggtagctg ccttcccaaa aagggcgcgt gcccaggctt tgagttgcac 25680

tcgcaccgta gtggcatcaa aaggtgaccg tgcccggtct gggcgttagg atacagcgcc 25740

tgcataaaag ccttgatctg cttaaaagcc acctgagcct ttgcgccttc agagaagaac 25800

atgccgcaag acttgccgga aaactgattg gccggacagg ccgcgtcgtg cacgcagcac 25860

cttgcgtcgg tgttggagat ctgcaccaca tttcggcccc accggttctt cacgatcttg 25920

gccttgctag actgctcctt cagcgcgcgc tgcccgtttt cgctcgtcac atccatttca 25980

atcacgtgct ccttatttat cataatgctt ccgtgtagac acttaagctc gccttcgatc 26040

tcagcgcagc ggtgcagcca caacgcgcag cccgtgggct cgtgatgctt gtaggtcacc 26100

tctgcaaacg actgcaggta cgcctgcagg aatcgcccca tcatcgtcac aaaggtcttg 26160

ttgctggtga aggtcagctg caacccgcgg tgctcctcgt tcagccaggt cttgcatacg 26220

gccgccagag cttccacttg gtcaggcagt agtttgaagt tcgcctttag atcgttatcc 26280

acgtggtact tgtccatcag cgcgcgcgca gcctccatgc ccttctccca cgcagacacg 26340

atcggcacac tcagcgggtt catcaccgta atttcacttt ccgcttcgct gggctcttcc 26400

tcttcctctt gcgtccgcat accacgcgcc actgggtcgt cttcattcag ccgccgcact 26460

gtgcgcttac ctcctttgcc atgcttgatt agcaccggtg ggttgctgaa acccaccatt 26520

tgtagcgcca catcttctct ttcttcctcg ctgtccacga ttacctctgg tgatggcggg 26580

cgctcgggct tgggagaagg gcgcttcttt ttcttcttgg gcgcaatggc caaatccgcc 26640

gccgaggtcg atggccgcgg gctgggtgtg cgcggcacca gcgcgtcttg tgatgagtct 26700

tcctcgtcct cggactcgat acgccgcctc atccgctttt ttgggggcgc ccggggaggc 26760

ggcggcgacg gggacgggga cgacacgtcc tccatggttg ggggacgtcg cgccgcaccg 26820

cgtccgcgct cgggggtggt ttcgcgctgc tcctcttccc gactggccat ttccttctcc 26880

tataggcaga aaaagatcat ggagtcagtc gagaagaagg acagcctaac cgccccctct 26940

gagttcgcca ccaccgcctc caccgatgcc gccaacgcgc ctaccacctt ccccgtcgag 27000

gcacccccgc ttgaggagga ggaagtgatt atcgagcagg acccaggttt tgtaagcgaa 27060

gacgacgagg accgctcagt accaacagag gataaaaagc aagaccagga caacgcagag 27120

gcaaacgagg aacaagtcgg gcgggggggac gaaaggcatg gcgactacct agatgtggga 27180

gacgacgtgc tgttgaagca tctgcagcgc cagtgcgcca ttatctgcga cgcgttgcaa 27240

gagcgcagcg atgtgcccct cgccatagcg gatgtcagcc ttgcctacga acgccaccta 27300

ttctcaccgc gcgtaccccc caaacgccaa gaaaacggca catgcgagcc caacccgcgc 27360

ctcaacttct accccgtatt tgccgtgcca gaggtgcttg ccacctatca catcttttc 27420

caaaactgca agataccct atcctgccgt gccaaccgca gccgagcgga caagcagctg 27480

gccttgcggc agggcgctgt catacctgat atcgcctcgc tcaacgaagt gccaaaaatc 27540

tttgagggtc ttggacgcga cgagaagcgc gcggcaaacg ctctgcaaca ggaaaacagc 27600

gaaaatgaaa gtcactctgg agtgttggtg gaactcgagg gtgacaacgc gcgcctagcc 27660

gtactaaaac gcagcatcga ggtcacccac tttgcctacc cggcacttaa cctacccccc 27720

aaggtcatga gcacagtcat gagtgagctg atcgtgcgcc gtgcgcagcc cctggagagg 27780

gatgcaaatt tgcaagaaca aacagaggag ggcctacccg cagttggcga cgagcagcta 27840

gcgcgctggc ttcaaacgcg cgagcctgcc gacttggagg agcgacgcaa actaatgatg 27900

gccgcagtgc tcgttaccgt ggagcttgag tgcatgcagc ggttctttgc tgacccggag 27960

atgcagcgca agctagagga aacattgcac tacacctttc gacagggcta cgtacgccag 28020

gcctgcaaga tctccaacgt ggagctctgc aacctggtct cctaccttgg aattttgcac 28080

gaaaaccgcc ttgggcaaaa cgtgcttcat tccacgctca agggcgaggc gcgccgcgac 28140

tacgtccgcg actgcgttta cttatttcta tgctacacct ggcagacggc catgggcgtt 28200

tggcagcagt gcttggagga gtgcaacctc aaggagctgc agaaactgct aaagcaaaac 28260

ttgaaggacc tatggacggc cttcaacgag cgctccgtgg ccgcgcacct ggcggacatc 28320

attttccccg aacgcctgct taaaaccctg caacagggtc tgccagactt caccagtcaa 28380

agcatgttgc agaactttag gaactttatc ctagagcgct caggaatctt gcccgccacc 28440

tgctgtgcac ttcctagcga ctttgtgccc attaagtacc gcgaatgccc tccgccgctt 28500

tggggccact gctaccttct gcagctagcc aactaccttg cctaccactc tgacataatg 28560

gaagacgtga gcggtgacgg tctactggag tgtcactgtc gctgcaacct atgcaccccg 28620

caccgctccc tggtttgcaa ttcgcagctg cttaacgaaa gtcaaattat cggtaccttt 28680

gagctgcagg gtccctcgcc tgacgaaaag tccgcggctc cggggttgaa actcactccg 28740

gggctgtgga cgtcggctta ccttcgcaaa tttgtacctg aggactacca cgcccacgag 28800

attaggttct acgaagacca atcccgcccg cctaatgcgg agcttaccgc ctgcgtcatt 28860

acccagggcc acattcttgg ccaattgcaa gccatcaaca aagcccgcca agagtttctg 28920

ctacgaaagg gacgggggggt ttacttggac ccccagtccg gcgaggagct caacccaatc 28980

cccccgccgc cgcagcccta tcagcagcag ccgcgggccc ttgcttccca ggatggcacc 29040

caaaaagaag ctgcagctgc cgccgccacc cacggacgag gaggaatact gggacagtca 29100

ggcagaggag gttttggacg aggaggagga ggacatgatg gaagactggg agagcctaga 29160

cgaggaagct tccgaggtcg aagaggtgtc agacgaaaca ccgtcaccct cggtcgcatt 29220

cccctcgccg gcgccccaga aatcggcaac cggttccagc atggctacaa cctccgctcc 29280

tcaggcgccg ccggcactgc ccgttcgccg acccaaccgt agatgggaca ccactggaac 29340

cagggccggt aagtccaagc agccgccgcc gttagcccaa gagcaacaac agcgccaagg 29400

ctaccgctca tggcgcgggc acaagaacgc catagttgct tgcttgcaag actgtggggg 29460

caacatctcc ttcgcccgcc gctttcttct ctaccatcac ggcgtggcct tcccccgtaa 29520

catcctgcat tactaccgtc atctctacag cccatactgc accggcggca gcggcagcaa 29580

cagcagcggc cacacagaag caaaggcgac cggatagcaa gactctgaca aagcccaaga 29640

aatccacagc ggcggcagca gcaggaggag gagcgctgcg tctggcgccc aacgaacccg 29700

tatcgacccg cgagcttaga aacaggattt ttcccactct gtatgctata tttcaacaga 29760

gcaggggcca agaacaagag ctgaaaataa aaaacaggtc tctgcgatcc ctcacccgca 29820

gctgcctgta tcacaaaagc gaagatcagc ttcggcgcac gctggaagac gcggaggctc 29880

tcttcagtaa atactgcgcg ctgactctta aggactagtt tcgcgccctt tctcaaattt 29940

aagcgcgaaa actacgtcat ctccagcggc cacacccggc gccagcacct gttgtcagcg 30000

ccattatgag caaggaaatt cccacgccct acatgtggag ttaccagcca caaatgggac 30060

ttgcggctgg agctgcccaa gactactcaa cccgaataaa ctacatgagc gcgggacccc 30120

acatgatatc ccgggtcaac ggaatacgcg cccaccgaaa ccgaattctc ctggaacagg 30180

cggctattac caccacacct cgtaataacc ttaatccccg tagttggccc gctgccctgg 30240

tgtaccagga aagtcccgct cccaccactg tggtacttcc cagagacgcc caggccgaag 30300

ttcagatgac taactcaggg gcgcagcttg cgggcggctt tcgtcacagg gtgcggtcgc 30360

ccgggcaggg tataactcac ctgacaatca gagggcgagg tattcagctc aacgacgagt 30420

cggtgagctc ctcgcttggt ctccgtccgg acgggacatt tcagatcggc ggcgccggcc 30480

gctcttcatt cacgcctcgt caggcaatcc taactctgca gacctcgtcc tctgagccgc 30540

gctctggagg cattggaact ctgcaattta ttgaggagtt tgtgccatcg gtctacttta 30600

accccttctc gggacctccc ggccactatc cggatcaatt tattcctaac tttgacgcgg 30660

taaaggactc ggcggacggc tacgactgaa tgttaagtgg agaggcagag caactgcgcc 30720

tgaaacacct ggtccactgt cgccgccaca agtgctttgc ccgcgactcc ggtgagtttt 30780

gctactttga attgcccgag gatcatatcg agggcccggc gcacggcgtc cggcttaccg 30840

cccagggaga gcttgcccgt agcctgattc gggagtttac ccagcgcccc ctgctagttg 30900

agcgggacag gggaccctgt gttctcactg tgatttgcaa ctgtcctaac cctggattac 30960

atcaagatcc tctagttaat gtcaggtcgc ctaagtcgat taactagagt acccggggat 31020

cttattccct ttaactaata aaaaaaaata ataaagcatc acttacttaa aatcagttag 31080

caaatttctg tccagtttat tcagcagcac ctccttgccc tcctcccagc tctggtattg 31140

cagcttcctc ctggctgcaa actttctcca caatctaaat ggaatgtcag tttcctcctg 31200

ttcctgtcca tccgcaccca ctatcttcat gttgttgcag atgaagcgcg caagaccgtc 31260

tgaagatacc ttcaaccccg tgtatccata tgacacggaa accggtcctc caactgtgcc 31320

ttttcttact cctccctttg tatcccccaa tgggtttcaa gagagtcccc ctggggtact 31380

ctctttgcgc ctatccgaac ctctagttac ctccaatggc atgcttgcgc tcaaaatggg 31440

caacggcctc tctctggacg aggccggcaa ccttacctcc caaaatgtaa ccactgtgag 31500

cccacctctc aaaaaaacca agtcaaacat aaacctggaa atatctgcac ccctcacagt 31560

tacctcagaa gccctaactg tggctgccgc cgcacctcta atggtcgcgg gcaacacact 31620

caccatgcaa tcacaggccc cgctaaccgt gcacgactcc aaacttagca ttgccaccca 31680

aggacccctc acagtgtcag aaggaaagct agccctgcaa acatcaggcc ccctcaccac 31740

caccgatagc agtaccctta ctatcactgc ctcacccccc ctaactactg ccactggtag 31800

cttgggcatt gacttgaaag agcccattta tacacaaaat ggaaaactag gactaaagta 31860

cggggctcct ttgcatgtaa cagacgacct aaacactttg accgtagcaa ctggtccagg 31920

tgtgactatt aataatactt ccttgcaaac taaagttact ggagccttgg gttttgattc 31980

acaaggcaat atgcaactta atgtagcagg aggactaagg attgattctc aaaacagacg 32040

ccttatactt gatgttagtt atccgtttga tgctcaaaac caactaaatc taagactagg 32100

acagggccct ctttttataa actcagccca caacttggat attaactaca acaaaggcct 32160

ttacttgttt acagcttcaa acaattccaa aaagcttgag gttaacctaa gcactgccaa 32220

ggggttgatg tttgacgcta cagccatagc cattaatgca ggagatgggc ttgaatttgg 32280

ttcacctaat gcaccaaaca caaatcccct caaaacaaaa attggccatg gcctagaatt 32340

tgattcaaac aaggctatgg ttcctaaact aggaactggc cttagttttg acagcacagg 32400

tgccattaca gtaggaaaca aaaataatga taagctaact ttgtggaccg gaataaaccc 32460

tccacctaac tgtcaaattg tggaaaacac taatacaaat gatggcaaac ttactttagt 32520

attagtaaaa aatggagggc ttgttaatgg ctacgtgtct ctagttggtg tatcagacac 32580

tgtgaaccaa atgttcacac aaaagacagc aaacatccaa ttaagattat attttgactc 32640

ttctggaaat ctattaactg aggaatcaga cttaaaaatt ccacttaaaa ataaatcttc 32700

tacagcgacc agtgaaactg tagccagcag caaagccttt atgccaagta ctacagctta 32760

tcccttcaac accactacta gggatagtga aaactacatt catggaatat gttactacat 32820

gactagttat gatagaagtc tatttccctt gaacatttct ataatgctaa acagccgtat 32880

gatttcttcc aatgttgcct atgccataca atttgaatgg aatctaaatg caagtgaatc 32940

tccagaaagc aacatagcta cgctgaccac atcccccttt ttcttttctt acattacaga 33000

agacgacaac taaagaatcg tttgtgttat gtttcaacgt gtttattttt caattgcaga 33060

aaatttcaag tcatttttca ttcagtagta tagccccacc accacatagc ttatacagat 33120

caccgtacct taatcaaact cacagaaccc tagtattcaa cctgccacct ccctcccaac 33180

acacagagta cacagtcctt tctccccggc tggccttaaa aagcatcata tcatgggtaa 33240

cagacatatt cttaggtgtt atattccaca cggtttcctg tcgagccaaa cgctcatcag 33300

tgatattaat aaactccccg ggcagctcac ttaagttcat gtcgctgtcc agctgctgag 33360

ccacaggctg ctgtccaact tgcggttgct taacgggcgg cgaaggagaa gtccacgcgt 33420

tgtgcattgt caaagtgtta cattcgggca gcagcggatg atcctccagt atggtagcgc 33480

gggtttctgt ctcaaaagga ggtagacgat ccctactgta cggagtgcgc cgagacaacc 33540

gagatcgtgt tggtcgtagt gtcatgccaa atggaacgcc ggacgtagtc atatttcctg 33600

aagcaaaacc aggtgcgggc gtgacaaaca gatctgcgtc tccggtctcg ccgcttagat 33660

cgctctgtgt agtagttgta gtatatccac tctctcaaag catccaggcg ccccctggct 33720

tcgggttcta tgtaaactcc ttcatgcgcc gctgccctga taacatccac caccgcagaa 33780

taagccacac ccagccaacc tacacattcg ttctgcgagt cacacacggg aggagcggga 33840

agagctggaa gaaccatgtt ttttttttta ttccaaaaga ttatccaaaa cctcaaaatg 33900

aagatctatt aagtgaacgc gctcccctcc ggtggcgtgg tcaaactcta cagccaaaga 33960

acagataatg gcatttgtaa gatgttgcac aatggcttcc aaaaggcaaa cggccctcac 34020

gtccaagtgg acgtaaaggc taaacccttc agggtgaatc tcctctataa acattccagc 34080

accttcaacc atgcccaaat aattctcatc tcgccacctt ctcaatatat ctctaagcaa 34140

atcccgaata ttaagtccgg ccattgtaaa aatctgctcc agagcgccct ccaccttcag 34200

cctcaagcag cgaatcatga ttgcaaaaat tcaggttcct cacagacctg tataagattc 34260

aaaagcggaa cattaacaaa aataccgcga tcccgtaggt cccttcgcag ggccagctga 34320

acataatcgt gcaggtctgc acggaccagc gcggccactt ccccgccagg aaccatgaca 34380

aaagaaccca cactgattat gacacgcata ctcggagcta tgctaaccag cgtagccccg 34440

atgtaagctt gttgcatggg cggcgatata aaatgcaagg tgctgctcaa aaaatcaggc 34500

aaagcctcgc gcaaaaaaga aagcacatcg tagtcatgct catgcagata aaggcaggta 34560

agctccggaa ccaccacaga aaaagacacc atttttctct caaacatgtc tgcgggtttc 34620

tgcataaaca caaaataaaa taacaaaaaa acatttaaac attagaagcc tgtcttacaa 34680

caggaaaaac aacccttata agcataagac ggactacggc catgccggcg tgaccgtaaa 34740

aaaactggtc accgtgatta aaaagcacca ccgacagctc ctcggtcatg tccggagtca 34800

taatgtaaga ctcggtaaac acatcaggtt gattcacatc ggtcagtgct aaaaagcgac 34860

cgaaatagcc cgggggaata catacccgca ggcgtagaga caacattaca gcccccatag 34920

gaggtataac aaaattaata ggagagaaaa acacataaac acctgaaaaa ccctcctgcc 34980

taggcaaaat agcaccctcc cgctccagaa caacatacag cgcttccaca gcggcagcca 35040

taacagtcag ccttaccagt aaaaaagaaa acctattaaa aaaacaccac tcgacacggc 35100

accagctcaa tcagtcacag tgtaaaaaag ggccaagtgc agagcgagta tatataggac 35160

taaaaaatga cgtaacggtt aaagtccaca aaaaacaccc agaaaaccgc acgcgaacct 35220

acgcccagaa acgaaagcca aaaaacccac aacttcctca atcgtcact tccgttttcc 35280

cacgttacgt cacttcccat tttaagaaaa ctacaattcc caacacatac aagttactcc 35340

gccctaaaac ctacgtcacc cgccccgttc ccacgccccg cgccacgtca caaactccac 35400

cccctcatta tcatattggc ttcaatccaa aataaggtat attattgatg atg 35453

<210> 30
<211> 35453
<212> DNA
<213> Artificial Sequence

<220>
<223> Adk35RF-Spike/E4orf6(RSV)-E4dl-711(E4re#28)

<400> 30
ttaattaaca tcatcaataa tataccttat tttggattga agccaatatg ataatgaggg 60

ggtggagttt gtgacgtggc gcggggcgtg ggaacggggc gggtgacgta gtagtgtggc 120

ggaagtgtga tgttgcaagt gtggcggaac acatgtaagc gacggatgtg gcaaaagtga 180

cgtttttggt gtgcgccggt gtacacagga agtgacaatt ttcgcgcggt tttaggcgga 240

tgttgtagta aatttgggcg taaccgagta agatttggcc attttcgcgg gaaaactgaa 300

taagaggaag tgaaatctga ataattttgt gttactcata gcgcgtaata atttgatccg 360

cgttaagata cattgatgag tttggacaaa ccacaactag aatgcagtga aaaaaatgct 420

ttatttgtga aatttgtgat gctattgctt tatttgtaac cattataagc tgcaataaac 480

aagttaacaa caacaattgc attcatttta tgtttcaggt tcaggggggag gtgtgggagg 540

ttttttaaag caagtaaaac ctctacaaat gtggtatggc tgattatgat caattttcat 600

ggccacttga tgtattgttc atatttgccc agttcttgga ggtcaatcag ggactcattc 660

aggttcttag ccacctcatt cagtctgtca atctccttct ggatgttcac cacagaggca 720

ttgatgccag agatgtctcc caggtccaca tcagggctgg tgtggttctt gaagtatttg 780

tccagttcct ccttgaagga gtccagttca ggttggagtg ggtcatagac tgtgttgttc 840

acaatgccaa tcaccacatc acagttgcca gacacaaagg tgttgtctgt ggtgataatc 900

tgtggttcat agaagttcct ctgggtcaca aaccagtggg tgccattgct cacaaacact 960

ccctcccttg gaaagtgagc cttgccatca tggcagatgg caggggctgt ggtgaagttc 1020

ttctcctggg caggcacata ggtcacatgc aggaacacca ctccatgagg ggcagactgt 1080

ggaaaactca tcaggtggta gcccttgcca cagaagtcca ccctcttgct ttgtcccagc 1140

acacactcac tcatcttggt ggcagccagg ttggcagatg ccctaatctc agcagccctg 1200

ataagttgtt gggtcacata ggtttggagg gattggagtc tgcctgtaat cagtctgtca 1260

atctggacct cagcctccac cttgtccagt ctgctcagga tgtcattcag cacagaggag 1320

atggctccaa agttgctgga aagttgcttc accagggtgt tcagagcctg ggcattctgg 1380

ttcaccacat cttggagttt gcccagggca gaggctgtgc tggacaggga gtcctgaatc 1440

ttgccaatgg cagagttgaa ctggttggca atcagtttct ggttctcata gagcacattc 1500

tgggtcactc caatgccatt gaacctgtaa gccatctgca tagcaaatgg gatttggagg 1560

gctgctcctg ctccaaaggt ccagccagag gtgatggtgc cagccagcag ggcagaggtg 1620

tattgggcaa tcatctcatc tgtcagcagt ggaggcagca ctgtcagtcc attgaacttc 1680

tgggcacaaa tcaggtccct ggcagcaatg tctcccagac agtctccata ttgcttgatg 1740

aagccagcat cagccagggt caccttgttg aacagcaggt cctcaatgaa ggacctcttg 1800

cttggcttgc ttgggtcagg cagaatctgg ctgaagttga agcctccaaa gtccttgatt 1860

ggaggtgtct tgtaaatctg cttcacctgg gcaaacacct cctgggtgtt cttgtcctgt 1920

tccacagcaa tgcctgtcag agccctgtta agttgggtac agaaggagcc atattggagc 1980

agcaggttgc tacactctgt gctgtctcca cagatataca ttgtacagtc cacagaggtc 2040

ttggtcatac tcacaggcag aatctctgtg gtcacagaga tggtgaagtt ggttgggatg 2100

gcaatgctgt tgttgctgta agccacagag ttctctgctc ccagactcat tgtgtaggca 2160

atgatgctct ggcttgccac agacctcgac ccaccgccac cggtctgggt ctggtaggag 2220

gcacagatgc ctgctccaat tgggatgtca cactcatagg agttgttcac atgctctgct 2280

ccaatcagac agccagccct ggtctggaac acattgctgc ctgtgctgta gaccctccag 2340

gttggtgtaa gttggtcagc atggatagcc acaggcacct cagtacagtt cacatcctgg 2400

tagagcacag ccacctggtt gctggtgttg gtgccaggtg taatcacaga cactcctcca 2460

aaggaacatg gtgtgatgtc cagaatctcc aaggtctgtg ggtccctcac agcatctgtg 2520

gtgtcagcaa tgtccctgcc aaactgttgg aatggcagga acttcttgtt gctctctgtc 2580

agcactcctg tgcctgtcag tccattgaag ttgaagttca cacacttgtt cttcaccagg 2640

ttggtgctct tctttggtcc acacactgtg gcaggggcat ggagcagttc aaaggacagc 2700

accaccaccc tgtatggttg gtagcccact ccattggttg gttggaagcc ataggattgg 2760

agtggaaagt aacagttgaa gccctccact ccattacatg gtgtgctgcc agcctggtaa 2820

atctctgtgc tgatgtccct ctcaaatggt ttcaggttgc tcttcctgaa cagtctgtag 2880

aggtagttgt agttgcctcc caccttgctg tccaggttgt tgctgttcca ggcaatcaca 2940

cagcctgtga agtcatcagg cagtttgtag ttgtagtcag caatcttgcc tgtttgtcca 3000

ggggcaatct gtctcacctc atctccccta atcacaaagg agtcagcata gacattggtg 3060

aaacacaggt cattcagttt ggttgggctc actccataac acttgaaggt gctgaaggag 3120

gcagagttgt agagcacaga gtagtcagcc acacagttgc taatcctctt cctgttccag 3180

gcatagacag aggcaaacct ggtggcattg aacacctctc caaatggaca caggttggtg 3240

atgtttggaa acctcacaat gctctctgtt ggttggaccc tgaagttgct ggtctggtag 3300

atgcccttct ccactgtgaa ggatttcagg gtacacttgg tctcagacag tgggtccagg 3360

gcacagtcca cagcatctgt gatggtgcca ttctcattgt atttcagcag gaaggtcctt 3420

ggttggaggt agcccacata gtaggctgct gctcctgctg tccagccaga ggaggagtct 3480

ccaggtgtca ggtaggacct gtgcagagcc agcagggtct ggaacctggt gatgttgatg 3540

ccaattggca ggtccaccag tggttccaag gcagagaagc cctgtggcag gtccctcacc 3600

aggttgattg gtgtgtgttt gctgtaaatc ttgaagtagc catcaatgtt cttgaacaca 3660

aactccctca ggttcttgaa gttgccctgc ttgccctcca agtccatcag gaatggttgg 3720

ctcacatatt caaaggtaca gttgttggca gaggagtaga ccctgaactc agactccatc 3780

caggacttgt tgttcttgtg gtagtagact cccaggaatg ggtcattaca gaactggaac 3840

tcacacacct taatcaccac attggtggca ttgttcacaa tcagcaggga ctgggtcttg 3900

ctgtccaggg tggtgccaaa aatccagccc ctgatgatgt tgctcttctc tgtgctggca 3960

aagtagactc catcattgaa tggcagcaca gggttgtcaa acctcttggt gccattggtg 4020

ccagacacat ggatggcatg gaaccaggtc acattgctga agaatggcag gaacaggtcc 4080

tgggtgctgt gcagcacaga ggacctgaac accttgtcag ggtagtagac tcccctggtg 4140

aaggagttgg tgtaggcagg aggaagttgg gtcctggtgg tcaggttcac acactggctg 4200

gacaccagtg gcagcagcac caggaacaca aacatggtgg caaatcggag gctggatcgg 4260

tcccggtgtc ttctatggag gtcaaaacag cgtggatggc gtctccaggc gatctgacgg 4320

ttcactaaac gagctcgtcg acgatctcta tcactgatag ggagatctct atcactgata 4380

gggagagctc tgcttatata gacctcccac cgtacacgcc taccgcccat ttgcgtcaat 4440

ggggcggagt tgttacgaca ttttggaaag tcccgttgat tttggtgcca aaacaaactc 4500

ccattgacgt caatggggtg gagacttgga aatccccgtg agtcaaaccg ctatccacgc 4560

ccattgatgt actgccaaaa ccgcatcacc atggtaatag cgatgactaa tacgtagatg 4620

tactgccaag taggaaagtc ccataaggtc atgtactggg cataatgcca ggcgggccat 4680

ttaccgtcat tgacgtcaat agggggcgta cttggcatat gatacacttg atgtactgcc 4740

aagtgggcag tttaccgtaa atactccacc cattgacgtc aatggaaagt ccctattggc 4800

gttactatgg gaacatacgt cattattgac gtcaatgggc gggggtcgtt gggcggtcag 4860

ccaggcgggc catttaccgt aagttatgta acgcggaact ccatatatgg gctatgaact 4920

aatgaccccg taattgatta ctattacagt gtagtcttat gcaatactct tgtagtcttg 4980

caacatggta acgatgagtt agcaacatgc cttacaagga gagaaaaagc accgtgcatg 5040

ccgattggtg gaagtaaggt ggtacgatcg tgccttatta ggaaggcaac agacgggtct 5100

gacatggatt ggacgaacca ctgaattgcc gcattgcaga gatattgtat ttaagtgcct 5160

agctcgatac ataaacaaac taccccaagc tggccaccat gactacgtcc ggcgttccat 5220

ttggcatgac actacgacca acacgatctc ggttgtctcg gcgcactccg tacagtaggg 5280

atcgtctacc tccttttgag acagaaaccc gcgctaccat actggaggat catccgctgc 5340

tgcccgaatg taacactttg acaatgcaca acgtgagtta cgtgcgaggt cttccctgca 5400

gtgtgggatt tacgctgatt caggaatggg ttgttccctg ggatatggtt ctaacgcggg 5460

aggagcttgt aatcctgagg aagtgtatgc acgtgtgcct gtgttgtgcc aacattgata 5520

tcatgacgag catgatgatc catggttacg agtcctgggc tctccactgt cattgttcca 5580

gtcccggttc cctgcagtgt atagccggcg ggcaggtttt ggccagctgg tttaggatgg 5640

tggtggatgg cgccatgttt aatcagaggt ttatatggta ccgggaggtg gtgaattaca 5700

acatgccaaa agaggtaatg tttatgtcca gcgtgtttat gaggggtcgc cacttaatct 5760

acctgcgctt gtggtatgat ggccacgtgg gttctgtggt ccccgccatg agctttggat 5820

acagcgcctt gcactgtggg attttgaaca atattgtggt gctgtgctgc agttactgtg 5880

ctgatttaag tgagatcagg gtgcgctgct gtgcccggag gacaaggcgc cttatgctgc 5940

gggcggtgcg aatcatcgct gaggagacca ctgccatgtt gtattcctgc aggacggagc 6000

ggcggcggca gcagtttatt cgcgcgctgc tgcagcacca ccgccctatc ctgatgcacg 6060

attatgactc tacccccatg tagaagcttg gggatcaatt ctctagagct cgctgatcag 6120

cctcgactgt gccttctagt tgccagccat ctgttgtttg cccctccccc gtgccttcct 6180

tgaccctgga aggtgccact cccactgtcc tttcctaata aaatgaggaa attgcatcgc 6240

attgtctgag taggtgtcat tctattctgg ggggtggggt ggggcaggac agcaaggggg 6300

aggattggga agacaatagc aggcatgctg gggatgcggt gggctctatg gcttctgagg 6360

aaattgggcg tggcttaagg gtgggaaaga atatataagg tgggggtctt atgtagtttt 6420

gtatctgttt tgcagcagcc gccgccgcca tgagcaccaa ctcgtttgat ggaagcattg 6480

tgagctcata tttgacaacg cgcatgcccc catgggccgg ggtgcgtcag aatgtgatgg 6540

gctccagcat tgatggtcgc cccgtcctgc ccgcaaactc tactaccttg acctacgaga 6600

ccgtgtctgg aacgccgttg gagactgcag cctccgccgc cgcttcagcc gctgcagcca 6660

ccgcccgcgg gattgtgact gactttgctt tcctgagccc gcttgcaagc agtgcagctt 6720

cccgttcatc cgcccgcgat gacaagttga cggctctttt ggcacaattg gattctttga 6780

cccgggaact taatgtcgtt tctcagcagc tgttggatct gcgccagcag gtttctgccc 6840

tgaaggcttc ctcccctccc aatgcggttt aaaacataaa taaaaaacca gactctgttt 6900

ggatttggat caagcaagtg tcttgctgtc tttatttagg ggttttgcgc gcgcggtagg 6960

cccgggacca gcggtctcgg tcgttgaggg tcctgtgtat tttttccagg acgtggtaaa 7020

ggtgactctg gatgttcaga tacatgggca taagcccgtc tctggggtgg aggtagcacc 7080

actgcagagc ttcatgctgc ggggtggtgt tgtagatgat ccagtcgtag caggagcgct 7140

gggcgtggtg cctaaaaatg tctttcagta gcaagctgat tgccaggggc aggcccttgg 7200

tgtaagtgtt tacaaagcgg ttaagctggg atgggtgcat acgtggggat atgagatgca 7260

tcttggactg tatttttagg ttggctatgt tcccagccat atccctccgg ggattcatgt 7320

tgtgcagaac caccagcaca gtgtatccgg tgcacttggg aaatttgtca tgtagcttag 7380

aaggaaatgc gtggaagaac ttggagacgc ccttgtgacc tccaagattt tccatgcatt 7440

cgtccataat gatggcaatg ggcccacggg cggcggcctg ggcgaagata tttctgggat 7500

cactaacgtc atagttgtgt tccaggatga gatcgtcata ggccattttt acaaagcgcg 7560

ggcggagggt gccagactgc ggtataatgg ttccatccgg cccaggggcg tagttaccct 7620

cacagatttg catttcccac gctttgagtt cagatggggg gatcatgtct acctgcgggg 7680

cgatgaagaa aacggtttcc ggggtagggg agatcagctg ggaagaaagc aggttcctga 7740

gcagctgcga cttaccgcag ccggtgggcc cgtaaatcac acctattacc gggtgcaact 7800

ggtagttaag agagctgcag ctgccgtcat ccctgagcag gggggccact tcgttaagca 7860

tgtccctgac tcgcatgttt tccctgacca aatccgccag aaggcgctcg ccgcccagcg 7920

atagcagttc ttgcaaggaa gcaaagtttt tcaacggttt gagaccgtcc gccgtaggca 7980

tgcttttgag cgtttgacca agcagttcca ggcggtccca cagctcggtc acctgctcta 8040

cggcatctcg atccagcata tctcctcgtt tcgcgggttg gggcggcttt cgctgtacgg 8100

cagtagtcgg tgctcgtcca gacgggccag ggtcatgtct ttccacgggc gcagggtcct 8160

cgtcagcgta gtctgggtca cggtgaaggg gtgcgctccg ggctgcgcgc tggccagggt 8220

gcgcttgagg ctggtcctgc tggtgctgaa gcgctgccgg tcttcgccct gcgcgtcggc 8280

caggtagcat ttgaccatgg tgtcatagtc cagcccctcc gcggcgtggc ccttggcgcg 8340

cagcttgccc ttggaggagg cgccgcacga ggggcagtgc agacttttga gggcgtagag 8400

cttgggcgcg agaaataccg attccgggga gtaggcatcc gcgccgcagg ccccgcagac 8460

ggtctcgcat tccacgagcc aggtgagctc tggccgttcg gggtcaaaaa ccaggtttcc 8520

cccatgcttt ttgatgcgtt tcttacctct ggtttccatg agccggtgtc cacgctcggt 8580

gacgaaaagg ctgtccgtgt ccccgtatac agacttgaga ggcctgtcct cgagcggtgt 8640

tccgcggtcc tcctcgtata gaaactcgga ccactctgag acaaaggctc gcgtccaggc 8700

cagcacgaag gaggctaagt gggaggggta gcggtcgttg tccactaggg ggtccactcg 8760

ctccagggtg tgaagacaca tgtcgccctc ttcggcatca aggaaggtga ttggtttgta 8820

ggtgtaggcc acgtgaccgg gtgttcctga aggggggcta taaaaggggg tgggggcgcg 8880

ttcgtcctca ctctcttccg catcgctgtc tgcgagggcc agctgttggg gtgagtactc 8940

cctctgaaaa gcgggcatga cttctgcgct aagattgtca gtttccaaaa acgaggagga 9000

tttgatattc acctggcccg cggtgatgcc tttgagggtg gccgcatcca tctggtcaga 9060

aaagacaatc tttttgttgt caagcttggt ggcaaacgac ccgtagaggg cgttggacag 9120

caacttggcg atggagcgca gggtttggtt tttgtcgcga tcggcgcgct ccttggccgc 9180

gatgtttagc tgcacgtatt cgcgcgcaac gcaccgccat tcgggaaaga cggtggtgcg 9240

ctcgtcgggc accaggtgca cgcgccaacc gcggttgtgc agggtgacaa ggtcaacgct 9300

ggtggctacc tctccgcgta ggcgctcgtt ggtccagcag aggcggccgc ccttgcgcga 9360

gcagaatggc ggtagggggt ctagctgcgt ctcgtccggg gggtctgcgt ccacggtaaa 9420

gaccccgggc agcaggcgcg cgtcgaagta gtctatcttg catccttgca agtctagcgc 9480

ctgctgccat gcgcgggcgg caagcgcgcg ctcgtatggg ttgagtgggg gaccccatgg 9540

catggggtgg gtgagcgcgg aggcgtacat gccgcaaatg tcgtaaacgt agaggggctc 9600

tctgagtatt ccaagatatg tagggtagca tcttccaccg cggatgctgg cgcgcacgta 9660

atcgtatagt tcgtgcgagg gagcgaggag gtcgggaccg aggttgctac gggcgggctg 9720

ctctgctcgg aagactatct gcctgaagat ggcatgtgag ttggatgata tggttggacg 9780

ctggaagacg ttgaagctgg cgtctgtgag acctaccgcg tcacgcacga aggaggcgta 9840

ggagtcgcgc agcttgttga ccagctcggc ggtgacctgc acgtctaggg cgcagtagtc 9900

cagggtttcc ttgatgatgt catacttatc ctgtcccttt tttttccaca gctcgcggtt 9960

gaggacaaac tcttcgcggt ctttccagta ctcttggatc ggaaacccgt cggcctccga 10020

acggtaagag cctagcatgt agaactggtt gacggcctgg taggcgcagc atccctttc 10080

tacgggtagc gcgtatgcct gcgcggcctt ccggagcgag gtgtgggtga gcgcaaaggt 10140

gtccctgacc atgactttga ggtactggta tttgaagtca gtgtcgtcgc atccgccctg 10200

ctcccagagc aaaaagtccg tgcgcttttt ggaacgcgga tttggcaggg cgaaggtgac 10260

atcgttgaag agtatctttc ccgcgcgagg cataaagttg cgtgtgatgc ggaagggtcc 10320

cggcacctcg gaacggttgt taattacctg ggcggcgagc acgatctcgt caaagccgtt 10380

gatgttgtgg cccacaatgt aaagttccaa gaagcgcggg atgcccttga tggaaggcaa 10440

ttttttaagt tcctcgtagg tgagctcttc aggggagctg agcccgtgct ctgaaagggc 10500

ccagtctgca agatgagggt tggaagcgac gaatgagctc cacaggtcac gggccattag 10560

catttgcagg tggtcgcgaa aggtcctaaa ctggcgacct atggccattt tttctggggt 10620

gatgcagtag aaggtaagcg ggtcttgttc ccagcggtcc catccaaggt tcgcggctag 10680

gtctcgcgcg gcagtcacta gaggctcatc tccgccgaac ttcatgacca gcatgaaggg 10740

cacgagctgc ttcccaaagg cccccatcca agtataggtc tctacatcgt aggtgacaaa 10800

gagacgctcg gtgcgaggat gcgagccgat cgggaagaac tggatctccc gccaccaatt 10860

ggaggagtgg ctattgatgt ggtgaaagta gaagtccctg cgacgggccg aacactcgtg 10920

ctggcttttg taaaaacgtg cgcagtactg gcagcggtgc acgggctgta catcctgcac 10980

gaggttgacc tgacgaccgc gcacaaggaa gcagagtggg aatttgagcc cctcgcctgg 11040

cgggtttggc tggtggtctt ctacttcggc tgcttgtcct tgaccgtctg gctgctcgag 11100

gggagttacg gtggatcgga ccaccacgcc gcgcgagccc aaagtccaga tgtccgcgcg 11160

cggcggtcgg agcttgatga caacatcgcg cagatgggag ctgtccatgg tctggagctc 11220

ccgcggcgtc aggtcaggcg ggagctcctg caggtttacc tcgcatagac gggtcagggc 11280

gcgggctaga tccaggtgat acctaatttc caggggctgg ttggtggcgg cgtcgatggc 11340

ttgcaagagg ccgcatcccc gcggcgcgac tacggtaccg cgcggcgggc ggtgggccgc 11400

gggggtgtcc ttggatgatg catctaaaag cggtgacgcg ggcgagcccc cggaggtagg 11460

gggggctccg gacccgccgg gagaggggggc aggggcacgt cggcgccgcg cgcgggcagg 11520

agctggtgct gcgcgcgtag gttgctggcg aacgcgacga cgcggcggtt gatctcctga 11580

atctggcgcc tctgcgtgaa gacgacgggc ccggtgagct tgaacctgaa agagagttcg 11640

acagaatcaa tttcggtgtc gttgacggcg gcctggcgca aaatctcctg cacgtctcct 11700

gagttgtctt gataggcgat ctcggccatg aactgctcga tctcttcctc ctggagatct 11760

ccgcgtccgg ctcgctccac ggtggcggcg aggtcgttgg aaatgcgggc catgagctgc 11820

gagaaggcgt tgaggcctcc ctcgttccag acgcggctgt agaccacgcc cccttcggca 11880

tcgcgggcgc gcatgaccac ctgcgcgaga ttgagctcca cgtgccgggc gaagacggcg 11940

tagtttcgca ggcgctgaaa gaggtagttg agggtggtgg cggtgtgttc tgccacgaag 12000

aagtacataa cccagcgtcg caacgtggat tcgttgatat cccccaaggc ctcaaggcgc 12060

tccatggcct cgtagaagtc cacggcgaag ttgaaaaact gggagttgcg cgccgacacg 12120

gttaactcct cctccagaag acggatgagc tcggcgacag tgtcgcgcac ctcgcgctca 12180

aaggctacag gggcctcttc ttcttcttca atctcctctt ccataagggc ctccccttct 12240

tcttcttctg gcggcggtgg gggaggggcg acacggcggc gacgacggcg caccgggagg 12300

cggtcgacaa agcgctcgat catctccccg cggcgacggc gcatggtctc ggtgacggcg 12360

cggccgttct cgcgggggcg cagttggaag acgccgcccg tcatgtcccg gttatgggtt 12420

ggcgggggcg tgccatgcgg cagggatacg gcgctaacga tgcatctcaa caattgttgt 12480

gtaggtactc cgccgccgag ggacctgagc gagtccgcat cgaccggatc ggaaaacctc 12540

tcgagaaagg cgtctaacca gtcacagtcg caaggtaggc tgagcaccgt ggcgggcggc 12600

agcgggcggc ggtcggggtt gtttctggcg gaggtgctgc tgatgatgta attaaagtag 12660

gcggtcttga gacggcggat ggtcgacaga agcaccatgt ccttgggtcc ggcctgctga 12720

atgcgcaggc ggtcggccat gccccaggct tcgttttgac atcggcgcag gtctttgtag 12780

tagtcttgca tgagcctttc taccggcact tcttcttctc cttcctcttg tcctgcatct 12840

cttgcatcta tcgctgcggc ggcggcggag tttggccgta ggtggcgccc tcttcctccc 12900

atgcgtgtga ccccgaagcc cctcatcggc tgaagcaggg ctaggtcggc gacaacgcgc 12960

tcggctaata tggcctgctg cacctgcgtg agggtagact ggaagtcatc catgtccaca 13020

aagcggtggt atgcgcccgt gttgatggtg taagtgcagt tggccataac ggaccagtta 13080

acggtctggt gacccggctg cgagagctcg gtgtacctga gacgcgagta agccctcgag 13140

tcaaatacgt agtcgttgca agtccgcacc aggtactggt atcccaccaa aaagtgcggc 13200

ggcggctggc ggtagagggg ccagcgtagg gtggccgggg ctccgggggc gagatcttcc 13260

aacataaggc gatgatatcc gtagatgtac ctggacatcc aggtgatgcc ggcggcggtg 13320

gtggaggcgc gcggaaagtc gcggacgcgg ttccagatgt tgcgcagcgg caaaaagtgc 13380

tccatggtcg ggacgctctg gccggtcagg cgcgcgcaat cgttgacgct ctagcgtgca 13440

aaaggagagc ctgtaagcgg gcactcttcc gtggtctggt ggataaattc gcaagggtat 13500

catggcggac gaccggggtt cgagccccgt atccggccgt ccgccgtgat ccatgcggtt 13560

accgcccgcg tgtcgaaccc aggtgtgcga cgtcagacaa cgggggagtg ctccttttgg 13620

cttccttcca ggcgcggcgg ctgctgcgct agctttttg gccactggcc gcgcgcagcg 13680

taagcggtta ggctggaaag cgaaagcatt aagtggctcg ctccctgtag ccggagggtt 13740

attttccaag ggttgagtcg cgggaccccc ggttcgagtc tcggaccggc cggactgcgg 13800

cgaacggggg tttgcctccc cgtcatgcaa gaccccgctt gcaaattcct ccggaaacag 13860

ggacgagccc ctttttgct tttcccagat gcatccggtg ctgcggcaga tgcgcccccc 13920

tcctcagcag cggcaagagc aagagcagcg gcagacatgc agggcaccct cccctcctcc 13980

taccgcgtca ggaggggcga catccgcggt tgacgcggca gcagatggtg attacgaacc 14040

cccgcggcgc cgggcccggc actacctgga cttggaggag ggcgagggcc tggcgcggct 14100

aggagcgccc tctcctgagc ggcacccaag ggtgcagctg aagcgtgata cgcgtgaggc 14160

gtacgtgccg cggcagaacc tgtttcgcga ccgcgaggga gaggagcccg aggagatgcg 14220

ggatcgaaag ttccacgcag ggcgcgagct gcggcatggc ctgaatcgcg agcggttgct 14280

gcgcgaggag gactttgagc ccgacgcgcg aaccgggatt agtcccgcgc gcgcacacgt 14340

ggcggccgcc gacctggtaa ccgcatacga gcagacggtg aaccaggaga ttaactttca 14400

aaaaagcttt aacaaccacg tgcgtacgct tgtggcgcgc gaggaggtgg ctataggact 14460

gatgcatctg tgggactttg taagcgcgct ggagcaaaac ccaaatagca agccgctcat 14520

ggcgcagctg ttccttatag tgcagcacag cagggacaac gaggcattca gggatgcgct 14580

gctaaacata gtagagcccg agggccgctg gctgctcgat ttgataaaca tcctgcagag 14640

catagtggtg caggagcgca gcttgagcct ggctgacaag gtggccgcca tcaactattc 14700

catgcttagc ctgggcaagt tttacgcccg caagatatac catacccctt acgttcccat 14760

agacaaggag gtaaagatcg aggggttcta catgcgcatg gcgctgaagg tgcttacctt 14820

gagcgacgac ctgggcgttt atcgcaacga gcgcatccac aaggccgtga gcgtgagccg 14880

gcggcgcgag ctcagcgacc gcgagctgat gcacagcctg caaagggccc tggctggcac 14940

gggcagcggc gatagagagg ccgagtccta ctttgacgcg ggcgctgacc tgcgctgggc 15000

cccaagccga cgcgccctgg aggcagctgg ggccggacct gggctggcgg tggcacccgc 15060

gcgcgctggc aacgtcggcg gcgtggagga atatgacgag gacgatgagt acgagccaga 15120

ggacggcgag tactaagcgg tgatgtttct gatcagatga tgcaagacgc aacggacccg 15180

gcggtgcggg cggcgctgca gagccagccg tccggcctta actccacgga cgactggcgc 15240

caggtcatgg accgcatcat gtcgctgact gcgcgcaatc ctgacgcgtt ccggcagcag 15300

ccgcaggcca accggctctc cgcaattctg gaagcggtgg tcccggcgcg cgcaaacccc 15360

acgcacgaga aggtgctggc gatcgtaaac gcgctggccg aaaacagggc catccggccc 15420

gacgaggccg gcctggtcta cgacgcgctg cttcagcgcg tggctcgtta caacagcggc 15480

aacgtgcaga ccaacctgga ccggctggtg ggggatgtgc gcgaggccgt ggcgcagcgt 15540

gagcgcgcgc agcagcaggg caacctgggc tccatggttg cactaaacgc cttcctgagt 15600

acacagcccg ccaacgtgcc gcggggacag gaggactaca ccaactttgt gagcgcactg 15660

cggctaatgg tgactgagac accgcaaagt gaggtgtacc agtctgggcc agactatttt 15720

ttccagacca gtagacaagg cctgcagacc gtaaacctga gccaggcttt caaaaacttg 15780

caggggctgt ggggggtgcg ggctcccaca ggcgaccgcg cgaccgtgtc tagcttgctg 15840

acgcccaact cgcgcctgtt gctgctgcta atagcgccct tcacggacag tggcagcgtg 15900

tcccgggaca catacctagg tcacttgctg acactgtacc gcgaggccat aggtcaggcg 15960

catgtggacg agcatacttt ccaggagatt acaagtgtca gccgcgcgct ggggcaggag 16020

gacacgggca gcctggaggc aaccctaaac tacctgctga ccaaccggcg gcagaagatc 16080

ccctcgttgc acagtttaaa cagcgaggag gagcgcattt tgcgctacgt gcagcagagc 16140

gtgagcctta acctgatgcg cgacggggta acgcccagcg tggcgctgga catgaccgcg 16200

cgcaacatgg aaccgggcat gtatgcctca aaccggccgt ttatcaaccg cctaatggac 16260

tacttgcatc gcgcggccgc cgtgaacccc gagtatttca ccaatgccat cttgaacccg 16320

cactggctac cgccccctgg tttctacacc gggggattcg aggtgcccga gggtaacgat 16380

ggattcctct gggacgacat agacgacagc gtgttttccc cgcaaccgca gaccctgcta 16440

gagttgcaac agcgcgagca ggcagaggcg gcgctgcgaa aggaaagctt ccgcaggcca 16500

agcagcttgt ccgatctagg cgctgcggcc ccgcggtcag atgctagtag cccatttcca 16560

agcttgatag ggtctcttac cagcactcgc accacccgcc cgcgcctgct gggcgaggag 16620

gagtacctaa acaactcgct gctgcagccg cagcgcgaaa aaaacctgcc tccggcattt 16680

cccaacaacg ggatagagag cctagtggac aagatgagta gatggaagac gtacgcgcag 16740

gagcacaggg acgtgccagg cccgcgcccg cccacccgtc gtcaaaggca cgaccgtcag 16800

cggggtctgg tgtgggagga cgatgactcg gcagacgaca gcagcgtcct ggatttggga 16860

gggagtggca acccgtttgc gcaccttcgc cccaggctgg ggagaatgtt ttaaaaaaaa 16920

aaaagcatga tgcaaaataa aaaactcacc aaggccatgg caccgagcgt tggttttctt 16980

gtattcccct tagtatgcgg cgcgcggcga tgtatgagga aggtcctcct ccctcctacg 17040

agagtgtggt gagcgcggcg ccagtggcgg cggcgctggg ttctcccttc gatgctcccc 17100

tggacccgcc gtttgtgcct ccgcggtacc tgcggcctac cgggggggaga aacagcatcc 17160

gttactctga gttggcaccc ctattcgaca ccacccgtgt gtacctggtg gacaacaagt 17220

caacggatgt ggcatccctg aactaccaga acgaccacag caactttctg accacggtca 17280

ttcaaaacaa tgactacagc ccgggggagg caagcacaca gaccatcaat cttgacgacc 17340

ggtcgcactg gggcggcgac ctgaaaacca tcctgcatac caacatgcca aatgtgaacg 17400

agttcatgtt taccaataag tttaaggcgc gggtgatggt gtcgcgcttg cctactaagg 17460

acaatcaggt ggagctgaaa tacgagtggg tggagttcac gctgcccgag ggcaactact 17520

ccgagaccat gaccatagac cttatgaaca acgcgatcgt ggagcactac ttgaaagtgg 17580

gcagacagaa cggggttctg gaaagcgaca tcggggtaaa gtttgacacc cgcaacttca 17640

gactggggtt tgaccccgtc actggtcttg tcatgcctgg ggtatataca aacgaagcct 17700

tccatccaga catcattttg ctgccaggat gcggggtgga cttcacccac agccgcctga 17760

gcaacttgtt gggcatccgc aagcggcaac ccttccagga gggctttagg atcacctacg 17820

atgatctgga gggtggtaac attcccgcac tgttggatgt ggacgcctac caggcgagct 17880

tgaaagatga caccgaacag ggcgggggtg gcgcaggcgg cagcaacagc agtggcagcg 17940

gcgcggaaga gaactccaac gcggcagccg cggcaatgca gccggtggag gacatgaacg 18000

atcatgccat tcgcggcgac acctttgcca cacgggctga ggagaagcgc gctgaggccg 18060

aagcagcggc cgaagctgcc gcccccgctg cgcaacccga ggtcgagaag cctcagaaga 18120

aaccggtgat caaacccctg acagaggaca gcaagaaacg cagttacaac ctaataagca 18180

atgacagcac cttcacccag taccgcagct ggtaccttgc atacaactac ggcgaccctc 18240

agaccggaat ccgctcatgg accctgcttt gcactcctga cgtaacctgc ggctcggagc 18300

aggtctactg gtcgttgcca gacatgatgc aagaccccgt gaccttccgc tccacgcgcc 18360

agatcagcaa ctttccggtg gtgggcgccg agctgttgcc cgtgcactcc aagagcttct 18420

acaacgacca ggccgtctac tcccaactca tccgccagtt tacctctctg acccacgtgt 18480

tcaatcgctt tcccgagaac cagattttgg cgcgcccgcc agcccccacc atcaccaccg 18540

tcagtgaaaa cgttcctgct ctcacagatc acgggacgct accgctgcgc aacagcatcg 18600

gaggagtcca gcgagtgacc attactgacg ccagacgccg cacctgcccc tacgtttaca 18660

aggccctggg catagtctcg ccgcgcgtcc tatcgagccg cacttttga gcaagcatgt 18720

ccatccttat atcgcccagc aataacacag gctggggcct gcgcttccca agcaagatgt 18780

ttggcggggc caagaagcgc tccgaccaac acccagtgcg cgtgcgcggg cactaccgcg 18840

cgccctgggg cgcgcacaaa cgcggccgca ctgggcgcac caccgtcgat gacgccatcg 18900

acgcggtggt ggaggaggcg cgcaactaca cgcccacgcc gccaccagtg tccacagtgg 18960

acgcggccat tcagaccgtg gtgcgcggag cccggcgcta tgctaaaatg aagagacggc 19020

ggaggcgcgt agcacgtcgc caccgccgcc gacccggcac tgccgcccaa cgcgcggcgg 19080

cggccctgct taaccgcgca cgtcgcaccg gccgacgggc ggccatgcgg gccgctcgaa 19140

ggctggccgc gggtattgtc actgtgcccc ccaggtccag gcgacgagcg gccgccgcag 19200

cagccgcggc cattagtgct atgactcagg gtcgcagggg caacgtgtat tgggtgcgcg 19260

actcggttag cggcctgcgc gtgcccgtgc gcacccgccc cccgcgcaac tagattgcaa 19320

gaaaaaacta cttagactcg tactgttgta tgtatccagc ggcggcggcg cgcaacgaag 19380

ctatgtccaa gcgcaaaatc aaagaagaga tgctccaggt catcgcgccg gagatctatg 19440

gccccccgaa gaaggaagag caggattaca agccccgaaa gctaaagcgg gtcaaaaaga 19500

aaaagaaaga tgatgatgat gaacttgacg acgaggtgga actgctgcac gctaccgcgc 19560

ccaggcgacg ggtacagtgg aaaggtcgac gcgtaaaacg tgttttgcga cccggcacca 19620

ccgtagtctt tacgcccggt gagcgctcca cccgcaccta caagcgcgtg tatgatgagg 19680

tgtacggcga cgaggacctg cttgagcagg ccaacgagcg cctcggggag tttgcctacg 19740

gaaagcggca taaggacatg ctggcgttgc cgctggacga gggcaaccca acacctagcc 19800

taaagcccgt aacactgcag caggtgctgc ccgcgcttgc accgtccgaa gaaaagcgcg 19860

gcctaaagcg cgagtctggt gacttggcac ccaccgtgca gctgatggta cccaagcgcc 19920

agcgactgga agatgtcttg gaaaaaatga ccgtggaacc tgggctggag cccgaggtcc 19980

gcgtgcggcc aatcaagcag gtggcgccgg gactgggcgt gcagaccgtg gacgttcaga 20040

tacccactac cagtagcacc agtattgcca ccgccacaga gggcatggag acacaaacgt 20100

ccccggttgc ctcagcggtg gcggatgccg cggtgcaggc ggtcgctgcg gccgcgtcca 20160

agacctctac ggaggtgcaa acggacccgt ggatgtttcg cgtttcagcc ccccggcgcc 20220

cgcgccgttc gaggaagtac ggcgccgcca gcgcgctact gcccgaatat gccctacatc 20280

cttccattgc gcctaccccc ggctatcgtg gctacaccta ccgccccaga agacgagcaa 20340

ctacccgacg ccgaaccacc actggaaccc gccgccgccg tcgccgtcgc cagcccgtgc 20400

tggccccgat ttccgtgcgc agggtggctc gcgaaggagg caggaccctg gtgctgccaa 20460

cagcgcgcta ccaccccagc atcgtttaaa agccggtctt tgtggttctt gcagatatgg 20520

ccctcacctg ccgcctccgt ttcccggtgc cgggattccg aggaagaatg caccgtagga 20580

ggggcatggc cggccacggc ctgacgggcg gcatgcgtcg tgcgcaccac cggcggcggc 20640

gcgcgtcgca ccgtcgcatg cgcggcggta tcctgcccct ccttattcca ctgatcgccg 20700

cggcgattgg cgccgtgccc ggaattgcat ccgtggcctt gcaggcgcag agacactgat 20760

taaaaacaag ttgcatgtgg aaaaatcaaa ataaaaagtc tggactctca cgctcgcttg 20820

gtcctgtaac tattttgtag aatggaagac atcaactttg cgtctctggc cccgcgacac 20880

ggctcgcgcc cgttcatggg aaactggcaa gatatcggca ccagcaatat gagcggtggc 20940

gccttcagct ggggctcgct gtggagcggc attaaaaatt tcggttccac cgttaagaac 21000

tatggcagca aggcctggaa cagcagcaca ggccagatgc tgagggataa gttgaaagag 21060

caaaatttcc aacaaaaggt ggtagatggc ctggcctctg gcattagcgg ggtggtggac 21120

ctggccaacc aggcagtgca aaataagatt aacagtaagc ttgatccccg ccctcccgta 21180

gaggagcctc caccggccgt ggagacagtg tctccagagg ggcgtggcga aaagcgtccg 21240

cgccccgaca gggaagaaac tctggtgacg caaatagacg agcctccctc gtacgaggag 21300

gcactaaagc aaggcctgcc caccacccgt cccatcgcgc ccatggctac cggagtgctg 21360

ggccagcaca cacccgtaac gctggacctg cctccccccg ccgacaccca gcagaaacct 21420

gtgctgccag gcccgaccgc cgttgttgta acccgtccta gccgcgcgtc cctgcgccgc 21480

gccgccagcg gtccgcgatc gttgcggccc gtagccagtg gcaactggca aagcacactg 21540

aacagcatcg tgggtctggg ggtgcaatcc ctgaagcgcc gacgatgctt ctgatagcta 21600

acgtgtcgta tgtgtgtcat gtatgcgtcc atgtcgccgc cagaggagct gctgagccgc 21660

cgcgcgcccg ctttccaaga tggctacccc ttcgatgatg ccgcagtggt cttacatgca 21720

catctcgggc caggacgcct cggagtacct gagccccggg ctggtgcagt ttgcccgcgc 21780

caccgagacg tacttcagcc tgaataacaa gtttagaaac cccacggtgg cgcctacgca 21840

cgacgtgacc acagaccggt cccagcgttt gacgctgcgg ttcatccctg tggaccgtga 21900

ggatactgcg tactcgtaca aggcgcggtt caccctagct gtgggtgata accgtgtgct 21960

ggacatggct tccacgtact ttgacatccg cggcgtgctg gacaggggcc ctacttttaa 22020

gccctactct ggcactgcct acaacgccct ggctcccaag ggtgccccaa atccttgcga 22080

atgggatgaa gctgctactg ctcttgaaat aaacctagaa gaagaggacg atgacaacga 22140

agacgaagta gacgagcaag ctgagcagca aaaaactcac gtatttgggc aggcgcctta 22200

ttctggtata aatattacaa aggagggtat tcaaataggt gtcgaaggtc aaacacctaa 22260

atatgccgat aaaacatttc aacctgaacc tcaaatagga gaatctcagt ggtacgaaac 22320

agaaattaat catgcagctg ggagagtcct aaaaaagact accccaatga aaccatgtta 22380

cggttcatat gcaaaaccca caaatgaaaa tggagggcaa ggcattcttg taaagcaaca 22440

aaatggaaag ctagaaagtc aagtggaaat gcaatttttc tcaactactg aggcagccgc 22500

aggcaatggt gataacttga ctcctaaagt ggtattgtac agtgaagatg tagatataga 22560

aaccccagac actcatattt cttacatgcc cactattaag gaaggtaact cacgagaact 22620

aatgggccaa caatctatgc ccaacaggcc taattacatt gcttttaggg acaattttat 22680

tggtctaatg tattacaaca gcacgggtaa tatgggtgtt ctggcgggcc aagcatcgca 22740

gttgaatgct gttgtagatt tgcaagacag aaacacagag ctttcatacc agcttttgct 22800

tgattccatt ggtgatagaa ccaggtactt ttctatgtgg aatcaggctg ttgacagcta 22860

tgatccagat gttagaatta ttgaaaatca tggaactgaa gatgaacttc caaattactg 22920

ctttccactg ggaggtgtga ttaatacaga gactcttacc aaggtaaaac ctaaaacagg 22980

tcaggaaaat ggatgggaaa aagatgctac agaattttca gataaaaatg aaataagagt 23040

tggaaataat tttgccatgg aaatcaatct aaatgccaac ctgtggagaa atttcctgta 23100

ctccaacata gcgctgtatt tgcccgacaa gctaaagtac agtccttcca acgtaaaaat 23160

ttctgataac ccaaacacct acgactacat gaacaagcga gtggtggctc ccgggctagt 23220

ggactgctac attaaccttg gagcacgctg gtcccttgac tatatggaca acgtcaaccc 23280

atttaaccac caccgcaatg ctggcctgcg ctaccgctca atgttgctgg gcaatggtcg 23340

ctatgtgccc ttccacatcc aggtgcctca gaagttcttt gccattaaaa acctccttct 23400

cctgccgggc tcatacacct acgagtggaa cttcaggaag gatgttaaca tggttctgca 23460

gagctcccta ggaaatgacc taagggttga cggagccagc attaagtttg atagcatttg 23520

cctttacgcc accttcttcc ccatggccca caacaccgcc tccacgcttg aggccatgct 23580

tagaaacgac accaacgacc agtcctttaa cgactatctc tccgccgcca acatgctcta 23640

ccctataccc gccaacgcta ccaacgtgcc catatccatc ccctcccgca actgggcggc 23700

tttccgcggc tgggccttca cgcgccttaa gactaaggaa accccatcac tgggctcggg 23760

ctacgaccct tattacacct actctggctc tataccctac ctagatggaa ccttttacct 23820

caaccacacc tttaagaagg tggccattac ctttgactct tctgtcagct ggcctggcaa 23880

tgaccgcctg cttaccccca acgagtttga aattaagcgc tcagttgacg gggagggtta 23940

caacgttgcc cagtgtaaca tgaccaaaga ctggttcctg gtacaaatgc tagctaacta 24000

taacattggc taccagggct tctatatccc agagagctac aaggaccgca tgtactcctt 24060

ctttagaaac ttccagccca tgagccgtca ggtggtggat gatactaaat acaaggacta 24120

ccaacaggtg ggcatcctac accaacacaa caactctgga tttgttggct accttgcccc 24180

caccatgcgc gaaggacagg cctaccctgc taacttcccc tatccgctta taggcaagac 24240

cgcagttgac agcattaccc agaaaaagtt tctttgcgat cgcacccttt ggcgcatccc 24300

attctccagt aactttatgt ccatgggcgc actcacagac ctgggccaaa accttctcta 24360

cgccaactcc gcccacgcgc tagacatgac ttttgaggtg gatcccatgg acgagcccac 24420

ccttctttat gttttgtttg aagtctttga cgtggtccgt gtgcaccagc cgcaccgcgg 24480

cgtcatcgaa accgtgtacc tgcgcacgcc cttctcggcc ggcaacgcca caacataaag 24540

aagcaagcaa catcaacaac agctgccgcc atgggctcca gtgagcagga actgaaagcc 24600

attgtcaaag atcttggttg tgggccatat tttttgggca cctatgacaa gcgctttcca 24660

ggctttgttt ctccacacaa gctcgcctgc gccatagtca atacggccgg tcgcgagact 24720

gggggcgtac actggatggc ctttgcctgg aacccgcact caaaaacatg ctacctcttt 24780

gagccctttg gcttttctga ccagcgactc aagcaggttt accagtttga gtacgagtca 24840

ctcctgcgcc gtagcgccat tgcttcttcc cccgaccgct gtataacgct ggaaaagtcc 24900

acccaaagcg tacaggggcc caactcggcc gcctgtggac tattctgctg catgtttctc 24960

cacgcctttg ccaactggcc ccaaactccc atggatcaca accccaccat gaaccttatt 25020

accggggtac ccaactccat gctcaacagt ccccaggtac agcccaccct gcgtcgcaac 25080

caggaacagc tctacagctt cctggagcgc cactcgccct acttccgcag ccacagtgcg 25140

cagattagga gcgccacttc tttttgtcac ttgaaaaaca tgtaaaaata atgtactaga 25200

gacactttca ataaaggcaa atgcttttat ttgtacactc tcgggtgatt atttaccccc 25260

acccttgccg tctgcgccgt ttaaaaatca aaggggttct gccgcgcatc gctatgcgcc 25320

actggcaggg acacgttgcg atactggtgt ttagtgctcc acttaaactc aggcacaacc 25380

atccgcggca gctcggtgaa gttttcactc cacaggctgc gcaccatcac caacgcgttt 25440

agcaggtcgg gcgccgatat cttgaagtcg cagttggggc ctccgccctg cgcgcgcgag 25500

ttgcgataca cagggttgca gcactggaac actatcagcg ccgggtggtg cacgctggcc 25560

agcacgctct tgtcggagat cagatccgcg tccaggtcct ccgcgttgct cagggcgaac 25620

ggagtcaact ttggtagctg ccttcccaaa aagggcgcgt gcccaggctt tgagttgcac 25680

tcgcaccgta gtggcatcaa aaggtgaccg tgcccggtct gggcgttagg atacagcgcc 25740

tgcataaaag ccttgatctg cttaaaagcc acctgagcct ttgcgccttc agagaagaac 25800

atgccgcaag acttgccgga aaactgattg gccggacagg ccgcgtcgtg cacgcagcac 25860

cttgcgtcgg tgttggagat ctgcaccaca tttcggcccc accggttctt cacgatcttg 25920

gccttgctag actgctcctt cagcgcgcgc tgcccgtttt cgctcgtcac atccatttca 25980

atcacgtgct ccttatttat cataatgctt ccgtgtagac acttaagctc gccttcgatc 26040

tcagcgcagc ggtgcagcca caacgcgcag cccgtgggct cgtgatgctt gtaggtcacc 26100

tctgcaaacg actgcaggta cgcctgcagg aatcgcccca tcatcgtcac aaaggtcttg 26160

ttgctggtga aggtcagctg caacccgcgg tgctcctcgt tcagccaggt cttgcatacg 26220

gccgccagag cttccacttg gtcaggcagt agtttgaagt tcgcctttag atcgttatcc 26280

acgtggtact tgtccatcag cgcgcgcgca gcctccatgc ccttctccca cgcagacacg 26340

atcggcacac tcagcgggtt catcaccgta atttcacttt ccgcttcgct gggctcttcc 26400

tcttcctctt gcgtccgcat accacgcgcc actgggtcgt cttcattcag ccgccgcact 26460

gtgcgcttac ctcctttgcc atgcttgatt agcaccggtg ggttgctgaa acccaccatt 26520

tgtagcgcca catcttctct ttcttcctcg ctgtccacga ttacctctgg tgatggcggg 26580

cgctcgggct tgggagaagg gcgcttcttt ttcttcttgg gcgcaatggc caaatccgcc 26640

gccgaggtcg atggccgcgg gctgggtgtg cgcggcacca gcgcgtcttg tgatgagtct 26700

tcctcgtcct cggactcgat acgccgcctc atccgctttt ttgggggcgc ccggggaggc 26760

ggcggcgacg gggacgggga cgacacgtcc tccatggttg ggggacgtcg cgccgcaccg 26820

cgtccgcgct cgggggtggt ttcgcgctgc tcctcttccc gactggccat ttccttctcc 26880

tataggcaga aaaagatcat ggagtcagtc gagaagaagg acagcctaac cgccccctct 26940

gagttcgcca ccaccgcctc caccgatgcc gccaacgcgc ctaccacctt ccccgtcgag 27000

gcacccccgc ttgaggagga ggaagtgatt atcgagcagg acccaggttt tgtaagcgaa 27060

gacgacgagg accgctcagt accaacagag gataaaaagc aagaccagga caacgcagag 27120

gcaaacgagg aacaagtcgg gcgggggggac gaaaggcatg gcgactacct agatgtggga 27180

gacgacgtgc tgttgaagca tctgcagcgc cagtgcgcca ttatctgcga cgcgttgcaa 27240

gagcgcagcg atgtgcccct cgccatagcg gatgtcagcc ttgcctacga acgccaccta 27300

ttctcaccgc gcgtaccccc caaacgccaa gaaaacggca catgcgagcc caacccgcgc 27360

ctcaacttct accccgtatt tgccgtgcca gaggtgcttg ccacctatca catcttttc 27420

caaaactgca agataccccct atcctgccgt gccaaccgca gccgagcgga caagcagctg 27480

gccttgcggc agggcgctgt catacctgat atcgcctcgc tcaacgaagt gccaaaaatc 27540

tttgagggtc ttggacgcga cgagaagcgc gcggcaaacg ctctgcaaca ggaaaacagc 27600

gaaaatgaaa gtcactctgg agtgttggtg gaactcgagg gtgacaacgc gcgcctagcc 27660

gtactaaaac gcagcatcga ggtcacccac tttgcctacc cggcacttaa cctacccccc 27720

aaggtcatga gcacagtcat gagtgagctg atcgtgcgcc gtgcgcagcc cctggagagg 27780

gatgcaaatt tgcaagaaca aacagaggag ggcctacccg cagttggcga cgagcagcta 27840

gcgcgctggc ttcaaacgcg cgagcctgcc gacttggagg agcgacgcaa actaatgatg 27900

gccgcagtgc tcgttaccgt ggagcttgag tgcatgcagc ggttctttgc tgacccggag 27960

atgcagcgca agctagagga aacattgcac tacacctttc gacagggcta cgtacgccag 28020

gcctgcaaga tctccaacgt ggagctctgc aacctggtct cctaccttgg aattttgcac 28080

gaaaaccgcc ttgggcaaaa cgtgcttcat tccacgctca agggcgaggc gcgccgcgac 28140

tacgtccgcg actgcgttta cttatttcta tgctacacct ggcagacggc catgggcgtt 28200

tggcagcagt gcttggagga gtgcaacctc aaggagctgc agaaactgct aaagcaaaac 28260

ttgaaggacc tatggacggc cttcaacgag cgctccgtgg ccgcgcacct ggcggacatc 28320

attttccccg aacgcctgct taaaaccctg caacagggtc tgccagactt caccagtcaa 28380

agcatgttgc agaactttag gaactttatc ctagagcgct caggaatctt gcccgccacc 28440

tgctgtgcac ttcctagcga ctttgtgccc attaagtacc gcgaatgccc tccgccgctt 28500

tggggccact gctaccttct gcagctagcc aactaccttg cctaccactc tgacataatg 28560

gaagacgtga gcggtgacgg tctactggag tgtcactgtc gctgcaacct atgcaccccg 28620

caccgctccc tggtttgcaa ttcgcagctg cttaacgaaa gtcaaattat cggtaccttt 28680

gagctgcagg gtccctcgcc tgacgaaaag tccgcggctc cggggttgaa actcactccg 28740

gggctgtgga cgtcggctta ccttcgcaaa tttgtacctg aggactacca cgcccacgag 28800

attaggttct acgaagacca atcccgcccg cctaatgcgg agcttaccgc ctgcgtcatt 28860

acccagggcc acattcttgg ccaattgcaa gccatcaaca aagcccgcca agagtttctg 28920

ctacgaaagg gacgggggggt ttacttggac ccccagtccg gcgaggagct caacccaatc 28980

cccccgccgc cgcagcccta tcagcagcag ccgcgggccc ttgcttccca ggatggcacc 29040

caaaaagaag ctgcagctgc cgccgccacc cacggacgag gaggaatact gggacagtca 29100

ggcagaggag gttttggacg aggaggagga ggacatgatg gaagactggg agagcctaga 29160

cgaggaagct tccgaggtcg aagaggtgtc agacgaaaca ccgtcaccct cggtcgcatt 29220

cccctcgccg gcgccccaga aatcggcaac cggttccagc atggctacaa cctccgctcc 29280

tcaggcgccg ccggcactgc ccgttcgccg acccaaccgt agatgggaca ccactggaac 29340

cagggccggt aagtccaagc agccgccgcc gttagcccaa gagcaacaac agcgccaagg 29400

ctaccgctca tggcgcgggc acaagaacgc catagttgct tgcttgcaag actgtggggg 29460

caacatctcc ttcgcccgcc gctttcttct ctaccatcac ggcgtggcct tcccccgtaa 29520

catcctgcat tactaccgtc atctctacag cccatactgc accggcggca gcggcagcaa 29580

cagcagcggc cacacagaag caaaggcgac cggatagcaa gactctgaca aagcccaaga 29640

aatccacagc ggcggcagca gcaggaggag gagcgctgcg tctggcgccc aacgaacccg 29700

tatcgacccg cgagcttaga aacaggattt ttcccactct gtatgctata tttcaacaga 29760

gcaggggcca agaacaagag ctgaaaataa aaaacaggtc tctgcgatcc ctcacccgca 29820

gctgcctgta tcacaaaagc gaagatcagc ttcggcgcac gctggaagac gcggaggctc 29880

tcttcagtaa atactgcgcg ctgactctta aggactagtt tcgcgccctt tctcaaattt 29940

aagcgcgaaa actacgtcat ctccagcggc cacacccggc gccagcacct gttgtcagcg 30000

ccattatgag caaggaaatt cccacgccct acatgtggag ttaccagcca caaatgggac 30060

ttgcggctgg agctgcccaa gactactcaa cccgaataaa ctacatgagc gcgggacccc 30120

acatgatatc ccgggtcaac ggaatacgcg cccaccgaaa ccgaattctc ctggaacagg 30180

cggctattac caccacacct cgtaataacc ttaatccccg tagttggccc gctgccctgg 30240

tgtaccagga aagtcccgct cccaccactg tggtacttcc cagagacgcc caggccgaag 30300

ttcagatgac taactcaggg gcgcagcttg cgggcggctt tcgtcacagg gtgcggtcgc 30360

ccgggcaggg tataactcac ctgacaatca gagggcgagg tattcagctc aacgacgagt 30420

cggtgagctc ctcgcttggt ctccgtccgg acgggacatt tcagatcggc ggcgccggcc 30480

gctcttcatt cacgcctcgt caggcaatcc taactctgca gacctcgtcc tctgagccgc 30540

gctctggagg cattggaact ctgcaattta ttgaggagtt tgtgccatcg gtctacttta 30600

accccttctc gggacctccc ggccactatc cggatcaatt tattcctaac tttgacgcgg 30660

taaaggactc ggcggacggc tacgactgaa tgttaagtgg agaggcagag caactgcgcc 30720

tgaaacacct ggtccactgt cgccgccaca agtgctttgc ccgcgactcc ggtgagtttt 30780

gctactttga attgcccgag gatcatatcg agggcccggc gcacggcgtc cggcttaccg 30840

cccagggaga gcttgcccgt agcctgattc gggagtttac ccagcgcccc ctgctagttg 30900

agcgggacag gggaccctgt gttctcactg tgatttgcaa ctgtcctaac cctggattac 30960

atcaagatcc tctagttaat gtcaggtcgc ctaagtcgat taactagagt acccggggat 31020

cttattccct ttaactaata aaaaaaaata ataaagcatc acttacttaa aatcagttag 31080

caaatttctg tccagtttat tcagcagcac ctccttgccc tcctcccagc tctggtattg 31140

cagcttcctc ctggctgcaa actttctcca caatctaaat ggaatgtcag tttcctcctg 31200

ttcctgtcca tccgcaccca ctatcttcat gttgttgcag atgaagcgcg caagaccgtc 31260

tgaagatacc ttcaaccccg tgtatccata tgacacggaa accggtcctc caactgtgcc 31320

ttttcttact cctccctttg tatcccccaa tgggtttcaa gagagtcccc ctggggtact 31380

ctctttgcgc ctatccgaac ctctagttac ctccaatggc atgcttgcgc tcaaaatggg 31440

caacggcctc tctctggacg aggccggcaa ccttacctcc caaaatgtaa ccactgtgag 31500

cccacctctc aaaaaaacca agtcaaacat aaacctggaa atatctgcac ccctcacagt 31560

tacctcagaa gccctaactg tggctgccgc cgcacctcta atggtcgcgg gcaacacact 31620

caccatgcaa tcacaggccc cgctaaccgt gcacgactcc aaacttagca ttgccaccca 31680

aggacccctc acagtgtcag aaggaaagct agccctgcaa acatcaggcc ccctcaccac 31740

caccgatagc agtaccctta ctatcactgc ctcacccccc ctaactactg ccactggtag 31800

cttgggcatt gacttgaaag agcccattta tacacaaaat ggaaaactag gactaaagta 31860

cggggctcct ttgcatgtaa cagacgacct aaacactttg accgtagcaa ctggtccagg 31920

tgtgactatt aataatactt ccttgcaaac taaagttact ggagccttgg gttttgattc 31980

acaaggcaat atgcaactta atgtagcagg aggactaagg attgattctc aaaacagacg 32040

ccttatactt gatgttagtt atccgtttga tgctcaaaac caactaaatc taagactagg 32100

acagggccct ctttttataa actcagccca caacttggat attaactaca acaaaggcct 32160

ttacttgttt acagcttcaa acaattccaa aaagcttgag gttaacctaa gcactgccaa 32220

ggggttgatg tttgacgcta cagccatagc cattaatgca ggagatgggc ttgaatttgg 32280

ttcacctaat gcaccaaaca caaatcccct caaaacaaaa attggccatg gcctagaatt 32340

tgattcaaac aaggctatgg ttcctaaact aggaactggc cttagttttg acagcacagg 32400

tgccattaca gtaggaaaca aaaataatga taagctaact ttgtggaccg gaataaaccc 32460

tccacctaac tgtcaaattg tggaaaacac taatacaaat gatggcaaac ttactttagt 32520

attagtaaaa aatggagggc ttgttaatgg ctacgtgtct ctagttggtg tatcagacac 32580

tgtgaaccaa atgttcacac aaaagacagc aaacatccaa ttaagattat attttgactc 32640

ttctggaaat ctattaactg aggaatcaga cttaaaaatt ccacttaaaa ataaatcttc 32700

tacagcgacc agtgaaactg tagccagcag caaagccttt atgccaagta ctacagctta 32760

tcccttcaac accactacta gggatagtga aaactacatt catggaatat gttactacat 32820

gactagttat gatagaagtc tatttccctt gaacatttct ataatgctaa acagccgtat 32880

gatttcttcc aatgttgcct atgccataca atttgaatgg aatctaaatg caagtgaatc 32940

tccagaaagc aacatagcta cgctgaccac atcccccttt ttcttttctt acattacaga 33000

agacgacaac taaagaatcg tttgtgttat gtttcaacgt gtttattttt caattgcaga 33060

aaatttcaag tcatttttca ttcagtagta tagccccacc accacatagc ttatacagat 33120

caccgtacct taatcaaact cacagaaccc tagtattcaa cctgccacct ccctcccaac 33180

acacagagta cacagtcctt tctccccggc tggccttaaa aagcatcata tcatgggtaa 33240

cagacatatt cttaggtgtt atattccaca cggtttcctg tcgagccaaa cgctcatcag 33300

tgatattaat aaactccccg ggcagctcac ttaagttcat gtcgctgtcc agctgctgag 33360

ccacaggctg ctgtccaact tgcggttgct taacgggcgg cgaaggagaa gtccacgcgt 33420

tgtgcattgt caaagtgtta cattcgggca gcagcggatg atcctccagt atggtagcgc 33480

gggtttctgt ctcaaaagga ggtagacgat ccctactgta cggagtgcgc cgagacaacc 33540

gagatcgtgt tggtcgtagt gtcatgccaa atggaacgcc ggacgtagtc atatttcctg 33600

aagcaaaacc aggtgcgggc gtgacaaaca gatctgcgtc tccggtctcg ccgcttagat 33660

cgctctgtgt agtagttgta gtatatccac tctctcaaag catccaggcg ccccctggct 33720

tcgggttcta tgtaaactcc ttcatgcgcc gctgccctga taacatccac caccgcagaa 33780

taagccacac ccagccaacc tacacattcg ttctgcgagt cacacacggg aggagcggga 33840

agagctggaa gaaccatgtt ttttttttta ttccaaaaga ttatccaaaa cctcaaaatg 33900

aagatctatt aagtgaacgc gctcccctcc ggtggcgtgg tcaaactcta cagccaaaga 33960

acagataatg gcatttgtaa gatgttgcac aatggcttcc aaaaggcaaa cggccctcac 34020

gtccaagtgg acgtaaaggc taaacccttc agggtgaatc tcctctataa acattccagc 34080

accttcaacc atgcccaaat aattctcatc tcgccacctt ctcaatatat ctctaagcaa 34140

atcccgaata ttaagtccgg ccattgtaaa aatctgctcc agagcgccct ccaccttcag 34200

cctcaagcag cgaatcatga ttgcaaaaat tcaggttcct cacagacctg tataagattc 34260

aaaagcggaa cattaacaaa aataccgcga tcccgtaggt cccttcgcag ggccagctga 34320

acataatcgt gcaggtctgc acggaccagc gcggccactt ccccgccagg aaccatgaca 34380

aaagaaccca cactgattat gacacgcata ctcggagcta tgctaaccag cgtagccccg 34440

atgtaagctt gttgcatggg cggcgatata aaatgcaagg tgctgctcaa aaaatcaggc 34500

aaagcctcgc gcaaaaaaga aagcacatcg tagtcatgct catgcagata aaggcaggta 34560

agctccggaa ccaccacaga aaaagacacc atttttctct caaacatgtc tgcgggtttc 34620

tgcataaaca caaaataaaa taacaaaaaa acatttaaac attagaagcc tgtcttacaa 34680

caggaaaaac aacccttata agcataagac ggactacggc catgccggcg tgaccgtaaa 34740

aaaactggtc accgtgatta aaaagcacca ccgacagctc ctcggtcatg tccggagtca 34800

taatgtaaga ctcggtaaac acatcaggtt gattcacatc ggtcagtgct aaaaagcgac 34860

cgaaatagcc cgggggaata catacccgca ggcgtagaga caacattaca gcccccatag 34920

gaggtataac aaaattaata ggagagaaaa acacataaac acctgaaaaa ccctcctgcc 34980

taggcaaaat agcaccctcc cgctccagaa caacatacag cgcttccaca gcggcagcca 35040

taacagtcag ccttaccagt aaaaaagaaa acctattaaa aaaacaccac tcgacacggc 35100

accagctcaa tcagtcacag tgtaaaaaag ggccaagtgc agagcgagta tatataggac 35160

taaaaaatga cgtaacggtt aaagtccaca aaaaacaccc agaaaaccgc acgcgaacct 35220

acgcccagaa acgaaagcca aaaaacccac aacttcctca aatcgtcact tccgttttcc 35280

cacgttacgt cacttcccat tttaagaaaa ctacaattcc caacacatac aagttactcc 35340

gccctaaaac ctacgtcacc cgccccgttc ccacgccccg cgccacgtca caaactccac 35400

cccctcatta tcatattggc ttcaatccaa aataaggtat attattgatg atg 35453

<210> 31
<211> 35726
<212> DNA
<213> Artificial Sequence

<220>
<223> Adk35F2-Spike/E4orf6(mPGK)-E4dl-711(E4re#29)

<400> 31
ttaattaaca tcatcaataa tataccttat tttggattga agccaatatg ataatgaggg 60

ggtggagttt gtgacgtggc gcggggcgtg ggaacggggc gggtgacgta gtagtgtggc 120

ggaagtgtga tgttgcaagt gtggcggaac acatgtaagc gacggatgtg gcaaaagtga 180

cgtttttggt gtgcgccggt gtacacagga agtgacaatt ttcgcgcggt tttaggcgga 240

tgttgtagta aatttgggcg taaccgagta agatttggcc attttcgcgg gaaaactgaa 300

taagaggaag tgaaatctga ataattttgt gttactcata gcgcgtaata atttctgtaa 360

tagtaatcaa ttacggggtc attagttcat agcccatata tggagttccg cgttacataa 420

cttacggtaa atggcccgcc tggctgaccg cccaacgacc cccgcccatt gacgtcaata 480

atgacgtatg ttcccatagt aacgccaata gggactttcc attgacgtca atgggtggag 540

tatttacggt aaactgccca cttggcagta catcaagtgt atcatatgcc aagtacgccc 600

cctattgacg tcaatgacgg taaatggccc gcctggcatt atgcccagta catgacctta 660

tgggactttc ctacttggca gtacatctac gtattagtca tcgctattac catggtgatg 720

cggttttggc agtacatcaa tgggcgtgga tagcggtttg actcacgggg atttccaagt 780

ctccacccca ttgacgtcaa tgggagtttg ttttggcacc aaaatcaacg ggactttcca 840

aaatgtcgta acaactccgc cccattgacg caaatgggcg gtaggcgtgt acggtgggag 900

gtctatataa gcagagctct ccctatcagt gatagagatc tccctatcag tgatagagat 960

cgtcgacgag ctcgtttagt gaaccgtcag atcgcctgga gacgccatcc acgctgtttt 1020

gacctccata gaagacaccg ggaccgatcc agcctccgat ttgccaccat gtttgtgttc 1080

ctggtgctgc tgccactggt gtccagccag tgtgtgaacc tgaccaccag gacccaactt 1140

cctcctgcct acaccaactc cttcaccagg ggagtctact accctgacaa ggtgttcagg 1200

tcctctgtgc tgcacagcac ccaggacctg ttcctgccat tcttcagcaa tgtgacctgg 1260

ttccatgcca tccatgtgtc tggcaccaat ggcaccaaga ggtttgacaa ccctgtgctg 1320

ccattcaatg atggagtcta ctttgccagc acagagaaga gcaacatcat caggggctgg 1380

atttttggca ccaccctgga cagcaagacc cagtccctgc tgattgtgaa caatgccacc 1440

aatgtggtga ttaaggtgtg tgagttccag ttctgtaatg acccattcct gggagtctac 1500

taccacaaga acaacaagtc ctggatggag tctgagttca gggtctactc ctctgccaac 1560

aactgtacct ttgaatatgt gagccaacca ttcctgatgg acttggaggg caagcagggc 1620

aacttcaaga acctgaggga gtttgtgttc aagaacattg atggctactt caagatttac 1680

agcaaacaca caccaatcaa cctggtgagg gacctgccac agggcttctc tgccttggaa 1740

ccactggtgg acctgccaat tggcatcaac atcaccaggt tccagaccct gctggctctg 1800

cacaggtcct acctgacacc tggagactcc tcctctggct ggacagcagg agcagcagcc 1860

tactatgtgg gctacctcca accaaggacc ttcctgctga aatacaatga gaatggcacc 1920

atcacagatg ctgtggactg tgccctggac ccactgtctg agaccaagtg taccctgaaa 1980

tccttcacag tggagaaggg catctaccag accagcaact tcagggtcca accaacagag 2040

agcattgtga ggtttccaaa catcaccaac ctgtgtccat ttggagaggt gttcaatgcc 2100

accaggtttg cctctgtcta tgcctggaac aggaagagga ttagcaactg tgtggctgac 2160

tactctgtgc tctacaactc tgcctccttc agcaccttca agtgttatgg agtgagccca 2220

accaaactga atgacctgtg tttcaccaat gtctatgctg actcctttgt gattagggga 2280

gatgaggtga gacagattgc ccctggacaa acaggcaaga ttgctgacta caactacaaa 2340

ctgcctgatg acttcacagg ctgtgtgatt gcctggaaca gcaacaacct ggacagcaag 2400

gtgggaggca actacaacta cctctacaga ctgttcagga agagcaacct gaaaccattt 2460

gagagggaca tcagcacaga gatttaccag gctggcagca caccatgtaa tggagtggag 2520

ggcttcaact gttactttcc actccaatcc tatggcttcc aaccaaccaa tggagtgggc 2580

taccaaccat acagggtggt ggtgctgtcc tttgaactgc tccatgcccc tgccacagtg 2640

tgtggaccaa agaagagcac caacctggtg aagaacaagt gtgtgaactt caacttcaat 2700

ggactgacag gcacaggagt gctgacagag agcaacaaga agttcctgcc attccaacag 2760

tttggcaggg acattgctga caccacagat gctgtgaggg acccacagac cttggagatt 2820

ctggacatca caccatgttc ctttggagga gtgtctgtga ttacacctgg caccaacacc 2880

agcaaccagg tggctgtgct ctaccaggat gtgaactgta ctgaggtgcc tgtggctatc 2940

catgctgacc aacttacacc aacctggagg gtctacagca caggcagcaa tgtgttccag 3000

accagggctg gctgtctgat tggagcagag catgtgaaca actcctatga gtgtgacatc 3060

ccaattggag caggcatctg tgcctcctac cagacccaga ccggtggcgg tgggtcgagg 3120

tctgtggcaa gccagagcat cattgcctac acaatgagtc tgggagcaga gaactctgtg 3180

gcttacagca acaacagcat tgccatccca accaacttca ccatctctgt gaccacagag 3240

attctgcctg tgagtatgac caagacctct gtggactgta caatgtatat ctgtggagac 3300

agcacagagt gtagcaacct gctgctccaa tatggctcct tctgtaccca acttaacagg 3360

gctctgacag gcattgctgt ggaacaggac aagaacaccc aggaggtgtt tgcccaggtg 3420

aagcagattt acaagacacc tccaatcaag gactttggag gcttcaactt cagccagatt 3480

ctgcctgacc caagcaagcc aagcaagagg tccttcattg aggacctgct gttcaacaag 3540

gtgaccctgg ctgatgctgg cttcatcaag caatatggag actgtctggg agacattgct 3600

gccagggacc tgatttgtgc ccagaagttc aatggactga cagtgctgcc tccactgctg 3660

acagatgaga tgattgccca atacacctct gccctgctgg ctggcaccat cacctctggc 3720

tggacctttg gagcaggagc agccctccaa atcccatttg ctatgcagat ggcttacagg 3780

ttcaatggca ttggagtgac ccagaatgtg ctctatgaga accagaaact gattgccaac 3840

cagttcaact ctgccattgg caagattcag gactccctgt ccagcacagc ctctgccctg 3900

ggcaaactcc aagatgtggt gaaccagaat gcccaggctc tgaacaccct ggtgaagcaa 3960

ctttccagca actttggagc catctcctct gtgctgaatg acatcctgag cagactggac 4020

aaggtggagg ctgaggtcca gattgacaga ctgattacag gcagactcca atccctccaa 4080

acctatgtga cccaacaact tatcagggct gctgagatta gggcatctgc caacctggct 4140

gccaccaaga tgagtgagtg tgtgctggga caaagcaaga gggtggactt ctgtggcaag 4200

ggctaccacc tgatgagttt tccacagtct gcccctcatg gagtggtgtt cctgcatgtg 4260

acctatgtgc ctgcccagga gaagaacttc accacagccc ctgccatctg ccatgatggc 4320

aaggctcact ttccaaggga gggagtgttt gtgagcaatg gcacccactg gtttgtgacc 4380

cagaggaact tctatgaacc acagattatc accacagaca acacctttgt gtctggcaac 4440

tgtgatgtgg tgattggcat tgtgaacaac acagtctatg acccactcca acctgaactg 4500

gactccttca aggaggaact ggacaaatac ttcaagaacc acaccagccc tgatgtggac 4560

ctgggagaca tctctggcat caatgcctct gtggtgaaca tccagaagga gattgacaga 4620

ctgaatgagg tggctaagaa cctgaatgag tccctgattg acctccaaga actgggcaaa 4680

tatgaacaat acatcaagtg gccatgaaaa ttgatcataa tcagccatac cacatttgta 4740

gaggttttac ttgctttaaa aaacctccca cacctccccc tgaacctgaa acataaaatg 4800

aatgcaattg ttgttgttaa cttgtttatt gcagcttata atggttacaa ataaagcaat 4860

agcatcacaa atttcacaaa taaagcattt ttttcactgc attctagttg tggtttgtcc 4920

aaactcatca atgtatctta acgcggatcg ggtaggggag gcgcttttcc caaggcagtc 4980

tggagcatgc gctttagcag ccccgctggg cacttggcgc tacacaagtg gcctctggcc 5040

tcgcacacat tccacatcca ccggtaggcg ccaaccggct ccgttctttg gtggcccctt 5100

cgcgccacct tctactcctc ccctagtcag gaagttcccc cccgccccgc agctcgcgtc 5160

gtgcaggacg tgacaaatgg aagtagcacg tctcactagt ctcgtgcaga tggacagcac 5220

cgctgagcaa tggaagcggg taggcctttg gggcagcggc caatagcagc tttgctcctt 5280

cgctttctgg gctcagaggc tgggaagggg tgggtccggg ggcgggctca ggggcgggct 5340

caggggcggg gcgggcgccc gaaggtcctc cggaggcccg gcattctgca cgcttcaaaa 5400

gcgcacgtct gccgcgctgt tctcctcttc ctcatctccg ggcctttcga aactacccca 5460

agctggccac catgactacg tccggcgttc catttggcat gacactacga ccaacacgat 5520

ctcggttgtc tcggcgcact ccgtacagta gggatcgtct acctccttt gagacagaaa 5580

cccgcgctac catactggag gatcatccgc tgctgcccga atgtaacact ttgacaatgc 5640

acaacgtgag ttacgtgcga ggtcttccct gcagtgtggg atttacgctg attcaggaat 5700

gggttgttcc ctgggatatg gttctaacgc gggaggagct tgtaatcctg aggaagtgta 5760

tgcacgtgtg cctgtgttgt gccaacattg atatcatgac gagcatgatg atccatggtt 5820

acgagtcctg ggctctccac tgtcattgtt ccagtcccgg ttccctgcag tgtatagccg 5880

gcgggcaggt tttggccagc tggtttagga tggtggtgga tggcgccatg tttaatcaga 5940

ggtttatatg gtaccgggag gtggtgaatt acaacatgcc aaaagaggta atgtttatgt 6000

ccagcgtgtt tatgaggggt cgccacttaa tctacctgcg cttgtggtat gatggccacg 6060

tgggttctgt ggtccccgcc atgagctttg gatacagcgc cttgcactgt gggattttga 6120

acaatattgt ggtgctgtgc tgcagttact gtgctgattt aagtgagatc agggtgcgct 6180

gctgtgcccg gaggacaagg cgccttatgc tgcgggcggt gcgaatcatc gctgaggaga 6240

ccactgccat gttgtattcc tgcaggacgg agcggcggcg gcagcagttt attcgcgcgc 6300

tgctgcagca ccaccgccct atcctgatgc acgattatga ctctaccccc atgtagaagc 6360

ttggggatca attctctaga gctcgctgat cagcctcgac tgtgccttct agttgccagc 6420

catctgttgt ttgcccctcc cccgtgcctt ccttgaccct ggaaggtgcc actcccactg 6480

tcctttccta ataaaatgag gaaattgcat cgcattgtct gagtaggtgt cattctattc 6540

tgggggggtgg ggtggggcag gacagcaagg gggaggattg ggaagacaat agcaggcatg 6600

ctggggatgc ggtgggctct atggcttctg aggaaattgg gcgtggctta agggtgggaa 6660

agaatatata aggtgggggt cttatgtagt tttgtatctg ttttgcagca gccgccgccg 6720

ccatgagcac caactcgttt gatggaagca ttgtgagctc atatttgaca acgcgcatgc 6780

ccccatgggc cggggtgcgt cagaatgtga tgggctccag cattgatggt cgccccgtcc 6840

tgcccgcaaa ctctactacc ttgacctacg agaccgtgtc tggaacgccg ttggagactg 6900

cagcctccgc cgccgcttca gccgctgcag ccaccgcccg cgggattgtg actgactttg 6960

ctttcctgag cccgcttgca agcagtgcag cttcccgttc atccgcccgc gatgacaagt 7020

tgacggctct tttggcacaa ttggattctt tgacccggga acttaatgtc gtttctcagc 7080

agctgttgga tctgcgccag caggtttctg ccctgaaggc ttcctcccct cccaatgcgg 7140

tttaaaacat aaataaaaaa ccagactctg tttggatttg gatcaagcaa gtgtcttgct 7200

gtctttattt aggggttttg cgcgcgcggt aggcccggga ccagcggtct cggtcgttga 7260

gggtcctgtg tatttttttcc aggacgtggt aaaggtgact ctggatgttc agatacatgg 7320

gcataagccc gtctctgggg tggaggtagc accactgcag agcttcatgc tgcggggtgg 7380

tgttgtagat gatccagtcg tagcaggagc gctgggcgtg gtgcctaaaa atgtctttca 7440

gtagcaagct gattgccagg ggcaggccct tggtgtaagt gtttacaaag cggttaagct 7500

gggatgggtg catacgtggg gatatgagat gcatcttgga ctgtattttt aggttggcta 7560

tgttcccagc catatccctc cggggattca tgttgtgcag aaccaccagc acagtgtatc 7620

cggtgcactt gggaaatttg tcatgtagct tagaaggaaa tgcgtggaag aacttggaga 7680

cgcccttgtg acctccaaga ttttccatgc attcgtccat aatgatggca atgggcccac 7740

gggcggcggc ctgggcgaag atatttctgg gatcactaac gtcatagttg tgttccagga 7800

tgagatcgtc ataggccatt tttacaaagc gcgggcggag ggtgccagac tgcggtataa 7860

tggttccatc cggcccaggg gcgtagttac cctcacagat ttgcatttcc cacgctttga 7920

gttcagatgg ggggatcatg tctacctgcg gggcgatgaa gaaaacggtt tccggggtag 7980

gggagatcag ctgggaagaa agcaggttcc tgagcagctg cgacttaccg cagccggtgg 8040

gcccgtaaat cacacctatt accgggtgca actggtagtt aagagagctg cagctgccgt 8100

catccctgag cagggggggcc acttcgttaa gcatgtccct gactcgcatg ttttccctga 8160

ccaaatccgc cagaaggcgc tcgccgccca gcgatagcag ttcttgcaag gaagcaaagt 8220

ttttcaacgg tttgagaccg tccgccgtag gcatgctttt gagcgtttga ccaagcagtt 8280

ccaggcggtc ccacagctcg gtcacctgct ctacggcatc tcgatccagc atatctcctc 8340

gtttcgcggg ttggggcggc tttcgctgta cggcagtagt cggtgctcgt ccagacgggc 8400

cagggtcatg tctttccacg ggcgcagggt cctcgtcagc gtagtctggg tcacggtgaa 8460

ggggtgcgct ccgggctgcg cgctggccag ggtgcgcttg aggctggtcc tgctggtgct 8520

gaagcgctgc cggtcttcgc cctgcgcgtc ggccaggtag catttgacca tggtgtcata 8580

gtccagcccc tccgcggcgt ggcccttggc gcgcagcttg cccttggagg aggcgccgca 8640

cgaggggcag tgcagacttt tgagggcgta gagcttgggc gcgagaaata ccgattccgg 8700

ggagtaggca tccgcgccgc aggccccgca gacggtctcg cattccacga gccaggtgag 8760

ctctggccgt tcggggtcaa aaaccaggtt tcccccatgc tttttgatgc gtttcttacc 8820

tctggtttcc atgagccggt gtccacgctc ggtgacgaaa aggctgtccg tgtccccgta 8880

tacagacttg agaggcctgt cctcgagcgg tgttccgcgg tcctcctcgt atagaaactc 8940

ggaccactct gagacaaagg ctcgcgtcca ggccagcacg aaggaggcta agtgggaggg 9000

gtagcggtcg ttgtccacta gggggtccac tcgctccagg gtgtgaagac acatgtcgcc 9060

ctcttcggca tcaaggaagg tgattggttt gtaggtgtag gccacgtgac cgggtgttcc 9120

tgaaggggggg ctataaaagg gggtgggggc gcgttcgtcc tcactctctt ccgcatcgct 9180

gtctgcgagg gccagctgtt ggggtgagta ctccctctga aaagcgggca tgacttctgc 9240

gctaagattg tcagtttcca aaaacgagga ggatttgata ttcacctggc ccgcggtgat 9300

gcctttgagg gtggccgcat ccatctggtc agaaaagaca atctttttgt tgtcaagctt 9360

ggtggcaaac gacccgtaga gggcgttgga cagcaacttg gcgatggagc gcagggtttg 9420

gtttttgtcg cgatcggcgc gctccttggc cgcgatgttt agctgcacgt attcgcgcgc 9480

aacgcaccgc cattcgggaa agacggtggt gcgctcgtcg ggcaccaggt gcacgcgcca 9540

accgcggttg tgcagggtga caaggtcaac gctggtggct acctctccgc gtaggcgctc 9600

gttggtccag cagaggcggc cgcccttgcg cgagcagaat ggcggtaggg ggtctagctg 9660

cgtctcgtcc ggggggtctg cgtccacggt aaagaccccg ggcagcaggc gcgcgtcgaa 9720

gtagtctatc ttgcatcctt gcaagtctag cgcctgctgc catgcgcggg cggcaagcgc 9780

gcgctcgtat gggttgagtg ggggacccca tggcatgggg tgggtgagcg cggaggcgta 9840

catgccgcaa atgtcgtaaa cgtagagggg ctctctgagt attccaagat atgtagggta 9900

gcatcttcca ccgcggatgc tggcgcgcac gtaatcgtat agttcgtgcg agggagcgag 9960

gaggtcggga ccgaggttgc tacgggcggg ctgctctgct cggaagacta tctgcctgaa 10020

gatggcatgt gagttggatg atatggttgg acgctggaag acgttgaagc tggcgtctgt 10080

gagacctacc gcgtcacgca cgaaggaggc gtaggagtcg cgcagcttgt tgaccagctc 10140

ggcggtgacc tgcacgtcta gggcgcagta gtccagggtt tccttgatga tgtcatactt 10200

atcctgtccc ttttttttcc acagctcgcg gttgaggaca aactcttcgc ggtctttcca 10260

gtactcttgg atcggaaacc cgtcggcctc cgaacggtaa gagcctagca tgtagaactg 10320

gttgacggcc tggtaggcgc agcatccctt ttctacgggt agcgcgtatg cctgcgcggc 10380

cttccggagc gaggtgtggg tgagcgcaaa ggtgtccctg accatgactt tgaggtactg 10440

gtatttgaag tcagtgtcgt cgcatccgcc ctgctcccag agcaaaaagt ccgtgcgctt 10500

tttggaacgc ggatttggca gggcgaaggt gacatcgttg aagagtatct ttcccgcgcg 10560

aggcataaag ttgcgtgtga tgcggaaggg tcccggcacc tcggaacggt tgttaattac 10620

ctgggcggcg agcacgatct cgtcaaagcc gttgatgttg tggcccacaa tgtaaagttc 10680

caagaagcgc gggatgccct tgatggaagg caatttttta agttcctcgt aggtgagctc 10740

ttcaggggag ctgagcccgt gctctgaaag ggcccagtct gcaagatgag ggttggaagc 10800

gacgaatgag ctccacaggt cacgggccat tagcatttgc aggtggtcgc gaaaggtcct 10860

aaactggcga cctatggcca ttttttctgg ggtgatgcag tagaaggtaa gcgggtcttg 10920

ttcccagcgg tcccatccaa ggttcgcggc taggtctcgc gcggcagtca ctagaggctc 10980

atctccgccg aacttcatga ccagcatgaa gggcacgagc tgcttcccaa aggcccccat 11040

ccaagtatag gtctctacat cgtaggtgac aaagagacgc tcggtgcgag gatgcgagcc 11100

gatcgggaag aactggatct cccgccacca attggaggag tggctattga tgtggtgaaa 11160

gtagaagtcc ctgcgacggg ccgaacactc gtgctggctt ttgtaaaaac gtgcgcagta 11220

ctggcagcgg tgcacgggct gtacatcctg cacgaggttg acctgacgac cgcgcacaag 11280

gaagcagagt gggaatttga gcccctcgcc tggcgggttt ggctggtggt cttctacttc 11340

ggctgcttgt ccttgaccgt ctggctgctc gaggggagtt acggtggatc ggaccaccac 11400

gccgcgcgag cccaaagtcc agatgtccgc gcgcggcggt cggagcttga tgacaacatc 11460

gcgcagatgg gagctgtcca tggtctggag ctcccgcggc gtcaggtcag gcgggagctc 11520

ctgcaggttt acctcgcata gacgggtcag ggcgcgggct agatccaggt gatacctaat 11580

ttccaggggc tggttggtgg cggcgtcgat ggcttgcaag aggccgcatc cccgcggcgc 11640

gactacggta ccgcgcggcg ggcggtgggc cgcgggggtg tccttggatg atgcatctaa 11700

aagcggtgac gcgggcgagc ccccggaggt agggggggct ccggacccgc cgggagaggg 11760

ggcaggggca cgtcggcgcc gcgcgcgggc aggagctggt gctgcgcgcg taggttgctg 11820

gcgaacgcga cgacgcggcg gttgatctcc tgaatctggc gcctctgcgt gaagacgacg 11880

ggcccggtga gcttgaacct gaaagagagt tcgacagaat caatttcggt gtcgttgacg 11940

gcggcctggc gcaaaatctc ctgcacgtct cctgagttgt cttgataggc gatctcggcc 12000

atgaactgct cgatctcttc ctcctggaga tctccgcgtc cggctcgctc cacggtggcg 12060

gcgaggtcgt tggaaatgcg ggccatgagc tgcgagaagg cgttgaggcc tccctcgttc 12120

cagacgcggc tgtagaccac gccccccttcg gcatcgcggg cgcgcatgac cacctgcgcg 12180

agattgagct ccacgtgccg ggcgaagacg gcgtagtttc gcaggcgctg aaagaggtag 12240

ttgagggtgg tggcggtgtg ttctgccacg aagaagtaca taacccagcg tcgcaacgtg 12300

gattcgttga tatcccccaa ggcctcaagg cgctccatgg cctcgtagaa gtccacggcg 12360

aagttgaaaa actgggagtt gcgcgccgac acggttaact cctcctccag aagacggatg 12420

agctcggcga cagtgtcgcg cacctcgcgc tcaaaggcta caggggcctc ttcttcttct 12480

tcaatctcct cttccataag ggcctcccct tcttcttctt ctggcggcgg tgggggaggg 12540

gggacacggc ggcgacgacg gcgcaccggg aggcggtcga caaagcgctc gatcatctcc 12600

ccgcggcgac ggcgcatggt ctcggtgacg gcgcggccgt tctcgcgggg gcgcagttgg 12660

aagacgccgc ccgtcatgtc ccggttatgg gttggcgggg ggctgccatg cggcagggat 12720

acggcgctaa cgatgcatct caacaattgt tgtgtaggta ctccgccgcc gagggacctg 12780

agcgagtccg catcgaccgg atcggaaaac ctctcgagaa aggcgtctaa ccagtcacag 12840

tcgcaaggta ggctgagcac cgtggcgggc ggcagcgggc ggcggtcggg gttgtttctg 12900

gcggaggtgc tgctgatgat gtaattaaag taggcggtct tgagacggcg gatggtcgac 12960

agaagcacca tgtccttggg tccggcctgc tgaatgcgca ggcggtcggc catgccccag 13020

gcttcgtttt gacatcggcg caggtctttg tagtagtctt gcatgagcct ttctaccggc 13080

acttcttctt ctccttcctc ttgtcctgca tctcttgcat ctatcgctgc ggcggcggcg 13140

gagtttggcc gtaggtggcg ccctcttcct cccatgcgtg tgaccccgaa gcccctcatc 13200

ggctgaagca gggctaggtc ggcgacaacg cgctcggcta atatggcctg ctgcacctgc 13260

gtgagggtag actggaagtc atccatgtcc acaaagcggt ggtatgcgcc cgtgttgatg 13320

gtgtaagtgc agttggccat aacggaccag ttaacggtct ggtgacccgg ctgcgagagc 13380

tcggtgtacc tgagacgcga gtaagccctc gagtcaaata cgtagtcgtt gcaagtccgc 13440

accaggtact ggtatcccac caaaaagtgc ggcggcggct ggcggtagag gggccagcgt 13500

agggtggccg gggctccggg ggcgagatct tccaacataa ggcgatgata tccgtagatg 13560

tacctggaca tccaggtgat gccggcggcg gtggtggagg cgcgcggaaa gtcgcggacg 13620

cggttccaga tgttgcgcag cggcaaaaag tgctccatgg tcgggacgct ctggccggtc 13680

aggcgcgcgc aatcgttgac gctctagcgt gcaaaaggag agcctgtaag cgggcactct 13740

tccgtggtct ggtggataaa ttcgcaaggg tatcatggcg gacgaccggg gttcgagccc 13800

cgtatccggc cgtccgccgt gatccatgcg gttaccgccc gcgtgtcgaa cccaggtgtg 13860

cgacgtcaga caacgggggа gtgctccttt tggcttcctt ccaggcgcgg cggctgctgc 13920

gctagctttt ttggccactg gccgcgcgca gcgtaagcgg ttaggctgga aagcgaaagc 13980

attaagtggc tcgctccctg tagccggagg gttattttcc aagggttgag tcgcgggacc 14040

cccggttcga gtctcggacc ggccggactg cggcgaacgg gggtttgcct ccccgtcatg 14100

caagaccccg cttgcaaatt cctccggaaa cagggacgag ccccttttt gcttttccca 14160

gatgcatccg gtgctgcggc agatgcgccc ccctcctcag cagcggcaag agcaagagca 14220

gcggcagaca tgcagggcac cctcccctcc tcctaccgcg tcaggagggg cgacatccgc 14280

ggttgacgcg gcagcagatg gtgattacga acccccgcgg cgccgggccc ggcactacct 14340

ggacttggag gagggcgagg gcctggcgcg gctaggagcg ccctctcctg agcggcaccc 14400

aagggtgcag ctgaagcgtg atacgcgtga ggcgtacgtg ccgcggcaga acctgtttcg 14460

cgaccgcgag ggagaggagc ccgaggagat gcgggatcga aagttccacg cagggcgcga 14520

gctgcggcat ggcctgaatc gcgagcggtt gctgcgcgag gaggactttg agcccgacgc 14580

gcgaaccggg attagtcccg cgcgcgcaca cgtggcggcc gccgacctgg taaccgcata 14640

cgagcagacg gtgaaccagg agattaactt tcaaaaaagc tttaacaacc acgtgcgtac 14700

gcttgtggcg cgcgaggagg tggctatagg actgatgcat ctgtgggact ttgtaagcgc 14760

gctggagcaa aacccaaata gcaagccgct catggcgcag ctgttcctta tagtgcagca 14820

cagcagggac aacgaggcat tcagggatgc gctgctaaac atagtagagc ccgagggccg 14880

ctggctgctc gatttgataa acatcctgca gagcatagtg gtgcaggagc gcagcttgag 14940

cctggctgac aaggtggccg ccatcaacta ttccatgctt agcctgggca agttttacgc 15000

ccgcaagata taccataccc cttacgttcc catagacaag gaggtaaaga tcgaggggtt 15060

ctacatgcgc atggcgctga aggtgcttac cttgagcgac gacctgggcg tttatcgcaa 15120

cgagcgcatc cacaaggccg tgagcgtgag ccggcggcgc gagctcagcg accgcgagct 15180

gatgcacagc ctgcaaaggg ccctggctgg cacgggcagc ggcgatagag aggccgagtc 15240

ctactttgac gcgggcgctg acctgcgctg ggccccaagc cgacgcgccc tggaggcagc 15300

tggggccgga cctgggctgg cggtggcacc cgcgcgcgct ggcaacgtcg gcggcgtgga 15360

ggaatatgac gaggacgatg agtacgagcc agaggacggc gagtactaag cggtgatgtt 15420

tctgatcaga tgatgcaaga cgcaacggac ccggcggtgc gggcggcgct gcagagccag 15480

ccgtccggcc ttaactccac ggacgactgg cgccaggtca tggaccgcat catgtcgctg 15540

actgcgcgca atcctgacgc gttccggcag cagccgcagg ccaaccggct ctccgcaatt 15600

ctggaagcgg tggtcccggc gcgcgcaaac cccacgcacg agaaggtgct ggcgatcgta 15660

aacgcgctgg ccgaaaacag ggccatccgg cccgacgagg ccggcctggt ctacgacgcg 15720

ctgcttcagc gcgtggctcg ttacaacagc ggcaacgtgc agaccaacct ggaccggctg 15780

gtgggggatg tgcgcgaggc cgtggcgcag cgtgagcgcg cgcagcagca gggcaacctg 15840

ggctccatgg ttgcactaaa cgccttcctg agtacacagc ccgccaacgt gccgcgggga 15900

caggaggact acaccaactt tgtgagcgca ctgcggctaa tggtgactga gacaccgcaa 15960

agtgaggtgt accagtctgg gccagactat tttttccaga ccagtagaca aggcctgcag 16020

accgtaaacc tgagccaggc tttcaaaaac ttgcaggggc tgtgggggggt gcgggctccc 16080

acaggcgacc gcgcgaccgt gtctagcttg ctgacgccca actcgcgcct gttgctgctg 16140

ctaatagcgc ccttcacgga cagtggcagc gtgtcccggg acacatacct aggtcacttg 16200

ctgacactgt accgcgaggc cataggtcag gcgcatgtgg acgagcatac tttccaggag 16260

attacaagtg tcagccgcgc gctggggcag gaggacacgg gcagcctgga ggcaacccta 16320

aactacctgc tgaccaaccg gcggcagaag atcccctcgt tgcacagttt aaacagcgag 16380

gaggagcgca ttttgcgcta cgtgcagcag agcgtgagcc ttaacctgat gcgcgacggg 16440

gtaacgccca gcgtggcgct ggacatgacc gcgcgcaaca tggaaccggg catgtatgcc 16500

tcaaaccggc cgtttatcaa ccgcctaatg gactacttgc atcgcgcggc cgccgtgaac 16560

cccgagtatt tcaccaatgc catcttgaac ccgcactggc taccgccccc tggtttctac 16620

accgggggat tcgaggtgcc cgagggtaac gatggattcc tctgggacga catagacgac 16680

agcgtgtttt ccccgcaacc gcagaccctg ctagagttgc aacagcgcga gcaggcagag 16740

gcggcgctgc gaaaggaaag cttccgcagg ccaagcagct tgtccgatct aggcgctgcg 16800

gccccgcggt cagatgctag tagcccattt ccaagcttga tagggtctct taccagcact 16860

cgcaccaccc gcccgcgcct gctgggcgag gaggagtacc taaacaactc gctgctgcag 16920

ccgcagcgcg aaaaaaacct gcctccggca tttcccaaca acgggataga gagcctagtg 16980

gacaagatga gtagatggaa gacgtacgcg caggagcaca gggacgtgcc aggcccgcgc 17040

ccgcccaccc gtcgtcaaag gcacgaccgt cagcggggtc tggtgtggga ggacgatgac 17100

tcggcagacg acagcagcgt cctggatttg ggagggagtg gcaacccgtt tgcgcacctt 17160

cgccccaggc tggggagaat gttttaaaaa aaaaaaagca tgatgcaaaa taaaaaactc 17220

accaaggcca tggcaccgag cgttggtttt cttgtattcc ccttagtatg cggcgcgcgg 17280

cgatgtatga ggaaggtcct cctccctcct acgagagtgt ggtgagcgcg gcgccagtgg 17340

cggcggcgct gggttctccc ttcgatgctc ccctggaccc gccgtttgtg cctccgcggt 17400

acctgcggcc taccgggggg agaaacagca tccgttactc tgagttggca cccctattcg 17460

acaccacccg tgtgtacctg gtggacaaca agtcaacgga tgtggcatcc ctgaactacc 17520

agaacgacca cagcaacttt ctgaccacgg tcattcaaaa caatgactac agcccggggg 17580

aggcaagcac acagaccatc aatcttgacg accggtcgca ctggggcggc gacctgaaaa 17640

ccatcctgca taccaacatg ccaaatgtga acgagttcat gtttaccaat aagtttaagg 17700

cgcgggtgat ggtgtcgcgc ttgcctacta aggacaatca ggtggagctg aaatacgagt 17760

gggtggagtt cacgctgccc gagggcaact actccgagac catgaccata gaccttatga 17820

acaacgcgat cgtggagcac tacttgaaag tgggcagaca gaacggggtt ctggaaagcg 17880

acatcggggt aaagtttgac acccgcaact tcagactggg gtttgacccc gtcactggtc 17940

ttgtcatgcc tggggtatat acaaacgaag ccttccatcc agacatcatt ttgctgccag 18000

gatgcggggt ggacttcacc cacagccgcc tgagcaactt gttgggcatc cgcaagcggc 18060

aacccttcca ggagggcttt aggatcacct acgatgatct ggagggtggt aacattcccg 18120

cactgttgga tgtggacgcc taccaggcga gcttgaaaga tgacaccgaa cagggcgggg 18180

gtggcgcagg cggcagcaac agcagtggca gcggcgcgga agagaactcc aacgcggcag 18240

ccgcggcaat gcagccggtg gaggacatga acgatcatgc cattcgcggc gacacctttg 18300

ccacacgggc tgaggagaag cgcgctgagg ccgaagcagc ggccgaagct gccgcccccg 18360

ctgcgcaacc cgaggtcgag aagcctcaga agaaaccggt gatcaaaccc ctgacagagg 18420

acagcaagaa acgcagttac aacctaataa gcaatgacag caccttcacc cagtaccgca 18480

gctggtacct tgcatacaac tacggcgacc ctcagaccgg aatccgctca tggaccctgc 18540

tttgcactcc tgacgtaacc tgcggctcgg agcaggtcta ctggtcgttg ccagacatga 18600

tgcaagaccc cgtgaccttc cgctccacgc gccagatcag caactttccg gtggtgggcg 18660

ccgagctgtt gcccgtgcac tccaagagct tctacaacga ccaggccgtc tactcccaac 18720

tcatccgcca gtttacctct ctgacccacg tgttcaatcg ctttcccgag aaccagattt 18780

tggcgcgccc gccagccccc accatcacca ccgtcagtga aaacgttcct gctctcacag 18840

atcacgggac gctaccgctg cgcaacagca tcggaggagt ccagcgagtg accattactg 18900

acgccagacg ccgcacctgc ccctacgttt acaaggccct gggcatagtc tcgccgcgcg 18960

tcctatcgag ccgcactttt tgagcaagca tgtccatcct tatatcgccc agcaataaca 19020

caggctgggg cctgcgcttc ccaagcaaga tgtttggcgg ggccaagaag cgctccgacc 19080

aacacccagt gcgcgtgcgc gggcactacc gcgcgccctg gggcgcgcac aaacgcggcc 19140

gcactgggcg caccaccgtc gatgacgcca tcgacgcggt ggtggaggag gcgcgcaact 19200

acacgcccac gccgccacca gtgtccacag tggacgcggc cattcagacc gtggtgcgcg 19260

gagcccggcg ctatgctaaa atgaagagac ggcggaggcg cgtagcacgt cgccaccgcc 19320

gccgacccgg cactgccgcc caacgcgcgg cggcggccct gcttaaccgc gcacgtcgca 19380

ccggccgacg ggcggccatg cgggccgctc gaaggctggc cgcgggtatt gtcactgtgc 19440

cccccaggtc caggcgacga gcggccgccg cagcagccgc ggccattagt gctatgactc 19500

agggtcgcag gggcaacgtg tattgggtgc gcgactcggt tagcggcctg cgcgtgcccg 19560

tgcgcacccg ccccccgcgc aactagattg caagaaaaaa ctacttagac tcgtactgtt 19620

gtatgtatcc agcggcggcg gcgcgcaacg aagctatgtc caagcgcaaa atcaaagaag 19680

agatgctcca ggtcatcgcg ccggagatct atggcccccc gaagaaggaa gagcaggatt 19740

acaagccccg aaagctaaag cgggtcaaaa agaaaaagaa agatgatgat gatgaacttg 19800

acgacgaggt ggaactgctg cacgctaccg cgcccaggcg acgggtacag tggaaaggtc 19860

gacgcgtaaa acgtgttttg cgacccggca ccaccgtagt ctttacgccc ggtgagcgct 19920

ccacccgcac ctacaagcgc gtgtatgatg aggtgtacgg cgacgaggac ctgcttgagc 19980

aggccaacga gcgcctcggg gagtttgcct acggaaagcg gcataaggac atgctggcgt 20040

tgccgctgga cgagggcaac ccaacaccta gcctaaagcc cgtaacactg cagcaggtgc 20100

tgcccgcgct tgcaccgtcc gaagaaaagc gcggcctaaa gcgcgagtct ggtgacttgg 20160

cacccaccgt gcagctgatg gtacccaagc gccagcgact ggaagatgtc ttggaaaaaa 20220

tgaccgtgga acctgggctg gagcccgagg tccgcgtgcg gccaatcaag caggtggcgc 20280

cgggactggg cgtgcagacc gtggacgttc agatacccac taccagtagc accagtattg 20340

ccaccgccac agagggcatg gagacacaaa cgtccccggt tgcctcagcg gtggcggatg 20400

ccgcggtgca ggcggtcgct gcggccgcgt ccaagacctc tacggaggtg caaacggacc 20460

cgtggatgtt tcgcgtttca gccccccggc gcccgcgccg ttcgaggaag tacggcgccg 20520

ccagcgcgct actgcccgaa tatgccctac atccttccat tgcgcctacc cccggctatc 20580

gtggctacac ctaccgcccc agaagacgag caactacccg acgccgaacc accactggaa 20640

cccgccgccg ccgtcgccgt cgccagcccg tgctggcccc gatttccgtg cgcagggtgg 20700

ctcgcgaagg aggcaggacc ctggtgctgc caacagcgcg ctaccacccc agcatcgttt 20760

aaaagccggt ctttgtggtt cttgcagata tggccctcac ctgccgcctc cgtttcccgg 20820

tgccgggatt ccgaggaaga atgcaccgta ggaggggcat ggccggccac ggcctgacgg 20880

gcggcatgcg tcgtgcgcac caccggcggc ggcgcgcgtc gcaccgtcgc atgcgcggcg 20940

gtatcctgcc cctccttatt ccactgatcg ccgcggcgat tggcgccgtg cccggaattg 21000

catccgtggc cttgcaggcg cagagacact gattaaaaac aagttgcatg tggaaaaatc 21060

aaaataaaaa gtctggactc tcacgctcgc ttggtcctgt aactattttg tagaatggaa 21120

gacatcaact ttgcgtctct ggccccgcga cacggctcgc gcccgttcat gggaaactgg 21180

caagatatcg gcaccagcaa tatgagcggt ggcgccttca gctggggctc gctgtggagc 21240

ggcattaaaa atttcggttc caccgttaag aactatggca gcaaggcctg gaacagcagc 21300

acaggccaga tgctgaggga taagttgaaa gagcaaaatt tccaacaaaa ggtggtagat 21360

ggcctggcct ctggcattag cggggtggtg gacctggcca accaggcagt gcaaaataag 21420

attaacagta agcttgatcc ccgccctccc gtagaggagc ctccaccggc cgtggagaca 21480

gtgtctccag aggggcgtgg cgaaaagcgt ccgcgccccg acagggaaga aactctggtg 21540

acgcaaatag acgagcctcc ctcgtacgag gaggcactaa agcaaggcct gcccaccacc 21600

cgtcccatcg cgcccatggc taccggagtg ctgggccagc acacacccgt aacgctggac 21660

ctgcctcccc ccgccgacac ccagcagaaa cctgtgctgc caggcccgac cgccgttgtt 21720

gtaacccgtc ctagccgcgc gtccctgcgc cgcgccgcca gcggtccgcg atcgttgcgg 21780

cccgtagcca gtggcaactg gcaaagcaca ctgaacagca tcgtgggtct gggggtgcaa 21840

tccctgaagc gccgacgatg cttctgatag ctaacgtgtc gtatgtgtgt catgtatgcg 21900

tccatgtcgc cgccagagga gctgctgagc cgccgcgcgc ccgctttcca agatggctac 21960

cccttcgatg atgccgcagt ggtcttacat gcacatctcg ggccaggacg cctcggagta 22020

cctgagcccc gggctggtgc agtttgcccg cgccaccgag acgtacttca gcctgaataa 22080

caagtttaga aaccccacgg tggcgcctac gcacgacgtg accacagacc ggtcccagcg 22140

tttgacgctg cggttcatcc ctgtggaccg tgaggatact gcgtactcgt acaaggcgcg 22200

gttcacccta gctgtgggtg ataaccgtgt gctggacatg gcttccacgt actttgacat 22260

ccgcggcgtg ctggacaggg gccctacttt taagccctac tctggcactg cctacaacgc 22320

cctggctccc aagggtgccc caaatccttg cgaatgggat gaagctgcta ctgctcttga 22380

aataaaccta gaagaagagg acgatgacaa cgaagacgaa gtagacgagc aagctgagca 22440

gcaaaaaact cacgtatttg ggcaggcgcc ttattctggt ataaatatta caaaggaggg 22500

tattcaaata ggtgtcgaag gtcaaacacc taaatatgcc gataaaacat ttcaacctga 22560

acctcaaata ggagaatctc agtggtacga aacagaaatt aatcatgcag ctgggagagt 22620

cctaaaaaag actaccccaa tgaaaccatg ttacggttca tatgcaaaac ccacaaatga 22680

aaatggaggg caaggcattc ttgtaaagca acaaaatgga aagctagaaa gtcaagtgga 22740

aatgcaattt ttctcaacta ctgaggcagc cgcaggcaat ggtgataact tgactcctaa 22800

agtggtattg tacagtgaag atgtagatat agaaacccca gacactcata tttcttacat 22860

gcccactatt aaggaaggta actcacgaga actaatgggc caacaatcta tgcccaacag 22920

gcctaattac attgctttta gggacaattt tattggtcta atgtattaca acagcacggg 22980

taatatgggt gttctggcgg gccaagcatc gcagttgaat gctgttgtag atttgcaaga 23040

cagaaacaca gagctttcat accagctttt gcttgattcc attggtgata gaaccaggta 23100

cttttctatg tggaatcagg ctgttgacag ctatgatcca gatgttagaa ttattgaaaa 23160

tcatggaact gaagatgaac ttccaaatta ctgctttcca ctgggaggtg tgattaatac 23220

agagactctt accaaggtaa aacctaaaac aggtcaggaa aatggatggg aaaaagatgc 23280

tacagaattt tcagataaaa atgaaataag agttggaaat aattttgcca tggaaatcaa 23340

tctaaatgcc aacctgtgga gaaatttcct gtactccaac atagcgctgt atttgcccga 23400

caagctaaag tacagtcctt ccaacgtaaa aatttctgat aacccaaaca cctacgacta 23460

catgaacaag cgagtggtgg ctcccgggct agtggactgc tacattaacc ttggagcacg 23520

ctggtccctt gactatatgg acaacgtcaa cccatttaac caccaccgca atgctggcct 23580

gcgctaccgc tcaatgttgc tgggcaatgg tcgctatgtg cccttccaca tccaggtgcc 23640

tcagaagttc tttgccatta aaaacctcct tctcctgccg ggctcataca cctacgagtg 23700

gaacttcagg aaggatgtta acatggttct gcagagctcc ctaggaaatg acctaagggt 23760

tgacggagcc agcattaagt ttgatagcat ttgcctttac gccaccttct tccccatggc 23820

ccacaacacc gcctccacgc ttgaggccat gcttagaaac gacaccaacg accagtcctt 23880

taacgactat ctctccgccg ccaacatgct ctaccctata cccgccaacg ctaccaacgt 23940

gcccatatcc atcccctccc gcaactgggc ggctttccgc ggctgggcct tcacgcgcct 24000

taagactaag gaaaccccat cactgggctc gggctacgac ccttattaca cctactctgg 24060

ctctataccc tacctagatg gaacctttta cctcaaccac acctttaaga aggtggccat 24120

tacctttgac tcttctgtca gctggcctgg caatgaccgc ctgcttaccc ccaacgagtt 24180

tgaaattaag cgctcagttg acggggaggg ttacaacgtt gcccagtgta acatgaccaa 24240

agactggttc ctggtacaaa tgctagctaa ctataacatt ggctaccagg gcttctatat 24300

cccagagagc tacaaggacc gcatgtactc cttctttaga aacttccagc ccatgagccg 24360

tcaggtggtg gatgatacta aatacaagga ctaccaacag gtgggcatcc tacaccaaca 24420

caacaactct ggatttgttg gctaccttgc ccccaccatg cgcgaaggac aggcctaccc 24480

tgctaacttc ccctatccgc ttataggcaa gaccgcagtt gacagcatta cccagaaaaa 24540

gtttctttgc gatcgcaccc tttggcgcat cccattctcc agtaacttta tgtccatggg 24600

cgcactcaca gacctgggcc aaaaccttct ctacgccaac tccgcccacg cgctagacat 24660

gacttttgag gtggatccca tggacgagcc cacccttctt tatgttttgt ttgaagtctt 24720

tgacgtggtc cgtgtgcacc agccgcaccg cggcgtcatc gaaaccgtgt acctgcgcac 24780

gcccttctcg gccggcaacg ccacaacata aagaagcaag caacatcaac aacagctgcc 24840

gccatgggct ccagtgagca ggaactgaaa gccattgtca aagatcttgg ttgtgggcca 24900

tatttttgg gcacctatga caagcgcttt ccaggctttg tttctccaca caagctcgcc 24960

tgcgccatag tcaatacggc cggtcgcgag actgggggcg tacactggat ggcctttgcc 25020

tggaacccgc actcaaaaac atgctacctc tttgagccct ttggcttttc tgaccagcga 25080

ctcaagcagg tttaccagtt tgagtacgag tcactcctgc gccgtagcgc cattgcttct 25140

tcccccgacc gctgtataac gctggaaaag tccacccaaa gcgtacaggg gcccaactcg 25200

gccgcctgtg gactattctg ctgcatgttt ctccacgcct ttgccaactg gccccaaact 25260

cccatggatc acaaccccac catgaacctt attaccgggg tacccaactc catgctcaac 25320

agtccccagg tacagcccac cctgcgtcgc aaccaggaac agctctacag cttcctggag 25380

cgccactcgc cctacttccg cagccacagt gcgcagatta ggagcgccac ttctttttgt 25440

cacttgaaaa acatgtaaaa ataatgtact agagacactt tcaataaagg caaatgcttt 25500

tatttgtaca ctctcgggtg attatttacc cccacccttg ccgtctgcgc cgtttaaaaa 25560

tcaaaggggt tctgccgcgc atcgctatgc gccactggca gggacacgtt gcgatactgg 25620

tgtttagtgc tccacttaaa ctcaggcaca accatccgcg gcagctcggt gaagttttca 25680

ctccacaggc tgcgcaccat caccaacgcg tttagcaggt cgggcgccga tatcttgaag 25740

tcgcagttgg ggcctccgcc ctgcgcgcgc gagttgcgat acacagggtt gcagcactgg 25800

aacactatca gcgccgggtg gtgcacgctg gccagcacgc tcttgtcgga gatcagatcc 25860

gcgtccaggt cctccgcgtt gctcagggcg aacggagtca actttggtag ctgccttccc 25920

aaaaagggcg cgtgcccagg ctttgagttg cactcgcacc gtagtggcat caaaaggtga 25980

ccgtgcccgg tctgggcgtt aggatacagc gcctgcataa aagccttgat ctgcttaaaa 26040

gccacctgag cctttgcgcc ttcagagaag aacatgccgc aagacttgcc ggaaaactga 26100

ttggccggac aggccgcgtc gtgcacgcag caccttgcgt cggtgttgga gatctgcacc 26160

acatttcggc cccaccggtt cttcacgatc ttggccttgc tagactgctc cttcagcgcg 26220

cgctgcccgt tttcgctcgt cacatccatt tcaatcacgt gctccttatt tatcataatg 26280

cttccgtgta gacacttaag ctcgccttcg atctcagcgc agcggtgcag ccacaacgcg 26340

cagcccgtgg gctcgtgatg cttgtaggtc acctctgcaa acgactgcag gtacgcctgc 26400

aggaatcgcc ccatcatcgt cacaaaggtc ttgttgctgg tgaaggtcag ctgcaacccg 26460

cggtgctcct cgttcagcca ggtcttgcat acggccgcca gagcttccac ttggtcaggc 26520

agtagtttga agttcgcctt tagatcgtta tccacgtggt acttgtccat cagcgcgcgc 26580

gcagcctcca tgcccttctc ccacgcagac acgatcggca cactcagcgg gttcatcacc 26640

gtaatttcac tttccgcttc gctgggctct tcctcttcct cttgcgtccg cataccacgc 26700

gccactgggt cgtcttcatt cagccgccgc actgtgcgct tacctccttt gccatgcttg 26760

attagcaccg gtgggttgct gaaacccacc atttgtagcg ccacatcttc tctttcttcc 26820

tcgctgtcca cgattacctc tggtgatggc gggcgctcgg gcttgggaga agggcgcttc 26880

tttttcttct tgggcgcaat ggccaaatcc gccgccgagg tcgatggccg cgggctgggt 26940

gtgcgcggca ccagcgcgtc ttgtgatgag tcttcctcgt cctcggactc gatacgccgc 27000

ctcatccgct tttttggggg cgcccgggga ggcggcggcg acggggacgg ggacgacacg 27060

tcctccatgg ttgggggacg tcgcgccgca ccgcgtccgc gctcgggggt ggtttcgcgc 27120

tgctcctctt cccgactggc catttccttc tcctataggc agaaaaagat catggagtca 27180

gtcgagaaga aggacagcct aaccgccccc tctgagttcg ccaccaccgc ctccaccgat 27240

gccgccaacg cgcctaccac cttccccgtc gaggcacccc cgcttgagga ggaggaagtg 27300

attatcgagc aggacccagg ttttgtaagc gaagacgacg aggaccgctc agtaccaaca 27360

gaggataaaa agcaagacca ggacaacgca gaggcaaacg aggaacaagt cgggcggggg 27420

gacgaaaggc atggcgacta cctagatgtg ggagacgacg tgctgttgaa gcatctgcag 27480

cgccagtgcg ccattatctg cgacgcgttg caagagcgca gcgatgtgcc cctcgccata 27540

gcggatgtca gccttgccta cgaacgccac ctattctcac cgcgcgtacc ccccaaacgc 27600

caagaaaacg gcacatgcga gcccaacccg cgcctcaact tctaccccgt atttgccgtg 27660

ccagaggtgc ttgccaccta tcacatcttt ttccaaaact gcaagatacc cctatcctgc 27720

cgtgccaacc gcagccgagc ggacaagcag ctggccttgc ggcagggcgc tgtcatacct 27780

gatatcgcct cgctcaacga agtgccaaaa atctttgagg gtcttggacg cgacgagaag 27840

cgcgcggcaa acgctctgca acaggaaaac agcgaaaatg aaagtcactc tggagtgttg 27900

gtggaactcg agggtgacaa cgcgcgccta gccgtactaa aacgcagcat cgaggtcacc 27960

cactttgcct acccggcact taacctaccc cccaaggtca tgagcacagt catgagtgag 28020

ctgatcgtgc gccgtgcgca gcccctggag agggatgcaa atttgcaaga acaaacagag 28080

gagggcctac ccgcagttgg cgacgagcag ctagcgcgct ggcttcaaac gcgcgagcct 28140

gccgacttgg aggagcgacg caaactaatg atggccgcag tgctcgttac cgtggagctt 28200

gagtgcatgc agcggttctt tgctgacccg gagatgcagc gcaagctaga ggaaacattg 28260

cactacacct ttcgacaggg ctacgtacgc caggcctgca agatctccaa cgtggagctc 28320

tgcaacctgg tctcctacct tggaattttg cacgaaaacc gccttgggca aaacgtgctt 28380

cattccacgc tcaagggcga ggcgcgccgc gactacgtcc gcgactgcgt ttacttattt 28440

ctatgctaca cctggcagac ggccatgggc gtttggcagc agtgcttgga ggagtgcaac 28500

ctcaaggagc tgcagaaact gctaaagcaa aacttgaagg acctatggac ggccttcaac 28560

gagcgctccg tggccgcgca cctggcggac atcattttcc ccgaacgcct gcttaaaacc 28620

ctgcaacagg gtctgccaga cttcaccagt caaagcatgt tgcagaactt taggaacttt 28680

atcctagagc gctcaggaat cttgcccgcc acctgctgtg cacttcctag cgactttgtg 28740

cccattaagt accgcgaatg ccctccgccg ctttggggcc actgctacct tctgcagcta 28800

gccaactacc ttgcctacca ctctgacata atggaagacg tgagcggtga cggtctactg 28860

gagtgtcact gtcgctgcaa cctatgcacc ccgcaccgct ccctggtttg caattcgcag 28920

ctgcttaacg aaagtcaaat tatcggtacc tttgagctgc agggtccctc gcctgacgaa 28980

aagtccgcgg ctccggggtt gaaactcact ccggggctgt ggacgtcggc ttaccttcgc 29040

aaatttgtac ctgaggacta ccacgcccac gagattaggt tctacgaaga ccaatcccgc 29100

ccgcctaatg cggagcttac cgcctgcgtc attacccagg gccacattct tggccaattg 29160

caagccatca acaaagcccg ccaagagttt ctgctacgaa agggacgggg ggtttacttg 29220

gacccccagt ccggcgagga gctcaaccca atccccccgc cgccgcagcc ctatcagcag 29280

cagccgcggg cccttgcttc ccaggatggc acccaaaaag aagctgcagc tgccgccgcc 29340

acccacggac gaggaggaat actgggacag tcaggcagag gaggttttgg acgaggagga 29400

ggaggacatg atggaagact gggagagcct agacgaggaa gcttccgagg tcgaagaggt 29460

gtcagacgaa acaccgtcac cctcggtcgc attcccctcg ccggcgcccc agaaatcggc 29520

aaccggttcc agcatggcta caacctccgc tcctcaggcg ccgccggcac tgcccgttcg 29580

ccgacccaac cgtagatggg acaccactgg aaccagggcc ggtaagtcca agcagccgcc 29640

gccgttagcc caagagcaac aacagcgcca aggctaccgc tcatggcgcg ggcacaagaa 29700

cgccatagtt gcttgcttgc aagactgtgg gggcaacatc tccttcgccc gccgctttct 29760

tctctaccat cacggcgtgg ccttcccccg taacatcctg cattactacc gtcatctcta 29820

cagcccatac tgcaccggcg gcagcggcag caacagcagc ggccacacag aagcaaaggc 29880

gaccggatag caagactctg acaaagccca agaaatccac agcggcggca gcagcaggag 29940

gaggagcgct gcgtctggcg cccaacgaac ccgtatcgac ccgcgagctt agaaacagga 30000

tttttcccac tctgtatgct atatttcaac agagcagggg ccaagaacaa gagctgaaaa 30060

taaaaaacag gtctctgcga tccctcaccc gcagctgcct gtatcacaaa agcgaagatc 30120

agcttcggcg cacgctggaa gacgcggagg ctctcttcag taaatactgc gcgctgactc 30180

ttaaggacta gtttcgcgcc ctttctcaaa tttaagcgcg aaaactacgt catctccagc 30240

ggccacaccc ggcgccagca cctgttgtca gcgccattat gagcaaggaa attcccacgc 30300

cctacatgtg gagttaccag ccacaaatgg gacttgcggc tggagctgcc caagactact 30360

caacccgaat aaactacatg agcgcgggac cccacatgat atcccgggtc aacggaatac 30420

gcgcccaccg aaaccgaatt ctcctggaac aggcggctat taccaccaca cctcgtaata 30480

accttaatcc ccgtagttgg cccgctgccc tggtgtacca ggaaagtccc gctcccacca 30540

ctgtggtact tcccagagac gcccaggccg aagttcagat gactaactca ggggcgcagc 30600

ttgcgggcgg ctttcgtcac agggtgcggt cgcccgggca gggtataact cacctgacaa 30660

tcagagggcg aggtattcag ctcaacgacg agtcggtgag ctcctcgctt ggtctccgtc 30720

cggacgggac atttcagatc ggcggcgccg gccgctcttc attcacgcct cgtcaggcaa 30780

tcctaactct gcagacctcg tcctctgagc cgcgctctgg aggcattgga actctgcaat 30840

ttattgagga gtttgtgcca tcggtctact ttaacccctt ctcgggacct cccggccact 30900

atccggatca atttattcct aactttgacg cggtaaagga ctcggcggac ggctacgact 30960

gaatgttaag tggagaggca gagcaactgc gcctgaaaca cctggtccac tgtcgccgcc 31020

acaagtgctt tgcccgcgac tccggtgagt tttgctactt tgaattgccc gaggatcata 31080

tcgagggccc ggcgcacggc gtccggctta ccgcccaggg agagcttgcc cgtagcctga 31140

ttcgggagtt tacccagcgc cccctgctag ttgagcggga caggggaccc tgtgttctca 31200

ctgtgatttg caactgtcct aaccctggat tacatcaaga tcctctagtt aatgtcaggt 31260

cgcctaagtc gattaactag agtacccggg gatcttattc cctttaacta ataaaaaaaa 31320

ataataaagc atcacttact taaaatcagt tagcaaattt ctgtccagtt tattcagcag 31380

cacctccttg ccctcctccc agctctggta ttgcagcttc ctcctggctg caaactttct 31440

ccacaatcta aatggaatgt cagtttcctc ctgttcctgt ccatccgcac ccactatctt 31500

catgttgttg cagatgaagc gcgcaagacc gtctgaagat accttcaacc ccgtgtatcc 31560

atatgacacg gaaaccggtc ctccaactgt gccttttctt actcctccct ttgtatcccc 31620

caatgggttt caagagagtc cccctggggt actctctttg cgcctatccg aacctctagt 31680

tacctccaat ggcatgcttg cgctcaaaat gggcaacggc ctctctctgg acgaggccgg 31740

caaccttacc tcccaaaatg taaccactgt gagcccacct ctcaaaaaaa ccaagtcaaa 31800

cataaacctg gaaatatctg cacccctcac agttacctca gaagccctaa ctgtggctgc 31860

cgccgcacct ctaatggtcg cgggcaacac actcaccatg caatcacagg ccccgctaac 31920

cgtgcacgac tccaaactta gcattgccac ccaaggaccc ctcacagtgt cagaaggaaa 31980

gctagccctg caaacatcag gccccctcac caccaccgat agcagtaccc ttactatcac 32040

tgcctcaccc cctctaacta ctgccactgg tagcttgggc attgacttga aagagcccat 32100

ttatacacaa aatggaaaac taggactaaa gtacggggct cctttgcatg taacagacga 32160

cctaaacact ttgaccgtag caactggtcc aggtgtgact attaataata cttccttgca 32220

aactaaagtt actggagcct tgggttttga ttcacaaggc aatatgcaac ttaatgtagc 32280

aggaggacta aggattgatt ctcaaaacag acgccttata cttgatgtta gttatccgtt 32340

tgatgctcaa aaccaactaa atctaagact aggacagggc cctcttttta taaactcagc 32400

ccacaacttg gatattaact acaacaaagg cctttacttg tttacagctt caaacaattc 32460

caaaaagctt gaggttaacc taagcactgc caaggggttg atgtttgacg ctacagccat 32520

agccattaat gcaggagatg ggcttgaatt tggttcacct aatgcaccaa acacaaatcc 32580

cctcaaaaca aaaattggcc atggcctaga atttgattca aacaaggcta tggttcctaa 32640

actaggaact ggccttagtt ttgacagcac aggtgccatt acagtaggaa acaaaaataa 32700

tgataagcta actttgtgga ccggaataaa ccctccacct aactgtcaaa ttgtggaaaa 32760

cactaataca aatgatggca aacttacttt agtattagta aaaaatggag ggcttgttaa 32820

tggctacgtg tctctagttg gtgtatcaga cactgtgaac caaatgttca cacaaaagac 32880

agcaaacatc caattaagat tatattttga ctcttctgga aatctattaa ctgaggaatc 32940

agacttaaaa attccactta aaaataaatc ttctacagcg accagtgaaa ctgtagccag 33000

cagcaaagcc tttatgccaa gtactacagc ttatcccttc aacaccacta ctagggatag 33060

tgaaaactac attcatggaa tatgttacta catgactagt tatgatagaa gtctatttcc 33120

cttgaacatt tctataatgc taaacagccg tatgatttct tccaatgttg cctatgccat 33180

acaatttgaa tggaatctaa atgcaagtga atctccagaa agcaacatag ctacgctgac 33240

cacatccccc tttttctttt cttacattac agaagacgac aactaaagaa tcgtttgtgt 33300

tatgtttcaa cgtgtttatt tttcaattgc agaaaatttc aagtcatttt tcattcagta 33360

gtatagcccc accaccacat agcttataca gatcaccgta ccttaatcaa actcacagaa 33420

ccctagtatt caacctgcca cctccctccc aacacacaga gtacacagtc ctttctcccc 33480

ggctggcctt aaaaagcatc atatcatggg taacagacat attcttaggt gttatattcc 33540

acacggtttc ctgtcgagcc aaacgctcat cagtgatatt aataaactcc ccgggcagct 33600

cacttaagtt catgtcgctg tccagctgct gagccacagg ctgctgtcca acttgcggtt 33660

gcttaacggg cggcgaagga gaagtccacg cgttgtgcat tgtcaaagtg ttacattcgg 33720

gcagcagcgg atgatcctcc agtatggtag cgcgggtttc tgtctcaaaa ggaggtagac 33780

gatccctact gtacggagtg cgccgagaca accgagatcg tgttggtcgt agtgtcatgc 33840

caaatggaac gccggacgta gtcatatttc ctgaagcaaa accaggtgcg ggcgtgacaa 33900

acagatctgc gtctccggtc tcgccgctta gatcgctctg tgtagtagtt gtagtatatc 33960

cactctctca aagcatccag gcgccccctg gcttcgggtt ctatgtaaac tccttcatgc 34020

gccgctgccc tgataacatc caccaccgca gaataagcca cacccagcca acctacacat 34080

tcgttctgcg agtcacacac gggaggagcg ggaagagctg gaagaaccat gttttttttt 34140

ttattccaaa agattatcca aaacctcaaa atgaagatct attaagtgaa cgcgctcccc 34200

tccggtggcg tggtcaaact ctacagccaa agaacagata atggcatttg taagatgttg 34260

cacaatggct tccaaaaggc aaacggccct cacgtccaag tggacgtaaa ggctaaaccc 34320

ttcagggtga atctcctcta taaacattcc agcaccttca accatgccca aataattctc 34380

atctcgccac cttctcaata tatctctaag caaatcccga atattaagtc cggccattgt 34440

aaaaatctgc tccagagcgc cctccacctt cagcctcaag cagcgaatca tgattgcaaa 34500

aattcaggtt cctcacagac ctgtataaga ttcaaaagcg gaacattaac aaaaataccg 34560

cgatcccgta ggtcccttcg cagggccagc tgaacataat cgtgcaggtc tgcacggacc 34620

agcgcggcca cttccccgcc aggaaccatg acaaaagaac ccacactgat tatgacacgc 34680

atactcggag ctatgctaac cagcgtagcc ccgatgtaag cttgttgcat gggcggcgat 34740

ataaaatgca aggtgctgct caaaaaatca ggcaaagcct cgcgcaaaaa agaaagcaca 34800

tcgtagtcat gctcatgcag ataaaggcag gtaagctccg gaaccaccac agaaaaagac 34860

accatttttc tctcaaacat gtctgcgggt ttctgcataa acacaaaata aaataacaaa 34920

aaaacattta aacattagaa gcctgtctta caacaggaaa aacaaccctt ataagcataa 34980

gacggactac ggccatgccg gcgtgaccgt aaaaaaactg gtcaccgtga ttaaaaagca 35040

ccaccgacag ctcctcggtc atgtccggag tcataatgta agactcggta aacacatcag 35100

gttgattcac atcggtcagt gctaaaaagc gaccgaaata gcccgggggа atacataccc 35160

gcaggcgtag agacaacatt acagccccca taggaggtat aacaaaatta ataggagaga 35220

aaaacacata aacacctgaa aaaccctcct gcctaggcaa aatagcaccc tcccgctcca 35280

gaacaacata cagcgcttcc acagcggcag ccataacagt cagccttacc agtaaaaaag 35340

aaaacctatt aaaaaaacac cactcgacac ggcaccagct caatcagtca cagtgtaaaa 35400

aagggccaag tgcagagcga gtatatatag gactaaaaaa tgacgtaacg gttaaagtcc 35460

acaaaaaaca cccagaaaac cgcacgcgaa cctacgccca gaaacgaaag ccaaaaaacc 35520

cacaacttcc tcaaatcgtc acttccgttt tcccacgtta cgtcacttcc cattttaaga 35580

aaactacaat tcccaacaca tacaagttac tccgccctaa aacctacgtc acccgccccg 35640

ttcccacgcc ccgcgccacg tcacaaactc cacccccctca ttatcatatt ggcttcaatc 35700

caaaataagg tatattattg atgatg 35726

<210> 32
<211> 35734
<212> DNA
<213> Artificial Sequence

<220>
<223> Adk35F2-Spike/E4orf6(CMV)-E4dl-711(E4re#30)

<400> 32
ttaattaaca tcatcaataa tataccttat tttggattga agccaatatg ataatgaggg 60

ggtggagttt gtgacgtggc gcggggcgtg ggaacggggc gggtgacgta gtagtgtggc 120

ggaagtgtga tgttgcaagt gtggcggaac acatgtaagc gacggatgtg gcaaaagtga 180

cgtttttggt gtgcgccggt gtacacagga agtgacaatt ttcgcgcggt tttaggcgga 240

tgttgtagta aatttgggcg taaccgagta agatttggcc attttcgcgg gaaaactgaa 300

taagaggaag tgaaatctga ataattttgt gttactcata gcgcgtaata atttctgtaa 360

tagtaatcaa ttacggggtc attagttcat agcccatata tggagttccg cgttacataa 420

cttacggtaa atggcccgcc tggctgaccg cccaacgacc cccgcccatt gacgtcaata 480

atgacgtatg ttcccatagt aacgccaata gggactttcc attgacgtca atgggtggag 540

tatttacggt aaactgccca cttggcagta catcaagtgt atcatatgcc aagtacgccc 600

cctattgacg tcaatgacgg taaatggccc gcctggcatt atgcccagta catgacctta 660

tgggactttc ctacttggca gtacatctac gtattagtca tcgctattac catggtgatg 720

cggttttggc agtacatcaa tgggcgtgga tagcggtttg actcacgggg atttccaagt 780

ctccacccca ttgacgtcaa tgggagtttg ttttggcacc aaaatcaacg ggactttcca 840

aaatgtcgta acaactccgc cccattgacg caaatgggcg gtaggcgtgt acggtgggag 900

gtctatataa gcagagctct ccctatcagt gatagagatc tccctatcag tgatagagat 960

cgtcgacgag ctcgtttagt gaaccgtcag atcgcctgga gacgccatcc acgctgtttt 1020

gacctccata gaagacaccg ggaccgatcc agcctccgat ttgccaccat gtttgtgttc 1080

ctggtgctgc tgccactggt gtccagccag tgtgtgaacc tgaccaccag gacccaactt 1140

cctcctgcct acaccaactc cttcaccagg ggagtctact accctgacaa ggtgttcagg 1200

tcctctgtgc tgcacagcac ccaggacctg ttcctgccat tcttcagcaa tgtgacctgg 1260

ttccatgcca tccatgtgtc tggcaccaat ggcaccaaga ggtttgacaa ccctgtgctg 1320

ccattcaatg atggagtcta ctttgccagc acagagaaga gcaacatcat caggggctgg 1380

atttttggca ccaccctgga cagcaagacc cagtccctgc tgattgtgaa caatgccacc 1440

aatgtggtga ttaaggtgtg tgagttccag ttctgtaatg acccattcct gggagtctac 1500

taccacaaga acaacaagtc ctggatggag tctgagttca gggtctactc ctctgccaac 1560

aactgtacct ttgaatatgt gagccaacca ttcctgatgg acttggaggg caagcagggc 1620

aacttcaaga acctgaggga gtttgtgttc aagaacattg atggctactt caagatttac 1680

agcaaacaca caccaatcaa cctggtgagg gacctgccac agggcttctc tgccttggaa 1740

ccactggtgg acctgccaat tggcatcaac atcaccaggt tccagaccct gctggctctg 1800

cacaggtcct acctgacacc tggagactcc tcctctggct ggacagcagg agcagcagcc 1860

tactatgtgg gctacctcca accaaggacc ttcctgctga aatacaatga gaatggcacc 1920

atcacagatg ctgtggactg tgccctggac ccactgtctg agaccaagtg taccctgaaa 1980

tccttcacag tggagaaggg catctaccag accagcaact tcagggtcca accaacagag 2040

agcattgtga ggtttccaaa catcaccaac ctgtgtccat ttggagaggt gttcaatgcc 2100

accaggtttg cctctgtcta tgcctggaac aggaagagga ttagcaactg tgtggctgac 2160

tactctgtgc tctacaactc tgcctccttc agcaccttca agtgttatgg agtgagccca 2220

accaaactga atgacctgtg tttcaccaat gtctatgctg actcctttgt gattagggga 2280

gatgaggtga gacagattgc ccctggacaa acaggcaaga ttgctgacta caactacaaa 2340

ctgcctgatg acttcacagg ctgtgtgatt gcctggaaca gcaacaacct ggacagcaag 2400

gtgggaggca actacaacta cctctacaga ctgttcagga agagcaacct gaaaccattt 2460

gagagggaca tcagcacaga gatttaccag gctggcagca caccatgtaa tggagtggag 2520

ggcttcaact gttactttcc actccaatcc tatggcttcc aaccaaccaa tggagtgggc 2580

taccaaccat acagggtggt ggtgctgtcc tttgaactgc tccatgcccc tgccacagtg 2640

tgtggaccaa agaagagcac caacctggtg aagaacaagt gtgtgaactt caacttcaat 2700

ggactgacag gcacaggagt gctgacagag agcaacaaga agttcctgcc attccaacag 2760

tttggcaggg acattgctga caccacagat gctgtgaggg acccacagac cttggagatt 2820

ctggacatca caccatgttc ctttggagga gtgtctgtga ttacacctgg caccaacacc 2880

agcaaccagg tggctgtgct ctaccaggat gtgaactgta ctgaggtgcc tgtggctatc 2940

catgctgacc aacttacacc aacctggagg gtctacagca caggcagcaa tgtgttccag 3000

accagggctg gctgtctgat tggagcagag catgtgaaca actcctatga gtgtgacatc 3060

ccaattggag caggcatctg tgcctcctac cagacccaga ccggtggcgg tgggtcgagg 3120

tctgtggcaa gccagagcat cattgcctac acaatgagtc tgggagcaga gaactctgtg 3180

gcttacagca acaacagcat tgccatccca accaacttca ccatctctgt gaccacagag 3240

attctgcctg tgagtatgac caagacctct gtggactgta caatgtatat ctgtggagac 3300

agcacagagt gtagcaacct gctgctccaa tatggctcct tctgtaccca acttaacagg 3360

gctctgacag gcattgctgt ggaacaggac aagaacaccc aggaggtgtt tgcccaggtg 3420

aagcagattt acaagacacc tccaatcaag gactttggag gcttcaactt cagccagatt 3480

ctgcctgacc caagcaagcc aagcaagagg tccttcattg aggacctgct gttcaacaag 3540

gtgaccctgg ctgatgctgg cttcatcaag caatatggag actgtctggg agacattgct 3600

gccagggacc tgatttgtgc ccagaagttc aatggactga cagtgctgcc tccactgctg 3660

acagatgaga tgattgccca atacacctct gccctgctgg ctggcaccat cacctctggc 3720

tggacctttg gagcaggagc agccctccaa atcccatttg ctatgcagat ggcttacagg 3780

ttcaatggca ttggagtgac ccagaatgtg ctctatgaga accagaaact gattgccaac 3840

cagttcaact ctgccattgg caagattcag gactccctgt ccagcacagc ctctgccctg 3900

ggcaaactcc aagatgtggt gaaccagaat gcccaggctc tgaacaccct ggtgaagcaa 3960

ctttccagca actttggagc catctcctct gtgctgaatg acatcctgag cagactggac 4020

aaggtggagg ctgaggtcca gattgacaga ctgattacag gcagactcca atccctccaa 4080

acctatgtga cccaacaact tatcagggct gctgagatta gggcatctgc caacctggct 4140

gccaccaaga tgagtgagtg tgtgctggga caaagcaaga gggtggactt ctgtggcaag 4200

ggctaccacc tgatgagttt tccacagtct gcccctcatg gagtggtgtt cctgcatgtg 4260

acctatgtgc ctgcccagga gaagaacttc accacagccc ctgccatctg ccatgatggc 4320

aaggctcact ttccaaggga gggagtgttt gtgagcaatg gcacccactg gtttgtgacc 4380

cagaggaact tctatgaacc acagattatc accacagaca acacctttgt gtctggcaac 4440

tgtgatgtgg tgattggcat tgtgaacaac acagtctatg acccactcca acctgaactg 4500

gactccttca aggaggaact ggacaaatac ttcaagaacc acaccagccc tgatgtggac 4560

ctgggagaca tctctggcat caatgcctct gtggtgaaca tccagaagga gattgacaga 4620

ctgaatgagg tggctaagaa cctgaatgag tccctgattg acctccaaga actgggcaaa 4680

tatgaacaat acatcaagtg gccatgaaaa ttgatcataa tcagccatac cacatttgta 4740

gaggttttac ttgctttaaa aaacctccca cacctccccc tgaacctgaa acataaaatg 4800

aatgcaattg ttgttgttaa cttgtttatt gcagcttata atggttacaa ataaagcaat 4860

agcatcacaa atttcacaaa taaagcattt ttttcactgc attctagttg tggtttgtcc 4920

aaactcatca atgtatctta acgcggatcc gttacataac ttacggtaaa tggcccgcct 4980

ggctgaccgc ccaacgaccc ccgcccattg acgtcaataa tgacgtatgt tcccatagta 5040

acgccaatag ggactttcca ttgacgtcaa tgggtggagt atttacggta aactgcccac 5100

ttggcagtac atcaagtgta tcatatgcca agtacgcccc ctattgacgt caatgacggt 5160

aaatggcccg cctggcatta tgcccagtac atgaccttat gggactttcc tacttggcag 5220

tacatctacg tattagtcat cgctattacc atggtgatgc ggttttggca gtacatcaat 5280

gggcgtggat agcggtttga ctcacgggga tttccaagtc tccaccccat tgacgtcaat 5340

gggagtttgt tttggcacca aaatcaacgg gactttccaa aatgtcgtaa caactccgcc 5400

ccattgacgc aaatgggcgg taggcgtgta cggtgggagg tctatataag cagagctaaa 5460

ctaccccaag ctggccacca tgactacgtc cggcgttcca tttggcatga cactacgacc 5520

aacacgatct cggttgtctc ggcgcactcc gtacagtagg gatcgtctac ctccttttga 5580

gacagaaacc cgcgctacca tactggagga tcatccgctg ctgcccgaat gtaacacttt 5640

gacaatgcac aacgtgagtt acgtgcgagg tcttccctgc agtgtgggat ttacgctgat 5700

tcaggaatgg gttgttccct gggatatggt tctaacgcgg gaggagcttg taatcctgag 5760

gaagtgtatg cacgtgtgcc tgtgttgtgc caacattgat atcatgacga gcatgatgat 5820

ccatggttac gagtcctggg ctctccactg tcattgttcc agtcccggtt ccctgcagtg 5880

tatagccggc gggcaggttt tggccagctg gtttaggatg gtggtggatg gcgccatgtt 5940

taatcagagg tttatatggt accgggaggt ggtgaattac aacatgccaa aagaggtaat 6000

gtttatgtcc agcgtgttta tgaggggtcg ccacttaatc tacctgcgct tgtggtatga 6060

tggccacgtg ggttctgtgg tccccgccat gagctttgga tacagcgcct tgcactgtgg 6120

gattttgaac aatattgtgg tgctgtgctg cagttactgt gctgatttaa gtgagatcag 6180

ggtgcgctgc tgtgcccgga ggacaaggcg ccttatgctg cgggcggtgc gaatcatcgc 6240

tgaggagacc actgccatgt tgtattcctg caggacggag cggcggcggc agcagtttat 6300

tcgcgcgctg ctgcagcacc accgccctat cctgatgcac gattatgact ctacccccat 6360

gtagaagctt ggggatcaat tctctagagc tcgctgatca gcctcgactg tgccttctag 6420

ttgccagcca tctgttgttt gcccctcccc cgtgccttcc ttgaccctgg aaggtgccac 6480

tcccactgtc ctttcctaat aaaatgagga aattgcatcg cattgtctga gtaggtgtca 6540

ttctattctg gggggtgggg tggggcagga cagcaagggg gaggattggg aagacaatag 6600

caggcatgct ggggatgcgg tgggctctat ggcttctgag gaaattgggc gtggcttaag 6660

ggtgggaaag aatatataag gtgggggtct tatgtagttt tgtatctgtt ttgcagcagc 6720

cgccgccgcc atgagcacca actcgtttga tggaagcatt gtgagctcat atttgacaac 6780

gcgcatgccc ccatgggccg gggtgcgtca gaatgtgatg ggctccagca ttgatggtcg 6840

ccccgtcctg cccgcaaact ctactacctt gacctacgag accgtgtctg gaacgccgtt 6900

ggagactgca gcctccgccg ccgcttcagc cgctgcagcc accgcccgcg ggattgtgac 6960

tgactttgct ttcctgagcc cgcttgcaag cagtgcagct tcccgttcat ccgcccgcga 7020

tgacaagttg acggctcttt tggcacaatt ggattctttg acccgggaac ttaatgtcgt 7080

ttctcagcag ctgttggatc tgcgccagca ggtttctgcc ctgaaggctt cctcccctcc 7140

caatgcggtt taaaacataa ataaaaaacc agactctgtt tggatttgga tcaagcaagt 7200

gtcttgctgt ctttatttag gggttttgcg cgcgcggtag gcccgggacc agcggtctcg 7260

gtcgttgagg gtcctgtgta ttttttccag gacgtggtaa aggtgactct ggatgttcag 7320

atacatgggc ataagcccgt ctctggggtg gaggtagcac cactgcagag cttcatgctg 7380

cggggtggtg ttgtagatga tccagtcgta gcaggagcgc tgggcgtggt gcctaaaaat 7440

gtctttcagt agcaagctga ttgccagggg caggcccttg gtgtaagtgt ttacaaagcg 7500

gttaagctgg gatgggtgca tacgtgggga tatgagatgc atcttggact gtatttttag 7560

gttggctatg ttcccagcca tatccctccg gggattcatg ttgtgcagaa ccaccagcac 7620

agtgtatccg gtgcacttgg gaaatttgtc atgtagctta gaaggaaatg cgtggaagaa 7680

cttggagacg cccttgtgac ctccaagatt ttccatgcat tcgtccataa tgatggcaat 7740

gggcccacgg gcggcggcct gggcgaagat atttctggga tcactaacgt catagttgtg 7800

ttccaggatg agatcgtcat aggccatttt tacaaagcgc gggcggaggg tgccagactg 7860

cggtataatg gttccatccg gcccaggggc gtagttaccc tcacagattt gcatttccca 7920

cgctttgagt tcagatgggg ggatcatgtc tacctgcggg gcgatgaaga aaacggtttc 7980

cggggtaggg gagatcagct gggaagaaag caggttcctg agcagctgcg acttaccgca 8040

gccggtgggc ccgtaaatca cacctattac cgggtgcaac tggtagttaa gagagctgca 8100

gctgccgtca tccctgagca ggggggccac ttcgttaagc atgtccctga ctcgcatgtt 8160

ttccctgacc aaatccgcca gaaggcgctc gccgcccagc gatagcagtt cttgcaagga 8220

agcaaagttt ttcaacggtt tgagaccgtc cgccgtaggc atgcttttga gcgtttgacc 8280

aagcagttcc aggcggtccc acagctcggt cacctgctct acggcatctc gatccagcat 8340

atctcctcgt ttcgcgggtt ggggcggctt tcgctgtacg gcagtagtcg gtgctcgtcc 8400

agacgggcca gggtcatgtc tttccacggg cgcagggtcc tcgtcagcgt agtctgggtc 8460

acggtgaagg ggtgcgctcc gggctgcgcg ctggccaggg tgcgcttgag gctggtcctg 8520

ctggtgctga agcgctgccg gtcttcgccc tgcgcgtcgg ccaggtagca tttgaccatg 8580

gtgtcatagt ccagcccctc cgcggcgtgg cccttggcgc gcagcttgcc cttggaggag 8640

gcgccgcacg aggggcagtg cagacttttg agggcgtaga gcttgggcgc gagaaatacc 8700

gattccgggg agtaggcatc cgcgccgcag gccccgcaga cggtctcgca ttccacgagc 8760

caggtgagct ctggccgttc ggggtcaaaa accaggtttc ccccatgctt tttgatgcgt 8820

ttcttacctc tggtttccat gagccggtgt ccacgctcgg tgacgaaaag gctgtccgtg 8880

tccccgtata cagacttgag aggcctgtcc tcgagcggtg ttccgcggtc ctcctcgtat 8940

agaaactcgg accactctga gacaaaggct cgcgtccagg ccagcacgaa ggaggctaag 9000

tgggaggggt agcggtcgtt gtccactagg gggtccactc gctccagggt gtgaagacac 9060

atgtcgccct cttcggcatc aaggaaggtg attggtttgt aggtgtaggc cacgtgaccg 9120

ggtgttcctg aaggggggct ataaaagggg gtgggggcgc gttcgtcctc actctcttcc 9180

gcatcgctgt ctgcgagggc cagctgttgg ggtgagtact ccctctgaaa agcgggcatg 9240

acttctgcgc taagattgtc agtttccaaa aacgaggagg atttgatatt cacctggccc 9300

gcggtgatgc ctttgagggt ggccgcatcc atctggtcag aaaagacaat ctttttgttg 9360

tcaagcttgg tggcaaacga cccgtagagg gcgttggaca gcaacttggc gatggagcgc 9420

agggtttggt ttttgtcgcg atcggcgcgc tccttggccg cgatgtttag ctgcacgtat 9480

tcgcgcgcaa cgcaccgcca ttcgggaaag acggtggtgc gctcgtcggg caccaggtgc 9540

acgcgccaac cgcggttgtg cagggtgaca aggtcaacgc tggtggctac ctctccgcgt 9600

aggcgctcgt tggtccagca gaggcggccg cccttgcgcg agcagaatgg cggtaggggg 9660

tctagctgcg tctcgtccgg ggggtctgcg tccacggtaa agaccccggg cagcaggcgc 9720

gcgtcgaagt agtctatctt gcatccttgc aagtctagcg cctgctgcca tgcgcgggcg 9780

gcaagcgcgc gctcgtatgg gttgagtggg ggaccccatg gcatggggtg ggtgagcgcg 9840

gaggcgtaca tgccgcaaat gtcgtaaacg tagaggggct ctctgagtat tccaagatat 9900

gtagggtagc atcttccacc gcggatgctg gcgcgcacgt aatcgtatag ttcgtgcgag 9960

ggagcgagga ggtcgggacc gaggttgcta cgggcgggct gctctgctcg gaagactatc 10020

tgcctgaaga tggcatgtga gttggatgat atggttggac gctggaagac gttgaagctg 10080

gcgtctgtga gacctaccgc gtcacgcacg aaggaggcgt aggagtcgcg cagcttgttg 10140

accagctcgg cggtgacctg cacgtctagg gcgcagtagt ccagggtttc cttgatgatg 10200

tcatacttat cctgtccctt ttttttccac agctcgcggt tgaggacaaa ctcttcgcgg 10260

tctttccagt actcttggat cggaaacccg tcggcctccg aacggtaaga gcctagcatg 10320

tagaactggt tgacggcctg gtaggcgcag catccctttt ctacgggtag cgcgtatgcc 10380

tgcgcggcct tccggagcga ggtgtgggtg agcgcaaagg tgtccctgac catgactttg 10440

aggtactggt atttgaagtc agtgtcgtcg catccgccct gctcccagag caaaaagtcc 10500

gtgcgctttt tggaacgcgg atttggcagg gcgaaggtga catcgttgaa gagtatcttt 10560

cccgcgcgag gcataaagtt gcgtgtgatg cggaagggtc ccggcacctc ggaacggttg 10620

ttaattacct gggcggcgag cacgatctcg tcaaagccgt tgatgttgtg gcccacaatg 10680

taaagttcca agaagcgcgg gatgcccttg atggaaggca atttttaag ttcctcgtag 10740

gtgagctctt caggggagct gagcccgtgc tctgaaaggg cccagtctgc aagatgaggg 10800

ttggaagcga cgaatgagct ccacaggtca cgggccatta gcatttgcag gtggtcgcga 10860

aaggtcctaa actggcgacc tatggccatt ttttctgggg tgatgcagta gaaggtaagc 10920

gggtcttgtt cccagcggtc ccatccaagg ttcgcggcta ggtctcgcgc ggcagtcact 10980

agaggctcat ctccgccgaa cttcatgacc agcatgaagg gcacgagctg cttcccaaag 11040

gcccccatcc aagtataggt ctctacatcg taggtgacaa agagacgctc ggtgcgagga 11100

tgcgagccga tcgggaagaa ctggatctcc cgccaccaat tggaggagtg gctattgatg 11160

tggtgaaagt agaagtccct gcgacgggcc gaacactcgt gctggctttt gtaaaaacgt 11220

gcgcagtact ggcagcggtg cacgggctgt acatcctgca cgaggttgac ctgacgaccg 11280

cgcacaagga agcagagtgg gaatttgagc ccctcgcctg gcgggtttgg ctggtggtct 11340

tctacttcgg ctgcttgtcc ttgaccgtct ggctgctcga ggggagttac ggtggatcgg 11400

accaccacgc cgcgcgagcc caaagtccag atgtccgcgc gcggcggtcg gagcttgatg 11460

acaacatcgc gcagatggga gctgtccatg gtctggagct cccgcggcgt caggtcaggc 11520

gggagctcct gcaggtttac ctcgcataga cgggtcaggg cgcgggctag atccaggtga 11580

tacctaattt ccaggggctg gttggtggcg gcgtcgatgg cttgcaagag gccgcatccc 11640

cgcggcgcga ctacggtacc gcgcggcggg cggtgggccg cgggggtgtc cttggatgat 11700

gcatctaaaa gcggtgacgc gggcgagccc ccggaggtag gggggctcc ggacccgccg 11760

ggagaggggg caggggcacg tcggcgccgc gcgcgggcag gagctggtgc tgcgcgcgta 11820

ggttgctggc gaacgcgacg acgcggcggt tgatctcctg aatctggcgc ctctgcgtga 11880

agacgacggg cccggtgagc ttgaacctga aagagagttc gacagaatca atttcggtgt 11940

cgttgacggc ggcctggcgc aaaatctcct gcacgtctcc tgagttgtct tgataggcga 12000

tctcggccat gaactgctcg atctcttcct cctggagatc tccgcgtccg gctcgctcca 12060

cggtggcggc gaggtcgttg gaaatgcggg ccatgagctg cgagaaggcg ttgaggcctc 12120

cctcgttcca gacgcggctg tagaccacgc ccccttcggc atcgcgggcg cgcatgacca 12180

cctgcgcgag attgagctcc acgtgccggg cgaagacggc gtagtttcgc aggcgctgaa 12240

agaggtagtt gagggtggtg gcggtgtgtt ctgccacgaa gaagtacata acccagcgtc 12300

gcaacgtgga ttcgttgata tcccccaagg cctcaaggcg ctccatggcc tcgtagaagt 12360

ccacggcgaa gttgaaaaac tgggagttgc gcgccgacac ggttaactcc tcctccagaa 12420

gacggatgag ctcggcgaca gtgtcgcgca cctcgcgctc aaaggctaca ggggcctctt 12480

cttcttcttc aatctcctct tccataaggg cctccccttc ttcttcttct ggcggcggtg 12540

ggggaggggg gacacggcgg cgacgacggc gcaccgggag gcggtcgaca aagcgctcga 12600

tcatctcccc gcggcgacgg cgcatggtct cggtgacggc gcggccgttc tcgcgggggc 12660

gcagttggaa gacgccgccc gtcatgtccc ggttatgggt tggcgggggg ctgccatgcg 12720

gcagggatac ggcgctaacg atgcatctca acaattgttg tgtaggtact ccgccgccga 12780

gggacctgag cgagtccgca tcgaccggat cggaaaacct ctcgagaaag gcgtctaacc 12840

agtcacagtc gcaaggtagg ctgagcaccg tggcgggcgg cagcgggcgg cggtcggggt 12900

tgtttctggc ggaggtgctg ctgatgatgt aattaaagta ggcggtcttg agacggcgga 12960

tggtcgacag aagcaccatg tccttgggtc cggcctgctg aatgcgcagg cggtcggcca 13020

tgccccaggc ttcgttttga catcggcgca ggtctttgta gtagtcttgc atgagccttt 13080

ctaccggcac ttcttcttct ccttcctctt gtcctgcatc tcttgcatct atcgctgcgg 13140

cggcggcgga gtttggccgt aggtggcgcc ctcttcctcc catgcgtgtg accccgaagc 13200

ccctcatcgg ctgaagcagg gctaggtcgg cgacaacgcg ctcggctaat atggcctgct 13260

gcacctgcgt gagggtagac tggaagtcat ccatgtccac aaagcggtgg tatgcgcccg 13320

tgttgatggt gtaagtgcag ttggccataa cggaccagtt aacggtctgg tgacccggct 13380

gcgagagctc ggtgtacctg agacgcgagt aagccctcga gtcaaatacg tagtcgttgc 13440

aagtccgcac caggtactgg tatcccacca aaaagtgcgg cggcggctgg cggtagaggg 13500

gccagcgtag ggtggccggg gctccggggg cgagatcttc caacataagg cgatgatatc 13560

cgtagatgta cctggacatc caggtgatgc cggcggcggt ggtggaggcg cgcggaaagt 13620

cgcggacgcg gttccagatg ttgcgcagcg gcaaaaagtg ctccatggtc gggacgctct 13680

ggccggtcag gcgcgcgcaa tcgttgacgc tctagcgtgc aaaaggagag cctgtaagcg 13740

ggcactcttc cgtggtctgg tggataaatt cgcaagggta tcatggcgga cgaccggggt 13800

tcgagccccg tatccggccg tccgccgtga tccatgcggt taccgcccgc gtgtcgaacc 13860

caggtgtgcg acgtcagaca acgggggagt gctccttttg gcttccttcc aggcgcggcg 13920

gctgctgcgc tagcttttt ggccactggc cgcgcgcagc gtaagcggtt aggctggaaa 13980

gcgaaagcat taagtggctc gctccctgta gccggagggt tattttccaa gggttgagtc 14040

gcgggacccc cggttcgagt ctcggaccgg ccggactgcg gcgaacgggg gtttgcctcc 14100

ccgtcatgca agaccccgct tgcaaattcc tccggaaaca gggacgagcc ccttttttgc 14160

ttttcccaga tgcatccggt gctgcggcag atgcgccccc ctcctcagca gcggcaagag 14220

caagagcagc ggcagacatg cagggcaccc tcccctcctc ctaccgcgtc aggaggggcg 14280

acatccgcgg ttgacgcggc agcagatggt gattacgaac ccccgcggcg ccgggcccgg 14340

cactacctgg acttggagga gggcgagggc ctggcgcggc taggagcgcc ctctcctgag 14400

cggcacccaa gggtgcagct gaagcgtgat acgcgtgagg cgtacgtgcc gcggcagaac 14460

ctgtttcgcg accgcgaggg agaggagccc gaggagatgc gggatcgaaa gttccacgca 14520

gggcgcgagc tgcggcatgg cctgaatcgc gagcggttgc tgcgcgagga ggactttgag 14580

cccgacgcgc gaaccgggat tagtcccgcg cgcgcacacg tggcggccgc cgacctggta 14640

accgcatacg agcagacggt gaaccaggag attaactttc aaaaaagctt taacaaccac 14700

gtgcgtacgc ttgtggcgcg cgaggaggtg gctataggac tgatgcatct gtgggacttt 14760

gtaagcgcgc tggagcaaaa cccaaatagc aagccgctca tggcgcagct gttccttata 14820

gtgcagcaca gcagggacaa cgaggcattc agggatgcgc tgctaaacat agtagagccc 14880

gagggccgct ggctgctcga tttgataaac atcctgcaga gcatagtggt gcaggagcgc 14940

agcttgagcc tggctgacaa ggtggccgcc atcaactatt ccatgcttag cctgggcaag 15000

ttttacgccc gcaagatata ccataccct tacgttccca tagacaagga ggtaaagatc 15060

gaggggttct acatgcgcat ggcgctgaag gtgcttacct tgagcgacga cctgggcgtt 15120

tatcgcaacg agcgcatcca caaggccgtg agcgtgagcc ggcggcgcga gctcagcgac 15180

cgcgagctga tgcacagcct gcaaagggcc ctggctggca cgggcagcgg cgatagagag 15240

gccgagtcct actttgacgc gggcgctgac ctgcgctggg ccccaagccg acgcgccctg 15300

gaggcagctg gggccggacc tgggctggcg gtggcacccg cgcgcgctgg caacgtcggc 15360

ggcgtggagg aatatgacga ggacgatgag tacgagccag aggacggcga gtactaagcg 15420

gtgatgtttc tgatcagatg atgcaagacg caacggaccc ggcggtgcgg gcggcgctgc 15480

agagccagcc gtccggcctt aactccacgg acgactggcg ccaggtcatg gaccgcatca 15540

tgtcgctgac tgcgcgcaat cctgacgcgt tccggcagca gccgcaggcc aaccggctct 15600

ccgcaattct ggaagcggtg gtcccggcgc gcgcaaaccc cacgcacgag aaggtgctgg 15660

cgatcgtaaa cgcgctggcc gaaaacaggg ccatccggcc cgacgaggcc ggcctggtct 15720

acgacgcgct gcttcagcgc gtggctcgtt acaacagcgg caacgtgcag accaacctgg 15780

accggctggt gggggatgtg cgcgaggccg tggcgcagcg tgagcgcgcg cagcagcagg 15840

gcaacctggg ctccatggtt gcactaaacg ccttcctgag tacacagccc gccaacgtgc 15900

cgcggggaca ggaggactac accaactttg tgagcgcact gcggctaatg gtgactgaga 15960

caccgcaaag tgaggtgtac cagtctgggc cagactattt tttccagacc agtagacaag 16020

gcctgcagac cgtaaacctg agccaggctt tcaaaaactt gcaggggctg tgggggtgc 16080

gggctcccac aggcgaccgc gcgaccgtgt ctagcttgct gacgcccaac tcgcgcctgt 16140

tgctgctgct aatagcgccc ttcacggaca gtggcagcgt gtcccgggac acatacctag 16200

gtcacttgct gacactgtac cgcgaggcca taggtcaggc gcatgtggac gagcatactt 16260

tccaggagat tacaagtgtc agccgcgcgc tggggcagga ggacacgggc agcctggagg 16320

caaccctaaa ctacctgctg accaaccggc ggcagaagat cccctcgttg cacagtttaa 16380

acagcgagga ggagcgcatt ttgcgctacg tgcagcagag cgtgagcctt aacctgatgc 16440

gcgacggggt aacgcccagc gtggcgctgg acatgaccgc gcgcaacatg gaaccgggca 16500

tgtatgcctc aaaccggccg tttatcaacc gcctaatgga ctacttgcat cgcgcggccg 16560

ccgtgaaccc cgagtatttc accaatgcca tcttgaaccc gcactggcta ccgccccctg 16620

gtttctacac cgggggattc gaggtgcccg agggtaacga tggattcctc tgggacgaca 16680

tagacgacag cgtgttttcc ccgcaaccgc agaccctgct agagttgcaa cagcgcgagc 16740

aggcagaggc ggcgctgcga aaggaaagct tccgcaggcc aagcagcttg tccgatctag 16800

gcgctgcggc cccgcggtca gatgctagta gcccatttcc aagcttgata gggtctctta 16860

ccagcactcg caccacccgc ccgcgcctgc tgggcgagga ggagtaccta aacaactcgc 16920

tgctgcagcc gcagcgcgaa aaaaacctgc ctccggcatt tcccaacaac gggatagaga 16980

gcctagtgga caagatgagt agatggaaga cgtacgcgca ggagcacagg gacgtgccag 17040

gcccgcgccc gcccacccgt cgtcaaaggc acgaccgtca gcggggtctg gtgtgggagg 17100

acgatgactc ggcagacgac agcagcgtcc tggatttggg agggagtggc aacccgtttg 17160

cgcaccttcg ccccaggctg gggagaatgt tttaaaaaaa aaaaagcatg atgcaaaata 17220

aaaaactcac caaggccatg gcaccgagcg ttggttttct tgtattcccc ttagtatgcg 17280

gcgcgcggcg atgtatgagg aaggtcctcc tccctcctac gagagtgtgg tgagcgcggc 17340

gccagtggcg gcggcgctgg gttctccctt cgatgctccc ctggacccgc cgtttgtgcc 17400

tccgcggtac ctgcggccta ccgggggggag aaacagcatc cgttactctg agttggcacc 17460

cctattcgac accacccgtg tgtacctggt ggacaacaag tcaacggatg tggcatccct 17520

gaactaccag aacgaccaca gcaactttct gaccacggtc attcaaaaca atgactacag 17580

cccgggggag gcaagcacac agaccatcaa tcttgacgac cggtcgcact ggggcggcga 17640

cctgaaaacc atcctgcata ccaacatgcc aaatgtgaac gagttcatgt ttaccaataa 17700

gtttaaggcg cgggtgatgg tgtcgcgctt gcctactaag gacaatcagg tggagctgaa 17760

atacgagtgg gtggagttca cgctgcccga gggcaactac tccgagacca tgaccataga 17820

ccttatgaac aacgcgatcg tggagcacta cttgaaagtg ggcagacaga acggggttct 17880

ggaaagcgac atcggggtaa agtttgacac ccgcaacttc agactggggt ttgaccccgt 17940

cactggtctt gtcatgcctg gggtatatac aaacgaagcc ttccatccag acatcatttt 18000

gctgccagga tgcggggtgg acttcaccca cagccgcctg agcaacttgt tgggcatccg 18060

caagcggcaa cccttccagg agggctttag gatcacctac gatgatctgg agggtggtaa 18120

cattcccgca ctgttggatg tggacgccta ccaggcgagc ttgaaagatg acaccgaaca 18180

gggcgggggt ggcgcaggcg gcagcaacag cagtggcagc ggcgcggaag agaactccaa 18240

cgcggcagcc gcggcaatgc agccggtgga ggacatgaac gatcatgcca ttcgcggcga 18300

caccttgcc acacgggctg aggagaagcg cgctgaggcc gaagcagcgg ccgaagctgc 18360

cgcccccgct gcgcaacccg aggtcgagaa gcctcagaag aaaccggtga tcaaacccct 18420

gacagaggac agcaagaaac gcagttacaa cctaataagc aatgacagca ccttcaccca 18480

gtaccgcagc tggtaccttg catacaacta cggcgaccct cagaccggaa tccgctcatg 18540

gaccctgctt tgcactcctg acgtaacctg cggctcggag caggtctact ggtcgttgcc 18600

agacatgatg caagaccccg tgaccttccg ctccacgcgc cagatcagca actttccggt 18660

ggtgggcgcc gagctgttgc ccgtgcactc caagagcttc tacaacgacc aggccgtcta 18720

ctcccaactc atccgccagt ttacctctct gacccacgtg ttcaatcgct ttcccgagaa 18780

ccagattttg gcgcgcccgc cagcccccac catcaccacc gtcagtgaaa acgttcctgc 18840

tctcacagat cacgggacgc taccgctgcg caacagcatc ggaggagtcc agcgagtgac 18900

cattactgac gccagacgcc gcacctgccc ctacgtttac aaggccctgg gcatagtctc 18960

gccgcgcgtc ctatcgagcc gcacttttg agcaagcatg tccatcctta tatcgcccag 19020

caataacaca ggctggggcc tgcgcttccc aagcaagatg tttggcgggg ccaagaagcg 19080

ctccgaccaa cacccagtgc gcgtgcgcgg gcactaccgc gcgccctggg gcgcgcacaa 19140

acgcggccgc actgggcgca ccaccgtcga tgacgccatc gacgcggtgg tggaggaggc 19200

gcgcaactac acgcccacgc cgccaccagt gtccacagtg gacgcggcca ttcagaccgt 19260

ggtgcgcgga gcccggcgct atgctaaaat gaagagacgg cggaggcgcg tagcacgtcg 19320

ccaccgccgc cgacccggca ctgccgccca acgcgcggcg gcggccctgc ttaaccgcgc 19380

acgtcgcacc ggccgacggg cggccatgcg ggccgctcga aggctggccg cgggtattgt 19440

cactgtgccc cccaggtcca ggcgacgagc ggccgccgca gcagccgcgg ccattagtgc 19500

tatgactcag ggtcgcaggg gcaacgtgta ttgggtgcgc gactcggtta gcggcctgcg 19560

cgtgcccgtg cgcacccgcc ccccgcgcaa ctagattgca agaaaaaact acttagactc 19620

gtactgttgt atgtatccag cggcggcggc gcgcaacgaa gctatgtcca agcgcaaaat 19680

caaagaagag atgctccagg tcatcgcgcc ggagatctat ggcccccga agaaggaaga 19740

gcaggattac aagccccgaa agctaaagcg ggtcaaaaag aaaaagaaag atgatgatga 19800

tgaacttgac gacgaggtgg aactgctgca cgctaccgcg cccaggcgac gggtacagtg 19860

gaaaggtcga cgcgtaaaac gtgttttgcg acccggcacc accgtagtct ttacgcccgg 19920

tgagcgctcc acccgcacct acaagcgcgt gtatgatgag gtgtacggcg acgaggacct 19980

gcttgagcag gccaacgagc gcctcgggga gtttgcctac ggaaagcggc ataaggacat 20040

gctggcgttg ccgctggacg agggcaaccc aacacctagc ctaaagcccg taacactgca 20100

gcaggtgctg cccgcgcttg caccgtccga agaaaagcgc ggcctaaagc gcgagtctgg 20160

tgacttggca cccaccgtgc agctgatggt acccaagcgc cagcgactgg aagatgtctt 20220

ggaaaaaatg accgtggaac ctgggctgga gcccgaggtc cgcgtgcggc caatcaagca 20280

ggtggcgccg ggactgggcg tgcagaccgt ggacgttcag atacccacta ccagtagcac 20340

cagtattgcc accgccacag agggcatgga gacacaaacg tccccggttg cctcagcggt 20400

ggcggatgcc gcggtgcagg cggtcgctgc ggccgcgtcc aagacctcta cggaggtgca 20460

aacggacccg tggatgtttc gcgtttcagc cccccggcgc ccgcgccgtt cgaggaagta 20520

cggcgccgcc agcgcgctac tgcccgaata tgccctacat ccttccattg cgcctacccc 20580

cggctatcgt ggctacacct accgccccag aagacgagca actacccgac gccgaaccac 20640

cactggaacc cgccgccgcc gtcgccgtcg ccagcccgtg ctggccccga tttccgtgcg 20700

cagggtggct cgcgaaggag gcaggaccct ggtgctgcca acagcgcgct accaccccag 20760

catcgtttaa aagccggtct ttgtggttct tgcagatatg gccctcacct gccgcctccg 20820

tttcccggtg ccgggattcc gaggaagaat gcaccgtagg aggggcatgg ccggccacgg 20880

cctgacgggc ggcatgcgtc gtgcgcacca ccggcggcgg cgcgcgtcgc accgtcgcat 20940

gcgcggcggt atcctgcccc tccttattcc actgatcgcc gcggcgattg gcgccgtgcc 21000

cggaattgca tccgtggcct tgcaggcgca gagacactga ttaaaaacaa gttgcatgtg 21060

gaaaaatcaa aataaaaagt ctggactctc acgctcgctt ggtcctgtaa ctattttgta 21120

gaatggaaga catcaacttt gcgtctctgg ccccgcgaca cggctcgcgc ccgttcatgg 21180

gaaactggca agatatcggc accagcaata tgagcggtgg cgccttcagc tggggctcgc 21240

tgtggagcgg cattaaaaat ttcggttcca ccgttaagaa ctatggcagc aaggcctgga 21300

acagcagcac aggccagatg ctgagggata agttgaaaga gcaaaatttc caacaaaagg 21360

tggtagatgg cctggcctct ggcattagcg gggtggtgga cctggccaac caggcagtgc 21420

aaaataagat taacagtaag cttgatcccc gccctcccgt agaggagcct ccaccggccg 21480

tggagacagt gtctccagag gggcgtggcg aaaagcgtcc gcgccccgac agggaagaaa 21540

ctctggtgac gcaaatagac gagcctccct cgtacgagga ggcactaaag caaggcctgc 21600

ccaccacccg tcccatcgcg cccatggcta ccggagtgct gggccagcac acacccgtaa 21660

cgctggacct gcctcccccc gccgacaccc agcagaaacc tgtgctgcca ggcccgaccg 21720

ccgttgttgt aacccgtcct agccgcgcgt ccctgcgccg cgccgccagc ggtccgcgat 21780

cgttgcggcc cgtagccagt ggcaactggc aaagcacact gaacagcatc gtgggtctgg 21840

gggtgcaatc cctgaagcgc cgacgatgct tctgatagct aacgtgtcgt atgtgtgtca 21900

tgtatgcgtc catgtcgccg ccagaggagc tgctgagccg ccgcgcgccc gctttccaag 21960

atggctaccc cttcgatgat gccgcagtgg tcttacatgc acatctcggg ccaggacgcc 22020

tcggagtacc tgagccccgg gctggtgcag tttgcccgcg ccaccgagac gtacttcagc 22080

ctgaataaca agtttagaaa ccccacggtg gcgcctacgc acgacgtgac cacagaccgg 22140

tcccagcgtt tgacgctgcg gttcatccct gtggaccgtg aggatactgc gtactcgtac 22200

aaggcgcggt tcaccctagc tgtgggtgat aaccgtgtgc tggacatggc ttccacgtac 22260

tttgacatcc gcggcgtgct ggacaggggc cctactttta agccctactc tggcactgcc 22320

tacaacgccc tggctcccaa gggtgcccca aatccttgcg aatgggatga agctgctact 22380

gctcttgaaa taaacctaga agaagaggac gatgacaacg aagacgaagt agacgagcaa 22440

gctgagcagc aaaaaactca cgtatttggg caggcgcctt attctggtat aaatattaca 22500

aaggagggta ttcaaatagg tgtcgaaggt caaacaccta aatatgccga taaaacattt 22560

caacctgaac ctcaaatagg agaatctcag tggtacgaaa cagaaattaa tcatgcagct 22620

gggagagtcc taaaaaagac taccccaatg aaaccatgtt acggttcata tgcaaaaccc 22680

acaaatgaaa atggagggca aggcattctt gtaaagcaac aaaatggaaa gctagaaagt 22740

caagtggaaa tgcaattttt ctcaactact gaggcagccg caggcaatgg tgataacttg 22800

actcctaaag tggtattgta cagtgaagat gtagatatag aaaccccaga cactcatatt 22860

tcttacatgc ccactattaa ggaaggtaac tcacgagaac taatgggcca acaatctatg 22920

cccaacaggc ctaattacat tgcttttagg gacaatttta ttggtctaat gtattacaac 22980

agcacgggta atatgggtgt tctggcgggc caagcatcgc agttgaatgc tgttgtagat 23040

ttgcaagaca gaaacacaga gctttcatac cagcttttgc ttgattccat tggtgataga 23100

accaggtact tttctatgtg gaatcaggct gttgacagct atgatccaga tgttagaatt 23160

attgaaaatc atggaactga agatgaactt ccaaattact gctttccact gggaggtgtg 23220

attaatacag agactcttac caaggtaaaa cctaaaacag gtcaggaaaa tggatgggaa 23280

aaagatgcta cagaattttc agataaaaat gaaataagag ttggaaataa ttttgccatg 23340

gaaatcaatc taaatgccaa cctgtggaga aatttcctgt actccaacat agcgctgtat 23400

ttgcccgaca agctaaagta cagtccttcc aacgtaaaaa tttctgataa cccaaacacc 23460

tacgactaca tgaacaagcg agtggtggct cccgggctag tggactgcta cattaacctt 23520

ggagcacgct ggtcccttga ctatatggac aacgtcaacc catttaacca ccaccgcaat 23580

gctggcctgc gctaccgctc aatgttgctg ggcaatggtc gctatgtgcc cttccacatc 23640

caggtgcctc agaagttctt tgccattaaa aacctccttc tcctgccggg ctcatacacc 23700

tacgagtgga acttcaggaa ggatgttaac atggttctgc agagctccct aggaaatgac 23760

ctaagggttg acggagccag cattaagttt gatagcattt gcctttacgc caccttcttc 23820

cccatggccc acaacaccgc ctccacgctt gaggccatgc ttagaaacga caccaacgac 23880

cagtccttta acgactatct ctccgccgcc aacatgctct accctatacc cgccaacgct 23940

accaacgtgc ccatatccat cccctcccgc aactgggcgg ctttccgcgg ctgggccttc 24000

acgcgcctta agactaagga aaccccatca ctgggctcgg gctacgaccc ttattacacc 24060

tactctggct ctatacccta cctagatgga acctttacc tcaaccacac ctttaagaag 24120

gtggccatta cctttgactc ttctgtcagc tggcctggca atgaccgcct gcttaccccc 24180

aacgagtttg aaattaagcg ctcagttgac ggggagggtt acaacgttgc ccagtgtaac 24240

atgaccaaag actggttcct ggtacaaatg ctagctaact ataacattgg ctaccagggc 24300

ttctatatcc cagagagcta caaggaccgc atgtactcct tctttagaaa cttccagccc 24360

atgagccgtc aggtggtgga tgatactaaa tacaaggact accaacaggt gggcatccta 24420

caccaacaca acaactctgg atttgttggc taccttgccc ccaccatgcg cgaaggacag 24480

gcctaccctg ctaacttccc ctatccgctt ataggcaaga ccgcagttga cagcattacc 24540

cagaaaaagt ttctttgcga tcgcaccctt tggcgcatcc cattctccag taactttatg 24600

tccatgggcg cactcacaga cctgggccaa aaccttctct acgccaactc cgcccacgcg 24660

ctagacatga cttttgaggt ggatcccatg gacgagccca cccttcttta tgttttgttt 24720

gaagtctttg acgtggtccg tgtgcaccag ccgcaccgcg gcgtcatcga aaccgtgtac 24780

ctgcgcacgc ccttctcggc cggcaacgcc acaacataaa gaagcaagca acatcaacaa 24840

cagctgccgc catgggctcc agtgagcagg aactgaaagc cattgtcaaa gatcttggtt 24900

gtgggccata ttttttgggc acctatgaca agcgctttcc aggctttgtt tctccacaca 24960

agctcgcctg cgccatagtc aatacggccg gtcgcgagac tgggggcgta cactggatgg 25020

cctttgcctg gaacccgcac tcaaaaacat gctacctctt tgagcccttt ggcttttctg 25080

accagcgact caagcaggtt taccagtttg agtacgagtc actcctgcgc cgtagcgcca 25140

ttgcttcttc ccccgaccgc tgtataacgc tggaaaagtc cacccaaagc gtacaggggc 25200

ccaactcggc cgcctgtgga ctattctgct gcatgtttct ccacgccttt gccaactggc 25260

cccaaactcc catggatcac aaccccacca tgaaccttat taccggggta cccaactcca 25320

tgctcaacag tccccaggta cagcccaccc tgcgtcgcaa ccaggaacag ctctacagct 25380

tcctggagcg ccactcgccc tacttccgca gccacagtgc gcagattagg agcgccactt 25440

ctttttgtca cttgaaaaac atgtaaaaat aatgtactag agacactttc aataaaggca 25500

aatgctttta tttgtacact ctcgggtgat tatttacccc cacccttgcc gtctgcgccg 25560

tttaaaaatc aaaggggttc tgccgcgcat cgctatgcgc cactggcagg gacacgttgc 25620

gatactggtg tttagtgctc cacttaaact caggcacaac catccgcggc agctcggtga 25680

agttttcact ccacaggctg cgcaccatca ccaacgcgtt tagcaggtcg ggcgccgata 25740

tcttgaagtc gcagttgggg cctccgccct gcgcgcgcga gttgcgatac acagggttgc 25800

agcactggaa cactatcagc gccgggtggt gcacgctggc cagcacgctc ttgtcggaga 25860

tcagatccgc gtccaggtcc tccgcgttgc tcagggcgaa cggagtcaac tttggtagct 25920

gccttcccaa aaagggcgcg tgcccaggct ttgagttgca ctcgcaccgt agtggcatca 25980

aaaggtgacc gtgcccggtc tgggcgttag gatacagcgc ctgcataaaa gccttgatct 26040

gcttaaaagc cacctgagcc tttgcgcctt cagagaagaa catgccgcaa gacttgccgg 26100

aaaactgatt ggccggacag gccgcgtcgt gcacgcagca ccttgcgtcg gtgttggaga 26160

tctgcaccac atttcggccc caccggttct tcacgatctt ggccttgcta gactgctcct 26220

tcagcgcgcg ctgcccgttt tcgctcgtca catccatttc aatcacgtgc tccttattta 26280

tcataatgct tccgtgtaga cacttaagct cgccttcgat ctcagcgcag cggtgcagcc 26340

acaacgcgca gcccgtgggc tcgtgatgct tgtaggtcac ctctgcaaac gactgcaggt 26400

acgcctgcag gaatcgcccc atcatcgtca caaaggtctt gttgctggtg aaggtcagct 26460

gcaacccgcg gtgctcctcg ttcagccagg tcttgcatac ggccgccaga gcttccactt 26520

ggtcaggcag tagtttgaag ttcgccttta gatcgttatc cacgtggtac ttgtccatca 26580

gcgcgcgcgc agcctccatg cccttctccc acgcagacac gatcggcaca ctcagcgggt 26640

tcatcaccgt aatttcactt tccgcttcgc tgggctcttc ctcttcctct tgcgtccgca 26700

taccacgcgc cactgggtcg tcttcattca gccgccgcac tgtgcgctta cctcctttgc 26760

catgcttgat tagcaccggt gggttgctga aacccaccat ttgtagcgcc acatcttctc 26820

tttcttcctc gctgtccacg attacctctg gtgatggcgg gcgctcgggc ttgggagaag 26880

ggcgcttctt tttcttcttg ggcgcaatgg ccaaatccgc cgccgaggtc gatggccgcg 26940

ggctgggtgt gcgcggcacc agcgcgtctt gtgatgagtc ttcctcgtcc tcggactcga 27000

tacgccgcct catccgcttt tttgggggcg cccggggagg cggcggcgac ggggacgggg 27060

acgacacgtc ctccatggtt gggggacgtc gcgccgcacc gcgtccgcgc tcgggggtgg 27120

tttcgcgctg ctcctcttcc cgactggcca tttccttctc ctataggcag aaaaagatca 27180

tggagtcagt cgagaagaag gacagcctaa ccgccccctc tgagttcgcc accaccgcct 27240

ccaccgatgc cgccaacgcg cctaccacct tccccgtcga ggcacccccg cttgaggagg 27300

aggaagtgat tatcgagcag gacccaggtt ttgtaagcga agacgacgag gaccgctcag 27360

taccaacaga ggataaaaag caagaccagg acaacgcaga ggcaaacgag gaacaagtcg 27420

ggcgggggga cgaaaggcat ggcgactacc tagatgtggg agacgacgtg ctgttgaagc 27480

atctgcagcg ccagtgcgcc attatctgcg acgcgttgca agagcgcagc gatgtgcccc 27540

tcgccatagc ggatgtcagc cttgcctacg aacgccacct attctcaccg cgcgtacccc 27600

ccaaacgcca agaaaacggc acatgcgagc ccaacccgcg cctcaacttc taccccgtat 27660

ttgccgtgcc agaggtgctt gccacctatc acatcttttt ccaaaactgc aagatacccc 27720

tatcctgccg tgccaaccgc agccgagcgg acaagcagct ggccttgcgg cagggcgctg 27780

tcatacctga tatcgcctcg ctcaacgaag tgccaaaaat ctttgagggt cttggacgcg 27840

acgagaagcg cgcggcaaac gctctgcaac aggaaaacag cgaaaatgaa agtcactctg 27900

gagtgttggt ggaactcgag ggtgacaacg cgcgcctagc cgtactaaaa cgcagcatcg 27960

aggtcaccca ctttgcctac ccggcactta acctaccccc caaggtcatg agcacagtca 28020

tgagtgagct gatcgtgcgc cgtgcgcagc ccctggagag ggatgcaaat ttgcaagaac 28080

aaacagagga gggcctaccc gcagttggcg acgagcagct agcgcgctgg cttcaaacgc 28140

gcgagcctgc cgacttggag gagcgacgca aactaatgat ggccgcagtg ctcgttaccg 28200

tggagcttga gtgcatgcag cggttctttg ctgacccgga gatgcagcgc aagctagagg 28260

aaacattgca ctacaccttt cgacagggct acgtacgcca ggcctgcaag atctccaacg 28320

tggagctctg caacctggtc tcctaccttg gaattttgca cgaaaaccgc cttgggcaaa 28380

acgtgcttca ttccacgctc aagggcgagg cgcgccgcga ctacgtccgc gactgcgttt 28440

acttatttct atgctacacc tggcagacgg ccatgggcgt ttggcagcag tgcttggagg 28500

agtgcaacct caaggagctg cagaaactgc taaagcaaaa cttgaaggac ctatggacgg 28560

ccttcaacga gcgctccgtg gccgcgcacc tggcggacat cattttcccc gaacgcctgc 28620

ttaaaaccct gcaacagggt ctgccagact tcaccagtca aagcatgttg cagaacttta 28680

ggaactttat cctagagcgc tcaggaatct tgcccgccac ctgctgtgca cttcctagcg 28740

actttgtgcc cattaagtac cgcgaatgcc ctccgccgct ttggggccac tgctaccttc 28800

tgcagctagc caactacctt gcctaccact ctgacataat ggaagacgtg agcggtgacg 28860

gtctactgga gtgtcactgt cgctgcaacc tatgcacccc gcaccgctcc ctggtttgca 28920

attcgcagct gcttaacgaa agtcaaatta tcggtacctt tgagctgcag ggtccctcgc 28980

ctgacgaaaa gtccgcggct ccggggttga aactcactcc ggggctgtgg acgtcggctt 29040

accttcgcaa atttgtacct gaggactacc acgcccacga gattaggttc tacgaagacc 29100

aatcccgccc gcctaatgcg gagcttaccg cctgcgtcat tacccagggc cacattcttg 29160

gccaattgca agccatcaac aaagcccgcc aagagtttct gctacgaaag ggacgggggg 29220

tttacttgga cccccagtcc ggcgaggagc tcaacccaat ccccccgccg ccgcagccct 29280

atcagcagca gccgcgggcc cttgcttccc aggatggcac ccaaaaagaa gctgcagctg 29340

ccgccgccac ccacggacga ggaggaatac tgggacagtc aggcagagga ggttttggac 29400

gaggaggagg aggacatgat ggaagactgg gagagcctag acgaggaagc ttccgaggtc 29460

gaagaggtgt cagacgaaac accgtcaccc tcggtcgcat tcccctcgcc ggcgccccag 29520

aaatcggcaa ccggttccag catggctaca acctccgctc ctcaggcgcc gccggcactg 29580

cccgttcgcc gacccaaccg tagatgggac accactggaa ccagggccgg taagtccaag 29640

cagccgccgc cgttagccca agagcaacaa cagcgccaag gctaccgctc atggcgcggg 29700

cacaagaacg ccatagttgc ttgcttgcaa gactgtgggg gcaacatctc cttcgcccgc 29760

cgctttcttc tctaccatca cggcgtggcc ttcccccgta acatcctgca ttactaccgt 29820

catctctaca gcccatactg caccggcggc agcggcagca acagcagcgg ccacacagaa 29880

gcaaaggcga ccggatagca agactctgac aaagcccaag aaatccacag cggcggcagc 29940

agcaggagga ggagcgctgc gtctggcgcc caacgaaccc gtatcgaccc gcgagcttag 30000

aaacaggatt tttcccactc tgtatgctat atttcaacag agcaggggcc aagaacaaga 30060

gctgaaaata aaaaacaggt ctctgcgatc cctcacccgc agctgcctgt atcacaaaag 30120

cgaagatcag cttcggcgca cgctggaaga cgcggaggct ctcttcagta aatactgcgc 30180

gctgactctt aaggactagt ttcgcgccct ttctcaaatt taagcgcgaa aactacgtca 30240

tctccagcgg ccacacccgg cgccagcacc tgttgtcagc gccattatga gcaaggaaat 30300

tcccacgccc tacatgtgga gttaccagcc acaaatggga cttgcggctg gagctgccca 30360

agactactca acccgaataa actacatgag cgcgggaccc cacatgatat cccgggtcaa 30420

cggaatacgc gcccaccgaa accgaattct cctggaacag gcggctatta ccaccacacc 30480

tcgtaataac cttaatcccc gtagttggcc cgctgccctg gtgtaccagg aaagtcccgc 30540

tcccaccact gtggtacttc ccagagacgc ccaggccgaa gttcagatga ctaactcagg 30600

ggcgcagctt gcgggcggct ttcgtcacag ggtgcggtcg cccgggcagg gtataactca 30660

cctgacaatc agagggcgag gtattcagct caacgacgag tcggtgagct cctcgcttgg 30720

tctccgtccg gacgggacat ttcagatcgg cggcgccggc cgctcttcat tcacgcctcg 30780

tcaggcaatc ctaactctgc agacctcgtc ctctgagccg cgctctggag gcattggaac 30840

tctgcaattt attgaggagt ttgtgccatc ggtctacttt aacccccttct cgggacctcc 30900

cggccactat ccggatcaat ttattcctaa ctttgacgcg gtaaaggact cggcggacgg 30960

ctacgactga atgttaagtg gagaggcaga gcaactgcgc ctgaaacacc tggtccactg 31020

tcgccgccac aagtgctttg cccgcgactc cggtgagttt tgctactttg aattgcccga 31080

ggatcatatc gagggcccgg cgcacggcgt ccggcttacc gcccagggag agcttgcccg 31140

tagcctgatt cgggagttta cccagcgccc cctgctagtt gagcgggaca ggggaccctg 31200

tgttctcact gtgatttgca actgtcctaa ccctggatta catcaagatc ctctagttaa 31260

tgtcaggtcg cctaagtcga ttaactagag tacccgggga tcttattccc tttaactaat 31320

aaaaaaaaat aataaagcat cacttactta aaatcagtta gcaaatttct gtccagttta 31380

ttcagcagca cctccttgcc ctcctcccag ctctggtatt gcagcttcct cctggctgca 31440

aactttctcc acaatctaaa tggaatgtca gtttcctcct gttcctgtcc atccgcaccc 31500

actatcttca tgttgttgca gatgaagcgc gcaagaccgt ctgaagatac cttcaacccc 31560

gtgtatccat atgacacgga aaccggtcct ccaactgtgc cttttcttac tcctcccttt 31620

gtatccccca atgggtttca agagagtccc cctggggtac tctctttgcg cctatccgaa 31680

cctctagtta cctccaatgg catgcttgcg ctcaaaatgg gcaacggcct ctctctggac 31740

gaggccggca accttacctc ccaaaatgta accactgtga gcccacctct caaaaaaacc 31800

aagtcaaaca taaacctgga aatatctgca cccctcacag ttacctcaga agccctaact 31860

gtggctgccg ccgcacctct aatggtcgcg ggcaacacac tcaccatgca atcacaggcc 31920

ccgctaaccg tgcacgactc caaacttagc attgccaccc aaggacccct cacagtgtca 31980

gaaggaaagc tagccctgca aacatcaggc cccctcacca ccaccgatag cagtaccctt 32040

actatcactg cctcaccccc tctaactact gccactggta gcttgggcat tgacttgaaa 32100

gagcccattt atacacaaaa tggaaaacta ggactaaagt acggggctcc tttgcatgta 32160

acagacgacc taaacacttt gaccgtagca actggtccag gtgtgactat taataatact 32220

tccttgcaaa ctaaagttac tggagccttg ggttttgatt cacaaggcaa tatgcaactt 32280

aatgtagcag gaggactaag gattgattct caaaacagac gccttatact tgatgttagt 32340

tatccgtttg atgctcaaaa ccaactaaat ctaagactag gacagggccc tctttttata 32400

aactcagccc acaacttgga tattaactac aacaaaggcc tttacttgtt tacagcttca 32460

aacaattcca aaaagcttga ggttaaccta agcactgcca aggggttgat gtttgacgct 32520

acagccatag ccattaatgc aggagatggg cttgaatttg gttcacctaa tgcaccaaac 32580

acaaatcccc tcaaaacaaa aattggccat ggcctagaat ttgattcaaa caaggctatg 32640

gttcctaaac taggaactgg ccttagtttt gacagcacag gtgccattac agtaggaaac 32700

aaaaataatg ataagctaac tttgtggacc ggaataaacc ctccacctaa ctgtcaaatt 32760

gtggaaaaca ctaatacaaa tgatggcaaa cttactttag tattagtaaa aaatggaggg 32820

cttgttaatg gctacgtgtc tctagttggt gtatcagaca ctgtgaacca aatgttcaca 32880

caaaagacag caaacatcca attaagatta tattttgact cttctggaaa tctattaact 32940

gaggaatcag acttaaaaat tccacttaaa aataaatctt ctacagcgac cagtgaaact 33000

gtagccagca gcaaagcctt tatgccaagt actacagctt atcccttcaa caccactact 33060

agggatagtg aaaactacat tcatggaata tgttactaca tgactagtta tgatagaagt 33120

ctatttccct tgaacatttc tataatgcta aacagccgta tgatttcttc caatgttgcc 33180

tatgccatac aatttgaatg gaatctaaat gcaagtgaat ctccagaaag caacatagct 33240

acgctgacca catccccctt tttcttttct tacattacag aagacgacaa ctaaagaatc 33300

gtttgtgtta tgtttcaacg tgtttatttt tcaattgcag aaaatttcaa gtcatttttc 33360

attcagtagt atagccccac caccacatag cttatacaga tcaccgtacc ttaatcaaac 33420

tcacagaacc ctagtattca acctgccacc tccctcccaa cacacagagt acacagtcct 33480

ttctccccgg ctggccttaa aaagcatcat atcatgggta acagacatat tcttaggtgt 33540

tatattccac acggtttcct gtcgagccaa acgctcatca gtgatattaa taaactcccc 33600

gggcagctca cttaagttca tgtcgctgtc cagctgctga gccacaggct gctgtccaac 33660

ttgcggttgc ttaacgggcg gcgaaggaga agtccacgcg ttgtgcattg tcaaagtgtt 33720

acattcgggc agcagcggat gatcctccag tatggtagcg cgggtttctg tctcaaaagg 33780

aggtagacga tccctactgt acggagtgcg ccgagacaac cgagatcgtg ttggtcgtag 33840

tgtcatgcca aatggaacgc cggacgtagt catatttcct gaagcaaaac caggtgcggg 33900

cgtgacaaac agatctgcgt ctccggtctc gccgcttaga tcgctctgtg tagtagttgt 33960

agtatatcca ctctctcaaa gcatccaggc gccccctggc ttcgggttct atgtaaactc 34020

cttcatgcgc cgctgccctg ataacatcca ccaccgcaga ataagccaca cccagccaac 34080

ctacacattc gttctgcgag tcacacacgg gaggagcggg aagagctgga agaaccatgt 34140

ttttttttt attccaaaag attatccaaa acctcaaaat gaagatctat taagtgaacg 34200

cgctcccctc cggtggcgtg gtcaaactct acagccaaag aacagataat ggcatttgta 34260

agatgttgca caatggcttc caaaaggcaa acggccctca cgtccaagtg gacgtaaagg 34320

ctaaaccctt cagggtgaat ctcctctata aacattccag caccttcaac catgcccaaa 34380

taattctcat ctcgccacct tctcaatata tctctaagca aatcccgaat attaagtccg 34440

gccattgtaa aaatctgctc cagagcgccc tccaccttca gcctcaagca gcgaatcatg 34500

attgcaaaaa ttcaggttcc tcacagacct gtataagatt caaaagcgga acattaacaa 34560

aaataccgcg atcccgtagg tcccttcgca gggccagctg aacataatcg tgcaggtctg 34620

cacggaccag cgcggccact tccccgccag gaaccatgac aaaagaaccc acactgatta 34680

tgacacgcat actcggagct atgctaacca gcgtagcccc gatgtaagct tgttgcatgg 34740

gcggcgatat aaaatgcaag gtgctgctca aaaaatcagg caaagcctcg cgcaaaaaag 34800

aaagcacatc gtagtcatgc tcatgcagat aaaggcaggt aagctccgga accaccacag 34860

aaaaagacac catttttctc tcaaacatgt ctgcgggttt ctgcataaac acaaaataaa 34920

ataacaaaaa aacatttaaa cattagaagc ctgtcttaca acaggaaaaa caacccttat 34980

aagcataaga cggactacgg ccatgccggc gtgaccgtaa aaaaactggt caccgtgatt 35040

aaaaagcacc accgacagct cctcggtcat gtccggagtc ataatgtaag actcggtaaa 35100

cacatcaggt tgattcacat cggtcagtgc taaaaagcga ccgaaatagc ccgggggaat 35160

acatacccgc aggcgtagag acaacattac agcccccata ggaggtataa caaaattaat 35220

aggagagaaa aacacataaa cacctgaaaa accctcctgc ctaggcaaaa tagcaccctc 35280

ccgctccaga acaacataca gcgcttccac agcggcagcc ataacagtca gccttaccag 35340

taaaaaagaa aacctattaa aaaaacacca ctcgacacgg caccagctca atcagtcaca 35400

gtgtaaaaaa gggccaagtg cagagcgagt atatatagga ctaaaaaatg acgtaacggt 35460

taaagtccac aaaaaacacc cagaaaaccg cacgcgaacc tacgcccaga aacgaaagcc 35520

aaaaaaccca caacttcctc aaatcgtcac ttccgttttc ccacgttacg tcacttccca 35580

ttttaagaaa actacaattc ccaacacata caagttactc cgccctaaaa cctacgtcac 35640

ccgccccgtt cccacgcccc gcgccacgtc acaaactcca ccccctcatt atcatattgg 35700

cttcaatcca aaataaggta tattattgat gatg 35734

<210> 33
<211> 35727
<212> DNA
<213> Artificial Sequence

<220>
<223> Adk35RF-Spike/E4orf6(mPGK)-E4dl-711(E4re#31)

<400> 33
ttaattaaca tcatcaataa tataccttat tttggattga agccaatatg ataatgaggg 60

ggtggagttt gtgacgtggc gcggggcgtg ggaacggggc gggtgacgta gtagtgtggc 120

ggaagtgtga tgttgcaagt gtggcggaac acatgtaagc gacggatgtg gcaaaagtga 180

cgtttttggt gtgcgccggt gtacacagga agtgacaatt ttcgcgcggt tttaggcgga 240

tgttgtagta aatttgggcg taaccgagta agatttggcc attttcgcgg gaaaactgaa 300

taagaggaag tgaaatctga ataattttgt gttactcata gcgcgtaata atttgatccg 360

cgttaagata cattgatgag tttggacaaa ccacaactag aatgcagtga aaaaaatgct 420

ttatttgtga aatttgtgat gctattgctt tatttgtaac cattataagc tgcaataaac 480

aagttaacaa caacaattgc attcatttta tgtttcaggt tcaggggggag gtgtgggagg 540

ttttttaaag caagtaaaac ctctacaaat gtggtatggc tgattatgat caattttcat 600

ggccacttga tgtattgttc atatttgccc agttcttgga ggtcaatcag ggactcattc 660

aggttcttag ccacctcatt cagtctgtca atctccttct ggatgttcac cacagaggca 720

ttgatgccag agatgtctcc caggtccaca tcagggctgg tgtggttctt gaagtatttg 780

tccagttcct ccttgaagga gtccagttca ggttggagtg ggtcatagac tgtgttgttc 840

acaatgccaa tcaccacatc acagttgcca gacacaaagg tgttgtctgt ggtgataatc 900

tgtggttcat agaagttcct ctgggtcaca aaccagtggg tgccattgct cacaaacact 960

ccctcccttg gaaagtgagc cttgccatca tggcagatgg caggggctgt ggtgaagttc 1020

ttctcctggg caggcacata ggtcacatgc aggaacacca ctccatgagg ggcagactgt 1080

ggaaaactca tcaggtggta gcccttgcca cagaagtcca ccctcttgct ttgtcccagc 1140

acacactcac tcatcttggt ggcagccagg ttggcagatg ccctaatctc agcagccctg 1200

ataagttgtt gggtcacata ggtttggagg gattggagtc tgcctgtaat cagtctgtca 1260

atctggacct cagcctccac cttgtccagt ctgctcagga tgtcattcag cacagaggag 1320

atggctccaa agttgctgga aagttgcttc accagggtgt tcagagcctg ggcattctgg 1380

ttcaccacat cttggagttt gcccagggca gaggctgtgc tggacaggga gtcctgaatc 1440

ttgccaatgg cagagttgaa ctggttggca atcagtttct ggttctcata gagcacattc 1500

tgggtcactc caatgccatt gaacctgtaa gccatctgca tagcaaatgg gatttggagg 1560

gctgctcctg ctccaaaggt ccagccagag gtgatggtgc cagccagcag ggcagaggtg 1620

tattgggcaa tcatctcatc tgtcagcagt ggaggcagca ctgtcagtcc attgaacttc 1680

tgggcacaaa tcaggtccct ggcagcaatg tctcccagac agtctccata ttgcttgatg 1740

aagccagcat cagccagggt caccttgttg aacagcaggt cctcaatgaa ggacctcttg 1800

cttggcttgc ttgggtcagg cagaatctgg ctgaagttga agcctccaaa gtccttgatt 1860

ggaggtgtct tgtaaatctg cttcacctgg gcaaacacct cctgggtgtt cttgtcctgt 1920

tccacagcaa tgcctgtcag agccctgtta agttgggtac agaaggagcc atattggagc 1980

agcaggttgc tacactctgt gctgtctcca cagatataca ttgtacagtc cacagaggtc 2040

ttggtcatac tcacaggcag aatctctgtg gtcacagaga tggtgaagtt ggttgggatg 2100

gcaatgctgt tgttgctgta agccacagag ttctctgctc ccagactcat tgtgtaggca 2160

atgatgctct ggcttgccac agacctcgac ccaccgccac cggtctgggt ctggtaggag 2220

gcacagatgc ctgctccaat tgggatgtca cactcatagg agttgttcac atgctctgct 2280

ccaatcagac agccagccct ggtctggaac acattgctgc ctgtgctgta gaccctccag 2340

gttggtgtaa gttggtcagc atggatagcc acaggcacct cagtacagtt cacatcctgg 2400

tagagcacag ccacctggtt gctggtgttg gtgccaggtg taatcacaga cactcctcca 2460

aaggaacatg gtgtgatgtc cagaatctcc aaggtctgtg ggtccctcac agcatctgtg 2520

gtgtcagcaa tgtccctgcc aaactgttgg aatggcagga acttcttgtt gctctctgtc 2580

agcactcctg tgcctgtcag tccattgaag ttgaagttca cacacttgtt cttcaccagg 2640

ttggtgctct tctttggtcc acacactgtg gcaggggcat ggagcagttc aaaggacagc 2700

accaccaccc tgtatggttg gtagcccact ccattggttg gttggaagcc ataggattgg 2760

agtggaaagt aacagttgaa gccctccact ccattacatg gtgtgctgcc agcctggtaa 2820

atctctgtgc tgatgtccct ctcaaatggt ttcaggttgc tcttcctgaa cagtctgtag 2880

aggtagttgt agttgcctcc caccttgctg tccaggttgt tgctgttcca ggcaatcaca 2940

cagcctgtga agtcatcagg cagtttgtag ttgtagtcag caatcttgcc tgtttgtcca 3000

ggggcaatct gtctcacctc atctccccta atcacaaagg agtcagcata gacattggtg 3060

aaacacaggt cattcagttt ggttgggctc actccataac acttgaaggt gctgaaggag 3120

gcagagttgt agagcacaga gtagtcagcc acacagttgc taatcctctt cctgttccag 3180

gcatagacag aggcaaacct ggtggcattg aacacctctc caaatggaca caggttggtg 3240

atgtttggaa acctcacaat gctctctgtt ggttggaccc tgaagttgct ggtctggtag 3300

atgcccttct ccactgtgaa ggatttcagg gtacacttgg tctcagacag tgggtccagg 3360

gcacagtcca cagcatctgt gatggtgcca ttctcattgt atttcagcag gaaggtcctt 3420

ggttggaggt agcccacata gtaggctgct gctcctgctg tccagccaga ggaggagtct 3480

ccaggtgtca ggtaggacct gtgcagagcc agcagggtct ggaacctggt gatgttgatg 3540

ccaattggca ggtccaccag tggttccaag gcagagaagc cctgtggcag gtccctcacc 3600

aggttgattg gtgtgtgttt gctgtaaatc ttgaagtagc catcaatgtt cttgaacaca 3660

aactccctca ggttcttgaa gttgccctgc ttgccctcca agtccatcag gaatggttgg 3720

ctcacatatt caaaggtaca gttgttggca gaggagtaga ccctgaactc agactccatc 3780

caggacttgt tgttcttgtg gtagtagact cccaggaatg ggtcattaca gaactggaac 3840

tcacacacct taatcaccac attggtggca ttgttcacaa tcagcaggga ctgggtcttg 3900

ctgtccaggg tggtgccaaa aatccagccc ctgatgatgt tgctcttctc tgtgctggca 3960

aagtagactc catcattgaa tggcagcaca gggttgtcaa acctcttggt gccattggtg 4020

ccagacacat ggatggcatg gaaccaggtc acattgctga agaatggcag gaacaggtcc 4080

tgggtgctgt gcagcacaga ggacctgaac accttgtcag ggtagtagac tcccctggtg 4140

aaggagttgg tgtaggcagg aggaagttgg gtcctggtgg tcaggttcac acactggctg 4200

gacaccagtg gcagcagcac caggaacaca aacatggtgg caaatcggag gctggatcgg 4260

tcccggtgtc ttctatggag gtcaaaacag cgtggatggc gtctccaggc gatctgacgg 4320

ttcactaaac gagctcgtcg acgatctcta tcactgatag ggagatctct atcactgata 4380

gggagagctc tgcttatata gacctcccac cgtacacgcc taccgcccat ttgcgtcaat 4440

ggggcggagt tgttacgaca ttttggaaag tcccgttgat tttggtgcca aaacaaactc 4500

ccattgacgt caatggggtg gagacttgga aatccccgtg agtcaaaccg ctatccacgc 4560

ccattgatgt actgccaaaa ccgcatcacc atggtaatag cgatgactaa tacgtagatg 4620

tactgccaag taggaaagtc ccataaggtc atgtactggg cataatgcca ggcgggccat 4680

ttaccgtcat tgacgtcaat aggggggcgta cttggcatat gatacacttg atgtactgcc 4740

aagtgggcag tttaccgtaa atactccacc cattgacgtc aatggaaagt ccctattggc 4800

gttactatgg gaacatacgt cattattgac gtcaatgggc gggggtcgtt gggcggtcag 4860

ccaggcgggc catttaccgt aagttatgta acgcggaact ccatatatgg gctatgaact 4920

aatgaccccg taattgatta ctattacagg ggtaggggag gcgcttttcc caaggcagtc 4980

tggagcatgc gctttagcag ccccgctggg cacttggcgc tacacaagtg gcctctggcc 5040

tcgcacacat tccacatcca ccggtaggcg ccaaccggct ccgttctttg gtggcccctt 5100

cgcgccacct tctactcctc ccctagtcag gaagttcccc cccgccccgc agctcgcgtc 5160

gtgcaggacg tgacaaatgg aagtagcacg tctcactagt ctcgtgcaga tggacagcac 5220

cgctgagcaa tggaagcggg taggcctttg gggcagcggc caatagcagc tttgctcctt 5280

cgctttctgg gctcagaggc tgggaagggg tgggtccggg ggcgggctca ggggcgggct 5340

caggggcggg gcgggcgccc gaaggtcctc cggaggcccg gcattctgca cgcttcaaaa 5400

gcgcacgtct gccgcgctgt tctcctcttc ctcatctccg ggcctttcga aactacccca 5460

agctggccac catgactacg tccggcgttc catttggcat gacactacga ccaacacgat 5520

ctcggttgtc tcggcgcact ccgtacagta gggatcgtct acctccttt gagacagaaa 5580

cccgcgctac catactggag gatcatccgc tgctgcccga atgtaacact ttgacaatgc 5640

acaacgtgag ttacgtgcga ggtcttccct gcagtgtggg atttacgctg attcaggaat 5700

gggttgttcc ctgggatatg gttctaacgc gggaggagct tgtaatcctg aggaagtgta 5760

tgcacgtgtg cctgtgttgt gccaacattg atatcatgac gagcatgatg atccatggtt 5820

acgagtcctg ggctctccac tgtcattgtt ccagtcccgg ttccctgcag tgtatagccg 5880

gcgggcaggt tttggccagc tggtttagga tggtggtgga tggcgccatg tttaatcaga 5940

ggtttatatg gtaccgggag gtggtgaatt acaacatgcc aaaagaggta atgtttatgt 6000

ccagcgtgtt tatgaggggt cgccacttaa tctacctgcg cttgtggtat gatggccacg 6060

tgggttctgt ggtccccgcc atgagctttg gatacagcgc cttgcactgt gggattttga 6120

acaatattgt ggtgctgtgc tgcagttact gtgctgattt aagtgagatc agggtgcgct 6180

gctgtgcccg gaggacaagg cgccttatgc tgcgggcggt gcgaatcatc gctgaggaga 6240

ccactgccat gttgtattcc tgcaggacgg agcggcggcg gcagcagttt attcgcgcgc 6300

tgctgcagca ccaccgccct atcctgatgc acgattatga ctctaccccc atgtagaagc 6360

ttggggatca attctctaga gctcgctgat cagcctcgac tgtgccttct agttgccagc 6420

catctgttgt ttgcccctcc cccgtgcctt ccttgaccct ggaaggtgcc actcccactg 6480

tcctttccta ataaaatgag gaaattgcat cgcattgtct gagtaggtgt cattctattc 6540

tgggggggtgg ggtggggcag gacagcaagg gggaggattg ggaagacaat agcaggcatg 6600

ctggggatgc ggtgggctct atggcttctg aggcaaattg ggcgtggctt aagggtggga 6660

aagaatatat aaggtggggg tcttatgtag ttttgtatct gttttgcagc agccgccgcc 6720

gccatgagca ccaactcgtt tgatggaagc attgtgagct catatttgac aacgcgcatg 6780

cccccatggg ccggggtgcg tcagaatgtg atgggctcca gcattgatgg tcgccccgtc 6840

ctgcccgcaa actctactac cttgacctac gagaccgtgt ctggaacgcc gttggagact 6900

gcagcctccg ccgccgcttc agccgctgca gccaccgccc gcgggattgt gactgacttt 6960

gctttcctga gcccgcttgc aagcagtgca gcttcccgtt catccgcccg cgatgacaag 7020

ttgacggctc ttttggcaca attggattct ttgacccggg aacttaatgt cgtttctcag 7080

cagctgttgg atctgcgcca gcaggtttct gccctgaagg cttcctcccc tcccaatgcg 7140

gtttaaaaca taaataaaaa accagactct gtttggattt ggatcaagca agtgtcttgc 7200

tgtctttatt taggggtttt gcgcgcgcgg taggcccggg accagcggtc tcggtcgttg 7260

agggtcctgt gtatttttc caggacgtgg taaaggtgac tctggatgtt cagatacatg 7320

ggcataagcc cgtctctggg gtggaggtag caccactgca gagcttcatg ctgcggggtg 7380

gtgttgtaga tgatccagtc gtagcaggag cgctgggcgt ggtgcctaaa aatgtctttc 7440

agtagcaagc tgattgccag gggcaggccc ttggtgtaag tgtttacaaa gcggttaagc 7500

tgggatgggt gcatacgtgg ggatatgaga tgcatcttgg actgtatttt taggttggct 7560

atgttcccag ccatatccct ccggggattc atgttgtgca gaaccaccag cacagtgtat 7620

ccggtgcact tgggaaattt gtcatgtagc ttagaaggaa atgcgtggaa gaacttggag 7680

acgcccttgt gacctccaag attttccatg cattcgtcca taatgatggc aatgggccca 7740

cgggcggcgg cctgggcgaa gatatttctg ggatcactaa cgtcatagtt gtgttccagg 7800

atgagatcgt cataggccat ttttacaaag cgcgggcgga gggtgccaga ctgcggtata 7860

atggttccat ccggcccagg ggcgtagtta ccctcacaga tttgcatttc ccacgctttg 7920

agttcagatg gggggatcat gtctacctgc ggggcgatga agaaaacggt ttccggggta 7980

ggggagatca gctgggaaga aagcaggttc ctgagcagct gcgacttacc gcagccggtg 8040

ggcccgtaaa tcacacctat taccgggtgc aactggtagt taagagagct gcagctgccg 8100

tcatccctga gcagggggggc cacttcgtta agcatgtccc tgactcgcat gttttccctg 8160

accaaatccg ccagaaggcg ctcgccgccc agcgatagca gttcttgcaa ggaagcaaag 8220

ttttttcaacg gtttgagacc gtccgccgta ggcatgcttt tgagcgtttg accaagcagt 8280

tccaggcggt cccacagctc ggtcacctgc tctacggcat ctcgatccag catatctcct 8340

cgtttcgcgg gttggggcgg ctttcgctgt acggcagtag tcggtgctcg tccagacggg 8400

ccagggtcat gtctttccac gggcgcaggg tcctcgtcag cgtagtctgg gtcacggtga 8460

aggggtgcgc tccgggctgc gcgctggcca gggtgcgctt gaggctggtc ctgctggtgc 8520

tgaagcgctg ccggtcttcg ccctgcgcgt cggccaggta gcatttgacc atggtgtcat 8580

agtccagccc ctccgcggcg tggcccttgg cgcgcagctt gcccttggag gaggcgccgc 8640

acgaggggca gtgcagactt ttgagggcgt agagcttggg cgcgagaaat accgattccg 8700

gggagtaggc atccgcgccg caggccccgc agacggtctc gcattccacg agccaggtga 8760

gctctggccg ttcggggtca aaaaccaggt ttcccccatg ctttttgatg cgtttcttac 8820

ctctggtttc catgagccgg tgtccacgct cggtgacgaa aaggctgtcc gtgtccccgt 8880

atacagactt gagaggcctg tcctcgagcg gtgttccgcg gtcctcctcg tatagaaact 8940

cggaccactc tgagacaaag gctcgcgtcc aggccagcac gaaggaggct aagtgggagg 9000

ggtagcggtc gttgtccact agggggtcca ctcgctccag ggtgtgaaga cacatgtcgc 9060

cctcttcggc atcaaggaag gtgattggtt tgtaggtgta ggccacgtga ccgggtgttc 9120

ctgaaggggg gctataaaag ggggtggggg cgcgttcgtc ctcactctct tccgcatcgc 9180

tgtctgcgag ggccagctgt tggggtgagt actccctctg aaaagcgggc atgacttctg 9240

cgctaagatt gtcagtttcc aaaaacgagg aggatttgat attcacctgg cccgcggtga 9300

tgcctttgag ggtggccgca tccatctggt cagaaaagac aatctttttg ttgtcaagct 9360

tggtggcaaa cgacccgtag agggcgttgg acagcaactt ggcgatggag cgcagggttt 9420

ggtttttgtc gcgatcggcg cgctccttgg ccgcgatgtt tagctgcacg tattcgcgcg 9480

caacgcaccg ccattcggga aagacggtgg tgcgctcgtc gggcaccagg tgcacgcgcc 9540

aaccgcggtt gtgcagggtg acaaggtcaa cgctggtggc tacctctccg cgtaggcgct 9600

cgttggtcca gcagaggcgg ccgcccttgc gcgagcagaa tggcggtagg gggtctagct 9660

gcgtctcgtc cggggggtct gcgtccacgg taaagacccc gggcagcagg cgcgcgtcga 9720

agtagtctat cttgcatcct tgcaagtcta gcgcctgctg ccatgcgcgg gcggcaagcg 9780

cgcgctcgta tgggttgagt gggggacccc atggcatggg gtgggtgagc gcggaggcgt 9840

acatgccgca aatgtcgtaa acgtagaggg gctctctgag tattccaaga tatgtagggt 9900

agcatcttcc accgcggatg ctggcgcgca cgtaatcgta tagttcgtgc gagggagcga 9960

ggaggtcggg accgaggttg ctacgggcgg gctgctctgc tcggaagact atctgcctga 10020

agatggcatg tgagttggat gatatggttg gacgctggaa gacgttgaag ctggcgtctg 10080

tgagacctac cgcgtcacgc acgaaggagg cgtaggagtc gcgcagcttg ttgaccagct 10140

cggcggtgac ctgcacgtct agggcgcagt agtccagggt ttccttgatg atgtcatact 10200

tatcctgtcc ctttttttc cacagctcgc ggttgaggac aaactcttcg cggtctttcc 10260

agtactcttg gatcggaaac ccgtcggcct ccgaacggta agagcctagc atgtagaact 10320

ggttgacggc ctggtaggcg cagcatccct tttctacggg tagcgcgtat gcctgcgcgg 10380

ccttccggag cgaggtgtgg gtgagcgcaa aggtgtccct gaccatgact ttgaggtact 10440

ggtatttgaa gtcagtgtcg tcgcatccgc cctgctccca gagcaaaaag tccgtgcgct 10500

ttttggaacg cggatttggc agggcgaagg tgacatcgtt gaagagtatc tttcccgcgc 10560

gaggcataaa gttgcgtgtg atgcggaagg gtcccggcac ctcggaacgg ttgttaatta 10620

cctgggcggc gagcacgatc tcgtcaaagc cgttgatgtt gtggcccaca atgtaaagtt 10680

ccaagaagcg cgggatgccc ttgatggaag gcaatttttt aagttcctcg taggtgagct 10740

cttcagggga gctgagcccg tgctctgaaa gggcccagtc tgcaagatga gggttggaag 10800

cgacgaatga gctccacagg tcacgggcca ttagcatttg caggtggtcg cgaaaggtcc 10860

taaactggcg acctatggcc atttttttctg gggtgatgca gtagaaggta agcgggtctt 10920

gttcccagcg gtcccatcca aggttcgcgg ctaggtctcg cgcggcagtc actagaggct 10980

catctccgcc gaacttcatg accagcatga agggcacgag ctgcttccca aaggccccca 11040

tccaagtata ggtctctaca tcgtaggtga caaagagacg ctcggtgcga ggatgcgagc 11100

cgatcgggaa gaactggatc tcccgccacc aattggagga gtggctattg atgtggtgaa 11160

agtagaagtc cctgcgacgg gccgaacact cgtgctggct tttgtaaaaa cgtgcgcagt 11220

actggcagcg gtgcacgggc tgtacatcct gcacgaggtt gacctgacga ccgcgcacaa 11280

ggaagcagag tgggaatttg agcccctcgc ctggcgggtt tggctggtgg tcttctactt 11340

cggctgcttg tccttgaccg tctggctgct cgaggggagt tacggtggat cggaccacca 11400

cgccgcgcga gcccaaagtc cagatgtccg cgcgcggcgg tcggagcttg atgacaacat 11460

cgcgcagatg ggagctgtcc atggtctgga gctcccgcgg cgtcaggtca ggcgggagct 11520

cctgcaggtt tacctcgcat agacgggtca gggcgcgggc tagatccagg tgatacctaa 11580

tttccagggg ctggttggtg gcggcgtcga tggcttgcaa gaggccgcat ccccgcggcg 11640

cgactacggt accgcgcggc gggcggtggg ccgcgggggt gtccttggat gatgcatcta 11700

aaagcggtga cgcgggcgag cccccggagg taggggggggc tccggacccg ccgggagagg 11760

gggcaggggc acgtcggcgc cgcgcgcggg caggagctgg tgctgcgcgc gtaggttgct 11820

ggcgaacgcg acgacgcggc ggttgatctc ctgaatctgg cgcctctgcg tgaagacgac 11880

gggcccggtg agcttgaacc tgaaagagag ttcgacagaa tcaatttcgg tgtcgttgac 11940

ggcggcctgg cgcaaaatct cctgcacgtc tcctgagttg tcttgatagg cgatctcggc 12000

catgaactgc tcgatctctt cctcctggag atctccgcgt ccggctcgct ccacggtggc 12060

ggcgaggtcg ttggaaatgc gggccatgag ctgcgagaag gcgttgaggc ctccctcgtt 12120

ccagacgcgg ctgtagacca cgccccttc ggcatcgcgg gcgcgcatga ccacctgcgc 12180

gagattgagc tccacgtgcc gggcgaagac ggcgtagttt cgcaggcgct gaaagaggta 12240

gttgagggtg gtggcggtgt gttctgccac gaagaagtac ataacccagc gtcgcaacgt 12300

ggattcgttg atatccccca aggcctcaag gcgctccatg gcctcgtaga agtccacggc 12360

gaagttgaaa aactgggagt tgcgcgccga cacggttaac tcctcctcca gaagacggat 12420

gagctcggcg acagtgtcgc gcacctcgcg ctcaaaggct acaggggcct cttcttcttc 12480

ttcaatctcc tcttccataa gggcctcccc ttcttcttct tctggcggcg gtgggggagg 12540

ggggacacgg cggcgacgac ggcgcaccgg gaggcggtcg acaaagcgct cgatcatctc 12600

cccgcggcga cggcgcatgg tctcggtgac ggcgcggccg ttctcgcggg ggcgcagttg 12660

gaagacgccg cccgtcatgt cccggttatg ggttggcggg gggctgccat gcggcaggga 12720

tacggcgcta acgatgcatc tcaacaattg ttgtgtaggt actccgccgc cgagggacct 12780

gagcgagtcc gcatcgaccg gatcggaaaa cctctcgaga aaggcgtcta accagtcaca 12840

gtcgcaaggt aggctgagca ccgtggcggg cggcagcggg cggcggtcgg ggttgtttct 12900

ggcggaggtg ctgctgatga tgtaattaaa gtaggcggtc ttgagacggc ggatggtcga 12960

cagaagcacc atgtccttgg gtccggcctg ctgaatgcgc aggcggtcgg ccatgcccca 13020

ggcttcgttt tgacatcggc gcaggtcttt gtagtagtct tgcatgagcc tttctaccgg 13080

cacttcttct tctccttcct cttgtcctgc atctcttgca tctatcgctg cggcggcggc 13140

ggagtttggc cgtaggtggc gccctcttcc tcccatgcgt gtgaccccga agcccctcat 13200

cggctgaagc agggctaggt cggcgacaac gcgctcggct aatatggcct gctgcacctg 13260

cgtgagggta gactggaagt catccatgtc cacaaagcgg tggtatgcgc ccgtgttgat 13320

ggtgtaagtg cagttggcca taacggacca gttaacggtc tggtgacccg gctgcgagag 13380

ctcggtgtac ctgagacgcg agtaagccct cgagtcaaat acgtagtcgt tgcaagtccg 13440

caccaggtac tggtatccca ccaaaaagtg cggcggcggc tggcggtaga ggggccagcg 13500

tagggtggcc ggggctccgg gggcgagatc ttccaacata aggcgatgat atccgtagat 13560

gtacctggac atccaggtga tgccggcggc ggtggtggag gcgcgcggaa agtcgcggac 13620

gcggttccag atgttgcgca gcggcaaaaa gtgctccatg gtcgggacgc tctggccggt 13680

caggcgcgcg caatcgttga cgctctagcg tgcaaaagga gagcctgtaa gcgggcactc 13740

ttccgtggtc tggtggataa attcgcaagg gtatcatggc ggacgaccgg ggttcgagcc 13800

ccgtatccgg ccgtccgccg tgatccatgc ggttaccgcc cgcgtgtcga acccaggtgt 13860

gcgacgtcag acaacggggg agtgctcctt ttggcttcct tccaggcgcg gcggctgctg 13920

cgctagcttt tttggccact ggccgcgcgc agcgtaagcg gttaggctgg aaagcgaaag 13980

cattaagtgg ctcgctccct gtagccggag ggttattttc caagggttga gtcgcgggac 14040

ccccggttcg agtctcggac cggccggact gcggcgaacg ggggtttgcc tccccgtcat 14100

gcaagacccc gcttgcaaat tcctccggaa acagggacga gccccttttt tgcttttccc 14160

agatgcatcc ggtgctgcgg cagatgcgcc cccctcctca gcagcggcaa gagcaagagc 14220

agcggcagac atgcagggca ccctcccctc ctcctaccgc gtcaggaggg gcgacatccg 14280

cggttgacgc ggcagcagat ggtgattacg aacccccgcg gcgccgggcc cggcactacc 14340

tggacttgga ggagggcgag ggcctggcgc ggctaggagc gccctctcct gagcggcacc 14400

caagggtgca gctgaagcgt gatacgcgtg aggcgtacgt gccgcggcag aacctgtttc 14460

gcgaccgcga gggagaggag cccgaggaga tgcgggatcg aaagttccac gcagggcgcg 14520

agctgcggca tggcctgaat cgcgagcggt tgctgcgcga ggaggacttt gagcccgacg 14580

cgcgaaccgg gattagtccc gcgcgcgcac acgtggcggc cgccgacctg gtaaccgcat 14640

acgagcagac ggtgaaccag gagattaact ttcaaaaaag ctttaacaac cacgtgcgta 14700

cgcttgtggc gcgcgaggag gtggctatag gactgatgca tctgtgggac tttgtaagcg 14760

cgctggagca aaacccaaat agcaagccgc tcatggcgca gctgttcctt atagtgcagc 14820

acagcaggga caacgaggca ttcagggatg cgctgctaaa catagtagag cccgagggcc 14880

gctggctgct cgatttgata aacatcctgc agagcatagt ggtgcaggag cgcagcttga 14940

gcctggctga caaggtggcc gccatcaact attccatgct tagcctgggc aagttttacg 15000

cccgcaagat ataccatacc ccttacgttc ccatagacaa ggaggtaaag atcgaggggt 15060

tctacatgcg catggcgctg aaggtgctta ccttgagcga cgacctgggc gtttatcgca 15120

acgagcgcat ccacaaggcc gtgagcgtga gccggcggcg cgagctcagc gaccgcgagc 15180

tgatgcacag cctgcaaagg gccctggctg gcacgggcag cggcgataga gaggccgagt 15240

cctactttga cgcgggcgct gacctgcgct gggccccaag ccgacgcgcc ctggaggcag 15300

ctggggccgg acctgggctg gcggtggcac ccgcgcgcgc tggcaacgtc ggcggcgtgg 15360

aggaatatga cgaggacgat gagtacgagc cagaggacgg cgagtactaa gcggtgatgt 15420

ttctgatcag atgatgcaag acgcaacgga cccggcggtg cgggcggcgc tgcagagcca 15480

gccgtccggc cttaactcca cggacgactg gcgccaggtc atggaccgca tcatgtcgct 15540

gactgcgcgc aatcctgacg cgttccggca gcagccgcag gccaaccggc tctccgcaat 15600

tctggaagcg gtggtcccgg cgcgcgcaaa ccccacgcac gagaaggtgc tggcgatcgt 15660

aaacgcgctg gccgaaaaca gggccatccg gcccgacgag gccggcctgg tctacgacgc 15720

gctgcttcag cgcgtggctc gttacaacag cggcaacgtg cagaccaacc tggaccggct 15780

ggtgggggat gtgcgcgagg ccgtggcgca gcgtgagcgc gcgcagcagc agggcaacct 15840

gggctccatg gttgcactaa acgccttcct gagtacacag cccgccaacg tgccgcgggg 15900

acaggaggac tacaccaact ttgtgagcgc actgcggcta atggtgactg agacaccgca 15960

aagtgaggtg taccagtctg ggccagacta ttttttccag accagtagac aaggcctgca 16020

gaccgtaaac ctgagccagg ctttcaaaaa cttgcagggg ctgtgggggg tgcgggctcc 16080

cacaggcgac cgcgcgaccg tgtctagctt gctgacgccc aactcgcgcc tgttgctgct 16140

gctaatagcg cccttcacgg acagtggcag cgtgtcccgg gacacatacc taggtcactt 16200

gctgacactg taccgcgagg ccataggtca ggcgcatgtg gacgagcata ctttccagga 16260

gattacaagt gtcagccgcg cgctggggca ggaggacacg ggcagcctgg aggcaaccct 16320

aaactacctg ctgaccaacc ggcggcagaa gatcccctcg ttgcacagtt taaacagcga 16380

ggaggagcgc attttgcgct acgtgcagca gagcgtgagc cttaacctga tgcgcgacgg 16440

ggtaacgccc agcgtggcgc tggacatgac cgcgcgcaac atggaaccgg gcatgtatgc 16500

ctcaaaccgg ccgtttatca accgcctaat ggactacttg catcgcgcgg ccgccgtgaa 16560

ccccgagtat ttcaccaatg ccatcttgaa cccgcactgg ctaccgcccc ctggtttcta 16620

caccgggggа ttcgaggtgc ccgagggtaa cgatggattc ctctgggacg acatagacga 16680

cagcgtgttt tccccgcaac cgcagaccct gctagagttg caacagcgcg agcaggcaga 16740

ggcggcgctg cgaaaggaaa gcttccgcag gccaagcagc ttgtccgatc taggcgctgc 16800

ggccccgcgg tcagatgcta gtagcccatt tccaagcttg atagggtctc ttaccagcac 16860

tcgcaccacc cgcccgcgcc tgctgggcga ggaggagtac ctaaacaact cgctgctgca 16920

gccgcagcgc gaaaaaaacc tgcctccggc atttcccaac aacgggatag agagcctagt 16980

ggacaagatg agtagatgga agacgtacgc gcaggagcac agggacgtgc caggcccgcg 17040

cccgcccacc cgtcgtcaaa ggcacgaccg tcagcggggt ctggtgtggg aggacgatga 17100

ctcggcagac gacagcagcg tcctggattt gggagggagt ggcaacccgt ttgcgcacct 17160

tcgccccagg ctggggagaa tgttttaaaa aaaaaaaagc atgatgcaaa ataaaaaact 17220

caccaaggcc atggcaccga gcgttggttt tcttgtattc cccttagtat gcggcgcgcg 17280

gcgatgtatg aggaaggtcc tcctccctcc tacgagagtg tggtgagcgc ggcgccagtg 17340

gcggcggcgc tgggttctcc cttcgatgct cccctggacc cgccgtttgt gcctccgcgg 17400

tacctgcggc ctaccggggg gagaaacagc atccgttact ctgagttggc acccctattc 17460

gacaccaccc gtgtgtacct ggtggacaac aagtcaacgg atgtggcatc cctgaactac 17520

cagaacgacc acagcaactt tctgaccacg gtcattcaaa acaatgacta cagcccgggg 17580

gaggcaagca cacagaccat caatcttgac gaccggtcgc actggggcgg cgacctgaaa 17640

accatcctgc ataccaacat gccaaatgtg aacgagttca tgtttaccaa taagtttaag 17700

gcgcgggtga tggtgtcgcg cttgcctact aaggacaatc aggtggagct gaaatacgag 17760

tgggtggagt tcacgctgcc cgagggcaac tactccgaga ccatgaccat agaccttatg 17820

aacaacgcga tcgtggagca ctacttgaaa gtgggcagac agaacggggt tctggaaagc 17880

gacatcgggg taaagtttga cacccgcaac ttcagactgg ggtttgaccc cgtcactggt 17940

cttgtcatgc ctggggtata tacaaacgaa gccttccatc cagacatcat tttgctgcca 18000

ggatgcgggg tggacttcac ccacagccgc ctgagcaact tgttgggcat ccgcaagcgg 18060

caacccttcc aggagggctt taggatcacc tacgatgatc tggagggtgg taacattccc 18120

gcactgttgg atgtggacgc ctaccaggcg agcttgaaag atgacaccga acagggcggg 18180

ggtggcgcag gcggcagcaa cagcagtggc agcggcgcgg aagagaactc caacgcggca 18240

gccgcggcaa tgcagccggt ggaggacatg aacgatcatg ccattcgcgg cgacaccttt 18300

gccacacggg ctgaggagaa gcgcgctgag gccgaagcag cggccgaagc tgccgccccc 18360

gctgcgcaac ccgaggtcga gaagcctcag aagaaaccgg tgatcaaacc cctgacagag 18420

gacagcaaga aacgcagtta caacctaata agcaatgaca gcaccttcac ccagtaccgc 18480

agctggtacc ttgcatacaa ctacggcgac cctcagaccg gaatccgctc atggaccctg 18540

ctttgcactc ctgacgtaac ctgcggctcg gagcaggtct actggtcgtt gccagacatg 18600

atgcaagacc ccgtgacctt ccgctccacg cgccagatca gcaactttcc ggtggtgggc 18660

gccgagctgt tgcccgtgca ctccaagagc ttctacaacg accaggccgt ctactcccaa 18720

ctcatccgcc agtttacctc tctgacccac gtgttcaatc gctttcccga gaaccagatt 18780

ttggcgcgcc cgccagcccc caccatcacc accgtcagtg aaaacgttcc tgctctcaca 18840

gatcacggga cgctaccgct gcgcaacagc atcggaggag tccagcgagt gaccattact 18900

gacgccagac gccgcacctg cccctacgtt tacaaggccc tgggcatagt ctcgccgcgc 18960

gtcctatcga gccgcacttt ttgagcaagc atgtccatcc ttatatcgcc cagcaataac 19020

acaggctggg gcctgcgctt cccaagcaag atgtttggcg gggccaagaa gcgctccgac 19080

caacacccag tgcgcgtgcg cgggcactac cgcgcgccct ggggcgcgca caaacgcggc 19140

cgcactgggc gcaccaccgt cgatgacgcc atcgacgcgg tggtggagga ggcgcgcaac 19200

tacacgccca cgccgccacc agtgtccaca gtggacgcgg ccattcagac cgtggtgcgc 19260

ggagcccggc gctatgctaa aatgaagaga cggcggaggc gcgtagcacg tcgccaccgc 19320

cgccgacccg gcactgccgc ccaacgcgcg gcggcggccc tgcttaaccg cgcacgtcgc 19380

accggccgac gggcggccat gcgggccgct cgaaggctgg ccgcgggtat tgtcactgtg 19440

ccccccaggt ccaggcgacg agcggccgcc gcagcagccg cggccattag tgctatgact 19500

cagggtcgca ggggcaacgt gtattgggtg cgcgactcgg ttagcggcct gcgcgtgccc 19560

gtgcgcaccc gccccccgcg caactagatt gcaagaaaaa actacttaga ctcgtactgt 19620

tgtatgtatc cagcggcggc ggcgcgcaac gaagctatgt ccaagcgcaa aatcaaagaa 19680

gagatgctcc aggtcatcgc gccggagatc tatggccccc cgaagaagga agagcaggat 19740

tacaagcccc gaaagctaaa gcgggtcaaa aagaaaaaga aagatgatga tgatgaactt 19800

gacgacgagg tggaactgct gcacgctacc gcgcccaggc gacgggtaca gtggaaaggt 19860

cgacgcgtaa aacgtgtttt gcgacccggc accaccgtag tctttacgcc cggtgagcgc 19920

tccacccgca cctacaagcg cgtgtatgat gaggtgtacg gcgacgagga cctgcttgag 19980

caggccaacg agcgcctcgg ggagtttgcc tacggaaagc ggcataagga catgctggcg 20040

ttgccgctgg acgagggcaa cccaacacct agcctaaagc ccgtaacact gcagcaggtg 20100

ctgcccgcgc ttgcaccgtc cgaagaaaag cgcggcctaa agcgcgagtc tggtgacttg 20160

gcacccaccg tgcagctgat ggtacccaag cgccagcgac tggaagatgt cttggaaaaa 20220

atgaccgtgg aacctgggct ggagcccgag gtccgcgtgc ggccaatcaa gcaggtggcg 20280

ccgggactgg gcgtgcagac cgtggacgtt cagataccca ctaccagtag caccagtatt 20340

gccaccgcca cagagggcat ggagacacaa acgtccccgg ttgcctcagc ggtggcggat 20400

gccgcggtgc aggcggtcgc tgcggccgcg tccaagacct ctacggaggt gcaaacggac 20460

ccgtggatgt ttcgcgtttc agccccccgg cgcccgcgcc gttcgaggaa gtacggcgcc 20520

gccagcgcgc tactgcccga atatgcccta catccttcca ttgcgcctac ccccggctat 20580

cgtggctaca cctaccgccc cagaagacga gcaactaccc gacgccgaac caccactgga 20640

acccgccgcc gccgtcgccg tcgccagccc gtgctggccc cgatttccgt gcgcagggtg 20700

gctcgcgaag gaggcaggac cctggtgctg ccaacagcgc gctaccaccc cagcatcgtt 20760

taaaagccgg tctttgtggt tcttgcagat atggccctca cctgccgcct ccgtttcccg 20820

gtgccgggat tccgaggaag aatgcaccgt aggaggggca tggccggcca cggcctgacg 20880

ggcggcatgc gtcgtgcgca ccaccggcgg cggcgcgcgt cgcaccgtcg catgcgcggc 20940

ggtatcctgc ccctccttat tccactgatc gccgcggcga ttggcgccgt gcccggaatt 21000

gcatccgtgg ccttgcaggc gcagagacac tgattaaaaa caagttgcat gtggaaaaat 21060

caaaataaaa agtctggact ctcacgctcg cttggtcctg taactatttt gtagaatgga 21120

agacatcaac tttgcgtctc tggccccgcg acacggctcg cgcccgttca tgggaaactg 21180

gcaagatatc ggcaccagca atatgagcgg tggcgccttc agctggggct cgctgtggag 21240

cggcattaaa aatttcggtt ccaccgttaa gaactatggc agcaaggcct ggaacagcag 21300

cacaggccag atgctgaggg ataagttgaa agagcaaaat ttccaacaaa aggtggtaga 21360

tggcctggcc tctggcatta gcggggtggt ggacctggcc aaccaggcag tgcaaaataa 21420

gattaacagt aagcttgatc cccgccctcc cgtagaggag cctccaccgg ccgtggagac 21480

agtgtctcca gaggggcgtg gcgaaaagcg tccgcgcccc gacagggaag aaactctggt 21540

gacgcaaata gacgagcctc cctcgtacga ggaggcacta aagcaaggcc tgcccaccac 21600

ccgtcccatc gcgcccatgg ctaccggagt gctgggccag cacacacccg taacgctgga 21660

cctgcctccc cccgccgaca cccagcagaa acctgtgctg ccaggcccga ccgccgttgt 21720

tgtaacccgt cctagccgcg cgtccctgcg ccgcgccgcc agcggtccgc gatcgttgcg 21780

gcccgtagcc agtggcaact ggcaaagcac actgaacagc atcgtgggtc tgggggtgca 21840

atccctgaag cgccgacgat gcttctgata gctaacgtgt cgtatgtgtg tcatgtatgc 21900

gtccatgtcg ccgccagagg agctgctgag ccgccgcgcg cccgctttcc aagatggcta 21960

ccccttcgat gatgccgcag tggtcttaca tgcacatctc gggccaggac gcctcggagt 22020

acctgagccc cgggctggtg cagtttgccc gcgccaccga gacgtacttc agcctgaata 22080

acaagtttag aaaccccacg gtggcgccta cgcacgacgt gaccacagac cggtcccagc 22140

gtttgacgct gcggttcatc cctgtggacc gtgaggatac tgcgtactcg tacaaggcgc 22200

ggttcaccct agctgtgggt gataaccgtg tgctggacat ggcttccacg tactttgaca 22260

tccgcggcgt gctggacagg ggccctactt ttaagcccta ctctggcact gcctacaacg 22320

ccctggctcc caagggtgcc ccaaatcctt gcgaatggga tgaagctgct actgctcttg 22380

aaataaacct agaagaagag gacgatgaca acgaagacga agtagacgag caagctgagc 22440

agcaaaaaac tcacgtattt gggcaggcgc cttattctgg tataaatatt acaaaggagg 22500

gtattcaaat aggtgtcgaa ggtcaaacac ctaaatatgc cgataaaaca tttcaacctg 22560

aacctcaaat aggagaatct cagtggtacg aaacagaaat taatcatgca gctgggagag 22620

tcctaaaaaa gactacccca atgaaaccat gttacggttc atatgcaaaa cccacaaatg 22680

aaaatggagg gcaaggcatt cttgtaaagc aacaaaatgg aaagctagaa agtcaagtgg 22740

aaatgcaatt tttctcaact actgaggcag ccgcaggcaa tggtgataac ttgactccta 22800

aagtggtatt gtacagtgaa gatgtagata tagaaacccc agacactcat atttcttaca 22860

tgcccactat taaggaaggt aactcacgag aactaatggg ccaacaatct atgcccaaca 22920

ggcctaatta cattgctttt agggacaatt ttattggtct aatgtattac aacagcacgg 22980

gtaatatggg tgttctggcg ggccaagcat cgcagttgaa tgctgttgta gatttgcaag 23040

acagaaacac agagctttca taccagcttt tgcttgattc cattggtgat agaaccaggt 23100

acttttctat gtggaatcag gctgttgaca gctatgatcc agatgttaga attattgaaa 23160

atcatggaac tgaagatgaa cttccaaatt actgctttcc actgggaggt gtgattaata 23220

cagagactct taccaaggta aaacctaaaa caggtcagga aaatggatgg gaaaaagatg 23280

ctacagaatt ttcagataaa aatgaaataa gagttggaaa taattttgcc atggaaatca 23340

atctaaatgc caacctgtgg agaaatttcc tgtactccaa catagcgctg tatttgcccg 23400

acaagctaaa gtacagtcct tccaacgtaa aaatttctga taacccaaac acctacgact 23460

acatgaacaa gcgagtggtg gctcccgggc tagtggactg ctacattaac cttggagcac 23520

gctggtccct tgactatatg gacaacgtca acccatttaa ccaccaccgc aatgctggcc 23580

tgcgctaccg ctcaatgttg ctgggcaatg gtcgctatgt gcccttccac atccaggtgc 23640

ctcagaagtt ctttgccatt aaaaacctcc ttctcctgcc gggctcatac acctacgagt 23700

ggaacttcag gaaggatgtt aacatggttc tgcagagctc cctaggaaat gacctaaggg 23760

ttgacggagc cagcattaag tttgatagca tttgccttta cgccaccttc ttccccatgg 23820

cccacaacac cgcctccacg cttgaggcca tgcttagaaa cgacaccaac gaccagtcct 23880

ttaacgacta tctctccgcc gccaacatgc tctaccctat acccgccaac gctaccaacg 23940

tgcccatatc catcccctcc cgcaactggg cggctttccg cggctgggcc ttcacgcgcc 24000

ttaagactaa ggaaacccca tcactgggct cgggctacga cccttattac acctactctg 24060

gctctatacc ctacctagat ggaacctttt acctcaacca cacctttaag aaggtggcca 24120

ttacctttga ctcttctgtc agctggcctg gcaatgaccg cctgcttacc cccaacgagt 24180

ttgaaattaa gcgctcagtt gacggggagg gttacaacgt tgcccagtgt aacatgacca 24240

aagactggtt cctggtacaa atgctagcta actataacat tggctaccag ggcttctata 24300

tcccagagag ctacaaggac cgcatgtact ccttctttag aaacttccag cccatgagcc 24360

gtcaggtggt ggatgatact aaatacaagg actaccaaca ggtgggcatc ctacaccaac 24420

acaacaactc tggatttgtt ggctaccttg cccccaccat gcgcgaagga caggcctacc 24480

ctgctaactt cccctatccg cttataggca agaccgcagt tgacagcatt acccagaaaa 24540

agtttctttg cgatcgcacc ctttggcgca tcccattctc cagtaacttt atgtccatgg 24600

gcgcactcac agacctgggc caaaaccttc tctacgccaa ctccgcccac gcgctagaca 24660

tgacttttga ggtggatccc atggacgagc ccacccttct ttatgttttg tttgaagtct 24720

ttgacgtggt ccgtgtgcac cagccgcacc gcggcgtcat cgaaaccgtg tacctgcgca 24780

cgcccttctc ggccggcaac gccacaacat aaagaagcaa gcaacatcaa caacagctgc 24840

cgccatgggc tccagtgagc aggaactgaa agccattgtc aaagatcttg gttgtgggcc 24900

atatttttg ggcacctatg acaagcgctt tccaggcttt gtttctccac acaagctcgc 24960

ctgcgccata gtcaatacgg ccggtcgcga gactgggggc gtacactgga tggcctttgc 25020

ctggaacccg cactcaaaaa catgctacct ctttgagccc tttggctttt ctgaccagcg 25080

actcaagcag gtttaccagt ttgagtacga gtcactcctg cgccgtagcg ccattgcttc 25140

ttcccccgac cgctgtataa cgctggaaaa gtccacccaa agcgtacagg ggcccaactc 25200

ggccgcctgt ggactattct gctgcatgtt tctccacgcc tttgccaact ggccccaaac 25260

tcccatggat cacaacccca ccatgaacct tattaccggg gtacccaact ccatgctcaa 25320

cagtccccag gtacagccca ccctgcgtcg caaccaggaa cagctctaca gcttcctgga 25380

gcgccactcg ccctacttcc gcagccacag tgcgcagatt aggagcgcca cttctttttg 25440

tcacttgaaa aacatgtaaa aataatgtac tagagacact ttcaataaag gcaaatgctt 25500

ttatttgtac actctcgggt gattatttac ccccaccctt gccgtctgcg ccgtttaaaa 25560

atcaaagggg ttctgccgcg catcgctatg cgccactggc agggacacgt tgcgatactg 25620

gtgtttagtg ctccacttaa actcaggcac aaccatccgc ggcagctcgg tgaagttttc 25680

actccacagg ctgcgcacca tcaccaacgc gtttagcagg tcgggcgccg atatcttgaa 25740

gtcgcagttg gggcctccgc cctgcgcgcg cgagttgcga tacacagggt tgcagcactg 25800

gaacactatc agcgccgggt ggtgcacgct ggccagcacg ctcttgtcgg agatcagatc 25860

cgcgtccagg tcctccgcgt tgctcagggc gaacggagtc aactttggta gctgccttcc 25920

caaaaagggc gcgtgcccag gctttgagtt gcactcgcac cgtagtggca tcaaaaggtg 25980

accgtgcccg gtctgggcgt taggatacag cgcctgcata aaagccttga tctgcttaaa 26040

agccacctga gcctttgcgc cttcagagaa gaacatgccg caagacttgc cggaaaactg 26100

attggccgga caggccgcgt cgtgcacgca gcaccttgcg tcggtgttgg agatctgcac 26160

cacatttcgg ccccaccggt tcttcacgat cttggccttg ctagactgct ccttcagcgc 26220

gcgctgcccg ttttcgctcg tcacatccat ttcaatcacg tgctccttat ttatcataat 26280

gcttccgtgt agacacttaa gctcgccttc gatctcagcg cagcggtgca gccacaacgc 26340

gcagcccgtg ggctcgtgat gcttgtaggt cacctctgca aacgactgca ggtacgcctg 26400

caggaatcgc cccatcatcg tcacaaaggt cttgttgctg gtgaaggtca gctgcaaccc 26460

gcggtgctcc tcgttcagcc aggtcttgca tacggccgcc agagcttcca cttggtcagg 26520

cagtagtttg aagttcgcct ttagatcgtt atccacgtgg tacttgtcca tcagcgcgcg 26580

cgcagcctcc atgcccttct cccacgcaga cacgatcggc acactcagcg ggttcatcac 26640

cgtaatttca ctttccgctt cgctgggctc ttcctcttcc tcttgcgtcc gcataccacg 26700

cgccactggg tcgtcttcat tcagccgccg cactgtgcgc ttacctcctt tgccatgctt 26760

gattagcacc ggtgggttgc tgaaacccac catttgtagc gccacatctt ctctttcttc 26820

ctcgctgtcc acgattacct ctggtgatgg cgggcgctcg ggcttgggag aagggcgctt 26880

ctttttcttc ttgggcgcaa tggccaaatc cgccgccgag gtcgatggcc gcgggctggg 26940

tgtgcgcggc accagcgcgt cttgtgatga gtcttcctcg tcctcggact cgatacgccg 27000

cctcatccgc ttttttgggg gcgcccgggg aggcggcggc gacggggacg gggacgacac 27060

gtcctccatg gttgggggac gtcgcgccgc accgcgtccg cgctcggggg tggtttcgcg 27120

ctgctcctct tcccgactgg ccatttcctt ctcctatagg cagaaaaaga tcatggagtc 27180

agtcgagaag aaggacagcc taaccgcccc ctctgagttc gccaccaccg cctccaccga 27240

tgccgccaac gcgcctacca ccttccccgt cgaggcaccc ccgcttgagg aggaggaagt 27300

gattatcgag caggacccag gttttgtaag cgaagacgac gaggaccgct cagtaccaac 27360

agaggataaa aagcaagacc aggacaacgc agaggcaaac gaggaacaag tcgggcgggg 27420

ggacgaaagg catggcgact acctagatgt gggagacgac gtgctgttga agcatctgca 27480

gcgccagtgc gccattatct gcgacgcgtt gcaagagcgc agcgatgtgc ccctcgccat 27540

agcggatgtc agccttgcct acgaacgcca cctattctca ccgcgcgtac cccccaaacg 27600

ccaagaaaac ggcacatgcg agcccaaccc gcgcctcaac ttctaccccg tatttgccgt 27660

gccagaggtg cttgccacct atcacatctt tttccaaaac tgcaagatac ccctatcctg 27720

ccgtgccaac cgcagccgag cggacaagca gctggccttg cggcagggcg ctgtcatacc 27780

tgatatcgcc tcgctcaacg aagtgccaaa aatctttgag ggtcttggac gcgacgagaa 27840

gcgcgcggca aacgctctgc aacaggaaaa cagcgaaaat gaaagtcact ctggagtgtt 27900

ggtggaactc gagggtgaca acgcgcgcct agccgtacta aaacgcagca tcgaggtcac 27960

ccactttgcc tacccggcac ttaacctacc ccccaaggtc atgagcacag tcatgagtga 28020

gctgatcgtg cgccgtgcgc agcccctgga gagggatgca aatttgcaag aacaaacaga 28080

ggagggccta cccgcagttg gcgacgagca gctagcgcgc tggcttcaaa cgcgcgagcc 28140

tgccgacttg gaggagcgac gcaaactaat gatggccgca gtgctcgtta ccgtggagct 28200

tgagtgcatg cagcggttct ttgctgaccc ggagatgcag cgcaagctag aggaaacatt 28260

gcactacacc tttcgacagg gctacgtacg ccaggcctgc aagatctcca acgtggagct 28320

ctgcaacctg gtctcctacc ttggaatttt gcacgaaaac cgccttgggc aaaacgtgct 28380

tcattccacg ctcaagggcg aggcgcgccg cgactacgtc cgcgactgcg tttacttatt 28440

tctatgctac acctggcaga cggccatggg cgtttggcag cagtgcttgg aggagtgcaa 28500

cctcaaggag ctgcagaaac tgctaaagca aaacttgaag gacctatgga cggccttcaa 28560

cgagcgctcc gtggccgcgc acctggcgga catcattttc cccgaacgcc tgcttaaaac 28620

cctgcaacag ggtctgccag acttcaccag tcaaagcatg ttgcagaact ttaggaactt 28680

tatcctagag cgctcaggaa tcttgcccgc cacctgctgt gcacttccta gcgactttgt 28740

gcccattaag taccgcgaat gccctccgcc gctttggggc cactgctacc ttctgcagct 28800

agccaactac cttgcctacc actctgacat aatggaagac gtgagcggtg acggtctact 28860

ggagtgtcac tgtcgctgca acctatgcac cccgcaccgc tccctggttt gcaattcgca 28920

gctgcttaac gaaagtcaaa ttatcggtac ctttgagctg cagggtccct cgcctgacga 28980

aaagtccgcg gctccggggt tgaaactcac tccggggctg tggacgtcgg cttaccttcg 29040

caaatttgta cctgaggact accacgccca cgagattagg ttctacgaag accaatcccg 29100

cccgcctaat gcggagctta ccgcctgcgt cattacccag ggccacattc ttggccaatt 29160

gcaagccatc aacaaagccc gccaagagtt tctgctacga aagggacggg gggtttactt 29220

ggacccccag tccggcgagg agctcaaccc aatccccccg ccgccgcagc cctatcagca 29280

gcagccgcgg gcccttgctt cccaggatgg cacccaaaaa gaagctgcag ctgccgccgc 29340

cacccacgga cgaggaggaa tactgggaca gtcaggcaga ggaggttttg gacgaggagg 29400

aggaggacat gatggaagac tgggagagcc tagacgagga agcttccgag gtcgaagagg 29460

tgtcagacga aacaccgtca ccctcggtcg cattcccctc gccggcgccc cagaaatcgg 29520

caaccggttc cagcatggct acaacctccg ctcctcaggc gccgccggca ctgcccgttc 29580

gccgacccaa ccgtagatgg gacaccactg gaaccagggc cggtaagtcc aagcagccgc 29640

cgccgttagc ccaagagcaa caacagcgcc aaggctaccg ctcatggcgc gggcacaaga 29700

acgccatagt tgcttgcttg caagactgtg ggggcaacat ctccttcgcc cgccgctttc 29760

ttctctacca tcacggcgtg gccttccccc gtaacatcct gcattactac cgtcatctct 29820

acagcccata ctgcaccggc ggcagcggca gcaacagcag cggccacaca gaagcaaagg 29880

cgaccggata gcaagactct gacaaagccc aagaaatcca cagcggcggc agcagcagga 29940

ggaggagcgc tgcgtctggc gcccaacgaa cccgtatcga cccgcgagct tagaaacagg 30000

atttttccca ctctgtatgc tatatttcaa cagagcaggg gccaagaaca agagctgaaa 30060

ataaaaaaca ggtctctgcg atccctcacc cgcagctgcc tgtatcacaa aagcgaagat 30120

cagcttcggc gcacgctgga agacgcggag gctctcttca gtaaatactg cgcgctgact 30180

cttaaggact agtttcgcgc cctttctcaa atttaagcgc gaaaactacg tcatctccag 30240

cggccacacc cggcgccagc acctgttgtc agcgccatta tgagcaagga aattcccacg 30300

ccctacatgt ggagttacca gccacaaatg ggacttgcgg ctggagctgc ccaagactac 30360

tcaacccgaa taaactacat gagcgcggga ccccacatga tatcccgggt caacggaata 30420

cgcgcccacc gaaaccgaat tctcctggaa caggcggcta ttaccaccac acctcgtaat 30480

aaccttaatc cccgtagttg gcccgctgcc ctggtgtacc aggaaagtcc cgctcccacc 30540

actgtggtac ttcccagaga cgcccaggcc gaagttcaga tgactaactc aggggcgcag 30600

cttgcgggcg gctttcgtca cagggtgcgg tcgcccgggc agggtataac tcacctgaca 30660

atcagagggc gaggtattca gctcaacgac gagtcggtga gctcctcgct tggtctccgt 30720

ccggacggga catttcagat cggcggcgcc ggccgctctt cattcacgcc tcgtcaggca 30780

atcctaactc tgcagacctc gtcctctgag ccgcgctctg gaggcattgg aactctgcaa 30840

tttattgagg agtttgtgcc atcggtctac tttaacccct tctcgggacc tcccggccac 30900

tatccggatc aatttattcc taactttgac gcggtaaagg actcggcgga cggctacgac 30960

tgaatgttaa gtggagaggc agagcaactg cgcctgaaac acctggtcca ctgtcgccgc 31020

cacaagtgct ttgcccgcga ctccggtgag ttttgctact ttgaattgcc cgaggatcat 31080

atcgagggcc cggcgcacgg cgtccggctt accgcccagg gagagcttgc ccgtagcctg 31140

attcgggagt ttacccagcg ccccctgcta gttgagcggg acaggggacc ctgtgttctc 31200

actgtgattt gcaactgtcc taaccctgga ttacatcaag atcctctagt taatgtcagg 31260

tcgcctaagt cgattaacta gagtacccgg ggatcttatt ccctttaact aataaaaaaa 31320

aataataaag catcacttac ttaaaatcag ttagcaaatt tctgtccagt ttattcagca 31380

gcacctcctt gccctcctcc cagctctggt attgcagctt cctcctggct gcaaactttc 31440

tccacaatct aaatggaatg tcagtttcct cctgttcctg tccatccgca cccactatct 31500

tcatgttgtt gcagatgaag cgcgcaagac cgtctgaaga taccttcaac cccgtgtatc 31560

catatgacac ggaaaccggt cctccaactg tgccttttct tactcctccc tttgtatccc 31620

ccaatgggtt tcaagagagt ccccctgggg tactctcttt gcgcctatcc gaacctctag 31680

ttacctccaa tggcatgctt gcgctcaaaa tgggcaacgg cctctctctg gacgaggccg 31740

gcaaccttac ctcccaaaat gtaaccactg tgagcccacc tctcaaaaaa accaagtcaa 31800

acataaacct ggaaatatct gcacccctca cagttacctc agaagcccta actgtggctg 31860

ccgccgcacc tctaatggtc gcgggcaaca cactcaccat gcaatcacag gccccgctaa 31920

ccgtgcacga ctccaaactt agcattgcca cccaaggacc cctcacagtg tcagaaggaa 31980

agctagccct gcaaacatca ggccccctca ccaccaccga tagcagtacc cttactatca 32040

ctgcctcacc ccctctaact actgccactg gtagcttggg cattgacttg aaagagccca 32100

tttatacaca aaatggaaaa ctaggactaa agtacggggc tcctttgcat gtaacagacg 32160

acctaaacac tttgaccgta gcaactggtc caggtgtgac tattaataat acttccttgc 32220

aaactaaagt tactggagcc ttgggttttg attcacaagg caatatgcaa cttaatgtag 32280

caggaggact aaggattgat tctcaaaaca gacgccttat acttgatgtt agttatccgt 32340

ttgatgctca aaaccaacta aatctaagac taggacaggg ccctcttttt ataaactcag 32400

cccacaactt ggatattaac tacaacaaag gcctttactt gtttacagct tcaaacaatt 32460

ccaaaaagct tgaggttaac ctaagcactg ccaaggggtt gatgtttgac gctacagcca 32520

tagccattaa tgcaggagat gggcttgaat ttggttcacc taatgcacca aacacaaatc 32580

ccctcaaaac aaaaattggc catggcctag aatttgattc aaacaaggct atggttccta 32640

aactaggaac tggccttagt tttgacagca caggtgccat tacagtagga aacaaaaata 32700

atgataagct aactttgtgg accggaataa accctccacc taactgtcaa attgtggaaa 32760

acactaatac aaatgatggc aaacttactt tagtattagt aaaaaatgga gggcttgtta 32820

atggctacgt gtctctagtt ggtgtatcag acactgtgaa ccaaatgttc acacaaaaga 32880

cagcaaacat ccaattaaga ttatattttg actcttctgg aaatctatta actgaggaat 32940

cagacttaaa aattccactt aaaaataaat cttctacagc gaccagtgaa actgtagcca 33000

gcagcaaagc ctttatgcca agtactacag cttatccctt caacaccact actagggata 33060

gtgaaaacta cattcatgga atatgttact acatgactag ttatgataga agtctatttc 33120

ccttgaacat ttctataatg ctaaacagcc gtatgatttc ttccaatgtt gcctatgcca 33180

tacaatttga atggaatcta aatgcaagtg aatctccaga aagcaacata gctacgctga 33240

ccacatcccc ctttttcttt tcttacatta cagaagacga caactaaaga atcgtttgtg 33300

ttatgtttca acgtgtttat ttttcaattg cagaaaattt caagtcattt ttcattcagt 33360

agtatagccc caccaccaca tagcttatac agatcaccgt accttaatca aactcacaga 33420

accctagtat tcaacctgcc acctccctcc caacacacag agtacacagt cctttctccc 33480

cggctggcct taaaaagcat catatcatgg gtaacagaca tattcttagg tgttatattc 33540

cacacggttt cctgtcgagc caaacgctca tcagtgatat taataaactc cccgggcagc 33600

tcacttaagt tcatgtcgct gtccagctgc tgagccacag gctgctgtcc aacttgcggt 33660

tgcttaacgg gcggcgaagg agaagtccac gcgttgtgca ttgtcaaagt gttacattcg 33720

ggcagcagcg gatgatcctc cagtatggta gcgcgggttt ctgtctcaaa aggaggtaga 33780

cgatccctac tgtacggagt gcgccgagac aaccgagatc gtgttggtcg tagtgtcatg 33840

ccaaatggaa cgccggacgt agtcatattt cctgaagcaa aaccaggtgc gggcgtgaca 33900

aacagatctg cgtctccggt ctcgccgctt agatcgctct gtgtagtagt tgtagtatat 33960

ccactctctc aaagcatcca ggcgcccccc ggcttcgggt tctatgtaaa ctccttcatg 34020

cgccgctgcc ctgataacat ccaccaccgc agaataagcc acacccagcc aacctacaca 34080

ttcgttctgc gagtcacaca cgggaggagc gggaagagct ggaagaacca tgttttttt 34140

tttattccaa aagattatcc aaaacctcaa aatgaagatc tattaagtga acgcgctccc 34200

ctccggtggc gtggtcaaac tctacagcca aagaacagat aatggcattt gtaagatgtt 34260

gcacaatggc ttccaaaagg caaacggccc tcacgtccaa gtggacgtaa aggctaaacc 34320

cttcagggtg aatctcctct ataaacattc cagcaccttc aaccatgccc aaataattct 34380

catctcgcca ccttctcaat atatctctaa gcaaatcccg aatattaagt ccggccattg 34440

taaaaatctg ctccagagcg ccctccacct tcagcctcaa gcagcgaatc atgattgcaa 34500

aaattcaggt tcctcacaga cctgtataag attcaaaagc ggaacattaa caaaaatacc 34560

gcgatcccgt aggtcccttc gcagggccag ctgaacataa tcgtgcaggt ctgcacggac 34620

cagcgcggcc acttccccgc caggaaccat gacaaaagaa cccacactga ttatgacacg 34680

catactcgga gctatgctaa ccagcgtagc cccgatgtaa gcttgttgca tgggcggcga 34740

tataaaatgc aaggtgctgc tcaaaaaatc aggcaaagcc tcgcgcaaaa aagaaagcac 34800

atcgtagtca tgctcatgca gataaaggca ggtaagctcc ggaaccacca cagaaaaaga 34860

caccattttt ctctcaaaca tgtctgcggg tttctgcata aacacaaaat aaaataacaa 34920

aaaaacattt aaacattaga agcctgtctt acaacaggaa aaacaaccct tataagcata 34980

agacggacta cggccatgcc ggcgtgaccg taaaaaaact ggtcaccgtg attaaaaagc 35040

accaccgaca gctcctcggt catgtccgga gtcataatgt aagactcggt aaacacatca 35100

ggttgattca catcggtcag tgctaaaaag cgaccgaaat agcccggggg aatacatacc 35160

cgcaggcgta gagacaacat tacagccccc ataggaggta taacaaaatt aataggagag 35220

aaaaacacat aaacacctga aaaaccctcc tgcctaggca aaatagcacc ctcccgctcc 35280

agaacaacat acagcgcttc cacagcggca gccataacag tcagccttac cagtaaaaaa 35340

gaaaacctat taaaaaaaca ccactcgaca cggcaccagc tcaatcagtc acagtgtaaa 35400

aaagggccaa gtgcagagcg agtatatata ggactaaaaa atgacgtaac ggttaaagtc 35460

cacaaaaaac acccagaaaa ccgcacgcga acctacgccc agaaacgaaa gccaaaaaac 35520

ccacaacttc ctcaaatcgt cacttccgtt ttcccacgtt acgtcacttc ccattttaag 35580

aaaactacaa ttcccaacac atacaagtta ctccgcccta aaacctacgt cacccgcccc 35640

gttcccacgc cccgcgccac gtcacaaact ccacccccctc attatcatat tggcttcaat 35700

ccaaaataag gtatattatt gatgatg 35727

<210> 34
<211> 36425
<212> DNA
<213> Artificial Sequence

<220>
<223> Adk35F2-Spike/E4orf6(mPGK)-E4dl-12(E4re#32)

<400> 34
ttaattaaca tcatcaataa taccttat tttggattga agccaatatg ataatgaggg 60

ggtggagttt gtgacgtggc gcggggcgtg ggaacggggc gggtgacgta gtagtgtggc 120

ggaagtgtga tgttgcaagt gtggcggaac acatgtaagc gacggatgtg gcaaaagtga 180

cgtttttggt gtgcgccggt gtacacagga agtgacaatt ttcgcgcggt tttaggcgga 240

tgttgtagta aatttgggcg taaccgagta agatttggcc attttcgcgg gaaaactgaa 300

taagaggaag tgaaatctga ataattttgt gttactcata gcgcgtaata atttctgtaa 360

tagtaatcaa ttacggggtc attagttcat agcccatata tggagttccg cgttacataa 420

cttacggtaa atggcccgcc tggctgaccg cccaacgacc cccgcccatt gacgtcaata 480

atgacgtatg ttcccatagt aacgccaata gggactttcc attgacgtca atgggtggag 540

tatttacggt aaactgccca cttggcagta catcaagtgt atcatatgcc aagtacgccc 600

cctattgacg tcaatgacgg taaatggccc gcctggcatt atgcccagta catgacctta 660

tgggactttc ctacttggca gtacatctac gtattagtca tcgctattac catggtgatg 720

cggttttggc agtacatcaa tgggcgtgga tagcggtttg actcacgggg atttccaagt 780

ctccacccca ttgacgtcaa tgggagtttg ttttggcacc aaaatcaacg ggactttcca 840

aaatgtcgta acaactccgc cccattgacg caaatgggcg gtaggcgtgt acggtgggag 900

gtctatataa gcagagctct ccctatcagt gatagagatc tccctatcag tgatagagat 960

cgtcgacgag ctcgtttagt gaaccgtcag atcgcctgga gacgccatcc acgctgtttt 1020

gacctccata gaagacaccg ggaccgatcc agcctccgat ttgccaccat gtttgtgttc 1080

ctggtgctgc tgccactggt gtccagccag tgtgtgaacc tgaccaccag gacccaactt 1140

cctcctgcct acaccaactc cttcaccagg ggagtctact accctgacaa ggtgttcagg 1200

tcctctgtgc tgcacagcac ccaggacctg ttcctgccat tcttcagcaa tgtgacctgg 1260

ttccatgcca tccatgtgtc tggcaccaat ggcaccaaga ggtttgacaa ccctgtgctg 1320

ccattcaatg atggagtcta ctttgccagc acagagaaga gcaacatcat caggggctgg 1380

atttttggca ccaccctgga cagcaagacc cagtccctgc tgattgtgaa caatgccacc 1440

aatgtggtga ttaaggtgtg tgagttccag ttctgtaatg acccattcct gggagtctac 1500

taccacaaga acaacaagtc ctggatggag tctgagttca gggtctactc ctctgccaac 1560

aactgtacct ttgaatatgt gagccaacca ttcctgatgg acttggaggg caagcagggc 1620

aacttcaaga acctgaggga gtttgtgttc aagaacattg atggctactt caagatttac 1680

agcaaacaca caccaatcaa cctggtgagg gacctgccac agggcttctc tgccttggaa 1740

ccactggtgg acctgccaat tggcatcaac atcaccaggt tccagaccct gctggctctg 1800

cacaggtcct acctgacacc tggagactcc tcctctggct ggacagcagg agcagcagcc 1860

tactatgtgg gctacctcca accaaggacc ttcctgctga aatacaatga gaatggcacc 1920

atcacagatg ctgtggactg tgccctggac ccactgtctg agaccaagtg taccctgaaa 1980

tccttcacag tggagaaggg catctaccag accagcaact tcagggtcca accaacagag 2040

agcattgtga ggtttccaaa catcaccaac ctgtgtccat ttggagaggt gttcaatgcc 2100

accaggtttg cctctgtcta tgcctggaac aggaagagga ttagcaactg tgtggctgac 2160

tactctgtgc tctacaactc tgcctccttc agcaccttca agtgttatgg agtgagccca 2220

accaaactga atgacctgtg tttcaccaat gtctatgctg actcctttgt gattagggga 2280

gatgaggtga gacagattgc ccctggacaa acaggcaaga ttgctgacta caactacaaa 2340

ctgcctgatg acttcacagg ctgtgtgatt gcctggaaca gcaacaacct ggacagcaag 2400

gtgggaggca actacaacta cctctacaga ctgttcagga agagcaacct gaaaccattt 2460

gagagggaca tcagcacaga gatttaccag gctggcagca caccatgtaa tggagtggag 2520

ggcttcaact gttactttcc actccaatcc tatggcttcc aaccaaccaa tggagtgggc 2580

taccaaccat acagggtggt ggtgctgtcc tttgaactgc tccatgcccc tgccacagtg 2640

tgtggaccaa agaagagcac caacctggtg aagaacaagt gtgtgaactt caacttcaat 2700

ggactgacag gcacaggagt gctgacagag agcaacaaga agttcctgcc attccaacag 2760

tttggcaggg acattgctga caccacagat gctgtgaggg acccacagac cttggagatt 2820

ctggacatca caccatgttc ctttggagga gtgtctgtga ttacacctgg caccaacacc 2880

agcaaccagg tggctgtgct ctaccaggat gtgaactgta ctgaggtgcc tgtggctatc 2940

catgctgacc aacttacacc aacctggagg gtctacagca caggcagcaa tgtgttccag 3000

accagggctg gctgtctgat tggagcagag catgtgaaca actcctatga gtgtgacatc 3060

ccaattggag caggcatctg tgcctcctac cagacccaga ccggtggcgg tgggtcgagg 3120

tctgtggcaa gccagagcat cattgcctac acaatgagtc tgggagcaga gaactctgtg 3180

gcttacagca acaacagcat tgccatccca accaacttca ccatctctgt gaccacagag 3240

attctgcctg tgagtatgac caagacctct gtggactgta caatgtatat ctgtggagac 3300

agcacagagt gtagcaacct gctgctccaa tatggctcct tctgtaccca acttaacagg 3360

gctctgacag gcattgctgt ggaacaggac aagaacaccc aggaggtgtt tgcccaggtg 3420

aagcagattt acaagacacc tccaatcaag gactttggag gcttcaactt cagccagatt 3480

ctgcctgacc caagcaagcc aagcaagagg tccttcattg aggacctgct gttcaacaag 3540

gtgaccctgg ctgatgctgg cttcatcaag caatatggag actgtctggg agacattgct 3600

gccagggacc tgatttgtgc ccagaagttc aatggactga cagtgctgcc tccactgctg 3660

acagatgaga tgattgccca atacacctct gccctgctgg ctggcaccat cacctctggc 3720

tggacctttg gagcaggagc agccctccaa atcccatttg ctatgcagat ggcttacagg 3780

ttcaatggca ttggagtgac ccagaatgtg ctctatgaga accagaaact gattgccaac 3840

cagttcaact ctgccattgg caagattcag gactccctgt ccagcacagc ctctgccctg 3900

ggcaaactcc aagatgtggt gaaccagaat gcccaggctc tgaacaccct ggtgaagcaa 3960

ctttccagca actttggagc catctcctct gtgctgaatg acatcctgag cagactggac 4020

aaggtggagg ctgaggtcca gattgacaga ctgattacag gcagactcca atccctccaa 4080

acctatgtga cccaacaact tatcagggct gctgagatta gggcatctgc caacctggct 4140

gccaccaaga tgagtgagtg tgtgctggga caaagcaaga gggtggactt ctgtggcaag 4200

ggctaccacc tgatgagttt tccacagtct gcccctcatg gagtggtgtt cctgcatgtg 4260

acctatgtgc ctgcccagga gaagaacttc accacagccc ctgccatctg ccatgatggc 4320

aaggctcact ttccaaggga gggagtgttt gtgagcaatg gcacccactg gtttgtgacc 4380

cagaggaact tctatgaacc acagattatc accacagaca acacctttgt gtctggcaac 4440

tgtgatgtgg tgattggcat tgtgaacaac acagtctatg acccactcca acctgaactg 4500

gactccttca aggaggaact ggacaaatac ttcaagaacc acaccagccc tgatgtggac 4560

ctgggagaca tctctggcat caatgcctct gtggtgaaca tccagaagga gattgacaga 4620

ctgaatgagg tggctaagaa cctgaatgag tccctgattg acctccaaga actgggcaaa 4680

tatgaacaat acatcaagtg gccatgaaaa ttgatcataa tcagccatac cacatttgta 4740

gaggttttac ttgctttaaa aaacctccca cacctccccc tgaacctgaa acataaaatg 4800

aatgcaattg ttgttgttaa cttgtttatt gcagcttata atggttacaa ataaagcaat 4860

agcatcacaa atttcacaaa taaagcattt ttttcactgc attctagttg tggtttgtcc 4920

aaactcatca atgtatctta acgcggatcg ggtaggggag gcgcttttcc caaggcagtc 4980

tggagcatgc gctttagcag ccccgctggg cacttggcgc tacacaagtg gcctctggcc 5040

tcgcacacat tccacatcca ccggtaggcg ccaaccggct ccgttctttg gtggcccctt 5100

cgcgccacct tctactcctc ccctagtcag gaagttcccc cccgccccgc agctcgcgtc 5160

gtgcaggacg tgacaaatgg aagtagcacg tctcactagt ctcgtgcaga tggacagcac 5220

cgctgagcaa tggaagcggg taggcctttg gggcagcggc caatagcagc tttgctcctt 5280

cgctttctgg gctcagaggc tgggaagggg tgggtccggg ggcgggctca ggggcgggct 5340

caggggcggg gcgggcgccc gaaggtcctc cggaggcccg gcattctgca cgcttcaaaa 5400

gcgcacgtct gccgcgctgt tctcctcttc ctcatctccg ggcctttcga aactacccca 5460

agctggccac catgactacg tccggcgttc catttggcat gacactacga ccaacacgat 5520

ctcggttgtc tcggcgcact ccgtacagta gggatcgtct acctcctttt gagacagaaa 5580

cccgcgctac catactggag gatcatccgc tgctgcccga atgtaacact ttgacaatgc 5640

acaacgtgag ttacgtgcga ggtcttccct gcagtgtggg atttacgctg attcaggaat 5700

gggttgttcc ctgggatatg gttctaacgc gggaggagct tgtaatcctg aggaagtgta 5760

tgcacgtgtg cctgtgttgt gccaacattg atatcatgac gagcatgatg atccatggtt 5820

acgagtcctg ggctctccac tgtcattgtt ccagtcccgg ttccctgcag tgtatagccg 5880

gcgggcaggt tttggccagc tggtttagga tggtggtgga tggcgccatg tttaatcaga 5940

ggtttatatg gtaccgggag gtggtgaatt acaacatgcc aaaagaggta atgtttatgt 6000

ccagcgtgtt tatgaggggt cgccacttaa tctacctgcg cttgtggtat gatggccacg 6060

tgggttctgt ggtccccgcc atgagctttg gatacagcgc cttgcactgt gggattttga 6120

acaatattgt ggtgctgtgc tgcagttact gtgctgattt aagtgagatc agggtgcgct 6180

gctgtgcccg gaggacaagg cgccttatgc tgcgggcggt gcgaatcatc gctgaggaga 6240

ccactgccat gttgtattcc tgcaggacgg agcggcggcg gcagcagttt attcgcgcgc 6300

tgctgcagca ccaccgccct atcctgatgc acgattatga ctctaccccc atgtagaagc 6360

ttggggatca attctctaga gctcgctgat cagcctcgac tgtgccttct agttgccagc 6420

catctgttgt ttgcccctcc cccgtgcctt ccttgaccct ggaaggtgcc actcccactg 6480

tcctttccta ataaaatgag gaaattgcat cgcattgtct gagtaggtgt cattctattc 6540

tgggggggtgg ggtggggcag gacagcaagg gggaggattg ggaagacaat agcaggcatg 6600

ctggggatgc ggtgggctct atggcttctg aggaaattgg gcgtggctta agggtgggaa 6660

agaatatata aggtgggggt cttatgtagt tttgtatctg ttttgcagca gccgccgccg 6720

ccatgagcac caactcgttt gatggaagca ttgtgagctc atatttgaca acgcgcatgc 6780

ccccatgggc cggggtgcgt cagaatgtga tgggctccag cattgatggt cgccccgtcc 6840

tgcccgcaaa ctctactacc ttgacctacg agaccgtgtc tggaacgccg ttggagactg 6900

cagcctccgc cgccgcttca gccgctgcag ccaccgcccg cgggattgtg actgactttg 6960

ctttcctgag cccgcttgca agcagtgcag cttcccgttc atccgcccgc gatgacaagt 7020

tgacggctct tttggcacaa ttggattctt tgacccggga acttaatgtc gtttctcagc 7080

agctgttgga tctgcgccag caggtttctg ccctgaaggc ttcctcccct cccaatgcgg 7140

tttaaaacat aaataaaaaa ccagactctg tttggatttg gatcaagcaa gtgtcttgct 7200

gtctttattt aggggttttg cgcgcgcggt aggcccggga ccagcggtct cggtcgttga 7260

gggtcctgtg tatttttttcc aggacgtggt aaaggtgact ctggatgttc agatacatgg 7320

gcataagccc gtctctgggg tggaggtagc accactgcag agcttcatgc tgcggggtgg 7380

tgttgtagat gatccagtcg tagcaggagc gctgggcgtg gtgcctaaaa atgtctttca 7440

gtagcaagct gattgccagg ggcaggccct tggtgtaagt gtttacaaag cggttaagct 7500

gggatgggtg catacgtggg gatatgagat gcatcttgga ctgtattttt aggttggcta 7560

tgttcccagc catatccctc cggggattca tgttgtgcag aaccaccagc acagtgtatc 7620

cggtgcactt gggaaatttg tcatgtagct tagaaggaaa tgcgtggaag aacttggaga 7680

cgcccttgtg acctccaaga ttttccatgc attcgtccat aatgatggca atgggcccac 7740

gggcggcggc ctgggcgaag atatttctgg gatcactaac gtcatagttg tgttccagga 7800

tgagatcgtc ataggccatt tttacaaagc gcgggcggag ggtgccagac tgcggtataa 7860

tggttccatc cggcccaggg gcgtagttac cctcacagat ttgcatttcc cacgctttga 7920

gttcagatgg ggggatcatg tctacctgcg gggcgatgaa gaaaacggtt tccggggtag 7980

gggagatcag ctgggaagaa agcaggttcc tgagcagctg cgacttaccg cagccggtgg 8040

gcccgtaaat cacacctatt accggctgca actggtagtt aagagagctg cagctgccgt 8100

catccctgag cagggggggcc acttcgttaa gcatgtccct gactcgcatg ttttccctga 8160

ccaaatccgc cagaaggcgc tcgccgccca gcgatagcag ttcttgcaag gaagcaaagt 8220

ttttcaacgg tttgagaccg tccgccgtag gcatgctttt gagcgtttga ccaagcagtt 8280

ccaggcggtc ccacagctcg gtcacctgct ctacggcatc tcgatccagc atatctcctc 8340

gtttcgcggg ttggggcggc tttcgctgta cggcagtagt cggtgctcgt ccagacgggc 8400

cagggtcatg tctttccacg ggcgcagggt cctcgtcagc gtagtctggg tcacggtgaa 8460

ggggtgcgct ccgggctgcg cgctggccag ggtgcgcttg aggctggtcc tgctggtgct 8520

gaagcgctgc cggtcttcgc cctgcgcgtc ggccaggtag catttgacca tggtgtcata 8580

gtccagcccc tccgcggcgt ggcccttggc gcgcagcttg cccttggagg aggcgccgca 8640

cgaggggcag tgcagacttt tgagggcgta gagcttgggc gcgagaaata ccgattccgg 8700

ggagtaggca tccgcgccgc aggccccgca gacggtctcg cattccacga gccaggtgag 8760

ctctggccgt tcggggtcaa aaaccaggtt tcccccatgc tttttgatgc gtttcttacc 8820

tctggtttcc atgagccggt gtccacgctc ggtgacgaaa aggctgtccg tgtccccgta 8880

tacagacttg agaggcctgt cctcgagcgg tgttccgcgg tcctcctcgt atagaaactc 8940

ggaccactct gagacaaagg ctcgcgtcca ggccagcacg aaggaggcta agtgggaggg 9000

gtagcggtcg ttgtccacta gggggtccac tcgctccagg gtgtgaagac acatgtcgcc 9060

ctcttcggca tcaaggaagg tgattggttt gtaggtgtag gccacgtgac cgggtgttcc 9120

tgaaggggggg ctataaaagg gggtgggggc gcgttcgtcc tcactctctt ccgcatcgct 9180

gtctgcgagg gccagctgtt ggggtgagta ctccctctga aaagcgggca tgacttctgc 9240

gctaagattg tcagtttcca aaaacgagga ggatttgata ttcacctggc ccgcggtgat 9300

gcctttgagg gtggccgcat ccatctggtc agaaaagaca atcttttttgt tgtcaagctt 9360

ggtggcaaac gacccgtaga gggcgttgga cagcaacttg gcgatggagc gcagggtttg 9420

gtttttgtcg cgatcggcgc gctccttggc cgcgatgttt agctgcacgt attcgcgcgc 9480

aacgcaccgc cattcgggaa agacggtggt gcgctcgtcg ggcaccaggt gcacgcgcca 9540

accgcggttg tgcagggtga caaggtcaac gctggtggct acctctccgc gtaggcgctc 9600

gttggtccag cagaggcggc cgcccttgcg cgagcagaat ggcggtaggg ggtctagctg 9660

cgtctcgtcc ggggggtctg cgtccacggt aaagaccccg ggcagcaggc gcgcgtcgaa 9720

gtagtctatc ttgcatcctt gcaagtctag cgcctgctgc catgcgcggg cggcaagcgc 9780

gcgctcgtat gggttgagtg ggggacccca tggcatgggg tgggtgagcg cggaggcgta 9840

catgccgcaa atgtcgtaaa cgtagagggg ctctctgagt attccaagat atgtagggta 9900

gcatcttcca ccgcggatgc tggcgcgcac gtaatcgtat agttcgtgcg agggagcgag 9960

gaggtcggga ccgaggttgc tacgggcggg ctgctctgct cggaagacta tctgcctgaa 10020

gatggcatgt gagttggatg atatggttgg acgctggaag acgttgaagc tggcgtctgt 10080

gagacctacc gcgtcacgca cgaaggaggc gtaggagtcg cgcagcttgt tgaccagctc 10140

ggcggtgacc tgcacgtcta gggcgcagta gtccagggtt tccttgatga tgtcatactt 10200

atcctgtccc ttttttttcc acagctcgcg gttgaggaca aactcttcgc ggtctttcca 10260

gtactcttgg atcggaaacc cgtcggcctc cgaacggtaa gagcctagca tgtagaactg 10320

gttgacggcc tggtaggcgc agcatccctt ttctacgggt agcgcgtatg cctgcgcggc 10380

cttccggagc gaggtgtggg tgagcgcaaa ggtgtccctg accatgactt tgaggtactg 10440

gtatttgaag tcagtgtcgt cgcatccgcc ctgctcccag agcaaaaagt ccgtgcgctt 10500

tttggaacgc ggatttggca gggcgaaggt gacatcgttg aagagtatct ttcccgcgcg 10560

aggcataaag ttgcgtgtga tgcggaaggg tcccggcacc tcggaacggt tgttaattac 10620

ctgggcggcg agcacgatct cgtcaaagcc gttgatgttg tggcccacaa tgtaaagttc 10680

caagaagcgc gggatgccct tgatggaagg caatttttta agttcctcgt aggtgagctc 10740

ttcaggggag ctgagcccgt gctctgaaag ggcccagtct gcaagatgag ggttggaagc 10800

gacgaatgag ctccacaggt cacgggccat tagcatttgc aggtggtcgc gaaaggtcct 10860

aaactggcga cctatggcca ttttttctgg ggtgatgcag tagaaggtaa gcgggtcttg 10920

ttcccagcgg tcccatccaa ggttcgcggc taggtctcgc gcggcagtca ctagaggctc 10980

atctccgccg aacttcatga ccagcatgaa gggcacgagc tgcttcccaa aggcccccat 11040

ccaagtatag gtctctacat cgtaggtgac aaagagacgc tcggtgcgag gatgcgagcc 11100

gatcgggaag aactggatct cccgccacca attggaggag tggctattga tgtggtgaaa 11160

gtagaagtcc ctgcgacggg ccgaacactc gtgctggctt ttgtaaaaac gtgcgcagta 11220

ctggcagcgg tgcacgggct gtacatcctg cacgaggttg acctgacgac cgcgcacaag 11280

gaagcagagt gggaatttga gcccctcgcc tggcgggttt ggctggtggt cttctacttc 11340

ggctgcttgt ccttgaccgt ctggctgctc gaggggagtt acggtggatc ggaccaccac 11400

gccgcgcgag cccaaagtcc agatgtccgc gcgcggcggt cggagcttga tgacaacatc 11460

gcgcagatgg gagctgtcca tggtctggag ctcccgcggc gtcaggtcag gcgggagctc 11520

ctgcaggttt acctcgcata gacgggtcag ggcgcgggct agatccaggt gatacctaat 11580

ttccaggggc tggttggtgg cggcgtcgat ggcttgcaag aggccgcatc cccgcggcgc 11640

gactacggta ccgcgcggcg ggcggtgggc cgcgggggtg tccttggatg atgcatctaa 11700

aagcggtgac gcgggcgagc ccccggaggt agggggggct ccggacccgc cgggagaggg 11760

ggcaggggca cgtcggcgcc gcgcgcgggc aggagctggt gctgcgcgcg taggttgctg 11820

gcgaacgcga cgacgcggcg gttgatctcc tgaatctggc gcctctgcgt gaagacgacg 11880

ggcccggtga gcttgaacct gaaagagagt tcgacagaat caatttcggt gtcgttgacg 11940

gcggcctggc gcaaaatctc ctgcacgtct cctgagttgt cttgataggc gatctcggcc 12000

atgaactgct cgatctcttc ctcctggaga tctccgcgtc cggctcgctc cacggtggcg 12060

gcgaggtcgt tggaaatgcg ggccatgagc tgcgagaagg cgttgaggcc tccctcgttc 12120

cagacgcggc tgtagaccac gccccccttcg gcatcgcggg cgcgcatgac cacctgcgcg 12180

agattgagct ccacgtgccg ggcgaagacg gcgtagtttc gcaggcgctg aaagaggtag 12240

ttgagggtgg tggcggtgtg ttctgccacg aagaagtaca taacccagcg tcgcaacgtg 12300

gattcgttga tatcccccaa ggcctcaagg cgctccatgg cctcgtagaa gtccacggcg 12360

aagttgaaaa actgggagtt gcgcgccgac acggttaact cctcctccag aagacggatg 12420

agctcggcga cagtgtcgcg cacctcgcgc tcaaaggcta caggggcctc ttcttcttct 12480

tcaatctcct cttccataag ggcctcccct tcttcttctt ctggcggcgg tgggggaggg 12540

gggacacggc ggcgacgacg gcgcaccggg aggcggtcga caaagcgctc gatcatctcc 12600

ccgcggcgac ggcgcatggt ctcggtgacg gcgcggccgt tctcgcgggg gcgcagttgg 12660

aagacgccgc ccgtcatgtc ccggttatgg gttggcgggg ggctgccatg cggcagggat 12720

acggcgctaa cgatgcatct caacaattgt tgtgtaggta ctccgccgcc gagggacctg 12780

agcgagtccg catcgaccgg atcggaaaac ctctcgagaa aggcgtctaa ccagtcacag 12840

tcgcaaggta ggctgagcac cgtggcgggc ggcagcgggc ggcggtcggg gttgtttctg 12900

gcggaggtgc tgctgatgat gtaattaaag taggcggtct tgagacggcg gatggtcgac 12960

agaagcacca tgtccttggg tccggcctgc tgaatgcgca ggcggtcggc catgccccag 13020

gcttcgtttt gacatcggcg caggtctttg tagtagtctt gcatgagcct ttctaccggc 13080

acttcttctt ctccttcctc ttgtcctgca tctcttgcat ctatcgctgc ggcggcggcg 13140

gagtttggcc gtaggtggcg ccctcttcct cccatgcgtg tgaccccgaa gcccctcatc 13200

ggctgaagca gggctaggtc ggcgacaacg cgctcggcta atatggcctg ctgcacctgc 13260

gtgagggtag actggaagtc atccatgtcc acaaagcggt ggtatgcgcc cgtgttgatg 13320

gtgtaagtgc agttggccat aacggaccag ttaacggtct ggtgacccgg ctgcgagagc 13380

tcggtgtacc tgagacgcga gtaagccctc gagtcaaata cgtagtcgtt gcaagtccgc 13440

accaggtact ggtatcccac caaaaagtgc ggcggcggct ggcggtagag gggccagcgt 13500

agggtggccg gggctccggg ggcgagatct tccaacataa ggcgatgata tccgtagatg 13560

tacctggaca tccaggtgat gccggcggcg gtggtggagg cgcgcggaaa gtcgcggacg 13620

cggttccaga tgttgcgcag cggcaaaaag tgctccatgg tcgggacgct ctggccggtc 13680

aggcgcgcgc aatcgttgac gctctagcgt gcaaaaggag agcctgtaag cgggcactct 13740

tccgtggtct ggtggataaa ttcgcaaggg tatcatggcg gacgaccggg gttcgagccc 13800

cgtatccggc cgtccgccgt gatccatgcg gttaccgccc gcgtgtcgaa cccaggtgtg 13860

cgacgtcaga caacggggga gtgctccttt tggcttcctt ccaggcgcgg cggctgctgc 13920

gctagctttt ttggccactg gccgcgcgca gcgtaagcgg ttaggctgga aagcgaaagc 13980

attaagtggc tcgctccctg tagccggagg gttattttcc aagggttgag tcgcgggacc 14040

cccggttcga gtctcggacc ggccggactg cggcgaacgg gggtttgcct ccccgtcatg 14100

caagaccccg cttgcaaatt cctccggaaa cagggacgag ccccttttttt gcttttccca 14160

gatgcatccg gtgctgcggc agatgcgccc ccctcctcag cagcggcaag agcaagagca 14220

gcggcagaca tgcagggcac cctcccctcc tcctaccgcg tcaggagggg cgacatccgc 14280

ggttgacgcg gcagcagatg gtgattacga acccccgcgg cgccgggccc ggcactacct 14340

ggacttggag gagggcgagg gcctggcgcg gctaggagcg ccctctcctg agcggcaccc 14400

aagggtgcag ctgaagcgtg atacgcgtga ggcgtacgtg ccgcggcaga acctgtttcg 14460

cgaccgcgag ggagaggagc ccgaggagat gcgggatcga aagttccacg cagggcgcga 14520

gctgcggcat ggcctgaatc gcgagcggtt gctgcgcgag gaggactttg agcccgacgc 14580

gcgaaccggg attagtcccg cgcgcgcaca cgtggcggcc gccgacctgg taaccgcata 14640

cgagcagacg gtgaaccagg agattaactt tcaaaaaagc tttaacaacc acgtgcgtac 14700

gcttgtggcg cgcgaggagg tggctatagg actgatgcat ctgtgggact ttgtaagcgc 14760

gctggagcaa aacccaaata gcaagccgct catggcgcag ctgttcctta tagtgcagca 14820

cagcagggac aacgaggcat tcagggatgc gctgctaaac atagtagagc ccgagggccg 14880

ctggctgctc gatttgataa acatcctgca gagcatagtg gtgcaggagc gcagcttgag 14940

cctggctgac aaggtggccg ccatcaacta ttccatgctt agcctgggca agttttacgc 15000

ccgcaagata taccataccc cttacgttcc catagacaag gaggtaaaga tcgaggggtt 15060

ctacatgcgc atggcgctga aggtgcttac cttgagcgac gacctgggcg tttatcgcaa 15120

cgagcgcatc cacaaggccg tgagcgtgag ccggcggcgc gagctcagcg accgcgagct 15180

gatgcacagc ctgcaaaggg ccctggctgg cacgggcagc ggcgatagag aggccgagtc 15240

ctactttgac gcgggcgctg acctgcgctg ggccccaagc cgacgcgccc tggaggcagc 15300

tggggccgga cctgggctgg cggtggcacc cgcgcgcgct ggcaacgtcg gcggcgtgga 15360

ggaatatgac gaggacgatg agtacgagcc agaggacggc gagtactaag cggtgatgtt 15420

tctgatcaga tgatgcaaga cgcaacggac ccggcggtgc gggcggcgct gcagagccag 15480

ccgtccggcc ttaactccac ggacgactgg cgccaggtca tggaccgcat catgtcgctg 15540

actgcgcgca atcctgacgc gttccggcag cagccgcagg ccaaccggct ctccgcaatt 15600

ctggaagcgg tggtcccggc gcgcgcaaac cccacgcacg agaaggtgct ggcgatcgta 15660

aacgcgctgg ccgaaaacag ggccatccgg cccgacgagg ccggcctggt ctacgacgcg 15720

ctgcttcagc gcgtggctcg ttacaacagc ggcaacgtgc agaccaacct ggaccggctg 15780

gtgggggatg tgcgcgaggc cgtggcgcag cgtgagcgcg cgcagcagca gggcaacctg 15840

ggctccatgg ttgcactaaa cgccttcctg agtacacagc ccgccaacgt gccgcgggga 15900

caggaggact acaccaactt tgtgagcgca ctgcggctaa tggtgactga gacaccgcaa 15960

agtgaggtgt accagtctgg gccagactat tttttccaga ccagtagaca aggcctgcag 16020

accgtaaacc tgagccaggc tttcaaaaac ttgcaggggc tgtgggggggt gcgggctccc 16080

acaggcgacc gcgcgaccgt gtctagcttg ctgacgccca actcgcgcct gttgctgctg 16140

ctaatagcgc ccttcacgga cagtggcagc gtgtcccggg acacatacct aggtcacttg 16200

ctgacactgt accgcgaggc cataggtcag gcgcatgtgg acgagcatac tttccaggag 16260

attacaagtg tcagccgcgc gctggggcag gaggacacgg gcagcctgga ggcaacccta 16320

aactacctgc tgaccaaccg gcggcagaag atcccctcgt tgcacagttt aaacagcgag 16380

gaggagcgca ttttgcgcta cgtgcagcag agcgtgagcc ttaacctgat gcgcgacggg 16440

gtaacgccca gcgtggcgct ggacatgacc gcgcgcaaca tggaaccggg catgtatgcc 16500

tcaaaccggc cgtttatcaa ccgcctaatg gactacttgc atcgcgcggc cgccgtgaac 16560

cccgagtatt tcaccaatgc catcttgaac ccgcactggc taccgccccc tggtttctac 16620

accgggggat tcgaggtgcc cgagggtaac gatggattcc tctgggacga catagacgac 16680

agcgtgtttt ccccgcaacc gcagaccctg ctagagttgc aacagcgcga gcaggcagag 16740

gcggcgctgc gaaaggaaag cttccgcagg ccaagcagct tgtccgatct aggcgctgcg 16800

gccccgcggt cagatgctag tagcccattt ccaagcttga tagggtctct taccagcact 16860

cgcaccaccc gcccgcgcct gctgggcgag gaggagtacc taaacaactc gctgctgcag 16920

ccgcagcgcg aaaaaaacct gcctccggca tttcccaaca acgggataga gagcctagtg 16980

gacaagatga gtagatggaa gacgtacgcg caggagcaca gggacgtgcc aggcccgcgc 17040

ccgcccaccc gtcgtcaaag gcacgaccgt cagcggggtc tggtgtggga ggacgatgac 17100

tcggcagacg acagcagcgt cctggatttg ggagggagtg gcaacccgtt tgcgcacctt 17160

cgccccaggc tggggagaat gttttaaaaa aaaaaaagca tgatgcaaaa taaaaaactc 17220

accaaggcca tggcaccgag cgttggtttt cttgtattcc ccttagtatg cggcgcgcgg 17280

cgatgtatga ggaaggtcct cctccctcct acgagagtgt ggtgagcgcg gcgccagtgg 17340

cggcggcgct gggttctccc ttcgatgctc ccctggaccc gccgtttgtg cctccgcggt 17400

acctgcggcc taccgggggg agaaacagca tccgttactc tgagttggca cccctattcg 17460

acaccacccg tgtgtacctg gtggacaaca agtcaacgga tgtggcatcc ctgaactacc 17520

agaacgacca cagcaacttt ctgaccacgg tcattcaaaa caatgactac agcccggggg 17580

aggcaagcac acagaccatc aatcttgacg accggtcgca ctggggcggc gacctgaaaa 17640

ccatcctgca taccaacatg ccaaatgtga acgagttcat gtttaccaat aagtttaagg 17700

cgcgggtgat ggtgtcgcgc ttgcctacta aggacaatca ggtggagctg aaatacgagt 17760

gggtggagtt cacgctgccc gagggcaact actccgagac catgaccata gaccttatga 17820

acaacgcgat cgtggagcac tacttgaaag tgggcagaca gaacggggtt ctggaaagcg 17880

acatcggggt aaagtttgac acccgcaact tcagactggg gtttgacccc gtcactggtc 17940

ttgtcatgcc tggggtatat acaaacgaag ccttccatcc agacatcatt ttgctgccag 18000

gatgcggggt ggacttcacc cacagccgcc tgagcaactt gttgggcatc cgcaagcggc 18060

aacccttcca ggagggcttt aggatcacct acgatgatct ggagggtggt aacattcccg 18120

cactgttgga tgtggacgcc taccaggcga gcttgaaaga tgacaccgaa cagggcgggg 18180

gtggcgcagg cggcagcaac agcagtggca gcggcgcgga agagaactcc aacgcggcag 18240

ccgcggcaat gcagccggtg gaggacatga acgatcatgc cattcgcggc gacacctttg 18300

ccacacgggc tgaggagaag cgcgctgagg ccgaagcagc ggccgaagct gccgcccccg 18360

ctgcgcaacc cgaggtcgag aagcctcaga agaaaccggt gatcaaaccc ctgacagagg 18420

acagcaagaa acgcagttac aacctaataa gcaatgacag caccttcacc cagtaccgca 18480

gctggtacct tgcatacaac tacggcgacc ctcagaccgg aatccgctca tggaccctgc 18540

tttgcactcc tgacgtaacc tgcggctcgg agcaggtcta ctggtcgttg ccagacatga 18600

tgcaagaccc cgtgaccttc cgctccacgc gccagatcag caactttccg gtggtgggcg 18660

ccgagctgtt gcccgtgcac tccaagagct tctacaacga ccaggccgtc tactcccaac 18720

tcatccgcca gtttacctct ctgacccacg tgttcaatcg ctttcccgag aaccagattt 18780

tggcgcgccc gccagccccc accatcacca ccgtcagtga aaacgttcct gctctcacag 18840

atcacgggac gctaccgctg cgcaacagca tcggaggagt ccagcgagtg accattactg 18900

acgccagacg ccgcacctgc ccctacgttt acaaggccct gggcatagtc tcgccgcgcg 18960

tcctatcgag ccgcactttt tgagcaagca tgtccatcct tatatcgccc agcaataaca 19020

caggctgggg cctgcgcttc ccaagcaaga tgtttggcgg ggccaagaag cgctccgacc 19080

aacacccagt gcgcgtgcgc gggcactacc gcgcgccctg gggcgcgcac aaacgcggcc 19140

gcactgggcg caccaccgtc gatgacgcca tcgacgcggt ggtggaggag gcgcgcaact 19200

acacgcccac gccgccacca gtgtccacag tggacgcggc cattcagacc gtggtgcgcg 19260

gagcccggcg ctatgctaaa atgaagagac ggcggaggcg cgtagcacgt cgccaccgcc 19320

gccgacccgg cactgccgcc caacgcgcgg cggcggccct gcttaaccgc gcacgtcgca 19380

ccggccgacg ggcggccatg cgggccgctc gaaggctggc cgcgggtatt gtcactgtgc 19440

cccccaggtc caggcgacga gcggccgccg cagcagccgc ggccattagt gctatgactc 19500

agggtcgcag gggcaacgtg tattgggtgc gcgactcggt tagcggcctg cgcgtgcccg 19560

tgcgcacccg ccccccgcgc aactagattg caagaaaaaa ctacttagac tcgtactgtt 19620

gtatgtatcc agcggcggcg gcgcgcaacg aagctatgtc caagcgcaaa atcaaagaag 19680

agatgctcca ggtcatcgcg ccggagatct atggcccccc gaagaaggaa gagcaggatt 19740

acaagccccg aaagctaaag cgggtcaaaa agaaaaagaa agatgatgat gatgaacttg 19800

acgacgaggt ggaactgctg cacgctaccg cgcccaggcg acgggtacag tggaaaggtc 19860

gacgcgtaaa acgtgttttg cgacccggca ccaccgtagt ctttacgccc ggtgagcgct 19920

ccacccgcac ctacaagcgc gtgtatgatg aggtgtacgg cgacgaggac ctgcttgagc 19980

aggccaacga gcgcctcggg gagtttgcct acggaaagcg gcataaggac atgctggcgt 20040

tgccgctgga cgagggcaac ccaacaccta gcctaaagcc cgtaacactg cagcaggtgc 20100

tgcccgcgct tgcaccgtcc gaagaaaagc gcggcctaaa gcgcgagtct ggtgacttgg 20160

cacccaccgt gcagctgatg gtacccaagc gccagcgact ggaagatgtc ttggaaaaaa 20220

tgaccgtgga acctgggctg gagcccgagg tccgcgtgcg gccaatcaag caggtggcgc 20280

cgggactggg cgtgcagacc gtggacgttc agatacccac taccagtagc accagtattg 20340

ccaccgccac agagggcatg gagacacaaa cgtccccggt tgcctcagcg gtggcggatg 20400

ccgcggtgca ggcggtcgct gcggccgcgt ccaagacctc tacggaggtg caaacggacc 20460

cgtggatgtt tcgcgtttca gccccccggc gcccgcgccg ttcgaggaag tacggcgccg 20520

ccagcgcgct actgcccgaa tatgccctac atccttccat tgcgcctacc cccggctatc 20580

gtggctacac ctaccgcccc agaagacgag caactacccg acgccgaacc accactggaa 20640

cccgccgccg ccgtcgccgt cgccagcccg tgctggcccc gatttccgtg cgcagggtgg 20700

ctcgcgaagg aggcaggacc ctggtgctgc caacagcgcg ctaccacccc agcatcgttt 20760

aaaagccggt ctttgtggtt cttgcagata tggccctcac ctgccgcctc cgtttcccgg 20820

tgccgggatt ccgaggaaga atgcaccgta ggaggggcat ggccggccac ggcctgacgg 20880

gcggcatgcg tcgtgcgcac caccggcggc ggcgcgcgtc gcaccgtcgc atgcgcggcg 20940

gtatcctgcc cctccttatt ccactgatcg ccgcggcgat tggcgccgtg cccggaattg 21000

catccgtggc cttgcaggcg cagagacact gattaaaaac aagttgcatg tggaaaaatc 21060

aaaataaaaa gtctggactc tcacgctcgc ttggtcctgt aactattttg tagaatggaa 21120

gacatcaact ttgcgtctct ggccccgcga cacggctcgc gcccgttcat gggaaactgg 21180

caagatatcg gcaccagcaa tatgagcggt ggcgccttca gctggggctc gctgtggagc 21240

ggcattaaaa atttcggttc caccgttaag aactatggca gcaaggcctg gaacagcagc 21300

acaggccaga tgctgaggga taagttgaaa gagcaaaatt tccaacaaaa ggtggtagat 21360

ggcctggcct ctggcattag cggggtggtg gacctggcca accaggcagt gcaaaataag 21420

attaacagta agcttgatcc ccgccctccc gtagaggagc ctccaccggc cgtggagaca 21480

gtgtctccag aggggcgtgg cgaaaagcgt ccgcgccccg acagggaaga aactctggtg 21540

acgcaaatag acgagcctcc ctcgtacgag gaggcactaa agcaaggcct gcccaccacc 21600

cgtcccatcg cgcccatggc taccggagtg ctgggccagc acacacccgt aacgctggac 21660

ctgcctcccc ccgccgacac ccagcagaaa cctgtgctgc caggcccgac cgccgttgtt 21720

gtaacccgtc ctagccgcgc gtccctgcgc cgcgccgcca gcggtccgcg atcgttgcgg 21780

cccgtagcca gtggcaactg gcaaagcaca ctgaacagca tcgtgggtct gggggtgcaa 21840

tccctgaagc gccgacgatg cttctgatag ctaacgtgtc gtatgtgtgt catgtatgcg 21900

tccatgtcgc cgccagagga gctgctgagc cgccgcgcgc ccgctttcca agatggctac 21960

cccttcgatg atgccgcagt ggtcttacat gcacatctcg ggccaggacg cctcggagta 22020

cctgagcccc gggctggtgc agtttgcccg cgccaccgag acgtacttca gcctgaataa 22080

caagtttaga aaccccacgg tggcgcctac gcacgacgtg accacagacc ggtcccagcg 22140

tttgacgctg cggttcatcc ctgtggaccg tgaggatact gcgtactcgt acaaggcgcg 22200

gttcacccta gctgtgggtg ataaccgtgt gctggacatg gcttccacgt actttgacat 22260

ccgcggcgtg ctggacaggg gccctacttt taagccctac tctggcactg cctacaacgc 22320

cctggctccc aagggtgccc caaatccttg cgaatgggat gaagctgcta ctgctcttga 22380

aataaaccta gaagaagagg acgatgacaa cgaagacgaa gtagacgagc aagctgagca 22440

gcaaaaaact cacgtatttg ggcaggcgcc ttattctggt ataaatatta caaaggaggg 22500

tattcaaata ggtgtcgaag gtcaaacacc taaatatgcc gataaaacat ttcaacctga 22560

acctcaaata ggagaatctc agtggtacga aacagaaatt aatcatgcag ctgggagagt 22620

cctaaaaaag actaccccaa tgaaaccatg ttacggttca tatgcaaaac ccacaaatga 22680

aaatggaggg caaggcattc ttgtaaagca acaaaatgga aagctagaaa gtcaagtgga 22740

aatgcaattt ttctcaacta ctgaggcagc cgcaggcaat ggtgataact tgactcctaa 22800

agtggtattg tacagtgaag atgtagatat agaaacccca gacactcata tttcttacat 22860

gcccactatt aaggaaggta actcacgaga actaatgggc caacaatcta tgcccaacag 22920

gcctaattac attgctttta gggacaattt tattggtcta atgtattaca acagcacggg 22980

taatatgggt gttctggcgg gccaagcatc gcagttgaat gctgttgtag atttgcaaga 23040

cagaaacaca gagctttcat accagctttt gcttgattcc attggtgata gaaccaggta 23100

cttttctatg tggaatcagg ctgttgacag ctatgatcca gatgttagaa ttattgaaaa 23160

tcatggaact gaagatgaac ttccaaatta ctgctttcca ctgggaggtg tgattaatac 23220

agagactctt accaaggtaa aacctaaaac aggtcaggaa aatggatggg aaaaagatgc 23280

tacagaattt tcagataaaa atgaaataag agttggaaat aattttgcca tggaaatcaa 23340

tctaaatgcc aacctgtgga gaaatttcct gtactccaac atagcgctgt atttgcccga 23400

caagctaaag tacagtcctt ccaacgtaaa aatttctgat aacccaaaca cctacgacta 23460

catgaacaag cgagtggtgg ctcccgggct agtggactgc tacattaacc ttggagcacg 23520

ctggtccctt gactatatgg acaacgtcaa cccatttaac caccaccgca atgctggcct 23580

gcgctaccgc tcaatgttgc tgggcaatgg tcgctatgtg cccttccaca tccaggtgcc 23640

tcagaagttc tttgccatta aaaacctcct tctcctgccg ggctcataca cctacgagtg 23700

gaacttcagg aaggatgtta acatggttct gcagagctcc ctaggaaatg acctaagggt 23760

tgacggagcc agcattaagt ttgatagcat ttgcctttac gccaccttct tccccatggc 23820

ccacaacacc gcctccacgc ttgaggccat gcttagaaac gacaccaacg accagtcctt 23880

taacgactat ctctccgccg ccaacatgct ctaccctata cccgccaacg ctaccaacgt 23940

gcccatatcc atcccctccc gcaactgggc ggctttccgc ggctgggcct tcacgcgcct 24000

taagactaag gaaaccccat cactgggctc gggctacgac ccttattaca cctactctgg 24060

ctctataccc tacctagatg gaacctttta cctcaaccac acctttaaga aggtggccat 24120

tacctttgac tcttctgtca gctggcctgg caatgaccgc ctgcttaccc ccaacgagtt 24180

tgaaattaag cgctcagttg acggggaggg ttacaacgtt gcccagtgta acatgaccaa 24240

agactggttc ctggtacaaa tgctagctaa ctataacatt ggctaccagg gcttctatat 24300

cccagagagc tacaaggacc gcatgtactc cttctttaga aacttccagc ccatgagccg 24360

tcaggtggtg gatgatacta aatacaagga ctaccaacag gtgggcatcc tacaccaaca 24420

caacaactct ggatttgttg gctaccttgc ccccaccatg cgcgaaggac aggcctaccc 24480

tgctaacttc ccctatccgc ttataggcaa gaccgcagtt gacagcatta cccagaaaaa 24540

gtttctttgc gatcgcaccc tttggcgcat cccattctcc agtaacttta tgtccatggg 24600

cgcactcaca gacctgggcc aaaaccttct ctacgccaac tccgcccacg cgctagacat 24660

gacttttgag gtggatccca tggacgagcc cacccttctt tatgttttgt ttgaagtctt 24720

tgacgtggtc cgtgtgcacc agccgcaccg cggcgtcatc gaaaccgtgt acctgcgcac 24780

gcccttctcg gccggcaacg ccacaacata aagaagcaag caacatcaac aacagctgcc 24840

gccatgggct ccagtgagca ggaactgaaa gccattgtca aagatcttgg ttgtgggcca 24900

tatttttgg gcacctatga caagcgcttt ccaggctttg tttctccaca caagctcgcc 24960

tgcgccatag tcaatacggc cggtcgcgag actgggggcg tacactggat ggcctttgcc 25020

tggaacccgc actcaaaaac atgctacctc tttgagccct ttggcttttc tgaccagcga 25080

ctcaagcagg tttaccagtt tgagtacgag tcactcctgc gccgtagcgc cattgcttct 25140

tcccccgacc gctgtataac gctggaaaag tccacccaaa gcgtacaggg gcccaactcg 25200

gccgcctgtg gactattctg ctgcatgttt ctccacgcct ttgccaactg gccccaaact 25260

cccatggatc acaaccccac catgaacctt attaccgggg tacccaactc catgctcaac 25320

agtccccagg tacagcccac cctgcgtcgc aaccaggaac agctctacag cttcctggag 25380

cgccactcgc cctacttccg cagccacagt gcgcagatta ggagcgccac ttctttttgt 25440

cacttgaaaa acatgtaaaa ataatgtact agagacactt tcaataaagg caaatgcttt 25500

tatttgtaca ctctcgggtg attatttacc cccacccttg ccgtctgcgc cgtttaaaaa 25560

tcaaaggggt tctgccgcgc atcgctatgc gccactggca gggacacgtt gcgatactgg 25620

tgtttagtgc tccacttaaa ctcaggcaca accatccgcg gcagctcggt gaagttttca 25680

ctccacaggc tgcgcaccat caccaacgcg tttagcaggt cgggcgccga tatcttgaag 25740

tcgcagttgg ggcctccgcc ctgcgcgcgc gagttgcgat acacagggtt gcagcactgg 25800

aacactatca gcgccgggtg gtgcacgctg gccagcacgc tcttgtcgga gatcagatcc 25860

gcgtccaggt cctccgcgtt gctcagggcg aacggagtca actttggtag ctgccttccc 25920

aaaaagggcg cgtgcccagg ctttgagttg cactcgcacc gtagtggcat caaaaggtga 25980

ccgtgcccgg tctgggcgtt aggatacagc gcctgcataa aagccttgat ctgcttaaaa 26040

gccacctgag cctttgcgcc ttcagagaag aacatgccgc aagacttgcc ggaaaactga 26100

ttggccggac aggccgcgtc gtgcacgcag caccttgcgt cggtgttgga gatctgcacc 26160

acatttcggc cccaccggtt cttcacgatc ttggccttgc tagactgctc cttcagcgcg 26220

cgctgcccgt tttcgctcgt cacatccatt tcaatcacgt gctccttatt tatcataatg 26280

cttccgtgta gacacttaag ctcgccttcg atctcagcgc agcggtgcag ccacaacgcg 26340

cagcccgtgg gctcgtgatg cttgtaggtc acctctgcaa acgactgcag gtacgcctgc 26400

aggaatcgcc ccatcatcgt cacaaaggtc ttgttgctgg tgaaggtcag ctgcaacccg 26460

cggtgctcct cgttcagcca ggtcttgcat acggccgcca gagcttccac ttggtcaggc 26520

agtagtttga agttcgcctt tagatcgtta tccacgtggt acttgtccat cagcgcgcgc 26580

gcagcctcca tgcccttctc ccacgcagac acgatcggca cactcagcgg gttcatcacc 26640

gtaatttcac tttccgcttc gctgggctct tcctcttcct cttgcgtccg cataccacgc 26700

gccactgggt cgtcttcatt cagccgccgc actgtgcgct tacctccttt gccatgcttg 26760

attagcaccg gtgggttgct gaaacccacc atttgtagcg ccacatcttc tctttcttcc 26820

tcgctgtcca cgattacctc tggtgatggc gggcgctcgg gcttgggaga agggcgcttc 26880

tttttcttct tgggcgcaat ggccaaatcc gccgccgagg tcgatggccg cgggctgggt 26940

gtgcgcggca ccagcgcgtc ttgtgatgag tcttcctcgt cctcggactc gatacgccgc 27000

ctcatccgct tttttggggg cgcccgggga ggcggcggcg acggggacgg ggacgacacg 27060

tcctccatgg ttgggggacg tcgcgccgca ccgcgtccgc gctcgggggt ggtttcgcgc 27120

tgctcctctt cccgactggc catttccttc tcctataggc agaaaaagat catggagtca 27180

gtcgagaaga aggacagcct aaccgccccc tctgagttcg ccaccaccgc ctccaccgat 27240

gccgccaacg cgcctaccac cttccccgtc gaggcacccc cgcttgagga ggaggaagtg 27300

attatcgagc aggacccagg ttttgtaagc gaagacgacg aggaccgctc agtaccaaca 27360

gaggataaaa agcaagacca ggacaacgca gaggcaaacg aggaacaagt cgggcggggg 27420

gacgaaaggc atggcgacta cctagatgtg ggagacgacg tgctgttgaa gcatctgcag 27480

cgccagtgcg ccattatctg cgacgcgttg caagagcgca gcgatgtgcc cctcgccata 27540

gcggatgtca gccttgccta cgaacgccac ctattctcac cgcgcgtacc ccccaaacgc 27600

caagaaaacg gcacatgcga gcccaacccg cgcctcaact tctaccccgt atttgccgtg 27660

ccagaggtgc ttgccaccta tcacatcttt ttccaaaact gcaagatacc cctatcctgc 27720

cgtgccaacc gcagccgagc ggacaagcag ctggccttgc ggcagggcgc tgtcatacct 27780

gatatcgcct cgctcaacga agtgccaaaa atctttgagg gtcttggacg cgacgagaag 27840

cgcgcggcaa acgctctgca acaggaaaac agcgaaaatg aaagtcactc tggagtgttg 27900

gtggaactcg agggtgacaa cgcgcgccta gccgtactaa aacgcagcat cgaggtcacc 27960

cactttgcct acccggcact taacctaccc cccaaggtca tgagcacagt catgagtgag 28020

ctgatcgtgc gccgtgcgca gcccctggag agggatgcaa atttgcaaga acaaacagag 28080

gagggcctac ccgcagttgg cgacgagcag ctagcgcgct ggcttcaaac gcgcgagcct 28140

gccgacttgg aggagcgacg caaactaatg atggccgcag tgctcgttac cgtggagctt 28200

gagtgcatgc agcggttctt tgctgacccg gagatgcagc gcaagctaga ggaaacattg 28260

cactacacct ttcgacaggg ctacgtacgc caggcctgca agatctccaa cgtggagctc 28320

tgcaacctgg tctcctacct tggaattttg cacgaaaacc gccttgggca aaacgtgctt 28380

cattccacgc tcaagggcga ggcgcgccgc gactacgtcc gcgactgcgt ttacttattt 28440

ctatgctaca cctggcagac ggccatgggc gtttggcagc agtgcttgga ggagtgcaac 28500

ctcaaggagc tgcagaaact gctaaagcaa aacttgaagg acctatggac ggccttcaac 28560

gagcgctccg tggccgcgca cctggcggac atcattttcc ccgaacgcct gcttaaaacc 28620

ctgcaacagg gtctgccaga cttcaccagt caaagcatgt tgcagaactt taggaacttt 28680

atcctagagc gctcaggaat cttgcccgcc acctgctgtg cacttcctag cgactttgtg 28740

cccattaagt accgcgaatg ccctccgccg ctttggggcc actgctacct tctgcagcta 28800

gccaactacc ttgcctacca ctctgacata atggaagacg tgagcggtga cggtctactg 28860

gagtgtcact gtcgctgcaa cctatgcacc ccgcaccgct ccctggtttg caattcgcag 28920

ctgcttaacg aaagtcaaat tatcggtacc tttgagctgc agggtccctc gcctgacgaa 28980

aagtccgcgg ctccggggtt gaaactcact ccggggctgt ggacgtcggc ttaccttcgc 29040

aaatttgtac ctgaggacta ccacgcccac gagattaggt tctacgaaga ccaatcccgc 29100

ccgcctaatg cggagcttac cgcctgcgtc attacccagg gccacattct tggccaattg 29160

caagccatca acaaagcccg ccaagagttt ctgctacgaa agggacgggg ggtttacttg 29220

gacccccagt ccggcgagga gctcaaccca atccccccgc cgccgcagcc ctatcagcag 29280

cagccgcggg cccttgcttc ccaggatggc acccaaaaag aagctgcagc tgccgccgcc 29340

acccacggac gaggaggaat actgggacag tcaggcagag gaggttttgg acgaggagga 29400

ggaggacatg atggaagact gggagagcct agacgaggaa gcttccgagg tcgaagaggt 29460

gtcagacgaa acaccgtcac cctcggtcgc attcccctcg ccggcgcccc agaaatcggc 29520

aaccggttcc agcatggcta caacctccgc tcctcaggcg ccgccggcac tgcccgttcg 29580

ccgacccaac cgtagatggg acaccactgg aaccagggcc ggtaagtcca agcagccgcc 29640

gccgttagcc caagagcaac aacagcgcca aggctaccgc tcatggcgcg ggcacaagaa 29700

cgccatagtt gcttgcttgc aagactgtgg gggcaacatc tccttcgccc gccgctttct 29760

tctctaccat cacggcgtgg ccttcccccg taacatcctg cattactacc gtcatctcta 29820

cagcccatac tgcaccggcg gcagcggcag caacagcagc ggccacacag aagcaaaggc 29880

gaccggatag caagactctg acaaagccca agaaatccac agcggcggca gcagcaggag 29940

gaggagcgct gcgtctggcg cccaacgaac ccgtatcgac ccgcgagctt agaaacagga 30000

tttttcccac tctgtatgct atatttcaac agagcagggg ccaagaacaa gagctgaaaa 30060

taaaaaacag gtctctgcga tccctcaccc gcagctgcct gtatcacaaa agcgaagatc 30120

agcttcggcg cacgctggaa gacgcggagg ctctcttcag taaatactgc gcgctgactc 30180

ttaaggacta gtttcgcgcc ctttctcaaa tttaagcgcg aaaactacgt catctccagc 30240

ggccacaccc ggcgccagca cctgttgtca gcgccattat gagcaaggaa attcccacgc 30300

cctacatgtg gagttaccag ccacaaatgg gacttgcggc tggagctgcc caagactact 30360

caacccgaat aaactacatg agcgcgggac cccacatgat atcccgggtc aacggaatac 30420

gcgcccaccg aaaccgaatt ctcctggaac aggcggctat taccaccaca cctcgtaata 30480

accttaatcc ccgtagttgg cccgctgccc tggtgtacca ggaaagtccc gctcccacca 30540

ctgtggtact tcccagagac gcccaggccg aagttcagat gactaactca ggggcgcagc 30600

ttgcgggcgg ctttcgtcac agggtgcggt cgcccgggca gggtataact cacctgacaa 30660

tcagagggcg aggtattcag ctcaacgacg agtcggtgag ctcctcgctt ggtctccgtc 30720

cggacgggac atttcagatc ggcggcgccg gccgctcttc attcacgcct cgtcaggcaa 30780

tcctaactct gcagacctcg tcctctgagc cgcgctctgg aggcattgga actctgcaat 30840

ttattgagga gtttgtgcca tcggtctact ttaacccctt ctcgggacct cccggccact 30900

atccggatca atttattcct aactttgacg cggtaaagga ctcggcggac ggctacgact 30960

gaatgttaag tggagaggca gagcaactgc gcctgaaaca cctggtccac tgtcgccgcc 31020

acaagtgctt tgcccgcgac tccggtgagt tttgctactt tgaattgccc gaggatcata 31080

tcgagggccc ggcgcacggc gtccggctta ccgcccaggg agagcttgcc cgtagcctga 31140

ttcgggagtt tacccagcgc cccctgctag ttgagcggga caggggaccc tgtgttctca 31200

ctgtgatttg caactgtcct aaccctggat tacatcaaga tcctctagtt aatgtcaggt 31260

cgcctaagtc gattaactag agtacccggg gatcttattc cctttaacta ataaaaaaaa 31320

ataataaagc atcacttact taaaatcagt tagcaaattt ctgtccagtt tattcagcag 31380

cacctccttg ccctcctccc agctctggta ttgcagcttc ctcctggctg caaactttct 31440

ccacaatcta aatggaatgt cagtttcctc ctgttcctgt ccatccgcac ccactatctt 31500

catgttgttg cagatgaagc gcgcaagacc gtctgaagat accttcaacc ccgtgtatcc 31560

atatgacacg gaaaccggtc ctccaactgt gccttttctt actcctccct ttgtatcccc 31620

caatgggttt caagagagtc cccctggggt actctctttg cgcctatccg aacctctagt 31680

tacctccaat ggcatgcttg cgctcaaaat gggcaacggc ctctctctgg acgaggccgg 31740

caaccttacc tcccaaaatg taaccactgt gagcccacct ctcaaaaaaa ccaagtcaaa 31800

cataaacctg gaaatatctg cacccctcac agttacctca gaagccctaa ctgtggctgc 31860

cgccgcacct ctaatggtcg cgggcaacac actcaccatg caatcacagg ccccgctaac 31920

cgtgcacgac tccaaactta gcattgccac ccaaggaccc ctcacagtgt cagaaggaaa 31980

gctagccctg caaacatcag gccccctcac caccaccgat agcagtaccc ttactatcac 32040

tgcctcaccc cctctaacta ctgccactgg tagcttgggc attgacttga aagagcccat 32100

ttatacacaa aatggaaaac taggactaaa gtacggggct cctttgcatg taacagacga 32160

cctaaacact ttgaccgtag caactggtcc aggtgtgact attaataata cttccttgca 32220

aactaaagtt actggagcct tgggttttga ttcacaaggc aatatgcaac ttaatgtagc 32280

aggaggacta aggattgatt ctcaaaacag acgccttata cttgatgtta gttatccgtt 32340

tgatgctcaa aaccaactaa atctaagact aggacagggc cctcttttta taaactcagc 32400

ccacaacttg gatattaact acaacaaagg cctttacttg tttacagctt caaacaattc 32460

caaaaagctt gaggttaacc taagcactgc caaggggttg atgtttgacg ctacagccat 32520

agccattaat gcaggagatg ggcttgaatt tggttcacct aatgcaccaa acacaaatcc 32580

cctcaaaaca aaaattggcc atggcctaga atttgattca aacaaggcta tggttcctaa 32640

actaggaact ggccttagtt ttgacagcac aggtgccatt acagtaggaa acaaaaataa 32700

tgataagcta actttgtgga ccggaataaa ccctccacct aactgtcaaa ttgtggaaaa 32760

cactaataca aatgatggca aacttacttt agtattagta aaaaatggag ggcttgttaa 32820

tggctacgtg tctctagttg gtgtatcaga cactgtgaac caaatgttca cacaaaagac 32880

agcaaacatc caattaagat tatattttga ctcttctgga aatctattaa ctgaggaatc 32940

agacttaaaa attccactta aaaataaatc ttctacagcg accagtgaaa ctgtagccag 33000

cagcaaagcc tttatgccaa gtactacagc ttatcccttc aacaccacta ctagggatag 33060

tgaaaactac attcatggaa tatgttacta catgactagt tatgatagaa gtctatttcc 33120

cttgaacatt tctataatgc taaacagccg tatgatttct tccaatgttg cctatgccat 33180

acaatttgaa tggaatctaa atgcaagtga atctccagaa agcaacatag ctacgctgac 33240

cacatccccc tttttctttt cttacattac agaagacgac aactaaagaa tcgtttgtgt 33300

tatgtttcaa cgtgtttatt tttcaattgc agaaaatttc aagtcatttt tcattcagta 33360

gtatagcccc accaccacat agcttataca gatcaccgta ccttaatcaa actcacagaa 33420

ccctagtatt caacctgcca cctccctccc aacacacaga gtacacagtc ctttctcccc 33480

ggctggcctt aaaaagcatc atatcatggg taacagacat attcttaggt gttatattcc 33540

acacggtttc ctgtcgagcc aaacgctcat cagtgatatt aataaactcc ccgggcagct 33600

cacttaagtt catgtcgctg tccagctgct gagccacagg ctgctgtcca acttgcggtt 33660

gcttaacggg cggcgaagga gaagtccacg ctcagtcata atcgtgcatc aggatagggc 33720

ggtggtgctg cagcagcgcg cgaataaact gctgccgccg ccgctccgtc ctgcaggaat 33780

acaacatggc agtggtctcc tcagcgatga ttcgcaccgc ccgcagcata aggcgccttg 33840

tcctccgggc acagcagcgc accctgatct cacttaaatc agcacagtaa ctgcagcaca 33900

gcaccacaat attgttcaaa atcccacagt gcaaggcgct gtatccaaag ctcatggcgg 33960

ggaccacaga acccacgtgg ccatcatacc acaagcgcag gtagattaag tggcgacccc 34020

tcataaacac gctggacata aacattacct cttttggcat gttgtaattc accacctccc 34080

ggtaccatat aaacctctga ttaaacatgg cgccatccac caccatccta aaccagctgg 34140

ccaaaacctg cccgccggct atacactgca gggaaccggg actggaacaa tgacagtgga 34200

gagcccagga ctcgtaacca tggatcatca tgctcgtcat gatatcaatg ttggcacaac 34260

acaggcacac gtgcatacac ttcctcagga ttacaagctc ctcccgcgtt agaaccatat 34320

cccagggaac aacccattcc tgaatcagcg taaatcccac actgcaggga agacctcgca 34380

cgtaactcac gttgtgcatt gtcaaagtgt tacattcggg cagcagcgga tgatcctcca 34440

gtatggtagc gcgggtttct gtctcaaaag gaggtagacg atccctactg tacggagtgc 34500

gccgagacaa ccgagatcgt gttggtcgta gtgtcatgcc aaatggaacg ccggacgtag 34560

tcatatttcc tgaagcaaaa ccaggtgcgg gcgtgacaaa cagatctgcg tctccggtct 34620

cgccgcttag atcgctctgt gtagtagttg tagtatatcc actctctcaa agcatccagg 34680

cgccccctgg cttcgggttc tatgtaaact ccttcatgcg ccgctgccct gataacatcc 34740

accaccgcag aataagccac acccagccaa cctacacatt cgttctgcga gtcacacacg 34800

ggaggagcgg gaagagctgg aagaaccatg ttttttttt tattccaaaa gattatccaa 34860

aacctcaaaa tgaagatcta ttaagtgaac gcgctcccct ccggtggcgt ggtcaaactc 34920

tacagccaaa gaacagataa tggcatttgt aagatgttgc acaatggctt ccaaaaggca 34980

aacggccctc acgtccaagt ggacgtaaag gctaaaccct tcagggtgaa tctcctctat 35040

aaacattcca gcaccttcaa ccatgcccaa ataattctca tctcgccacc ttctcaatat 35100

atctctaagc aaatcccgaa tattaagtcc ggccattgta aaaatctgct ccagagcgcc 35160

ctccaccttc agcctcaagc agcgaatcat gattgcaaaa attcaggttc ctcacagacc 35220

tgtataagat tcaaaagcgg aacattaaca aaaataccgc gatcccgtag gtcccttcgc 35280

agggccagct gaacataatc gtgcaggtct gcacggacca gcgcggccac ttccccgcca 35340

ggaaccatga caaaagaacc cacactgatt atgacacgca tactcggagc tatgctaacc 35400

agcgtagccc cgatgtaagc ttgttgcatg ggcggcgata taaaatgcaa ggtgctgctc 35460

aaaaaatcag gcaaagcctc gcgcaaaaaa gaaagcacat cgtagtcatg ctcatgcaga 35520

taaaggcagg taagctccgg aaccaccaca gaaaaagaca ccatttttct ctcaaacatg 35580

tctgcgggtt tctgcataaa cacaaaataa aataacaaaa aaacatttaa acattagaag 35640

cctgtcttac aacaggaaaa acaaccctta taagcataag acggactacg gccatgccgg 35700

cgtgaccgta aaaaaactgg tcaccgtgat taaaaagcac caccgacagc tcctcggtca 35760

tgtccggagt cataatgtaa gactcggtaa acacatcagg ttgattcaca tcggtcagtg 35820

ctaaaaagcg accgaaatag cccgggggaa tacatacccg caggcgtaga gacaacatta 35880

cagcccccat aggaggtata acaaaattaa taggagagaa aaacacataa acacctgaaa 35940

aaccctcctg cctaggcaaa atagcaccct cccgctccag aacaacatac agcgcttcca 36000

cagcggcagc cataacagtc agccttacca gtaaaaaaga aaacctatta aaaaaacacc 36060

actcgacacg gcaccagctc aatcagtcac agtgtaaaaa agggccaagt gcagagcgag 36120

tatatatagg actaaaaaat gacgtaacgg ttaaagtcca caaaaaacac ccagaaaacc 36180

gcacgcgaac ctacgcccag aaacgaaagc caaaaaaccc acaacttcct caaatcgtca 36240

cttccgtttt cccacgttac gtcacttccc attttaagaa aactacaatt cccaacacat 36300

acaagttact ccgccctaaa acctacgtca cccgccccgt tcccacgccc cgcgccacgt 36360

cacaaactcc acccccctcat tatcatattg gcttcaatcc aaaataaggt atattattga 36420

tgatg 36425

<210> 35
<211> 36410
<212> DNA
<213> Artificial Sequence

<220>
<223> Adk35F2-Spike/E4orf6(mPGK)-E4dl-27(E4re#33)

<400> 35
ttaattaaca tcatcaataa tataccttat tttggattga agccaatatg ataatgaggg 60

ggtggagttt gtgacgtggc gcggggcgtg ggaacggggc gggtgacgta gtagtgtggc 120

ggaagtgtga tgttgcaagt gtggcggaac acatgtaagc gacggatgtg gcaaaagtga 180

cgtttttggt gtgcgccggt gtacacagga agtgacaatt ttcgcgcggt tttaggcgga 240

tgttgtagta aatttgggcg taaccgagta agatttggcc attttcgcgg gaaaactgaa 300

taagaggaag tgaaatctga ataattttgt gttactcata gcgcgtaata atttctgtaa 360

tagtaatcaa ttacggggtc attagttcat agcccatata tggagttccg cgttacataa 420

cttacggtaa atggcccgcc tggctgaccg cccaacgacc cccgcccatt gacgtcaata 480

atgacgtatg ttcccatagt aacgccaata gggactttcc attgacgtca atgggtggag 540

tatttacggt aaactgccca cttggcagta catcaagtgt atcatatgcc aagtacgccc 600

cctattgacg tcaatgacgg taaatggccc gcctggcatt atgcccagta catgacctta 660

tgggactttc ctacttggca gtacatctac gtattagtca tcgctattac catggtgatg 720

cggttttggc agtacatcaa tgggcgtgga tagcggtttg actcacgggg atttccaagt 780

ctccacccca ttgacgtcaa tgggagtttg ttttggcacc aaaatcaacg ggactttcca 840

aaatgtcgta acaactccgc cccattgacg caaatgggcg gtaggcgtgt acggtgggag 900

gtctatataa gcagagctct ccctatcagt gatagagatc tccctatcag tgatagagat 960

cgtcgacgag ctcgtttagt gaaccgtcag atcgcctgga gacgccatcc acgctgtttt 1020

gacctccata gaagacaccg ggaccgatcc agcctccgat ttgccaccat gtttgtgttc 1080

ctggtgctgc tgccactggt gtccagccag tgtgtgaacc tgaccaccag gacccaactt 1140

cctcctgcct acaccaactc cttcaccagg ggagtctact accctgacaa ggtgttcagg 1200

tcctctgtgc tgcacagcac ccaggacctg ttcctgccat tcttcagcaa tgtgacctgg 1260

ttccatgcca tccatgtgtc tggcaccaat ggcaccaaga ggtttgacaa ccctgtgctg 1320

ccattcaatg atggagtcta ctttgccagc acagagaaga gcaacatcat caggggctgg 1380

atttttggca ccaccctgga cagcaagacc cagtccctgc tgattgtgaa caatgccacc 1440

aatgtggtga ttaaggtgtg tgagttccag ttctgtaatg acccattcct gggagtctac 1500

taccacaaga acaacaagtc ctggatggag tctgagttca gggtctactc ctctgccaac 1560

aactgtacct ttgaatatgt gagccaacca ttcctgatgg acttggaggg caagcagggc 1620

aacttcaaga acctgaggga gtttgtgttc aagaacattg atggctactt caagatttac 1680

agcaaacaca caccaatcaa cctggtgagg gacctgccac agggcttctc tgccttggaa 1740

ccactggtgg acctgccaat tggcatcaac atcaccaggt tccagaccct gctggctctg 1800

cacaggtcct acctgacacc tggagactcc tcctctggct ggacagcagg agcagcagcc 1860

tactatgtgg gctacctcca accaaggacc ttcctgctga aatacaatga gaatggcacc 1920

atcacagatg ctgtggactg tgccctggac ccactgtctg agaccaagtg taccctgaaa 1980

tccttcacag tggagaaggg catctaccag accagcaact tcagggtcca accaacagag 2040

agcattgtga ggtttccaaa catcaccaac ctgtgtccat ttggagaggt gttcaatgcc 2100

accaggtttg cctctgtcta tgcctggaac aggaagagga ttagcaactg tgtggctgac 2160

tactctgtgc tctacaactc tgcctccttc agcaccttca agtgttatgg agtgagccca 2220

accaaactga atgacctgtg tttcaccaat gtctatgctg actcctttgt gattagggga 2280

gatgaggtga gacagattgc ccctggacaa acaggcaaga ttgctgacta caactacaaa 2340

ctgcctgatg acttcacagg ctgtgtgatt gcctggaaca gcaacaacct ggacagcaag 2400

gtgggaggca actacaacta cctctacaga ctgttcagga agagcaacct gaaaccattt 2460

gagagggaca tcagcacaga gatttaccag gctggcagca caccatgtaa tggagtggag 2520

ggcttcaact gttactttcc actccaatcc tatggcttcc aaccaaccaa tggagtgggc 2580

taccaaccat acagggtggt ggtgctgtcc tttgaactgc tccatgcccc tgccacagtg 2640

tgtggaccaa agaagagcac caacctggtg aagaacaagt gtgtgaactt caacttcaat 2700

ggactgacag gcacaggagt gctgacagag agcaacaaga agttcctgcc attccaacag 2760

tttggcaggg acattgctga caccacagat gctgtgaggg acccacagac cttggagatt 2820

ctggacatca caccatgttc ctttggagga gtgtctgtga ttacacctgg caccaacacc 2880

agcaaccagg tggctgtgct ctaccaggat gtgaactgta ctgaggtgcc tgtggctatc 2940

catgctgacc aacttacacc aacctggagg gtctacagca caggcagcaa tgtgttccag 3000

accagggctg gctgtctgat tggagcagag catgtgaaca actcctatga gtgtgacatc 3060

ccaattggag caggcatctg tgcctcctac cagacccaga ccggtggcgg tgggtcgagg 3120

tctgtggcaa gccagagcat cattgcctac acaatgagtc tgggagcaga gaactctgtg 3180

gcttacagca acaacagcat tgccatccca accaacttca ccatctctgt gaccacagag 3240

attctgcctg tgagtatgac caagacctct gtggactgta caatgtatat ctgtggagac 3300

agcacagagt gtagcaacct gctgctccaa tatggctcct tctgtaccca acttaacagg 3360

gctctgacag gcattgctgt ggaacaggac aagaacaccc aggaggtgtt tgcccaggtg 3420

aagcagattt acaagacacc tccaatcaag gactttggag gcttcaactt cagccagatt 3480

ctgcctgacc caagcaagcc aagcaagagg tccttcattg aggacctgct gttcaacaag 3540

gtgaccctgg ctgatgctgg cttcatcaag caatatggag actgtctggg agacattgct 3600

gccagggacc tgatttgtgc ccagaagttc aatggactga cagtgctgcc tccactgctg 3660

acagatgaga tgattgccca atacacctct gccctgctgg ctggcaccat cacctctggc 3720

tggacctttg gagcaggagc agccctccaa atcccatttg ctatgcagat ggcttacagg 3780

ttcaatggca ttggagtgac ccagaatgtg ctctatgaga accagaaact gattgccaac 3840

cagttcaact ctgccattgg caagattcag gactccctgt ccagcacagc ctctgccctg 3900

ggcaaactcc aagatgtggt gaaccagaat gcccaggctc tgaacaccct ggtgaagcaa 3960

ctttccagca actttggagc catctcctct gtgctgaatg acatcctgag cagactggac 4020

aaggtggagg ctgaggtcca gattgacaga ctgattacag gcagactcca atccctccaa 4080

acctatgtga cccaacaact tatcagggct gctgagatta gggcatctgc caacctggct 4140

gccaccaaga tgagtgagtg tgtgctggga caaagcaaga gggtggactt ctgtggcaag 4200

ggctaccacc tgatgagttt tccacagtct gcccctcatg gagtggtgtt cctgcatgtg 4260

acctatgtgc ctgcccagga gaagaacttc accacagccc ctgccatctg ccatgatggc 4320

aaggctcact ttccaaggga gggagtgttt gtgagcaatg gcacccactg gtttgtgacc 4380

cagaggaact tctatgaacc acagattatc accacagaca acacctttgt gtctggcaac 4440

tgtgatgtgg tgattggcat tgtgaacaac acagtctatg acccactcca acctgaactg 4500

gactccttca aggaggaact ggacaaatac ttcaagaacc acaccagccc tgatgtggac 4560

ctgggagaca tctctggcat caatgcctct gtggtgaaca tccagaagga gattgacaga 4620

ctgaatgagg tggctaagaa cctgaatgag tccctgattg acctccaaga actgggcaaa 4680

tatgaacaat acatcaagtg gccatgaaaa ttgatcataa tcagccatac cacatttgta 4740

gaggttttac ttgctttaaa aaacctccca cacctccccc tgaacctgaa acataaaatg 4800

aatgcaattg ttgttgttaa cttgtttatt gcagcttata atggttacaa ataaagcaat 4860

agcatcacaa atttcacaaa taaagcattt ttttcactgc attctagttg tggtttgtcc 4920

aaactcatca atgtatctta acgcggatcg ggtaggggag gcgcttttcc caaggcagtc 4980

tggagcatgc gctttagcag ccccgctggg cacttggcgc tacacaagtg gcctctggcc 5040

tcgcacacat tccacatcca ccggtaggcg ccaaccggct ccgttctttg gtggcccctt 5100

cgcgccacct tctactcctc ccctagtcag gaagttcccc cccgccccgc agctcgcgtc 5160

gtgcaggacg tgacaaatgg aagtagcacg tctcactagt ctcgtgcaga tggacagcac 5220

cgctgagcaa tggaagcggg taggcctttg gggcagcggc caatagcagc tttgctcctt 5280

cgctttctgg gctcagaggc tgggaagggg tgggtccggg ggcgggctca ggggcgggct 5340

caggggcggg gcgggcgccc gaaggtcctc cggaggcccg gcattctgca cgcttcaaaa 5400

gcgcacgtct gccgcgctgt tctcctcttc ctcatctccg ggcctttcga aactacccca 5460

agctggccac catgactacg tccggcgttc catttggcat gacactacga ccaacacgat 5520

ctcggttgtc tcggcgcact ccgtacagta gggatcgtct acctcctttt gagacagaaa 5580

cccgcgctac catactggag gatcatccgc tgctgcccga atgtaacact ttgacaatgc 5640

acaacgtgag ttacgtgcga ggtcttccct gcagtgtggg atttacgctg attcaggaat 5700

gggttgttcc ctgggatatg gttctaacgc gggaggagct tgtaatcctg aggaagtgta 5760

tgcacgtgtg cctgtgttgt gccaacattg atatcatgac gagcatgatg atccatggtt 5820

acgagtcctg ggctctccac tgtcattgtt ccagtcccgg ttccctgcag tgtatagccg 5880

gcgggcaggt tttggccagc tggtttagga tggtggtgga tggcgccatg tttaatcaga 5940

ggtttatatg gtaccgggag gtggtgaatt acaacatgcc aaaagaggta atgtttatgt 6000

ccagcgtgtt tatgaggggt cgccacttaa tctacctgcg cttgtggtat gatggccacg 6060

tgggttctgt ggtccccgcc atgagctttg gatacagcgc cttgcactgt gggattttga 6120

acaatattgt ggtgctgtgc tgcagttact gtgctgattt aagtgagatc agggtgcgct 6180

gctgtgcccg gaggacaagg cgccttatgc tgcgggcggt gcgaatcatc gctgaggaga 6240

ccactgccat gttgtattcc tgcaggacgg agcggcggcg gcagcagttt attcgcgcgc 6300

tgctgcagca ccaccgccct atcctgatgc acgattatga ctctaccccc atgtagaagc 6360

ttggggatca attctctaga gctcgctgat cagcctcgac tgtgccttct agttgccagc 6420

catctgttgt ttgcccctcc cccgtgcctt ccttgaccct ggaaggtgcc actcccactg 6480

tcctttccta ataaaatgag gaaattgcat cgcattgtct gagtaggtgt cattctattc 6540

tgggggggtgg ggtggggcag gacagcaagg gggaggattg ggaagacaat agcaggcatg 6600

ctggggatgc ggtgggctct atggcttctg aggaaattgg gcgtggctta agggtgggaa 6660

agaatatata aggtgggggt cttatgtagt tttgtatctg ttttgcagca gccgccgccg 6720

ccatgagcac caactcgttt gatggaagca ttgtgagctc atatttgaca acgcgcatgc 6780

ccccatgggc cggggtgcgt cagaatgtga tgggctccag cattgatggt cgccccgtcc 6840

tgcccgcaaa ctctactacc ttgacctacg agaccgtgtc tggaacgccg ttggagactg 6900

cagcctccgc cgccgcttca gccgctgcag ccaccgcccg cgggattgtg actgactttg 6960

ctttcctgag cccgcttgca agcagtgcag cttcccgttc atccgcccgc gatgacaagt 7020

tgacggctct tttggcacaa ttggattctt tgacccggga acttaatgtc gtttctcagc 7080

agctgttgga tctgcgccag caggtttctg ccctgaaggc ttcctccccc cccaatgcgg 7140

tttaaaacat aaataaaaaa ccagactctg tttggatttg gatcaagcaa gtgtcttgct 7200

gtctttattt aggggttttg cgcgcgcggt aggcccggga ccagcggtct cggtcgttga 7260

gggtcctgtg tatttttcc aggacgtggt aaaggtgact ctggatgttc agatacatgg 7320

gcataagccc gtctctgggg tggaggtagc accactgcag agcttcatgc tgcggggtgg 7380

tgttgtagat gatccagtcg tagcaggagc gctgggcgtg gtgcctaaaa atgtctttca 7440

gtagcaagct gattgccagg ggcaggccct tggtgtaagt gtttacaaag cggttaagct 7500

gggatgggtg catacgtggg gatatgagat gcatcttgga ctgtattttt aggttggcta 7560

tgttcccagc catatccctc cggggattca tgttgtgcag aaccaccagc acagtgtatc 7620

cggtgcactt gggaaatttg tcatgtagct tagaaggaaa tgcgtggaag aacttggaga 7680

cgcccttgtg acctccaaga ttttccatgc attcgtccat aatgatggca atgggcccac 7740

gggcggcggc ctgggcgaag atatttctgg gatcactaac gtcatagttg tgttccagga 7800

tgagatcgtc ataggccatt tttacaaagc gcgggcggag ggtgccagac tgcggtataa 7860

tggttccatc cggcccaggg gcgtagttac cctcacagat ttgcatttcc cacgctttga 7920

gttcagatgg ggggatcatg tctacctgcg gggcgatgaa gaaaacggtt tccggggtag 7980

gggagatcag ctgggaagaa agcaggttcc tgagcagctg cgacttaccg cagccggtgg 8040

gcccgtaaat cacacctatt accggctgca actggtagtt aagagagctg cagctgccgt 8100

catccctgag cagggggggcc acttcgttaa gcatgtccct gactcgcatg ttttccctga 8160

ccaaatccgc cagaaggcgc tcgccgccca gcgatagcag ttcttgcaag gaagcaaagt 8220

ttttcaacgg tttgagaccg tccgccgtag gcatgctttt gagcgtttga ccaagcagtt 8280

ccaggcggtc ccacagctcg gtcacctgct ctacggcatc tcgatccagc atatctcctc 8340

gtttcgcggg ttggggcggc tttcgctgta cggcagtagt cggtgctcgt ccagacgggc 8400

cagggtcatg tctttccacg ggcgcagggt cctcgtcagc gtagtctggg tcacggtgaa 8460

ggggtgcgct ccgggctgcg cgctggccag ggtgcgcttg aggctggtcc tgctggtgct 8520

gaagcgctgc cggtcttcgc cctgcgcgtc ggccaggtag catttgacca tggtgtcata 8580

gtccagcccc tccgcggcgt ggcccttggc gcgcagcttg cccttggagg aggcgccgca 8640

cgaggggcag tgcagacttt tgagggcgta gagcttgggc gcgagaaata ccgattccgg 8700

ggagtaggca tccgcgccgc aggccccgca gacggtctcg cattccacga gccaggtgag 8760

ctctggccgt tcggggtcaa aaaccaggtt tcccccatgc tttttgatgc gtttcttacc 8820

tctggtttcc atgagccggt gtccacgctc ggtgacgaaa aggctgtccg tgtccccgta 8880

tacagacttg agaggcctgt cctcgagcgg tgttccgcgg tcctcctcgt atagaaactc 8940

ggaccactct gagacaaagg ctcgcgtcca ggccagcacg aaggaggcta agtgggaggg 9000

gtagcggtcg ttgtccacta gggggtccac tcgctccagg gtgtgaagac acatgtcgcc 9060

ctcttcggca tcaaggaagg tgattggttt gtaggtgtag gccacgtgac cgggtgttcc 9120

tgaaggggggg ctataaaagg gggtgggggc gcgttcgtcc tcactctctt ccgcatcgct 9180

gtctgcgagg gccagctgtt ggggtgagta ctccctctga aaagcgggca tgacttctgc 9240

gctaagattg tcagtttcca aaaacgagga ggatttgata ttcacctggc ccgcggtgat 9300

gcctttgagg gtggccgcat ccatctggtc agaaaagaca atctttttgt tgtcaagctt 9360

ggtggcaaac gacccgtaga gggcgttgga cagcaacttg gcgatggagc gcagggtttg 9420

gtttttgtcg cgatcggcgc gctccttggc cgcgatgttt agctgcacgt attcgcgcgc 9480

aacgcaccgc cattcgggaa agacggtggt gcgctcgtcg ggcaccaggt gcacgcgcca 9540

accgcggttg tgcagggtga caaggtcaac gctggtggct acctctccgc gtaggcgctc 9600

gttggtccag cagaggcggc cgcccttgcg cgagcagaat ggcggtaggg ggtctagctg 9660

cgtctcgtcc ggggggtctg cgtccacggt aaagaccccg ggcagcaggc gcgcgtcgaa 9720

gtagtctatc ttgcatcctt gcaagtctag cgcctgctgc catgcgcggg cggcaagcgc 9780

gcgctcgtat gggttgagtg ggggacccca tggcatgggg tgggtgagcg cggaggcgta 9840

catgccgcaa atgtcgtaaa cgtagagggg ctctctgagt attccaagat atgtagggta 9900

gcatcttcca ccgcggatgc tggcgcgcac gtaatcgtat agttcgtgcg agggagcgag 9960

gaggtcggga ccgaggttgc tacgggcggg ctgctctgct cggaagacta tctgcctgaa 10020

gatggcatgt gagttggatg atatggttgg acgctggaag acgttgaagc tggcgtctgt 10080

gagacctacc gcgtcacgca cgaaggaggc gtaggagtcg cgcagcttgt tgaccagctc 10140

ggcggtgacc tgcacgtcta gggcgcagta gtccagggtt tccttgatga tgtcatactt 10200

atcctgtccc ttttttttcc acagctcgcg gttgaggaca aactcttcgc ggtctttcca 10260

gtactcttgg atcggaaacc cgtcggcctc cgaacggtaa gagcctagca tgtagaactg 10320

gttgacggcc tggtaggcgc agcatccctt ttctacgggt agcgcgtatg cctgcgcggc 10380

cttccggagc gaggtgtggg tgagcgcaaa ggtgtccctg accatgactt tgaggtactg 10440

gtatttgaag tcagtgtcgt cgcatccgcc ctgctcccag agcaaaaagt ccgtgcgctt 10500

tttggaacgc ggatttggca gggcgaaggt gacatcgttg aagagtatct ttcccgcgcg 10560

aggcataaag ttgcgtgtga tgcggaaggg tcccggcacc tcggaacggt tgttaattac 10620

ctgggcggcg agcacgatct cgtcaaagcc gttgatgttg tggcccacaa tgtaaagttc 10680

caagaagcgc gggatgccct tgatggaagg caatttttta agttcctcgt aggtgagctc 10740

ttcaggggag ctgagcccgt gctctgaaag ggcccagtct gcaagatgag ggttggaagc 10800

gacgaatgag ctccacaggt cacgggccat tagcatttgc aggtggtcgc gaaaggtcct 10860

aaactggcga cctatggcca ttttttctgg ggtgatgcag tagaaggtaa gcgggtcttg 10920

ttcccagcgg tcccatccaa ggttcgcggc taggtctcgc gcggcagtca ctagaggctc 10980

atctccgccg aacttcatga ccagcatgaa gggcacgagc tgcttcccaa aggcccccat 11040

ccaagtatag gtctctacat cgtaggtgac aaagagacgc tcggtgcgag gatgcgagcc 11100

gatcgggaag aactggatct cccgccacca attggaggag tggctattga tgtggtgaaa 11160

gtagaagtcc ctgcgacggg ccgaacactc gtgctggctt ttgtaaaaac gtgcgcagta 11220

ctggcagcgg tgcacgggct gtacatcctg cacgaggttg acctgacgac cgcgcacaag 11280

gaagcagagt gggaatttga gcccctcgcc tggcgggttt ggctggtggt cttctacttc 11340

ggctgcttgt ccttgaccgt ctggctgctc gaggggagtt acggtggatc ggaccaccac 11400

gccgcgcgag cccaaagtcc agatgtccgc gcgcggcggt cggagcttga tgacaacatc 11460

gcgcagatgg gagctgtcca tggtctggag ctcccgcggc gtcaggtcag gcgggagctc 11520

ctgcaggttt acctcgcata gacgggtcag ggcgcgggct agatccaggt gatacctaat 11580

ttccaggggc tggttggtgg cggcgtcgat ggcttgcaag aggccgcatc cccgcggcgc 11640

gactacggta ccgcgcggcg ggcggtgggc cgcgggggtg tccttggatg atgcatctaa 11700

aagcggtgac gcgggcgagc ccccggaggt agggggggct ccggacccgc cgggagaggg 11760

ggcaggggca cgtcggcgcc gcgcgcgggc aggagctggt gctgcgcgcg taggttgctg 11820

gcgaacgcga cgacgcggcg gttgatctcc tgaatctggc gcctctgcgt gaagacgacg 11880

ggcccggtga gcttgaacct gaaagagagt tcgacagaat caatttcggt gtcgttgacg 11940

gcggcctggc gcaaaatctc ctgcacgtct cctgagttgt cttgataggc gatctcggcc 12000

atgaactgct cgatctcttc ctcctggaga tctccgcgtc cggctcgctc cacggtggcg 12060

gcgaggtcgt tggaaatgcg ggccatgagc tgcgagaagg cgttgaggcc tccctcgttc 12120

cagacgcggc tgtagaccac gccccccttcg gcatcgcggg cgcgcatgac cacctgcgcg 12180

agattgagct ccacgtgccg ggcgaagacg gcgtagtttc gcaggcgctg aaagaggtag 12240

ttgagggtgg tggcggtgtg ttctgccacg aagaagtaca taacccagcg tcgcaacgtg 12300

gattcgttga tatcccccaa ggcctcaagg cgctccatgg cctcgtagaa gtccacggcg 12360

aagttgaaaa actgggagtt gcgcgccgac acggttaact cctcctccag aagacggatg 12420

agctcggcga cagtgtcgcg cacctcgcgc tcaaaggcta caggggcctc ttcttcttct 12480

tcaatctcct cttccataag ggcctcccct tcttcttctt ctggcggcgg tgggggaggg 12540

gggacacggc ggcgacgacg gcgcaccggg aggcggtcga caaagcgctc gatcatctcc 12600

ccgcggcgac ggcgcatggt ctcggtgacg gcgcggccgt tctcgcgggg gcgcagttgg 12660

aagacgccgc ccgtcatgtc ccggttatgg gttggcgggg ggctgccatg cggcagggat 12720

acggcgctaa cgatgcatct caacaattgt tgtgtaggta ctccgccgcc gagggacctg 12780

agcgagtccg catcgaccgg atcggaaaac ctctcgagaa aggcgtctaa ccagtcacag 12840

tcgcaaggta ggctgagcac cgtggcgggc ggcagcgggc ggcggtcggg gttgtttctg 12900

gcggaggtgc tgctgatgat gtaattaaag taggcggtct tgagacggcg gatggtcgac 12960

agaagcacca tgtccttggg tccggcctgc tgaatgcgca ggcggtcggc catgccccag 13020

gcttcgtttt gacatcggcg caggtctttg tagtagtctt gcatgagcct ttctaccggc 13080

acttcttctt ctccttcctc ttgtcctgca tctcttgcat ctatcgctgc ggcggcggcg 13140

gagtttggcc gtaggtggcg ccctcttcct cccatgcgtg tgaccccgaa gcccctcatc 13200

ggctgaagca gggctaggtc ggcgacaacg cgctcggcta atatggcctg ctgcacctgc 13260

gtgagggtag actggaagtc atccatgtcc acaaagcggt ggtatgcgcc cgtgttgatg 13320

gtgtaagtgc agttggccat aacggaccag ttaacggtct ggtgacccgg ctgcgagagc 13380

tcggtgtacc tgagacgcga gtaagccctc gagtcaaata cgtagtcgtt gcaagtccgc 13440

accaggtact ggtatcccac caaaaagtgc ggcggcggct ggcggtagag gggccagcgt 13500

agggtggccg gggctccggg ggcgagatct tccaacataa ggcgatgata tccgtagatg 13560

tacctggaca tccaggtgat gccggcggcg gtggtggagg cgcgcggaaa gtcgcggacg 13620

cggttccaga tgttgcgcag cggcaaaaag tgctccatgg tcgggacgct ctggccggtc 13680

aggcgcgcgc aatcgttgac gctctagcgt gcaaaaggag agcctgtaag cgggcactct 13740

tccgtggtct ggtggataaa ttcgcaaggg tatcatggcg gacgaccggg gttcgagccc 13800

cgtatccggc cgtccgccgt gatccatgcg gttaccgccc gcgtgtcgaa cccaggtgtg 13860

cgacgtcaga caacgggggа gtgctccttt tggcttcctt ccaggcgcgg cggctgctgc 13920

gctagctttt ttggccactg gccgcgcgca gcgtaagcgg ttaggctgga aagcgaaagc 13980

attaagtggc tcgctccctg tagccggagg gttattttcc aagggttgag tcgcgggacc 14040

cccggttcga gtctcggacc ggccggactg cggcgaacgg gggtttgcct ccccgtcatg 14100

caagaccccg cttgcaaatt cctccggaaa cagggacgag ccccttttтt gcttttccca 14160

gatgcatccg gtgctgcggc agatgcgccc ccctcctcag cagcggcaag agcaagagca 14220

gcggcagaca tgcagggcac cctcccctcc tcctaccgcg tcaggagggg cgacatccgc 14280

ggttgacgcg gcagcagatg gtgattacga acccccgcgg cgccgggccc ggcactacct 14340

ggacttggag gagggcgagg gcctggcgcg gctaggagcg ccctctcctg agcggcaccc 14400

aagggtgcag ctgaagcgtg atacgcgtga ggcgtacgtg ccgcggcaga acctgtttcg 14460

cgaccgcgag ggagaggagc ccgaggagat gcgggatcga aagttccacg cagggcgcga 14520

gctgcggcat ggcctgaatc gcgagcggtt gctgcgcgag gaggactttg agcccgacgc 14580

gcgaaccggg attagtcccg cgcgcgcaca cgtggcggcc gccgacctgg taaccgcata 14640

cgagcagacg gtgaaccagg agattaactt tcaaaaaagc tttaacaacc acgtgcgtac 14700

gcttgtggcg cgcgaggagg tggctatagg actgatgcat ctgtgggact ttgtaagcgc 14760

gctggagcaa aacccaaata gcaagccgct catggcgcag ctgttcctta tagtgcagca 14820

cagcagggac aacgaggcat tcagggatgc gctgctaaac atagtagagc ccgagggccg 14880

ctggctgctc gatttgataa acatcctgca gagcatagtg gtgcaggagc gcagcttgag 14940

cctggctgac aaggtggccg ccatcaacta ttccatgctt agcctgggca agttttacgc 15000

ccgcaagata taccataccc cttacgttcc catagacaag gaggtaaaga tcgaggggtt 15060

ctacatgcgc atggcgctga aggtgcttac cttgagcgac gacctgggcg tttatcgcaa 15120

cgagcgcatc cacaaggccg tgagcgtgag ccggcggcgc gagctcagcg accgcgagct 15180

gatgcacagc ctgcaaaggg ccctggctgg cacgggcagc ggcgatagag aggccgagtc 15240

ctactttgac gcgggcgctg acctgcgctg ggccccaagc cgacgcgccc tggaggcagc 15300

tggggccgga cctgggctgg cggtggcacc cgcgcgcgct ggcaacgtcg gcggcgtgga 15360

ggaatatgac gaggacgatg agtacgagcc agaggacggc gagtactaag cggtgatgtt 15420

tctgatcaga tgatgcaaga cgcaacggac ccggcggtgc gggcggcgct gcagagccag 15480

ccgtccggcc ttaactccac ggacgactgg cgccaggtca tggaccgcat catgtcgctg 15540

actgcgcgca atcctgacgc gttccggcag cagccgcagg ccaaccggct ctccgcaatt 15600

ctggaagcgg tggtcccggc gcgcgcaaac cccacgcacg agaaggtgct ggcgatcgta 15660

aacgcgctgg ccgaaaacag ggccatccgg cccgacgagg ccggcctggt ctacgacgcg 15720

ctgcttcagc gcgtggctcg ttacaacagc ggcaacgtgc agaccaacct ggaccggctg 15780

gtgggggatg tgcgcgaggc cgtggcgcag cgtgagcgcg cgcagcagca gggcaacctg 15840

ggctccatgg ttgcactaaa cgccttcctg agtacacagc ccgccaacgt gccgcgggga 15900

caggaggact acaccaactt tgtgagcgca ctgcggctaa tggtgactga gacaccgcaa 15960

agtgaggtgt accagtctgg gccagactat tttttccaga ccagtagaca aggcctgcag 16020

accgtaaacc tgagccaggc tttcaaaaac ttgcaggggc tgtgggggggt gcgggctccc 16080

acaggcgacc gcgcgaccgt gtctagcttg ctgacgccca actcgcgcct gttgctgctg 16140

ctaatagcgc ccttcacgga cagtggcagc gtgtcccggg acacatacct aggtcacttg 16200

ctgacactgt accgcgaggc cataggtcag gcgcatgtgg acgagcatac tttccaggag 16260

attacaagtg tcagccgcgc gctggggcag gaggacacgg gcagcctgga ggcaacccta 16320

aactacctgc tgaccaaccg gcggcagaag atcccctcgt tgcacagttt aaacagcgag 16380

gaggagcgca ttttgcgcta cgtgcagcag agcgtgagcc ttaacctgat gcgcgacggg 16440

gtaacgccca gcgtggcgct ggacatgacc gcgcgcaaca tggaaccggg catgtatgcc 16500

tcaaaccggc cgtttatcaa ccgcctaatg gactacttgc atcgcgcggc cgccgtgaac 16560

cccgagtatt tcaccaatgc catcttgaac ccgcactggc taccgccccc tggtttctac 16620

accgggggat tcgaggtgcc cgagggtaac gatggattcc tctgggacga catagacgac 16680

agcgtgtttt ccccgcaacc gcagaccctg ctagagttgc aacagcgcga gcaggcagag 16740

gcggcgctgc gaaaggaaag cttccgcagg ccaagcagct tgtccgatct aggcgctgcg 16800

gccccgcggt cagatgctag tagcccattt ccaagcttga tagggtctct taccagcact 16860

cgcaccaccc gcccgcgcct gctgggcgag gaggagtacc taaacaactc gctgctgcag 16920

ccgcagcgcg aaaaaaacct gcctccggca tttcccaaca acgggataga gagcctagtg 16980

gacaagatga gtagatggaa gacgtacgcg caggagcaca gggacgtgcc aggcccgcgc 17040

ccgcccaccc gtcgtcaaag gcacgaccgt cagcggggtc tggtgtggga ggacgatgac 17100

tcggcagacg acagcagcgt cctggatttg ggagggagtg gcaacccgtt tgcgcacctt 17160

cgccccaggc tggggagaat gttttaaaaa aaaaaaagca tgatgcaaaa taaaaaactc 17220

accaaggcca tggcaccgag cgttggtttt cttgtattcc ccttagtatg cggcgcgcgg 17280

cgatgtatga ggaaggtcct cctccctcct acgagagtgt ggtgagcgcg gcgccagtgg 17340

cggcggcgct gggttctccc ttcgatgctc ccctggaccc gccgtttgtg cctccgcggt 17400

acctgcggcc taccgggggg agaaacagca tccgttactc tgagttggca cccctattcg 17460

acaccacccg tgtgtacctg gtggacaaca agtcaacgga tgtggcatcc ctgaactacc 17520

agaacgacca cagcaacttt ctgaccacgg tcattcaaaa caatgactac agcccggggg 17580

aggcaagcac acagaccatc aatcttgacg accggtcgca ctggggcggc gacctgaaaa 17640

ccatcctgca taccaacatg ccaaatgtga acgagttcat gtttaccaat aagtttaagg 17700

cgcgggtgat ggtgtcgcgc ttgcctacta aggacaatca ggtggagctg aaatacgagt 17760

gggtggagtt cacgctgccc gagggcaact actccgagac catgaccata gaccttatga 17820

acaacgcgat cgtggagcac tacttgaaag tgggcagaca gaacggggtt ctggaaagcg 17880

acatcggggt aaagtttgac acccgcaact tcagactggg gtttgacccc gtcactggtc 17940

ttgtcatgcc tggggtatat acaaacgaag ccttccatcc agacatcatt ttgctgccag 18000

gatgcggggt ggacttcacc cacagccgcc tgagcaactt gttgggcatc cgcaagcggc 18060

aacccttcca ggagggcttt aggatcacct acgatgatct ggagggtggt aacattcccg 18120

cactgttgga tgtggacgcc taccaggcga gcttgaaaga tgacaccgaa cagggcgggg 18180

gtggcgcagg cggcagcaac agcagtggca gcggcgcgga agagaactcc aacgcggcag 18240

ccgcggcaat gcagccggtg gaggacatga acgatcatgc cattcgcggc gacacctttg 18300

ccacacgggc tgaggagaag cgcgctgagg ccgaagcagc ggccgaagct gccgcccccg 18360

ctgcgcaacc cgaggtcgag aagcctcaga agaaaccggt gatcaaaccc ctgacagagg 18420

acagcaagaa acgcagttac aacctaataa gcaatgacag caccttcacc cagtaccgca 18480

gctggtacct tgcatacaac tacggcgacc ctcagaccgg aatccgctca tggaccctgc 18540

tttgcactcc tgacgtaacc tgcggctcgg agcaggtcta ctggtcgttg ccagacatga 18600

tgcaagaccc cgtgaccttc cgctccacgc gccagatcag caactttccg gtggtgggcg 18660

ccgagctgtt gcccgtgcac tccaagagct tctacaacga ccaggccgtc tactcccaac 18720

tcatccgcca gtttacctct ctgacccacg tgttcaatcg ctttcccgag aaccagattt 18780

tggcgcgccc gccagccccc accatcacca ccgtcagtga aaacgttcct gctctcacag 18840

atcacgggac gctaccgctg cgcaacagca tcggaggagt ccagcgagtg accattactg 18900

acgccagacg ccgcacctgc ccctacgttt acaaggccct gggcatagtc tcgccgcgcg 18960

tcctatcgag ccgcactttt tgagcaagca tgtccatcct tatatcgccc agcaataaca 19020

caggctgggg cctgcgcttc ccaagcaaga tgtttggcgg ggccaagaag cgctccgacc 19080

aacacccagt gcgcgtgcgc gggcactacc gcgcgccctg gggcgcgcac aaacgcggcc 19140

gcactgggcg caccaccgtc gatgacgcca tcgacgcggt ggtggaggag gcgcgcaact 19200

acacgcccac gccgccacca gtgtccacag tggacgcggc cattcagacc gtggtgcgcg 19260

gagcccggcg ctatgctaaa atgaagagac ggcggaggcg cgtagcacgt cgccaccgcc 19320

gccgacccgg cactgccgcc caacgcgcgg cggcggccct gcttaaccgc gcacgtcgca 19380

ccggccgacg ggcggccatg cgggccgctc gaaggctggc cgcgggtatt gtcactgtgc 19440

cccccaggtc caggcgacga gcggccgccg cagcagccgc ggccattagt gctatgactc 19500

agggtcgcag gggcaacgtg tattgggtgc gcgactcggt tagcggcctg cgcgtgcccg 19560

tgcgcacccg ccccccgcgc aactagattg caagaaaaaa ctacttagac tcgtactgtt 19620

gtatgtatcc agcggcggcg gcgcgcaacg aagctatgtc caagcgcaaa atcaaagaag 19680

agatgctcca ggtcatcgcg ccggagatct atggcccccc gaagaaggaa gagcaggatt 19740

acaagccccg aaagctaaag cgggtcaaaa agaaaaagaa agatgatgat gatgaacttg 19800

acgacgaggt ggaactgctg cacgctaccg cgcccaggcg acgggtacag tggaaaggtc 19860

gacgcgtaaa acgtgttttg cgacccggca ccaccgtagt ctttacgccc ggtgagcgct 19920

ccacccgcac ctacaagcgc gtgtatgatg aggtgtacgg cgacgaggac ctgcttgagc 19980

aggccaacga gcgcctcggg gagtttgcct acggaaagcg gcataaggac atgctggcgt 20040

tgccgctgga cgagggcaac ccaacaccta gcctaaagcc cgtaacactg cagcaggtgc 20100

tgcccgcgct tgcaccgtcc gaagaaaagc gcggcctaaa gcgcgagtct ggtgacttgg 20160

cacccaccgt gcagctgatg gtacccaagc gccagcgact ggaagatgtc ttggaaaaaa 20220

tgaccgtgga acctgggctg gagcccgagg tccgcgtgcg gccaatcaag caggtggcgc 20280

cgggactggg cgtgcagacc gtggacgttc agatacccac taccagtagc accagtattg 20340

ccaccgccac agagggcatg gagacacaaa cgtccccggt tgcctcagcg gtggcggatg 20400

ccgcggtgca ggcggtcgct gcggccgcgt ccaagacctc tacggaggtg caaacggacc 20460

cgtggatgtt tcgcgtttca gccccccggc gcccgcgccg ttcgaggaag tacggcgccg 20520

ccagcgcgct actgcccgaa tatgccctac atccttccat tgcgcctacc cccggctatc 20580

gtggctacac ctaccgcccc agaagacgag caactacccg acgccgaacc accactggaa 20640

cccgccgccg ccgtcgccgt cgccagcccg tgctggcccc gatttccgtg cgcagggtgg 20700

ctcgcgaagg aggcaggacc ctggtgctgc caacagcgcg ctaccacccc agcatcgttt 20760

aaaagccggt ctttgtggtt cttgcagata tggccctcac ctgccgcctc cgtttcccgg 20820

tgccgggatt ccgaggaaga atgcaccgta ggaggggcat ggccggccac ggcctgacgg 20880

gcggcatgcg tcgtgcgcac caccggcggc ggcgcgcgtc gcaccgtcgc atgcgcggcg 20940

gtatcctgcc cctccttatt ccactgatcg ccgcggcgat tggcgccgtg cccggaattg 21000

catccgtggc cttgcaggcg cagagacact gattaaaaac aagttgcatg tggaaaaatc 21060

aaaataaaaa gtctggactc tcacgctcgc ttggtcctgt aactattttg tagaatggaa 21120

gacatcaact ttgcgtctct ggccccgcga cacggctcgc gcccgttcat gggaaactgg 21180

caagatatcg gcaccagcaa tatgagcggt ggcgccttca gctggggctc gctgtggagc 21240

ggcattaaaa atttcggttc caccgttaag aactatggca gcaaggcctg gaacagcagc 21300

acaggccaga tgctgaggga taagttgaaa gagcaaaatt tccaacaaaa ggtggtagat 21360

ggcctggcct ctggcattag cggggtggtg gacctggcca accaggcagt gcaaaataag 21420

attaacagta agcttgatcc ccgccctccc gtagaggagc ctccaccggc cgtggagaca 21480

gtgtctccag aggggcgtgg cgaaaagcgt ccgcgccccg acagggaaga aactctggtg 21540

acgcaaatag acgagcctcc ctcgtacgag gaggcactaa agcaaggcct gcccaccacc 21600

cgtcccatcg cgcccatggc taccggagtg ctgggccagc acacacccgt aacgctggac 21660

ctgcctcccc ccgccgacac ccagcagaaa cctgtgctgc caggcccgac cgccgttgtt 21720

gtaacccgtc ctagccgcgc gtccctgcgc cgcgccgcca gcggtccgcg atcgttgcgg 21780

cccgtagcca gtggcaactg gcaaagcaca ctgaacagca tcgtgggtct gggggtgcaa 21840

tccctgaagc gccgacgatg cttctgatag ctaacgtgtc gtatgtgtgt catgtatgcg 21900

tccatgtcgc cgccagagga gctgctgagc cgccgcgcgc ccgctttcca agatggctac 21960

cccttcgatg atgccgcagt ggtcttacat gcacatctcg ggccaggacg cctcggagta 22020

cctgagcccc gggctggtgc agtttgcccg cgccaccgag acgtacttca gcctgaataa 22080

caagtttaga aaccccacgg tggcgcctac gcacgacgtg accacagacc ggtcccagcg 22140

tttgacgctg cggttcatcc ctgtggaccg tgaggatact gcgtactcgt acaaggcgcg 22200

gttcacccta gctgtgggtg ataaccgtgt gctggacatg gcttccacgt actttgacat 22260

ccgcggcgtg ctggacaggg gccctacttt taagccctac tctggcactg cctacaacgc 22320

cctggctccc aagggtgccc caaatccttg cgaatgggat gaagctgcta ctgctcttga 22380

aataaaccta gaagaagagg acgatgacaa cgaagacgaa gtagacgagc aagctgagca 22440

gcaaaaaact cacgtatttg ggcaggcgcc ttattctggt ataaatatta caaaggaggg 22500

tattcaaata ggtgtcgaag gtcaaacacc taaatatgcc gataaaacat ttcaacctga 22560

acctcaaata ggagaatctc agtggtacga aacagaaatt aatcatgcag ctgggagagt 22620

cctaaaaaag actaccccaa tgaaaccatg ttacggttca tatgcaaaac ccacaaatga 22680

aaatggaggg caaggcattc ttgtaaagca acaaaatgga aagctagaaa gtcaagtgga 22740

aatgcaattt ttctcaacta ctgaggcagc cgcaggcaat ggtgataact tgactcctaa 22800

agtggtattg tacagtgaag atgtagatat agaaacccca gacactcata tttcttacat 22860

gcccactatt aaggaaggta actcacgaga actaatgggc caacaatcta tgcccaacag 22920

gcctaattac attgctttta gggacaattt tattggtcta atgtattaca acagcacggg 22980

taatatgggt gttctggcgg gccaagcatc gcagttgaat gctgttgtag atttgcaaga 23040

cagaaacaca gagctttcat accagctttt gcttgattcc attggtgata gaaccaggta 23100

cttttctatg tggaatcagg ctgttgacag ctatgatcca gatgttagaa ttattgaaaa 23160

tcatggaact gaagatgaac ttccaaatta ctgctttcca ctgggaggtg tgattaatac 23220

agagactctt accaaggtaa aacctaaaac aggtcaggaa aatggatggg aaaaagatgc 23280

tacagaattt tcagataaaa atgaaataag agttggaaat aattttgcca tggaaatcaa 23340

tctaaatgcc aacctgtgga gaaatttcct gtactccaac atagcgctgt atttgcccga 23400

caagctaaag tacagtcctt ccaacgtaaa aatttctgat aacccaaaca cctacgacta 23460

catgaacaag cgagtggtgg ctcccgggct agtggactgc tacattaacc ttggagcacg 23520

ctggtccctt gactatatgg acaacgtcaa cccatttaac caccaccgca atgctggcct 23580

gcgctaccgc tcaatgttgc tgggcaatgg tcgctatgtg cccttccaca tccaggtgcc 23640

tcagaagttc tttgccatta aaaacctcct tctcctgccg ggctcataca cctacgagtg 23700

gaacttcagg aaggatgtta acatggttct gcagagctcc ctaggaaatg acctaagggt 23760

tgacggagcc agcattaagt ttgatagcat ttgcctttac gccaccttct tccccatggc 23820

ccacaacacc gcctccacgc ttgaggccat gcttagaaac gacaccaacg accagtcctt 23880

taacgactat ctctccgccg ccaacatgct ctaccctata cccgccaacg ctaccaacgt 23940

gcccatatcc atcccctccc gcaactgggc ggctttccgc ggctgggcct tcacgcgcct 24000

taagactaag gaaaccccat cactgggctc gggctacgac ccttattaca cctactctgg 24060

ctctataccc tacctagatg gaacctttta cctcaaccac acctttaaga aggtggccat 24120

tacctttgac tcttctgtca gctggcctgg caatgaccgc ctgcttaccc ccaacgagtt 24180

tgaaattaag cgctcagttg acggggaggg ttacaacgtt gcccagtgta acatgaccaa 24240

agactggttc ctggtacaaa tgctagctaa ctataacatt ggctaccagg gcttctatat 24300

cccagagagc tacaaggacc gcatgtactc cttctttaga aacttccagc ccatgagccg 24360

tcaggtggtg gatgatacta aatacaagga ctaccaacag gtgggcatcc tacaccaaca 24420

caacaactct ggatttgttg gctaccttgc ccccaccatg cgcgaaggac aggcctaccc 24480

tgctaacttc ccctatccgc ttataggcaa gaccgcagtt gacagcatta cccagaaaaa 24540

gtttctttgc gatcgcaccc tttggcgcat cccattctcc agtaacttta tgtccatggg 24600

cgcactcaca gacctgggcc aaaaccttct ctacgccaac tccgcccacg cgctagacat 24660

gacttttgag gtggatccca tggacgagcc cacccttctt tatgttttgt ttgaagtctt 24720

tgacgtggtc cgtgtgcacc agccgcaccg cggcgtcatc gaaaccgtgt acctgcgcac 24780

gcccttctcg gccggcaacg ccacaacata aagaagcaag caacatcaac aacagctgcc 24840

gccatgggct ccagtgagca ggaactgaaa gccattgtca aagatcttgg ttgtgggcca 24900

tatttttgg gcacctatga caagcgcttt ccaggctttg tttctccaca caagctcgcc 24960

tgcgccatag tcaatacggc cggtcgcgag actgggggcg tacactggat ggcctttgcc 25020

tggaacccgc actcaaaaac atgctacctc tttgagccct ttggcttttc tgaccagcga 25080

ctcaagcagg tttaccagtt tgagtacgag tcactcctgc gccgtagcgc cattgcttct 25140

tcccccgacc gctgtataac gctggaaaag tccacccaaa gcgtacaggg gcccaactcg 25200

gccgcctgtg gactattctg ctgcatgttt ctccacgcct ttgccaactg gccccaaact 25260

cccatggatc acaaccccac catgaacctt attaccgggg tacccaactc catgctcaac 25320

agtccccagg tacagcccac cctgcgtcgc aaccaggaac agctctacag cttcctggag 25380

cgccactcgc cctacttccg cagccacagt gcgcagatta ggagcgccac ttctttttgt 25440

cacttgaaaa acatgtaaaa ataatgtact agagacactt tcaataaagg caaatgcttt 25500

tatttgtaca ctctcgggtg attatttacc cccacccttg ccgtctgcgc cgtttaaaaa 25560

tcaaaggggt tctgccgcgc atcgctatgc gccactggca gggacacgtt gcgatactgg 25620

tgtttagtgc tccacttaaa ctcaggcaca accatccgcg gcagctcggt gaagttttca 25680

ctccacaggc tgcgcaccat caccaacgcg tttagcaggt cgggcgccga tatcttgaag 25740

tcgcagttgg ggcctccgcc ctgcgcgcgc gagttgcgat acacagggtt gcagcactgg 25800

aacactatca gcgccgggtg gtgcacgctg gccagcacgc tcttgtcgga gatcagatcc 25860

gcgtccaggt cctccgcgtt gctcagggcg aacggagtca actttggtag ctgccttccc 25920

aaaaagggcg cgtgcccagg ctttgagttg cactcgcacc gtagtggcat caaaaggtga 25980

ccgtgcccgg tctgggcgtt aggatacagc gcctgcataa aagccttgat ctgcttaaaa 26040

gccacctgag cctttgcgcc ttcagagaag aacatgccgc aagacttgcc ggaaaactga 26100

ttggccggac aggccgcgtc gtgcacgcag caccttgcgt cggtgttgga gatctgcacc 26160

acatttcggc cccaccggtt cttcacgatc ttggccttgc tagactgctc cttcagcgcg 26220

cgctgcccgt tttcgctcgt cacatccatt tcaatcacgt gctccttatt tatcataatg 26280

cttccgtgta gacacttaag ctcgccttcg atctcagcgc agcggtgcag ccacaacgcg 26340

cagcccgtgg gctcgtgatg cttgtaggtc acctctgcaa acgactgcag gtacgcctgc 26400

aggaatcgcc ccatcatcgt cacaaaggtc ttgttgctgg tgaaggtcag ctgcaacccg 26460

cggtgctcct cgttcagcca ggtcttgcat acggccgcca gagcttccac ttggtcaggc 26520

agtagtttga agttcgcctt tagatcgtta tccacgtggt acttgtccat cagcgcgcgc 26580

gcagcctcca tgcccttctc ccacgcagac acgatcggca cactcagcgg gttcatcacc 26640

gtaatttcac tttccgcttc gctgggctct tcctcttcct cttgcgtccg cataccacgc 26700

gccactgggt cgtcttcatt cagccgccgc actgtgcgct tacctccttt gccatgcttg 26760

attagcaccg gtgggttgct gaaacccacc atttgtagcg ccacatcttc tctttcttcc 26820

tcgctgtcca cgattacctc tggtgatggc gggcgctcgg gcttgggaga agggcgcttc 26880

tttttcttct tgggcgcaat ggccaaatcc gccgccgagg tcgatggccg cgggctgggt 26940

gtgcgcggca ccagcgcgtc ttgtgatgag tcttcctcgt cctcggactc gatacgccgc 27000

ctcatccgct tttttggggg cgcccgggga ggcggcggcg acggggacgg ggacgacacg 27060

tcctccatgg ttgggggacg tcgcgccgca ccgcgtccgc gctcgggggt ggtttcgcgc 27120

tgctcctctt cccgactggc catttccttc tcctataggc agaaaaagat catggagtca 27180

gtcgagaaga aggacagcct aaccgccccc tctgagttcg ccaccaccgc ctccaccgat 27240

gccgccaacg cgcctaccac cttccccgtc gaggcacccc cgcttgagga ggaggaagtg 27300

attatcgagc aggacccagg ttttgtaagc gaagacgacg aggaccgctc agtaccaaca 27360

gaggataaaa agcaagacca ggacaacgca gaggcaaacg aggaacaagt cgggcggggg 27420

gacgaaaggc atggcgacta cctagatgtg ggagacgacg tgctgttgaa gcatctgcag 27480

cgccagtgcg ccattatctg cgacgcgttg caagagcgca gcgatgtgcc cctcgccata 27540

gcggatgtca gccttgccta cgaacgccac ctattctcac cgcgcgtacc ccccaaacgc 27600

caagaaaacg gcacatgcga gcccaacccg cgcctcaact tctaccccgt atttgccgtg 27660

ccagaggtgc ttgccaccta tcacatcttt ttccaaaact gcaagatacc cctatcctgc 27720

cgtgccaacc gcagccgagc ggacaagcag ctggccttgc ggcagggcgc tgtcatacct 27780

gatatcgcct cgctcaacga agtgccaaaa atctttgagg gtcttggacg cgacgagaag 27840

cgcgcggcaa acgctctgca acaggaaaac agcgaaaatg aaagtcactc tggagtgttg 27900

gtggaactcg agggtgacaa cgcgcgccta gccgtactaa aacgcagcat cgaggtcacc 27960

cactttgcct acccggcact taacctaccc cccaaggtca tgagcacagt catgagtgag 28020

ctgatcgtgc gccgtgcgca gcccctggag agggatgcaa atttgcaaga acaaacagag 28080

gagggcctac ccgcagttgg cgacgagcag ctagcgcgct ggcttcaaac gcgcgagcct 28140

gccgacttgg aggagcgacg caaactaatg atggccgcag tgctcgttac cgtggagctt 28200

gagtgcatgc agcggttctt tgctgacccg gagatgcagc gcaagctaga ggaaacattg 28260

cactacacct ttcgacaggg ctacgtacgc caggcctgca agatctccaa cgtggagctc 28320

tgcaacctgg tctcctacct tggaattttg cacgaaaacc gccttgggca aaacgtgctt 28380

cattccacgc tcaagggcga ggcgcgccgc gactacgtcc gcgactgcgt ttacttattt 28440

ctatgctaca cctggcagac ggccatgggc gtttggcagc agtgcttgga ggagtgcaac 28500

ctcaaggagc tgcagaaact gctaaagcaa aacttgaagg acctatggac ggccttcaac 28560

gagcgctccg tggccgcgca cctggcggac atcattttcc ccgaacgcct gcttaaaacc 28620

ctgcaacagg gtctgccaga cttcaccagt caaagcatgt tgcagaactt taggaacttt 28680

atcctagagc gctcaggaat cttgcccgcc acctgctgtg cacttcctag cgactttgtg 28740

cccattaagt accgcgaatg ccctccgccg ctttggggcc actgctacct tctgcagcta 28800

gccaactacc ttgcctacca ctctgacata atggaagacg tgagcggtga cggtctactg 28860

gagtgtcact gtcgctgcaa cctatgcacc ccgcaccgct ccctggtttg caattcgcag 28920

ctgcttaacg aaagtcaaat tatcggtacc tttgagctgc agggtccctc gcctgacgaa 28980

aagtccgcgg ctccggggtt gaaactcact ccggggctgt ggacgtcggc ttaccttcgc 29040

aaatttgtac ctgaggacta ccacgcccac gagattaggt tctacgaaga ccaatcccgc 29100

ccgcctaatg cggagcttac cgcctgcgtc attacccagg gccacattct tggccaattg 29160

caagccatca acaaagcccg ccaagagttt ctgctacgaa agggacgggg ggtttacttg 29220

gacccccagt ccggcgagga gctcaaccca atccccccgc cgccgcagcc ctatcagcag 29280

cagccgcggg cccttgcttc ccaggatggc acccaaaaag aagctgcagc tgccgccgcc 29340

acccacggac gaggaggaat actgggacag tcaggcagag gaggttttgg acgaggagga 29400

ggaggacatg atggaagact gggagagcct agacgaggaa gcttccgagg tcgaagaggt 29460

gtcagacgaa acaccgtcac cctcggtcgc attcccctcg ccggcgcccc agaaatcggc 29520

aaccggttcc agcatggcta caacctccgc tcctcaggcg ccgccggcac tgcccgttcg 29580

ccgacccaac cgtagatggg acaccactgg aaccagggcc ggtaagtcca agcagccgcc 29640

gccgttagcc caagagcaac aacagcgcca aggctaccgc tcatggcgcg ggcacaagaa 29700

cgccatagtt gcttgcttgc aagactgtgg gggcaacatc tccttcgccc gccgctttct 29760

tctctaccat cacggcgtgg ccttcccccg taacatcctg cattactacc gtcatctcta 29820

cagcccatac tgcaccggcg gcagcggcag caacagcagc ggccacacag aagcaaaggc 29880

gaccggatag caagactctg acaaagccca agaaatccac agcggcggca gcagcaggag 29940

gaggagcgct gcgtctggcg cccaacgaac ccgtatcgac ccgcgagctt agaaacagga 30000

tttttcccac tctgtatgct atatttcaac agagcagggg ccaagaacaa gagctgaaaa 30060

taaaaaacag gtctctgcga tccctcaccc gcagctgcct gtatcacaaa agcgaagatc 30120

agcttcggcg cacgctggaa gacgcggagg ctctcttcag taaatactgc gcgctgactc 30180

ttaaggacta gtttcgcgcc ctttctcaaa tttaagcgcg aaaactacgt catctccagc 30240

ggccacaccc ggcgccagca cctgttgtca gcgccattat gagcaaggaa attcccacgc 30300

cctacatgtg gagttaccag ccacaaatgg gacttgcggc tggagctgcc caagactact 30360

caacccgaat aaactacatg agcgcgggac cccacatgat atcccgggtc aacggaatac 30420

gcgcccaccg aaaccgaatt ctcctggaac aggcggctat taccaccaca cctcgtaata 30480

accttaatcc ccgtagttgg cccgctgccc tggtgtacca ggaaagtccc gctcccacca 30540

ctgtggtact tcccagagac gcccaggccg aagttcagat gactaactca ggggcgcagc 30600

ttgcgggcgg ctttcgtcac agggtgcggt cgcccgggca gggtataact cacctgacaa 30660

tcagagggcg aggtattcag ctcaacgacg agtcggtgag ctcctcgctt ggtctccgtc 30720

cggacgggac atttcagatc ggcggcgccg gccgctcttc attcacgcct cgtcaggcaa 30780

tcctaactct gcagacctcg tcctctgagc cgcgctctgg aggcattgga actctgcaat 30840

ttattgagga gtttgtgcca tcggtctact ttaacccctt ctcgggacct cccggccact 30900

atccggatca atttattcct aactttgacg cggtaaagga ctcggcggac ggctacgact 30960

gaatgttaag tggagaggca gagcaactgc gcctgaaaca cctggtccac tgtcgccgcc 31020

acaagtgctt tgcccgcgac tccggtgagt tttgctactt tgaattgccc gaggatcata 31080

tcgagggccc ggcgcacggc gtccggctta ccgcccaggg agagcttgcc cgtagcctga 31140

ttcgggagtt tacccagcgc cccctgctag ttgagcggga caggggaccc tgtgttctca 31200

ctgtgatttg caactgtcct aaccctggat tacatcaaga tcctctagtt aatgtcaggt 31260

cgcctaagtc gattaactag agtacccggg gatcttattc cctttaacta ataaaaaaaa 31320

ataataaagc atcacttact taaaatcagt tagcaaattt ctgtccagtt tattcagcag 31380

cacctccttg ccctcctccc agctctggta ttgcagcttc ctcctggctg caaactttct 31440

ccacaatcta aatggaatgt cagtttcctc ctgttcctgt ccatccgcac ccactatctt 31500

catgttgttg cagatgaagc gcgcaagacc gtctgaagat accttcaacc ccgtgtatcc 31560

atatgacacg gaaaccggtc ctccaactgt gccttttctt actcctccct ttgtatcccc 31620

caatgggttt caagagagtc cccctggggt actctctttg cgcctatccg aacctctagt 31680

tacctccaat ggcatgcttg cgctcaaaat gggcaacggc ctctctctgg acgaggccgg 31740

caaccttacc tcccaaaatg taaccactgt gagcccacct ctcaaaaaaa ccaagtcaaa 31800

cataaacctg gaaatatctg cacccctcac agttacctca gaagccctaa ctgtggctgc 31860

cgccgcacct ctaatggtcg cgggcaacac actcaccatg caatcacagg ccccgctaac 31920

cgtgcacgac tccaaactta gcattgccac ccaaggaccc ctcacagtgt cagaaggaaa 31980

gctagccctg caaacatcag gccccctcac caccaccgat agcagtaccc ttactatcac 32040

tgcctcaccc cctctaacta ctgccactgg tagcttgggc attgacttga aagagcccat 32100

ttatacacaa aatggaaaac taggactaaa gtacggggct cctttgcatg taacagacga 32160

cctaaacact ttgaccgtag caactggtcc aggtgtgact attaataata cttccttgca 32220

aactaaagtt actggagcct tgggttttga ttcacaaggc aatatgcaac ttaatgtagc 32280

aggaggacta aggattgatt ctcaaaacag acgccttata cttgatgtta gttatccgtt 32340

tgatgctcaa aaccaactaa atctaagact aggacagggc cctcttttta taaactcagc 32400

ccacaacttg gatattaact acaacaaagg cctttacttg tttacagctt caaacaattc 32460

caaaaagctt gaggttaacc taagcactgc caaggggttg atgtttgacg ctacagccat 32520

agccattaat gcaggagatg ggcttgaatt tggttcacct aatgcaccaa acacaaatcc 32580

cctcaaaaca aaaattggcc atggcctaga atttgattca aacaaggcta tggttcctaa 32640

actaggaact ggccttagtt ttgacagcac aggtgccatt acagtaggaa acaaaaataa 32700

tgataagcta actttgtgga ccggaataaa ccctccacct aactgtcaaa ttgtggaaaa 32760

cactaataca aatgatggca aacttacttt agtattagta aaaaatggag ggcttgttaa 32820

tggctacgtg tctctagttg gtgtatcaga cactgtgaac caaatgttca cacaaaagac 32880

agcaaacatc caattaagat tatattttga ctcttctgga aatctattaa ctgaggaatc 32940

agacttaaaa attccactta aaaataaatc ttctacagcg accagtgaaa ctgtagccag 33000

cagcaaagcc tttatgccaa gtactacagc ttatcccttc aacaccacta ctagggatag 33060

tgaaaactac attcatggaa tatgttacta catgactagt tatgatagaa gtctatttcc 33120

cttgaacatt tctataatgc taaacagccg tatgatttct tccaatgttg cctatgccat 33180

acaatttgaa tggaatctaa atgcaagtga atctccagaa agcaacatag ctacgctgac 33240

cacatccccc tttttctttt cttacattac agaagacgac aactaaagaa tcgtttgtgt 33300

tatgtttcaa cgtgtttatt tttcaattgc agaaaatttc aagtcatttt tcattcagta 33360

gtatagcccc accaccacat agcttataca gatcaccgta ccttaatcaa actcacagaa 33420

ccctagtatt caacctgcca cctccctccc aacacacaga gtacacagtc ctttctcccc 33480

ggctggcctt aaaaagcatc atatcatggg taacagacat attcttaggt gttatattcc 33540

acacggtttc ctgtcgagcc aaacgctcat cagtgatatt aataaactcc ccgggcagct 33600

cacttaagtt catgtcgctg tccagctgct gagccacagg ctgctgtcca acttgcggtt 33660

gcttaacggg cggcgaagga gaagtccacg ctcacaggat agggcggtgg tgctgcagca 33720

gcgcgcgaat aaactgctgc cgccgccgct ccgtcctgca ggaatacaac atggcagtgg 33780

tctcctcagc gatgattcgc accgcccgca gcataaggcg ccttgtcctc cgggcacagc 33840

agcgcaccct gatctcactt aaatcagcac agtaactgca gcacagcacc acaatattgt 33900

tcaaaatccc acagtgcaag gcgctgtatc caaagctcat ggcggggacc acagaaccca 33960

cgtggccatc ataccacaag cgcaggtaga ttaagtggcg acccctcata aacacgctgg 34020

acataaacat tacctctttt ggcatgttgt aattcaccac ctcccggtac catataaacc 34080

tctgattaaa catggcgcca tccaccacca tcctaaacca gctggccaaa acctgcccgc 34140

cggctataca ctgcagggaa ccgggactgg aacaatgaca gtggagagcc caggactcgt 34200

aaccatggat catcatgctc gtcatgatat caatgttggc acaacacagg cacacgtgca 34260

tacacttcct caggattaca agctcctccc gcgttagaac catatcccag ggaacaaccc 34320

attcctgaat cagcgtaaat cccacactgc agggaagacc tcgcacgtaa ctcacgttgt 34380

gcattgtcaa agtgttacat tcgggcagca gcggatgatc ctccagtatg gtagcgcggg 34440

tttctgtctc aaaaggaggt agacgatccc tactgtacgg agtgcgccga gacaaccgag 34500

atcgtgttgg tcgtagtgtc atgccaaatg gaacgccgga cgtagtcata tttcctgaag 34560

caaaaccagg tgcgggcgtg acaaacagat ctgcgtctcc ggtctcgccg cttagatcgc 34620

tctgtgtagt agttgtagta tatccactct ctcaaagcat ccaggcgccc cctggcttcg 34680

ggttctatgt aaactccttc atgcgccgct gccctgataa catccaccac cgcagaataa 34740

gccacaccca gccaacctac acattcgttc tgcgagtcac acacgggagg agcgggaaga 34800

gctggaagaa ccatgttttt ttttttattc caaaagatta tccaaaacct caaaatgaag 34860

atctattaag tgaacgcgct cccctccggt ggcgtggtca aactctacag ccaaagaaca 34920

gataatggca tttgtaagat gttgcacaat ggcttccaaa aggcaaacgg ccctcacgtc 34980

caagtggacg taaaggctaa acccttcagg gtgaatctcc tctataaaca ttccagcacc 35040

ttcaaccatg cccaaataat tctcatctcg ccaccttctc aatatatctc taagcaaatc 35100

ccgaatatta agtccggcca ttgtaaaaat ctgctccaga gcgccctcca ccttcagcct 35160

caagcagcga atcatgattg caaaaattca ggttcctcac agacctgtat aagattcaaa 35220

agcggaacat taacaaaaat accgcgatcc cgtaggtccc ttcgcagggc cagctgaaca 35280

taatcgtgca ggtctgcacg gaccagcgcg gccacttccc cgccaggaac catgacaaaa 35340

gaacccacac tgattatgac acgcatactc ggagctatgc taaccagcgt agccccgatg 35400

taagcttgtt gcatgggcgg cgatataaaa tgcaaggtgc tgctcaaaaa atcaggcaaa 35460

gcctcgcgca aaaaagaaag cacatcgtag tcatgctcat gcagataaag gcaggtaagc 35520

tccggaacca ccacagaaaa agacaccatt tttctctcaa acatgtctgc gggtttctgc 35580

ataaacacaa aataaaataa caaaaaaaca tttaaacatt agaagcctgt cttacaacag 35640

gaaaaacaac ccttataagc ataagacgga ctacggccat gccggcgtga ccgtaaaaaa 35700

actggtcacc gtgattaaaa agcaccaccg acagctcctc ggtcatgtcc ggagtcataa 35760

tgtaagactc ggtaaacaca tcaggttgat tcacatcggt cagtgctaaa aagcgaccga 35820

aatagcccgg gggaatacat acccgcaggc gtagagacaa cattacagcc cccataggag 35880

gtataacaaa attaatagga gagaaaaaca cataaacacc tgaaaaaccc tcctgcctag 35940

gcaaaatagc accctcccgc tccagaacaa catacagcgc ttccacagcg gcagccataa 36000

cagtcagcct taccagtaaa aaagaaaacc tattaaaaaa acaccactcg acacggcacc 36060

agctcaatca gtcacagtgt aaaaaagggc caagtgcaga gcgagtatat ataggactaa 36120

aaaatgacgt aacggttaaa gtccacaaaa aacacccaga aaaccgcacg cgaacctacg 36180

cccagaaacg aaagccaaaa aacccacaac ttcctcaaat cgtcacttcc gttttcccac 36240

gttacgtcac ttcccatttt aagaaaacta caattcccaa cacatacaag ttactccgcc 36300

ctaaaaccta cgtcacccgc cccgttccca cgccccgcgc cacgtcacaa actccacccc 36360

ctcattatca tattggcttc aatccaaaat aaggtatatt attgatgatg 36410

<210> 36
<211> 36395
<212> DNA
<213> Artificial Sequence

<220>
<223> Adk35F2-Spike/E4orf6(mPGK)-E4dl-42(E4re#34)

<400> 36
ttaattaaca tcatcaataa tataccttat tttggattga agccaatatg ataatgaggg 60

ggtggagttt gtgacgtggc gcggggcgtg ggaacggggc gggtgacgta gtagtgtggc 120

ggaagtgtga tgttgcaagt gtggcggaac acatgtaagc gacggatgtg gcaaaagtga 180

cgtttttggt gtgcgccggt gtacacagga agtgacaatt ttcgcgcggt tttaggcgga 240

tgttgtagta aatttgggcg taaccgagta agatttggcc attttcgcgg gaaaactgaa 300

taagaggaag tgaaatctga ataattttgt gttactcata gcgcgtaata atttctgtaa 360

tagtaatcaa ttacggggtc attagttcat agcccatata tggagttccg cgttacataa 420

cttacggtaa atggcccgcc tggctgaccg cccaacgacc cccgcccatt gacgtcaata 480

atgacgtatg ttcccatagt aacgccaata gggactttcc attgacgtca atgggtggag 540

tatttacggt aaactgccca cttggcagta catcaagtgt atcatatgcc aagtacgccc 600

cctattgacg tcaatgacgg taaatggccc gcctggcatt atgcccagta catgacctta 660

tgggactttc ctacttggca gtacatctac gtattagtca tcgctattac catggtgatg 720

cggttttggc agtacatcaa tgggcgtgga tagcggtttg actcacgggg atttccaagt 780

ctccacccca ttgacgtcaa tgggagtttg ttttggcacc aaaatcaacg ggactttcca 840

aaatgtcgta acaactccgc cccattgacg caaatgggcg gtaggcgtgt acggtgggag 900

gtctatataa gcagagctct ccctatcagt gatagagatc tccctatcag tgatagagat 960

cgtcgacgag ctcgtttagt gaaccgtcag atcgcctgga gacgccatcc acgctgtttt 1020

gacctccata gaagacaccg ggaccgatcc agcctccgat ttgccaccat gtttgtgttc 1080

ctggtgctgc tgccactggt gtccagccag tgtgtgaacc tgaccaccag gacccaactt 1140

cctcctgcct acaccaactc cttcaccagg ggagtctact accctgacaa ggtgttcagg 1200

tcctctgtgc tgcacagcac ccaggacctg ttcctgccat tcttcagcaa tgtgacctgg 1260

ttccatgcca tccatgtgtc tggcaccaat ggcaccaaga ggtttgacaa ccctgtgctg 1320

ccattcaatg atggagtcta ctttgccagc acagagaaga gcaacatcat caggggctgg 1380

atttttggca ccaccctgga cagcaagacc cagtccctgc tgattgtgaa caatgccacc 1440

aatgtggtga ttaaggtgtg tgagttccag ttctgtaatg acccattcct gggagtctac 1500

taccacaaga acaacaagtc ctggatggag tctgagttca gggtctactc ctctgccaac 1560

aactgtacct ttgaatatgt gagccaacca ttcctgatgg acttggaggg caagcagggc 1620

aacttcaaga acctgaggga gtttgtgttc aagaacattg atggctactt caagatttac 1680

agcaaacaca caccaatcaa cctggtgagg gacctgccac agggcttctc tgccttggaa 1740

ccactggtgg acctgccaat tggcatcaac atcaccaggt tccagaccct gctggctctg 1800

cacaggtcct acctgacacc tggagactcc tcctctggct ggacagcagg agcagcagcc 1860

tactatgtgg gctacctcca accaaggacc ttcctgctga aatacaatga gaatggcacc 1920

atcacagatg ctgtggactg tgccctggac ccactgtctg agaccaagtg taccctgaaa 1980

tccttcacag tggagaaggg catctaccag accagcaact tcagggtcca accaacagag 2040

agcattgtga ggtttccaaa catcaccaac ctgtgtccat ttggagaggt gttcaatgcc 2100

accaggtttg cctctgtcta tgcctggaac aggaagagga ttagcaactg tgtggctgac 2160

tactctgtgc tctacaactc tgcctccttc agcaccttca agtgttatgg agtgagccca 2220

accaaactga atgacctgtg tttcaccaat gtctatgctg actcctttgt gattagggga 2280

gatgaggtga gacagattgc ccctggacaa acaggcaaga ttgctgacta caactacaaa 2340

ctgcctgatg acttcacagg ctgtgtgatt gcctggaaca gcaacaacct ggacagcaag 2400

gtgggaggca actacaacta cctctacaga ctgttcagga agagcaacct gaaaccattt 2460

gagagggaca tcagcacaga gatttaccag gctggcagca caccatgtaa tggagtggag 2520

ggcttcaact gttactttcc actccaatcc tatggcttcc aaccaaccaa tggagtgggc 2580

taccaaccat acagggtggt ggtgctgtcc tttgaactgc tccatgcccc tgccacagtg 2640

tgtggaccaa agaagagcac caacctggtg aagaacaagt gtgtgaactt caacttcaat 2700

ggactgacag gcacaggagt gctgacagag agcaacaaga agttcctgcc attccaacag 2760

tttggcaggg acattgctga caccacagat gctgtgaggg acccacagac cttggagatt 2820

ctggacatca caccatgttc ctttggagga gtgtctgtga ttacacctgg caccaacacc 2880

agcaaccagg tggctgtgct ctaccaggat gtgaactgta ctgaggtgcc tgtggctatc 2940

catgctgacc aacttacacc aacctggagg gtctacagca caggcagcaa tgtgttccag 3000

accagggctg gctgtctgat tggagcagag catgtgaaca actcctatga gtgtgacatc 3060

ccaattggag caggcatctg tgcctcctac cagacccaga ccggtggcgg tgggtcgagg 3120

tctgtggcaa gccagagcat cattgcctac acaatgagtc tgggagcaga gaactctgtg 3180

gcttacagca acaacagcat tgccatccca accaacttca ccatctctgt gaccacagag 3240

attctgcctg tgagtatgac caagacctct gtggactgta caatgtatat ctgtggagac 3300

agcacagagt gtagcaacct gctgctccaa tatggctcct tctgtaccca acttaacagg 3360

gctctgacag gcattgctgt ggaacaggac aagaacaccc aggaggtgtt tgcccaggtg 3420

aagcagattt acaagacacc tccaatcaag gactttggag gcttcaactt cagccagatt 3480

ctgcctgacc caagcaagcc aagcaagagg tccttcattg aggacctgct gttcaacaag 3540

gtgaccctgg ctgatgctgg cttcatcaag caatatggag actgtctggg agacattgct 3600

gccagggacc tgatttgtgc ccagaagttc aatggactga cagtgctgcc tccactgctg 3660

acagatgaga tgattgccca atacacctct gccctgctgg ctggcaccat cacctctggc 3720

tggacctttg gagcaggagc agccctccaa atcccatttg ctatgcagat ggcttacagg 3780

ttcaatggca ttggagtgac ccagaatgtg ctctatgaga accagaaact gattgccaac 3840

cagttcaact ctgccattgg caagattcag gactccctgt ccagcacagc ctctgccctg 3900

ggcaaactcc aagatgtggt gaaccagaat gcccaggctc tgaacaccct ggtgaagcaa 3960

ctttccagca actttggagc catctcctct gtgctgaatg acatcctgag cagactggac 4020

aaggtggagg ctgaggtcca gattgacaga ctgattacag gcagactcca atccctccaa 4080

acctatgtga cccaacaact tatcagggct gctgagatta gggcatctgc caacctggct 4140

gccaccaaga tgagtgagtg tgtgctggga caaagcaaga gggtggactt ctgtggcaag 4200

ggctaccacc tgatgagttt tccacagtct gcccctcatg gagtggtgtt cctgcatgtg 4260

acctatgtgc ctgcccagga gaagaacttc accacagccc ctgccatctg ccatgatggc 4320

aaggctcact ttccaaggga gggagtgttt gtgagcaatg gcacccactg gtttgtgacc 4380

cagaggaact tctatgaacc acagattatc accacagaca acacctttgt gtctggcaac 4440

tgtgatgtgg tgattggcat tgtgaacaac acagtctatg acccactcca acctgaactg 4500

gactccttca aggaggaact ggacaaatac ttcaagaacc acaccagccc tgatgtggac 4560

ctgggagaca tctctggcat caatgcctct gtggtgaaca tccagaagga gattgacaga 4620

ctgaatgagg tggctaagaa cctgaatgag tccctgattg acctccaaga actgggcaaa 4680

tatgaacaat acatcaagtg gccatgaaaa ttgatcataa tcagccatac cacatttgta 4740

gaggttttac ttgctttaaa aaacctccca cacctccccc tgaacctgaa acataaaatg 4800

aatgcaattg ttgttgttaa cttgtttatt gcagcttata atggttacaa ataaagcaat 4860

agcatcacaa atttcacaaa taaagcattt ttttcactgc attctagttg tggtttgtcc 4920

aaactcatca atgtatctta acgcggatcg ggtaggggag gcgcttttcc caaggcagtc 4980

tggagcatgc gctttagcag ccccgctggg cacttggcgc tacacaagtg gcctctggcc 5040

tcgcacacat tccacatcca ccggtaggcg ccaaccggct ccgttctttg gtggcccctt 5100

cgcgccacct tctactcctc ccctagtcag gaagttcccc cccgccccgc agctcgcgtc 5160

gtgcaggacg tgacaaatgg aagtagcacg tctcactagt ctcgtgcaga tggacagcac 5220

cgctgagcaa tggaagcggg taggcctttg gggcagcggc caatagcagc tttgctcctt 5280

cgctttctgg gctcagaggc tgggaagggg tgggtccggg ggcgggctca ggggcgggct 5340

caggggcggg gcgggcgccc gaaggtcctc cggaggcccg gcattctgca cgcttcaaaa 5400

gcgcacgtct gccgcgctgt tctcctcttc ctcatctccg ggcctttcga aactacccca 5460

agctggccac catgactacg tccggcgttc catttggcat gacactacga ccaacacgat 5520

ctcggttgtc tcggcgcact ccgtacagta gggatcgtct acctcctttt gagacagaaa 5580

cccgcgctac catactggag gatcatccgc tgctgcccga atgtaacact ttgacaatgc 5640

acaacgtgag ttacgtgcga ggtcttccct gcagtgtggg atttacgctg attcaggaat 5700

gggttgttcc ctgggatatg gttctaacgc gggaggagct tgtaatcctg aggaagtgta 5760

tgcacgtgtg cctgtgttgt gccaacattg atatcatgac gagcatgatg atccatggtt 5820

acgagtcctg ggctctccac tgtcattgtt ccagtcccgg ttccctgcag tgtatagccg 5880

gcgggcaggt tttggccagc tggtttagga tggtggtgga tggcgccatg tttaatcaga 5940

ggtttatatg gtaccgggag gtggtgaatt acaacatgcc aaaagaggta atgtttatgt 6000

ccagcgtgtt tatgaggggt cgccacttaa tctacctgcg cttgtggtat gatggccacg 6060

tgggttctgt ggtccccgcc atgagctttg gatacagcgc cttgcactgt gggattttga 6120

acaatattgt ggtgctgtgc tgcagttact gtgctgattt aagtgagatc agggtgcgct 6180

gctgtgcccg gaggacaagg cgccttatgc tgcgggcggt gcgaatcatc gctgaggaga 6240

ccactgccat gttgtattcc tgcaggacgg agcggcggcg gcagcagttt attcgcgcgc 6300

tgctgcagca ccaccgccct atcctgatgc acgattatga ctctaccccc atgtagaagc 6360

ttggggatca attctctaga gctcgctgat cagcctcgac tgtgccttct agttgccagc 6420

catctgttgt ttgcccctcc cccgtgcctt ccttgaccct ggaaggtgcc actcccactg 6480

tcctttccta ataaaatgag gaaattgcat cgcattgtct gagtaggtgt cattctattc 6540

tgggggggtgg ggtggggcag gacagcaagg gggaggattg ggaagacaat agcaggcatg 6600

ctggggatgc ggtgggctct atggcttctg aggaaattgg gcgtggctta agggtgggaa 6660

agaatatata aggtgggggt cttatgtagt tttgtatctg ttttgcagca gccgccgccg 6720

ccatgagcac caactcgttt gatggaagca ttgtgagctc atatttgaca acgcgcatgc 6780

ccccatgggc cggggtgcgt cagaatgtga tgggctccag cattgatggt cgccccgtcc 6840

tgcccgcaaa ctctactacc ttgacctacg agaccgtgtc tggaacgccg ttggagactg 6900

cagcctccgc cgccgcttca gccgctgcag ccaccgcccg cgggattgtg actgactttg 6960

ctttcctgag cccgcttgca agcagtgcag cttcccgttc atccgcccgc gatgacaagt 7020

tgacggctct tttggcacaa ttggattctt tgacccggga acttaatgtc gtttctcagc 7080

agctgttgga tctgcgccag caggtttctg ccctgaaggc ttcctccccc cccaatgcgg 7140

tttaaaacat aaataaaaaa ccagactctg tttggatttg gatcaagcaa gtgtcttgct 7200

gtctttattt aggggttttg cgcgcgcggt aggcccggga ccagcggtct cggtcgttga 7260

gggtcctgtg tatttttcc aggacgtggt aaaggtgact ctggatgttc agatacatgg 7320

gcataagccc gtctctgggg tggaggtagc accactgcag agcttcatgc tgcggggtgg 7380

tgttgtagat gatccagtcg tagcaggagc gctgggcgtg gtgcctaaaa atgtctttca 7440

gtagcaagct gattgccagg ggcaggccct tggtgtaagt gtttacaaag cggttaagct 7500

gggatgggtg catacgtggg gatatgagat gcatcttgga ctgtattttt aggttggcta 7560

tgttcccagc catatccctc cggggattca tgttgtgcag aaccaccagc acagtgtatc 7620

cggtgcactt gggaaatttg tcatgtagct tagaaggaaa tgcgtggaag aacttggaga 7680

cgcccttgtg acctccaaga ttttccatgc attcgtccat aatgatggca atgggcccac 7740

gggcggcggc ctgggcgaag atatttctgg gatcactaac gtcatagttg tgttccagga 7800

tgagatcgtc ataggccatt tttacaaagc gcgggcggag ggtgccagac tgcggtataa 7860

tggttccatc cggcccaggg gcgtagttac cctcacagat ttgcatttcc cacgctttga 7920

gttcagatgg ggggatcatg tctacctgcg gggcgatgaa gaaaacggtt tccggggtag 7980

gggagatcag ctgggaagaa agcaggttcc tgagcagctg cgacttaccg cagccggtgg 8040

gcccgtaaat cacacctatt accggctgca actggtagtt aagagagctg cagctgccgt 8100

catccctgag cagggggggcc acttcgttaa gcatgtccct gactcgcatg ttttccctga 8160

ccaaatccgc cagaaggcgc tcgccgccca gcgatagcag ttcttgcaag gaagcaaagt 8220

ttttcaacgg tttgagaccg tccgccgtag gcatgctttt gagcgtttga ccaagcagtt 8280

ccaggcggtc ccacagctcg gtcacctgct ctacggcatc tcgatccagc atatctcctc 8340

gtttcgcggg ttggggcggc tttcgctgta cggcagtagt cggtgctcgt ccagacgggc 8400

cagggtcatg tctttccacg ggcgcagggt cctcgtcagc gtagtctggg tcacggtgaa 8460

ggggtgcgct ccgggctgcg cgctggccag ggtgcgcttg aggctggtcc tgctggtgct 8520

gaagcgctgc cggtcttcgc cctgcgcgtc ggccaggtag catttgacca tggtgtcata 8580

gtccagcccc tccgcggcgt ggcccttggc gcgcagcttg cccttggagg aggcgccgca 8640

cgaggggcag tgcagacttt tgagggcgta gagcttgggc gcgagaaata ccgattccgg 8700

ggagtaggca tccgcgccgc aggccccgca gacggtctcg cattccacga gccaggtgag 8760

ctctggccgt tcggggtcaa aaaccaggtt tcccccatgc tttttgatgc gtttcttacc 8820

tctggtttcc atgagccggt gtccacgctc ggtgacgaaa aggctgtccg tgtccccgta 8880

tacagacttg agaggcctgt cctcgagcgg tgttccgcgg tcctcctcgt atagaaactc 8940

ggaccactct gagacaaagg ctcgcgtcca ggccagcacg aaggaggcta agtgggaggg 9000

gtagcggtcg ttgtccacta gggggtccac tcgctccagg gtgtgaagac acatgtcgcc 9060

ctcttcggca tcaaggaagg tgattggttt gtaggtgtag gccacgtgac cgggtgttcc 9120

tgaaggggggg ctataaaagg gggtgggggc gcgttcgtcc tcactctctt ccgcatcgct 9180

gtctgcgagg gccagctgtt ggggtgagta ctccctctga aaagcgggca tgacttctgc 9240

gctaagattg tcagtttcca aaaacgagga ggatttgata ttcacctggc ccgcggtgat 9300

gcctttgagg gtggccgcat ccatctggtc agaaaagaca atctttttgt tgtcaagctt 9360

ggtggcaaac gacccgtaga gggcgttgga cagcaacttg gcgatggagc gcagggtttg 9420

gtttttgtcg cgatcggcgc gctccttggc cgcgatgttt agctgcacgt attcgcgcgc 9480

aacgcaccgc cattcgggaa agacggtggt gcgctcgtcg ggcaccaggt gcacgcgcca 9540

accgcggttg tgcagggtga caaggtcaac gctggtggct acctctccgc gtaggcgctc 9600

gttggtccag cagaggcggc cgcccttgcg cgagcagaat ggcggtaggg ggtctagctg 9660

cgtctcgtcc ggggggtctg cgtccacggt aaagaccccg ggcagcaggc gcgcgtcgaa 9720

gtagtctatc ttgcatcctt gcaagtctag cgcctgctgc catgcgcggg cggcaagcgc 9780

gcgctcgtat gggttgagtg ggggacccca tggcatgggg tgggtgagcg cggaggcgta 9840

catgccgcaa atgtcgtaaa cgtagagggg ctctctgagt attccaagat atgtagggta 9900

gcatcttcca ccgcggatgc tggcgcgcac gtaatcgtat agttcgtgcg agggagcgag 9960

gaggtcggga ccgaggttgc tacgggcggg ctgctctgct cggaagacta tctgcctgaa 10020

gatggcatgt gagttggatg atatggttgg acgctggaag acgttgaagc tggcgtctgt 10080

gagacctacc gcgtcacgca cgaaggaggc gtaggagtcg cgcagcttgt tgaccagctc 10140

ggcggtgacc tgcacgtcta gggcgcagta gtccagggtt tccttgatga tgtcatactt 10200

atcctgtccc ttttttttcc acagctcgcg gttgaggaca aactcttcgc ggtctttcca 10260

gtactcttgg atcggaaacc cgtcggcctc cgaacggtaa gagcctagca tgtagaactg 10320

gttgacggcc tggtaggcgc agcatccctt ttctacgggt agcgcgtatg cctgcgcggc 10380

cttccggagc gaggtgtggg tgagcgcaaa ggtgtccctg accatgactt tgaggtactg 10440

gtatttgaag tcagtgtcgt cgcatccgcc ctgctcccag agcaaaaagt ccgtgcgctt 10500

tttggaacgc ggatttggca gggcgaaggt gacatcgttg aagagtatct ttcccgcgcg 10560

aggcataaag ttgcgtgtga tgcggaaggg tcccggcacc tcggaacggt tgttaattac 10620

ctgggcggcg agcacgatct cgtcaaagcc gttgatgttg tggcccacaa tgtaaagttc 10680

caagaagcgc gggatgccct tgatggaagg caatttttta agttcctcgt aggtgagctc 10740

ttcaggggag ctgagcccgt gctctgaaag ggcccagtct gcaagatgag ggttggaagc 10800

gacgaatgag ctccacaggt cacgggccat tagcatttgc aggtggtcgc gaaaggtcct 10860

aaactggcga cctatggcca ttttttctgg ggtgatgcag tagaaggtaa gcgggtcttg 10920

ttcccagcgg tcccatccaa ggttcgcggc taggtctcgc gcggcagtca ctagaggctc 10980

atctccgccg aacttcatga ccagcatgaa gggcacgagc tgcttcccaa aggcccccat 11040

ccaagtatag gtctctacat cgtaggtgac aaagagacgc tcggtgcgag gatgcgagcc 11100

gatcgggaag aactggatct cccgccacca attggaggag tggctattga tgtggtgaaa 11160

gtagaagtcc ctgcgacggg ccgaacactc gtgctggctt ttgtaaaaac gtgcgcagta 11220

ctggcagcgg tgcacgggct gtacatcctg cacgaggttg acctgacgac cgcgcacaag 11280

gaagcagagt gggaatttga gcccctcgcc tggcgggttt ggctggtggt cttctacttc 11340

ggctgcttgt ccttgaccgt ctggctgctc gaggggagtt acggtggatc ggaccaccac 11400

gccgcgcgag cccaaagtcc agatgtccgc gcgcggcggt cggagcttga tgacaacatc 11460

gcgcagatgg gagctgtcca tggtctggag ctcccgcggc gtcaggtcag gcgggagctc 11520

ctgcaggttt acctcgcata gacgggtcag ggcgcgggct agatccaggt gatacctaat 11580

ttccaggggc tggttggtgg cggcgtcgat ggcttgcaag aggccgcatc cccgcggcgc 11640

gactacggta ccgcgcggcg ggcggtgggc cgcgggggtg tccttggatg atgcatctaa 11700

aagcggtgac gcgggcgagc ccccggaggt agggggggct ccggacccgc cgggagaggg 11760

ggcaggggca cgtcggcgcc gcgcgcgggc aggagctggt gctgcgcgcg taggttgctg 11820

gcgaacgcga cgacgcggcg gttgatctcc tgaatctggc gcctctgcgt gaagacgacg 11880

ggcccggtga gcttgaacct gaaagagagt tcgacagaat caatttcggt gtcgttgacg 11940

gcggcctggc gcaaaatctc ctgcacgtct cctgagttgt cttgataggc gatctcggcc 12000

atgaactgct cgatctcttc ctcctggaga tctccgcgtc cggctcgctc cacggtggcg 12060

gcgaggtcgt tggaaatgcg ggccatgagc tgcgagaagg cgttgaggcc tccctcgttc 12120

cagacgcggc tgtagaccac gccccccttcg gcatcgcggg cgcgcatgac cacctgcgcg 12180

agattgagct ccacgtgccg ggcgaagacg gcgtagtttc gcaggcgctg aaagaggtag 12240

ttgagggtgg tggcggtgtg ttctgccacg aagaagtaca taacccagcg tcgcaacgtg 12300

gattcgttga tatcccccaa ggcctcaagg cgctccatgg cctcgtagaa gtccacggcg 12360

aagttgaaaa actgggagtt gcgcgccgac acggttaact cctcctccag aagacggatg 12420

agctcggcga cagtgtcgcg cacctcgcgc tcaaaggcta caggggcctc ttcttcttct 12480

tcaatctcct cttccataag ggcctcccct tcttcttctt ctggcggcgg tgggggaggg 12540

gggacacggc ggcgacgacg gcgcaccggg aggcggtcga caaagcgctc gatcatctcc 12600

ccgcggcgac ggcgcatggt ctcggtgacg gcgcggccgt tctcgcgggg gcgcagttgg 12660

aagacgccgc ccgtcatgtc ccggttatgg gttggcgggg ggctgccatg cggcagggat 12720

acggcgctaa cgatgcatct caacaattgt tgtgtaggta ctccgccgcc gagggacctg 12780

agcgagtccg catcgaccgg atcggaaaac ctctcgagaa aggcgtctaa ccagtcacag 12840

tcgcaaggta ggctgagcac cgtggcgggc ggcagcgggc ggcggtcggg gttgtttctg 12900

gcggaggtgc tgctgatgat gtaattaaag taggcggtct tgagacggcg gatggtcgac 12960

agaagcacca tgtccttggg tccggcctgc tgaatgcgca ggcggtcggc catgccccag 13020

gcttcgtttt gacatcggcg caggtctttg tagtagtctt gcatgagcct ttctaccggc 13080

acttcttctt ctccttcctc ttgtcctgca tctcttgcat ctatcgctgc ggcggcggcg 13140

gagtttggcc gtaggtggcg ccctcttcct cccatgcgtg tgaccccgaa gcccctcatc 13200

ggctgaagca gggctaggtc ggcgacaacg cgctcggcta atatggcctg ctgcacctgc 13260

gtgagggtag actggaagtc atccatgtcc acaaagcggt ggtatgcgcc cgtgttgatg 13320

gtgtaagtgc agttggccat aacggaccag ttaacggtct ggtgacccgg ctgcgagagc 13380

tcggtgtacc tgagacgcga gtaagccctc gagtcaaata cgtagtcgtt gcaagtccgc 13440

accaggtact ggtatcccac caaaaagtgc ggcggcggct ggcggtagag gggccagcgt 13500

agggtggccg gggctccggg ggcgagatct tccaacataa ggcgatgata tccgtagatg 13560

tacctggaca tccaggtgat gccggcggcg gtggtggagg cgcgcggaaa gtcgcggacg 13620

cggttccaga tgttgcgcag cggcaaaaag tgctccatgg tcgggacgct ctggccggtc 13680

aggcgcgcgc aatcgttgac gctctagcgt gcaaaaggag agcctgtaag cgggcactct 13740

tccgtggtct ggtggataaa ttcgcaaggg tatcatggcg gacgaccggg gttcgagccc 13800

cgtatccggc cgtccgccgt gatccatgcg gttaccgccc gcgtgtcgaa cccaggtgtg 13860

cgacgtcaga caacgggggа gtgctccttt tggcttcctt ccaggcgcgg cggctgctgc 13920

gctagctttt ttggccactg gccgcgcgca gcgtaagcgg ttaggctgga aagcgaaagc 13980

attaagtggc tcgctccctg tagccggagg gttattttcc aagggttgag tcgcgggacc 14040

cccggttcga gtctcggacc ggccggactg cggcgaacgg gggtttgcct ccccgtcatg 14100

caagaccccg cttgcaaatt cctccggaaa cagggacgag ccccttttтt gcttttccca 14160

gatgcatccg gtgctgcggc agatgcgccc ccctcctcag cagcggcaag agcaagagca 14220

gcggcagaca tgcagggcac cctcccctcc tcctaccgcg tcaggagggg cgacatccgc 14280

ggttgacgcg gcagcagatg gtgattacga acccccgcgg cgccgggccc ggcactacct 14340

ggacttggag gagggcgagg gcctggcgcg gctaggagcg ccctctcctg agcggcaccc 14400

aagggtgcag ctgaagcgtg atacgcgtga ggcgtacgtg ccgcggcaga acctgtttcg 14460

cgaccgcgag ggagaggagc ccgaggagat gcgggatcga aagttccacg cagggcgcga 14520

gctgcggcat ggcctgaatc gcgagcggtt gctgcgcgag gaggactttg agcccgacgc 14580

gcgaaccggg attagtcccg cgcgcgcaca cgtggcggcc gccgacctgg taaccgcata 14640

cgagcagacg gtgaaccagg agattaactt tcaaaaaagc tttaacaacc acgtgcgtac 14700

gcttgtggcg cgcgaggagg tggctatagg actgatgcat ctgtgggact ttgtaagcgc 14760

gctggagcaa aacccaaata gcaagccgct catggcgcag ctgttcctta tagtgcagca 14820

cagcagggac aacgaggcat tcagggatgc gctgctaaac atagtagagc ccgagggccg 14880

ctggctgctc gatttgataa acatcctgca gagcatagtg gtgcaggagc gcagcttgag 14940

cctggctgac aaggtggccg ccatcaacta ttccatgctt agcctgggca agttttacgc 15000

ccgcaagata taccataccc cttacgttcc catagacaag gaggtaaaga tcgaggggtt 15060

ctacatgcgc atggcgctga aggtgcttac cttgagcgac gacctgggcg tttatcgcaa 15120

cgagcgcatc cacaaggccg tgagcgtgag ccggcggcgc gagctcagcg accgcgagct 15180

gatgcacagc ctgcaaaggg ccctggctgg cacgggcagc ggcgatagag aggccgagtc 15240

ctactttgac gcgggcgctg acctgcgctg ggccccaagc cgacgcgccc tggaggcagc 15300

tggggccgga cctgggctgg cggtggcacc cgcgcgcgct ggcaacgtcg gcggcgtgga 15360

ggaatatgac gaggacgatg agtacgagcc agaggacggc gagtactaag cggtgatgtt 15420

tctgatcaga tgatgcaaga cgcaacggac ccggcggtgc gggcggcgct gcagagccag 15480

ccgtccggcc ttaactccac ggacgactgg cgccaggtca tggaccgcat catgtcgctg 15540

actgcgcgca atcctgacgc gttccggcag cagccgcagg ccaaccggct ctccgcaatt 15600

ctggaagcgg tggtcccggc gcgcgcaaac cccacgcacg agaaggtgct ggcgatcgta 15660

aacgcgctgg ccgaaaacag ggccatccgg cccgacgagg ccggcctggt ctacgacgcg 15720

ctgcttcagc gcgtggctcg ttacaacagc ggcaacgtgc agaccaacct ggaccggctg 15780

gtgggggatg tgcgcgaggc cgtggcgcag cgtgagcgcg cgcagcagca gggcaacctg 15840

ggctccatgg ttgcactaaa cgccttcctg agtacacagc ccgccaacgt gccgcgggga 15900

caggaggact acaccaactt tgtgagcgca ctgcggctaa tggtgactga gacaccgcaa 15960

agtgaggtgt accagtctgg gccagactat tttttccaga ccagtagaca aggcctgcag 16020

accgtaaacc tgagccaggc tttcaaaaac ttgcaggggc tgtgggggggt gcgggctccc 16080

acaggcgacc gcgcgaccgt gtctagcttg ctgacgccca actcgcgcct gttgctgctg 16140

ctaatagcgc ccttcacgga cagtggcagc gtgtcccggg acacatacct aggtcacttg 16200

ctgacactgt accgcgaggc cataggtcag gcgcatgtgg acgagcatac tttccaggag 16260

attacaagtg tcagccgcgc gctggggcag gaggacacgg gcagcctgga ggcaacccta 16320

aactacctgc tgaccaaccg gcggcagaag atcccctcgt tgcacagttt aaacagcgag 16380

gaggagcgca ttttgcgcta cgtgcagcag agcgtgagcc ttaacctgat gcgcgacggg 16440

gtaacgccca gcgtggcgct ggacatgacc gcgcgcaaca tggaaccggg catgtatgcc 16500

tcaaaccggc cgtttatcaa ccgcctaatg gactacttgc atcgcgcggc cgccgtgaac 16560

cccgagtatt tcaccaatgc catcttgaac ccgcactggc taccgccccc tggtttctac 16620

accgggggat tcgaggtgcc cgagggtaac gatggattcc tctgggacga catagacgac 16680

agcgtgtttt ccccgcaacc gcagaccctg ctagagttgc aacagcgcga gcaggcagag 16740

gcggcgctgc gaaaggaaag cttccgcagg ccaagcagct tgtccgatct aggcgctgcg 16800

gccccgcggt cagatgctag tagcccattt ccaagcttga tagggtctct taccagcact 16860

cgcaccaccc gcccgcgcct gctgggcgag gaggagtacc taaacaactc gctgctgcag 16920

ccgcagcgcg aaaaaaacct gcctccggca tttcccaaca acgggataga gagcctagtg 16980

gacaagatga gtagatggaa gacgtacgcg caggagcaca gggacgtgcc aggcccgcgc 17040

ccgcccaccc gtcgtcaaag gcacgaccgt cagcggggtc tggtgtggga ggacgatgac 17100

tcggcagacg acagcagcgt cctggatttg ggagggagtg gcaacccgtt tgcgcacctt 17160

cgccccaggc tggggagaat gttttaaaaa aaaaaaagca tgatgcaaaa taaaaaactc 17220

accaaggcca tggcaccgag cgttggtttt cttgtattcc ccttagtatg cggcgcgcgg 17280

cgatgtatga ggaaggtcct cctccctcct acgagagtgt ggtgagcgcg gcgccagtgg 17340

cggcggcgct gggttctccc ttcgatgctc ccctggaccc gccgtttgtg cctccgcggt 17400

acctgcggcc taccgggggg agaaacagca tccgttactc tgagttggca cccctattcg 17460

acaccacccg tgtgtacctg gtggacaaca agtcaacgga tgtggcatcc ctgaactacc 17520

agaacgacca cagcaacttt ctgaccacgg tcattcaaaa caatgactac agcccggggg 17580

aggcaagcac acagaccatc aatcttgacg accggtcgca ctggggcggc gacctgaaaa 17640

ccatcctgca taccaacatg ccaaatgtga acgagttcat gtttaccaat aagtttaagg 17700

cgcgggtgat ggtgtcgcgc ttgcctacta aggacaatca ggtggagctg aaatacgagt 17760

gggtggagtt cacgctgccc gagggcaact actccgagac catgaccata gaccttatga 17820

acaacgcgat cgtggagcac tacttgaaag tgggcagaca gaacggggtt ctggaaagcg 17880

acatcggggt aaagtttgac acccgcaact tcagactggg gtttgacccc gtcactggtc 17940

ttgtcatgcc tggggtatat acaaacgaag ccttccatcc agacatcatt ttgctgccag 18000

gatgcggggt ggacttcacc cacagccgcc tgagcaactt gttgggcatc cgcaagcggc 18060

aacccttcca ggagggcttt aggatcacct acgatgatct ggagggtggt aacattcccg 18120

cactgttgga tgtggacgcc taccaggcga gcttgaaaga tgacaccgaa cagggcgggg 18180

gtggcgcagg cggcagcaac agcagtggca gcggcgcgga agagaactcc aacgcggcag 18240

ccgcggcaat gcagccggtg gaggacatga acgatcatgc cattcgcggc gacacctttg 18300

ccacacgggc tgaggagaag cgcgctgagg ccgaagcagc ggccgaagct gccgcccccg 18360

ctgcgcaacc cgaggtcgag aagcctcaga agaaaccggt gatcaaaccc ctgacagagg 18420

acagcaagaa acgcagttac aacctaataa gcaatgacag caccttcacc cagtaccgca 18480

gctggtacct tgcatacaac tacggcgacc ctcagaccgg aatccgctca tggaccctgc 18540

tttgcactcc tgacgtaacc tgcggctcgg agcaggtcta ctggtcgttg ccagacatga 18600

tgcaagaccc cgtgaccttc cgctccacgc gccagatcag caactttccg gtggtgggcg 18660

ccgagctgtt gcccgtgcac tccaagagct tctacaacga ccaggccgtc tactcccaac 18720

tcatccgcca gtttacctct ctgacccacg tgttcaatcg ctttcccgag aaccagattt 18780

tggcgcgccc gccagccccc accatcacca ccgtcagtga aaacgttcct gctctcacag 18840

atcacgggac gctaccgctg cgcaacagca tcggaggagt ccagcgagtg accattactg 18900

acgccagacg ccgcacctgc ccctacgttt acaaggccct gggcatagtc tcgccgcgcg 18960

tcctatcgag ccgcactttt tgagcaagca tgtccatcct tatatcgccc agcaataaca 19020

caggctgggg cctgcgcttc ccaagcaaga tgtttggcgg ggccaagaag cgctccgacc 19080

aacacccagt gcgcgtgcgc gggcactacc gcgcgccctg gggcgcgcac aaacgcggcc 19140

gcactgggcg caccaccgtc gatgacgcca tcgacgcggt ggtggaggag gcgcgcaact 19200

acacgcccac gccgccacca gtgtccacag tggacgcggc cattcagacc gtggtgcgcg 19260

gagcccggcg ctatgctaaa atgaagagac ggcggaggcg cgtagcacgt cgccaccgcc 19320

gccgacccgg cactgccgcc caacgcgcgg cggcggccct gcttaaccgc gcacgtcgca 19380

ccggccgacg ggcggccatg cgggccgctc gaaggctggc cgcgggtatt gtcactgtgc 19440

cccccaggtc caggcgacga gcggccgccg cagcagccgc ggccattagt gctatgactc 19500

agggtcgcag gggcaacgtg tattgggtgc gcgactcggt tagcggcctg cgcgtgcccg 19560

tgcgcacccg ccccccgcgc aactagattg caagaaaaaa ctacttagac tcgtactgtt 19620

gtatgtatcc agcggcggcg gcgcgcaacg aagctatgtc caagcgcaaa atcaaagaag 19680

agatgctcca ggtcatcgcg ccggagatct atggcccccc gaagaaggaa gagcaggatt 19740

acaagccccg aaagctaaag cgggtcaaaa agaaaaagaa agatgatgat gatgaacttg 19800

acgacgaggt ggaactgctg cacgctaccg cgcccaggcg acgggtacag tggaaaggtc 19860

gacgcgtaaa acgtgttttg cgacccggca ccaccgtagt ctttacgccc ggtgagcgct 19920

ccacccgcac ctacaagcgc gtgtatgatg aggtgtacgg cgacgaggac ctgcttgagc 19980

aggccaacga gcgcctcggg gagtttgcct acggaaagcg gcataaggac atgctggcgt 20040

tgccgctgga cgagggcaac ccaacaccta gcctaaagcc cgtaacactg cagcaggtgc 20100

tgcccgcgct tgcaccgtcc gaagaaaagc gcggcctaaa gcgcgagtct ggtgacttgg 20160

cacccaccgt gcagctgatg gtacccaagc gccagcgact ggaagatgtc ttggaaaaaa 20220

tgaccgtgga acctgggctg gagcccgagg tccgcgtgcg gccaatcaag caggtggcgc 20280

cgggactggg cgtgcagacc gtggacgttc agatacccac taccagtagc accagtattg 20340

ccaccgccac agagggcatg gagacacaaa cgtccccggt tgcctcagcg gtggcggatg 20400

ccgcggtgca ggcggtcgct gcggccgcgt ccaagacctc tacggaggtg caaacggacc 20460

cgtggatgtt tcgcgtttca gccccccggc gcccgcgccg ttcgaggaag tacggcgccg 20520

ccagcgcgct actgcccgaa tatgccctac atccttccat tgcgcctacc cccggctatc 20580

gtggctacac ctaccgcccc agaagacgag caactacccg acgccgaacc accactggaa 20640

cccgccgccg ccgtcgccgt cgccagcccg tgctggcccc gatttccgtg cgcagggtgg 20700

ctcgcgaagg aggcaggacc ctggtgctgc caacagcgcg ctaccacccc agcatcgttt 20760

aaaagccggt ctttgtggtt cttgcagata tggccctcac ctgccgcctc cgtttcccgg 20820

tgccgggatt ccgaggaaga atgcaccgta ggaggggcat ggccggccac ggcctgacgg 20880

gcggcatgcg tcgtgcgcac caccggcggc ggcgcgcgtc gcaccgtcgc atgcgcggcg 20940

gtatcctgcc cctccttatt ccactgatcg ccgcggcgat tggcgccgtg cccggaattg 21000

catccgtggc cttgcaggcg cagagacact gattaaaaac aagttgcatg tggaaaaatc 21060

aaaataaaaa gtctggactc tcacgctcgc ttggtcctgt aactattttg tagaatggaa 21120

gacatcaact ttgcgtctct ggccccgcga cacggctcgc gcccgttcat gggaaactgg 21180

caagatatcg gcaccagcaa tatgagcggt ggcgccttca gctggggctc gctgtggagc 21240

ggcattaaaa atttcggttc caccgttaag aactatggca gcaaggcctg gaacagcagc 21300

acaggccaga tgctgaggga taagttgaaa gagcaaaatt tccaacaaaa ggtggtagat 21360

ggcctggcct ctggcattag cggggtggtg gacctggcca accaggcagt gcaaaataag 21420

attaacagta agcttgatcc ccgccctccc gtagaggagc ctccaccggc cgtggagaca 21480

gtgtctccag aggggcgtgg cgaaaagcgt ccgcgccccg acagggaaga aactctggtg 21540

acgcaaatag acgagcctcc ctcgtacgag gaggcactaa agcaaggcct gcccaccacc 21600

cgtcccatcg cgcccatggc taccggagtg ctgggccagc acacacccgt aacgctggac 21660

ctgcctcccc ccgccgacac ccagcagaaa cctgtgctgc caggcccgac cgccgttgtt 21720

gtaacccgtc ctagccgcgc gtccctgcgc cgcgccgcca gcggtccgcg atcgttgcgg 21780

cccgtagcca gtggcaactg gcaaagcaca ctgaacagca tcgtgggtct gggggtgcaa 21840

tccctgaagc gccgacgatg cttctgatag ctaacgtgtc gtatgtgtgt catgtatgcg 21900

tccatgtcgc cgccagagga gctgctgagc cgccgcgcgc ccgctttcca agatggctac 21960

cccttcgatg atgccgcagt ggtcttacat gcacatctcg ggccaggacg cctcggagta 22020

cctgagcccc gggctggtgc agtttgcccg cgccaccgag acgtacttca gcctgaataa 22080

caagtttaga aaccccacgg tggcgcctac gcacgacgtg accacagacc ggtcccagcg 22140

tttgacgctg cggttcatcc ctgtggaccg tgaggatact gcgtactcgt acaaggcgcg 22200

gttcacccta gctgtgggtg ataaccgtgt gctggacatg gcttccacgt actttgacat 22260

ccgcggcgtg ctggacaggg gccctacttt taagccctac tctggcactg cctacaacgc 22320

cctggctccc aagggtgccc caaatccttg cgaatgggat gaagctgcta ctgctcttga 22380

aataaaccta gaagaagagg acgatgacaa cgaagacgaa gtagacgagc aagctgagca 22440

gcaaaaaact cacgtatttg ggcaggcgcc ttattctggt ataaatatta caaaggaggg 22500

tattcaaata ggtgtcgaag gtcaaacacc taaatatgcc gataaaacat ttcaacctga 22560

acctcaaata ggagaatctc agtggtacga aacagaaatt aatcatgcag ctgggagagt 22620

cctaaaaaag actaccccaa tgaaaccatg ttacggttca tatgcaaaac ccacaaatga 22680

aaatggaggg caaggcattc ttgtaaagca acaaaatgga aagctagaaa gtcaagtgga 22740

aatgcaattt ttctcaacta ctgaggcagc cgcaggcaat ggtgataact tgactcctaa 22800

agtggtattg tacagtgaag atgtagatat agaaacccca gacactcata tttcttacat 22860

gcccactatt aaggaaggta actcacgaga actaatgggc caacaatcta tgcccaacag 22920

gcctaattac attgctttta gggacaattt tattggtcta atgtattaca acagcacggg 22980

taatatgggt gttctggcgg gccaagcatc gcagttgaat gctgttgtag atttgcaaga 23040

cagaaacaca gagctttcat accagctttt gcttgattcc attggtgata gaaccaggta 23100

cttttctatg tggaatcagg ctgttgacag ctatgatcca gatgttagaa ttattgaaaa 23160

tcatggaact gaagatgaac ttccaaatta ctgctttcca ctgggaggtg tgattaatac 23220

agagactctt accaaggtaa aacctaaaac aggtcaggaa aatggatggg aaaaagatgc 23280

tacagaattt tcagataaaa atgaaataag agttggaaat aattttgcca tggaaatcaa 23340

tctaaatgcc aacctgtgga gaaatttcct gtactccaac atagcgctgt atttgcccga 23400

caagctaaag tacagtcctt ccaacgtaaa aatttctgat aacccaaaca cctacgacta 23460

catgaacaag cgagtggtgg ctcccgggct agtggactgc tacattaacc ttggagcacg 23520

ctggtccctt gactatatgg acaacgtcaa cccatttaac caccaccgca atgctggcct 23580

gcgctaccgc tcaatgttgc tgggcaatgg tcgctatgtg cccttccaca tccaggtgcc 23640

tcagaagttc tttgccatta aaaacctcct tctcctgccg ggctcataca cctacgagtg 23700

gaacttcagg aaggatgtta acatggttct gcagagctcc ctaggaaatg acctaagggt 23760

tgacggagcc agcattaagt ttgatagcat ttgcctttac gccaccttct tccccatggc 23820

ccacaacacc gcctccacgc ttgaggccat gcttagaaac gacaccaacg accagtcctt 23880

taacgactat ctctccgccg ccaacatgct ctaccctata cccgccaacg ctaccaacgt 23940

gcccatatcc atcccctccc gcaactgggc ggctttccgc ggctgggcct tcacgcgcct 24000

taagactaag gaaaccccat cactgggctc gggctacgac ccttattaca cctactctgg 24060

ctctataccc tacctagatg gaacctttta cctcaaccac acctttaaga aggtggccat 24120

tacctttgac tcttctgtca gctggcctgg caatgaccgc ctgcttaccc ccaacgagtt 24180

tgaaattaag cgctcagttg acggggaggg ttacaacgtt gcccagtgta acatgaccaa 24240

agactggttc ctggtacaaa tgctagctaa ctataacatt ggctaccagg gcttctatat 24300

cccagagagc tacaaggacc gcatgtactc cttctttaga aacttccagc ccatgagccg 24360

tcaggtggtg gatgatacta aatacaagga ctaccaacag gtgggcatcc tacaccaaca 24420

caacaactct ggatttgttg gctaccttgc ccccaccatg cgcgaaggac aggcctaccc 24480

tgctaacttc ccctatccgc ttataggcaa gaccgcagtt gacagcatta cccagaaaaa 24540

gtttctttgc gatcgcaccc tttggcgcat cccattctcc agtaacttta tgtccatggg 24600

cgcactcaca gacctgggcc aaaaccttct ctacgccaac tccgcccacg cgctagacat 24660

gacttttgag gtggatccca tggacgagcc cacccttctt tatgttttgt ttgaagtctt 24720

tgacgtggtc cgtgtgcacc agccgcaccg cggcgtcatc gaaaccgtgt acctgcgcac 24780

gcccttctcg gccggcaacg ccacaacata aagaagcaag caacatcaac aacagctgcc 24840

gccatgggct ccagtgagca ggaactgaaa gccattgtca aagatcttgg ttgtgggcca 24900

tatttttgg gcacctatga caagcgcttt ccaggctttg tttctccaca caagctcgcc 24960

tgcgccatag tcaatacggc cggtcgcgag actgggggcg tacactggat ggcctttgcc 25020

tggaacccgc actcaaaaac atgctacctc tttgagccct ttggcttttc tgaccagcga 25080

ctcaagcagg tttaccagtt tgagtacgag tcactcctgc gccgtagcgc cattgcttct 25140

tcccccgacc gctgtataac gctggaaaag tccacccaaa gcgtacaggg gcccaactcg 25200

gccgcctgtg gactattctg ctgcatgttt ctccacgcct ttgccaactg gccccaaact 25260

cccatggatc acaaccccac catgaacctt attaccgggg tacccaactc catgctcaac 25320

agtccccagg tacagcccac cctgcgtcgc aaccaggaac agctctacag cttcctggag 25380

cgccactcgc cctacttccg cagccacagt gcgcagatta ggagcgccac ttctttttgt 25440

cacttgaaaa acatgtaaaa ataatgtact agagacactt tcaataaagg caaatgcttt 25500

tatttgtaca ctctcgggtg attatttacc cccacccttg ccgtctgcgc cgtttaaaaa 25560

tcaaaggggt tctgccgcgc atcgctatgc gccactggca gggacacgtt gcgatactgg 25620

tgtttagtgc tccacttaaa ctcaggcaca accatccgcg gcagctcggt gaagttttca 25680

ctccacaggc tgcgcaccat caccaacgcg tttagcaggt cgggcgccga tatcttgaag 25740

tcgcagttgg ggcctccgcc ctgcgcgcgc gagttgcgat acacagggtt gcagcactgg 25800

aacactatca gcgccgggtg gtgcacgctg gccagcacgc tcttgtcgga gatcagatcc 25860

gcgtccaggt cctccgcgtt gctcagggcg aacggagtca actttggtag ctgccttccc 25920

aaaaagggcg cgtgcccagg ctttgagttg cactcgcacc gtagtggcat caaaaggtga 25980

ccgtgcccgg tctgggcgtt aggatacagc gcctgcataa aagccttgat ctgcttaaaa 26040

gccacctgag cctttgcgcc ttcagagaag aacatgccgc aagacttgcc ggaaaactga 26100

ttggccggac aggccgcgtc gtgcacgcag caccttgcgt cggtgttgga gatctgcacc 26160

acatttcggc cccaccggtt cttcacgatc ttggccttgc tagactgctc cttcagcgcg 26220

cgctgcccgt tttcgctcgt cacatccatt tcaatcacgt gctccttatt tatcataatg 26280

cttccgtgta gacacttaag ctcgccttcg atctcagcgc agcggtgcag ccacaacgcg 26340

cagcccgtgg gctcgtgatg cttgtaggtc acctctgcaa acgactgcag gtacgcctgc 26400

aggaatcgcc ccatcatcgt cacaaaggtc ttgttgctgg tgaaggtcag ctgcaacccg 26460

cggtgctcct cgttcagcca ggtcttgcat acggccgcca gagcttccac ttggtcaggc 26520

agtagtttga agttcgcctt tagatcgtta tccacgtggt acttgtccat cagcgcgcgc 26580

gcagcctcca tgcccttctc ccacgcagac acgatcggca cactcagcgg gttcatcacc 26640

gtaatttcac tttccgcttc gctgggctct tcctcttcct cttgcgtccg cataccacgc 26700

gccactgggt cgtcttcatt cagccgccgc actgtgcgct tacctccttt gccatgcttg 26760

attagcaccg gtgggttgct gaaacccacc atttgtagcg ccacatcttc tctttcttcc 26820

tcgctgtcca cgattacctc tggtgatggc gggcgctcgg gcttgggaga agggcgcttc 26880

tttttcttct tgggcgcaat ggccaaatcc gccgccgagg tcgatggccg cgggctgggt 26940

gtgcgcggca ccagcgcgtc ttgtgatgag tcttcctcgt cctcggactc gatacgccgc 27000

ctcatccgct tttttggggg cgcccgggga ggcggcggcg acggggacgg ggacgacacg 27060

tcctccatgg ttgggggacg tcgcgccgca ccgcgtccgc gctcgggggt ggtttcgcgc 27120

tgctcctctt cccgactggc catttccttc tcctataggc agaaaaagat catggagtca 27180

gtcgagaaga aggacagcct aaccgccccc tctgagttcg ccaccaccgc ctccaccgat 27240

gccgccaacg cgcctaccac cttccccgtc gaggcacccc cgcttgagga ggaggaagtg 27300

attatcgagc aggacccagg ttttgtaagc gaagacgacg aggaccgctc agtaccaaca 27360

gaggataaaa agcaagacca ggacaacgca gaggcaaacg aggaacaagt cgggcggggg 27420

gacgaaaggc atggcgacta cctagatgtg ggagacgacg tgctgttgaa gcatctgcag 27480

cgccagtgcg ccattatctg cgacgcgttg caagagcgca gcgatgtgcc cctcgccata 27540

gcggatgtca gccttgccta cgaacgccac ctattctcac cgcgcgtacc ccccaaacgc 27600

caagaaaacg gcacatgcga gcccaacccg cgcctcaact tctaccccgt atttgccgtg 27660

ccagaggtgc ttgccaccta tcacatcttt ttccaaaact gcaagatacc cctatcctgc 27720

cgtgccaacc gcagccgagc ggacaagcag ctggccttgc ggcagggcgc tgtcatacct 27780

gatatcgcct cgctcaacga agtgccaaaa atctttgagg gtcttggacg cgacgagaag 27840

cgcgcggcaa acgctctgca acaggaaaac agcgaaaatg aaagtcactc tggagtgttg 27900

gtggaactcg agggtgacaa cgcgcgccta gccgtactaa aacgcagcat cgaggtcacc 27960

cactttgcct acccggcact taacctaccc cccaaggtca tgagcacagt catgagtgag 28020

ctgatcgtgc gccgtgcgca gcccctggag agggatgcaa atttgcaaga acaaacagag 28080

gagggcctac ccgcagttgg cgacgagcag ctagcgcgct ggcttcaaac gcgcgagcct 28140

gccgacttgg aggagcgacg caaactaatg atggccgcag tgctcgttac cgtggagctt 28200

gagtgcatgc agcggttctt tgctgacccg gagatgcagc gcaagctaga ggaaacattg 28260

cactacacct ttcgacaggg ctacgtacgc caggcctgca agatctccaa cgtggagctc 28320

tgcaacctgg tctcctacct tggaattttg cacgaaaacc gccttgggca aaacgtgctt 28380

cattccacgc tcaagggcga ggcgcgccgc gactacgtcc gcgactgcgt ttacttattt 28440

ctatgctaca cctggcagac ggccatgggc gtttggcagc agtgcttgga ggagtgcaac 28500

ctcaaggagc tgcagaaact gctaaagcaa aacttgaagg acctatggac ggccttcaac 28560

gagcgctccg tggccgcgca cctggcggac atcattttcc ccgaacgcct gcttaaaacc 28620

ctgcaacagg gtctgccaga cttcaccagt caaagcatgt tgcagaactt taggaacttt 28680

atcctagagc gctcaggaat cttgcccgcc acctgctgtg cacttcctag cgactttgtg 28740

cccattaagt accgcgaatg ccctccgccg ctttggggcc actgctacct tctgcagcta 28800

gccaactacc ttgcctacca ctctgacata atggaagacg tgagcggtga cggtctactg 28860

gagtgtcact gtcgctgcaa cctatgcacc ccgcaccgct ccctggtttg caattcgcag 28920

ctgcttaacg aaagtcaaat tatcggtacc tttgagctgc agggtccctc gcctgacgaa 28980

aagtccgcgg ctccggggtt gaaactcact ccggggctgt ggacgtcggc ttaccttcgc 29040

aaatttgtac ctgaggacta ccacgcccac gagattaggt tctacgaaga ccaatcccgc 29100

ccgcctaatg cggagcttac cgcctgcgtc attacccagg gccacattct tggccaattg 29160

caagccatca acaaagcccg ccaagagttt ctgctacgaa agggacgggg ggtttacttg 29220

gacccccagt ccggcgagga gctcaaccca atccccccgc cgccgcagcc ctatcagcag 29280

cagccgcggg cccttgcttc ccaggatggc acccaaaaag aagctgcagc tgccgccgcc 29340

acccacggac gaggaggaat actgggacag tcaggcagag gaggttttgg acgaggagga 29400

ggaggacatg atggaagact gggagagcct agacgaggaa gcttccgagg tcgaagaggt 29460

gtcagacgaa acaccgtcac cctcggtcgc attcccctcg ccggcgcccc agaaatcggc 29520

aaccggttcc agcatggcta caacctccgc tcctcaggcg ccgccggcac tgcccgttcg 29580

ccgacccaac cgtagatggg acaccactgg aaccagggcc ggtaagtcca agcagccgcc 29640

gccgttagcc caagagcaac aacagcgcca aggctaccgc tcatggcgcg ggcacaagaa 29700

cgccatagtt gcttgcttgc aagactgtgg gggcaacatc tccttcgccc gccgctttct 29760

tctctaccat cacggcgtgg ccttcccccg taacatcctg cattactacc gtcatctcta 29820

cagcccatac tgcaccggcg gcagcggcag caacagcagc ggccacacag aagcaaaggc 29880

gaccggatag caagactctg acaaagccca agaaatccac agcggcggca gcagcaggag 29940

gaggagcgct gcgtctggcg cccaacgaac ccgtatcgac ccgcgagctt agaaacagga 30000

tttttcccac tctgtatgct atatttcaac agagcagggg ccaagaacaa gagctgaaaa 30060

taaaaaacag gtctctgcga tccctcaccc gcagctgcct gtatcacaaa agcgaagatc 30120

agcttcggcg cacgctggaa gacgcggagg ctctcttcag taaatactgc gcgctgactc 30180

ttaaggacta gtttcgcgcc ctttctcaaa tttaagcgcg aaaactacgt catctccagc 30240

ggccacaccc ggcgccagca cctgttgtca gcgccattat gagcaaggaa attcccacgc 30300

cctacatgtg gagttaccag ccacaaatgg gacttgcggc tggagctgcc caagactact 30360

caacccgaat aaactacatg agcgcgggac cccacatgat atcccgggtc aacggaatac 30420

gcgcccaccg aaaccgaatt ctcctggaac aggcggctat taccaccaca cctcgtaata 30480

accttaatcc ccgtagttgg cccgctgccc tggtgtacca ggaaagtccc gctcccacca 30540

ctgtggtact tcccagagac gcccaggccg aagttcagat gactaactca ggggcgcagc 30600

ttgcgggcgg ctttcgtcac agggtgcggt cgcccgggca gggtataact cacctgacaa 30660

tcagagggcg aggtattcag ctcaacgacg agtcggtgag ctcctcgctt ggtctccgtc 30720

cggacgggac atttcagatc ggcggcgccg gccgctcttc attcacgcct cgtcaggcaa 30780

tcctaactct gcagacctcg tcctctgagc cgcgctctgg aggcattgga actctgcaat 30840

ttattgagga gtttgtgcca tcggtctact ttaacccctt ctcgggacct cccggccact 30900

atccggatca atttattcct aactttgacg cggtaaagga ctcggcggac ggctacgact 30960

gaatgttaag tggagaggca gagcaactgc gcctgaaaca cctggtccac tgtcgccgcc 31020

acaagtgctt tgcccgcgac tccggtgagt tttgctactt tgaattgccc gaggatcata 31080

tcgagggccc ggcgcacggc gtccggctta ccgcccaggg agagcttgcc cgtagcctga 31140

ttcgggagtt tacccagcgc cccctgctag ttgagcggga caggggaccc tgtgttctca 31200

ctgtgatttg caactgtcct aaccctggat tacatcaaga tcctctagtt aatgtcaggt 31260

cgcctaagtc gattaactag agtacccggg gatcttattc cctttaacta ataaaaaaaa 31320

ataataaagc atcacttact taaaatcagt tagcaaattt ctgtccagtt tattcagcag 31380

cacctccttg ccctcctccc agctctggta ttgcagcttc ctcctggctg caaactttct 31440

ccacaatcta aatggaatgt cagtttcctc ctgttcctgt ccatccgcac ccactatctt 31500

catgttgttg cagatgaagc gcgcaagacc gtctgaagat accttcaacc ccgtgtatcc 31560

atatgacacg gaaaccggtc ctccaactgt gccttttctt actcctccct ttgtatcccc 31620

caatgggttt caagagagtc cccctggggt actctctttg cgcctatccg aacctctagt 31680

tacctccaat ggcatgcttg cgctcaaaat gggcaacggc ctctctctgg acgaggccgg 31740

caaccttacc tcccaaaatg taaccactgt gagcccacct ctcaaaaaaa ccaagtcaaa 31800

cataaacctg gaaatatctg cacccctcac agttacctca gaagccctaa ctgtggctgc 31860

cgccgcacct ctaatggtcg cgggcaacac actcaccatg caatcacagg ccccgctaac 31920

cgtgcacgac tccaaactta gcattgccac ccaaggaccc ctcacagtgt cagaaggaaa 31980

gctagccctg caaacatcag gccccctcac caccaccgat agcagtaccc ttactatcac 32040

tgcctcaccc cctctaacta ctgccactgg tagcttgggc attgacttga aagagcccat 32100

ttatacacaa aatggaaaac taggactaaa gtacggggct cctttgcatg taacagacga 32160

cctaaacact ttgaccgtag caactggtcc aggtgtgact attaataata cttccttgca 32220

aactaaagtt actggagcct tgggttttga ttcacaaggc aatatgcaac ttaatgtagc 32280

aggaggacta aggattgatt ctcaaaacag acgccttata cttgatgtta gttatccgtt 32340

tgatgctcaa aaccaactaa atctaagact aggacagggc cctcttttta taaactcagc 32400

ccacaacttg gatattaact acaacaaagg cctttacttg tttacagctt caaacaattc 32460

caaaaagctt gaggttaacc taagcactgc caaggggttg atgtttgacg ctacagccat 32520

agccattaat gcaggagatg ggcttgaatt tggttcacct aatgcaccaa acacaaatcc 32580

cctcaaaaca aaaattggcc atggcctaga atttgattca aacaaggcta tggttcctaa 32640

actaggaact ggccttagtt ttgacagcac aggtgccatt acagtaggaa acaaaaataa 32700

tgataagcta actttgtgga ccggaataaa ccctccacct aactgtcaaa ttgtggaaaa 32760

cactaataca aatgatggca aacttacttt agtattagta aaaaatggag ggcttgttaa 32820

tggctacgtg tctctagttg gtgtatcaga cactgtgaac caaatgttca cacaaaagac 32880

agcaaacatc caattaagat tatattttga ctcttctgga aatctattaa ctgaggaatc 32940

agacttaaaa attccactta aaaataaatc ttctacagcg accagtgaaa ctgtagccag 33000

cagcaaagcc tttatgccaa gtactacagc ttatcccttc aacaccacta ctagggatag 33060

tgaaaactac attcatggaa tatgttacta catgactagt tatgatagaa gtctatttcc 33120

cttgaacatt tctataatgc taaacagccg tatgatttct tccaatgttg cctatgccat 33180

acaatttgaa tggaatctaa atgcaagtga atctccagaa agcaacatag ctacgctgac 33240

cacatccccc tttttctttt cttacattac agaagacgac aactaaagaa tcgtttgtgt 33300

tatgtttcaa cgtgtttatt tttcaattgc agaaaatttc aagtcatttt tcattcagta 33360

gtatagcccc accaccacat agcttataca gatcaccgta ccttaatcaa actcacagaa 33420

ccctagtatt caacctgcca cctccctccc aacacacaga gtacacagtc ctttctcccc 33480

ggctggcctt aaaaagcatc atatcatggg taacagacat attcttaggt gttatattcc 33540

acacggtttc ctgtcgagcc aaacgctcat cagtgatatt aataaactcc ccgggcagct 33600

cacttaagtt catgtcgctg tccagctgct gagccacagg ctgctgtcca acttgcggtt 33660

gcttaacggg cggcgaagga gaagtccacg ctcagtgctg cagcagcgcg cgaataaact 33720

gctgccgccg ccgctccgtc ctgcaggaat acaacatggc agtggtctcc tcagcgatga 33780

ttcgcaccgc ccgcagcata aggcgccttg tcctccgggc acagcagcgc accctgatct 33840

cacttaaatc agcacagtaa ctgcagcaca gcaccacaat attgttcaaa atcccacagt 33900

gcaaggcgct gtatccaaag ctcatggcgg ggaccacaga acccacgtgg ccatcatacc 33960

acaagcgcag gtagattaag tggcgacccc tcataaacac gctggacata aacattacct 34020

cttttggcat gttgtaattc accacctccc ggtaccatat aaacctctga ttaaacatgg 34080

cgccatccac caccatccta aaccagctgg ccaaaacctg cccgccggct atacactgca 34140

gggaaccggg actggaacaa tgacagtgga gagcccagga ctcgtaacca tggatcatca 34200

tgctcgtcat gatatcaatg ttggcacaac acaggcacac gtgcatacac ttcctcagga 34260

ttacaagctc ctcccgcgtt agaaccatat cccagggaac aacccattcc tgaatcagcg 34320

taaatcccac actgcaggga agacctcgca cgtaactcac gttgtgcatt gtcaaagtgt 34380

tacattcggg cagcagcgga tgatcctcca gtatggtagc gcgggtttct gtctcaaaag 34440

gaggtagacg atccctactg tacggagtgc gccgagacaa ccgagatcgt gttggtcgta 34500

gtgtcatgcc aaatggaacg ccggacgtag tcatatttcc tgaagcaaaa ccaggtgcgg 34560

gcgtgacaaa cagatctgcg tctccggtct cgccgcttag atcgctctgt gtagtagttg 34620

tagtatatcc actctctcaa agcatccagg cgccccctgg cttcgggttc tatgtaaact 34680

ccttcatgcg ccgctgccct gataacatcc accaccgcag aataagccac acccagccaa 34740

cctacacatt cgttctgcga gtcacacacg ggaggagcgg gaagagctgg aagaaccatg 34800

ttttttttt tattccaaaa gattatccaa aacctcaaaa tgaagatcta ttaagtgaac 34860

gcgctcccct ccggtggcgt ggtcaaactc tacagccaaa gaacagataa tggcatttgt 34920

aagatgttgc acaatggctt ccaaaaggca aacggccctc acgtccaagt ggacgtaaag 34980

gctaaaccct tcagggtgaa tctcctctat aaacattcca gcaccttcaa ccatgcccaa 35040

ataattctca tctcgccacc ttctcaatat atctctaagc aaatcccgaa tattaagtcc 35100

ggccattgta aaaatctgct ccagagcgcc ctccaccttc agcctcaagc agcgaatcat 35160

gattgcaaaa attcaggttc ctcacagacc tgtataagat tcaaaagcgg aacattaaca 35220

aaaataccgc gatcccgtag gtcccttcgc agggccagct gaacataatc gtgcaggtct 35280

gcacggacca gcgcggccac ttccccgcca ggaaccatga caaaagaacc cacactgatt 35340

atgacacgca tactcggagc tatgctaacc agcgtagccc cgatgtaagc ttgttgcatg 35400

ggcggcgata taaaatgcaa ggtgctgctc aaaaaatcag gcaaagcctc gcgcaaaaaa 35460

gaaagcacat cgtagtcatg ctcatgcaga taaaggcagg taagctccgg aaccaccaca 35520

gaaaaagaca ccatttttct ctcaaacatg tctgcgggtt tctgcataaa cacaaaataa 35580

aataacaaaa aaacatttaa acattagaag cctgtcttac aacaggaaaa acaaccctta 35640

taagcataag acggactacg gccatgccgg cgtgaccgta aaaaaactgg tcaccgtgat 35700

taaaaagcac caccgacagc tcctcggtca tgtccggagt cataatgtaa gactcggtaa 35760

acacatcagg ttgattcaca tcggtcagtg ctaaaaagcg accgaaatag cccgggggaa 35820

tacatacccg caggcgtaga gacaacatta cagcccccat aggaggtata acaaaattaa 35880

taggagagaa aaacacataa acacctgaaa aaccctcctg cctaggcaaa atagcaccct 35940

cccgctccag aacaacatac agcgcttcca cagcggcagc cataacagtc agccttacca 36000

gtaaaaaaga aaacctatta aaaaaacacc actcgacacg gcaccagctc aatcagtcac 36060

agtgtaaaaa agggccaagt gcagagcgag tatatatagg actaaaaaat gacgtaacgg 36120

ttaaagtcca caaaaaacac ccagaaaacc gcacgcgaac ctacgcccag aaacgaaagc 36180

caaaaaaccc acaacttcct caaatcgtca cttccgtttt cccacgttac gtcacttccc 36240

attttaagaa aactacaatt cccaacacat acaagttact ccgccctaaa acctacgtca 36300

cccgccccgt tcccacgccc cgcgccacgt cacaaactcc acccccctcat tatcatattg 36360

gcttcaatcc aaaataaggt atattattga tgatg 36395

<210> 37
<211> 36380
<212> DNA
<213> Artificial Sequence

<220>
<223> Adk35F2-Spike/E4orf6(mPGK)-E4dl-57(E4re#35)

<400> 37
ttaattaaca tcatcaataa tataccttat tttggattga agccaatatg ataatgaggg 60

ggtggagttt gtgacgtggc gcggggcgtg ggaacggggc gggtgacgta gtagtgtggc 120

ggaagtgtga tgttgcaagt gtggcggaac acatgtaagc gacggatgtg gcaaaagtga 180

cgtttttggt gtgcgccggt gtacacagga agtgacaatt ttcgcgcggt tttaggcgga 240

tgttgtagta aatttgggcg taaccgagta agatttggcc attttcgcgg gaaaactgaa 300

taagaggaag tgaaatctga ataattttgt gttactcata gcgcgtaata atttctgtaa 360

tagtaatcaa ttacggggtc attagttcat agcccatata tggagttccg cgttacataa 420

cttacggtaa atggcccgcc tggctgaccg cccaacgacc cccgcccatt gacgtcaata 480

atgacgtatg ttcccatagt aacgccaata gggactttcc attgacgtca atgggtggag 540

tatttacggt aaactgccca cttggcagta catcaagtgt atcatatgcc aagtacgccc 600

cctattgacg tcaatgacgg taaatggccc gcctggcatt atgcccagta catgacctta 660

tgggactttc ctacttggca gtacatctac gtattagtca tcgctattac catggtgatg 720

cggttttggc agtacatcaa tgggcgtgga tagcggtttg actcacgggg atttccaagt 780

ctccacccca ttgacgtcaa tgggagtttg ttttggcacc aaaatcaacg ggactttcca 840

aaatgtcgta acaactccgc cccattgacg caaatgggcg gtaggcgtgt acggtgggag 900

gtctatataa gcagagctct ccctatcagt gatagagatc tccctatcag tgatagagat 960

cgtcgacgag ctcgtttagt gaaccgtcag atcgcctgga gacgccatcc acgctgtttt 1020

gacctccata gaagacaccg ggaccgatcc agcctccgat ttgccaccat gtttgtgttc 1080

ctggtgctgc tgccactggt gtccagccag tgtgtgaacc tgaccaccag gacccaactt 1140

cctcctgcct acaccaactc cttcaccagg ggagtctact accctgacaa ggtgttcagg 1200

tcctctgtgc tgcacagcac ccaggacctg ttcctgccat tcttcagcaa tgtgacctgg 1260

ttccatgcca tccatgtgtc tggcaccaat ggcaccaaga ggtttgacaa ccctgtgctg 1320

ccattcaatg atggagtcta ctttgccagc acagagaaga gcaacatcat caggggctgg 1380

atttttggca ccaccctgga cagcaagacc cagtccctgc tgattgtgaa caatgccacc 1440

aatgtggtga ttaaggtgtg tgagttccag ttctgtaatg acccattcct gggagtctac 1500

taccacaaga acaacaagtc ctggatggag tctgagttca gggtctactc ctctgccaac 1560

aactgtacct ttgaatatgt gagccaacca ttcctgatgg acttggaggg caagcagggc 1620

aacttcaaga acctgaggga gtttgtgttc aagaacattg atggctactt caagatttac 1680

agcaaacaca caccaatcaa cctggtgagg gacctgccac agggcttctc tgccttggaa 1740

ccactggtgg acctgccaat tggcatcaac atcaccaggt tccagaccct gctggctctg 1800

cacaggtcct acctgacacc tggagactcc tcctctggct ggacagcagg agcagcagcc 1860

tactatgtgg gctacctcca accaaggacc ttcctgctga aatacaatga gaatggcacc 1920

atcacagatg ctgtggactg tgccctggac ccactgtctg agaccaagtg taccctgaaa 1980

tccttcacag tggagaaggg catctaccag accagcaact tcagggtcca accaacagag 2040

agcattgtga ggtttccaaa catcaccaac ctgtgtccat ttggagaggt gttcaatgcc 2100

accaggtttg cctctgtcta tgcctggaac aggaagagga ttagcaactg tgtggctgac 2160

tactctgtgc tctacaactc tgcctccttc agcaccttca agtgttatgg agtgagccca 2220

accaaactga atgacctgtg tttcaccaat gtctatgctg actcctttgt gattagggga 2280

gatgaggtga gacagattgc ccctggacaa acaggcaaga ttgctgacta caactacaaa 2340

ctgcctgatg acttcacagg ctgtgtgatt gcctggaaca gcaacaacct ggacagcaag 2400

gtgggaggca actacaacta cctctacaga ctgttcagga agagcaacct gaaaccattt 2460

gagagggaca tcagcacaga gatttaccag gctggcagca caccatgtaa tggagtggag 2520

ggcttcaact gttactttcc actccaatcc tatggcttcc aaccaaccaa tggagtgggc 2580

taccaaccat acagggtggt ggtgctgtcc tttgaactgc tccatgcccc tgccacagtg 2640

tgtggaccaa agaagagcac caacctggtg aagaacaagt gtgtgaactt caacttcaat 2700

ggactgacag gcacaggagt gctgacagag agcaacaaga agttcctgcc attccaacag 2760

tttggcaggg acattgctga caccacagat gctgtgaggg acccacagac cttggagatt 2820

ctggacatca caccatgttc ctttggagga gtgtctgtga ttacacctgg caccaacacc 2880

agcaaccagg tggctgtgct ctaccaggat gtgaactgta ctgaggtgcc tgtggctatc 2940

catgctgacc aacttacacc aacctggagg gtctacagca caggcagcaa tgtgttccag 3000

accagggctg gctgtctgat tggagcagag catgtgaaca actcctatga gtgtgacatc 3060

ccaattggag caggcatctg tgcctcctac cagacccaga ccggtggcgg tgggtcgagg 3120

tctgtggcaa gccagagcat cattgcctac acaatgagtc tgggagcaga gaactctgtg 3180

gcttacagca acaacagcat tgccatccca accaacttca ccatctctgt gaccacagag 3240

attctgcctg tgagtatgac caagacctct gtggactgta caatgtatat ctgtggagac 3300

agcacagagt gtagcaacct gctgctccaa tatggctcct tctgtaccca acttaacagg 3360

gctctgacag gcattgctgt ggaacaggac aagaacaccc aggaggtgtt tgcccaggtg 3420

aagcagattt acaagacacc tccaatcaag gactttggag gcttcaactt cagccagatt 3480

ctgcctgacc caagcaagcc aagcaagagg tccttcattg aggacctgct gttcaacaag 3540

gtgaccctgg ctgatgctgg cttcatcaag caatatggag actgtctggg agacattgct 3600

gccagggacc tgatttgtgc ccagaagttc aatggactga cagtgctgcc tccactgctg 3660

acagatgaga tgattgccca atacacctct gccctgctgg ctggcaccat cacctctggc 3720

tggacctttg gagcaggagc agccctccaa atcccatttg ctatgcagat ggcttacagg 3780

ttcaatggca ttggagtgac ccagaatgtg ctctatgaga accagaaact gattgccaac 3840

cagttcaact ctgccattgg caagattcag gactccctgt ccagcacagc ctctgccctg 3900

ggcaaactcc aagatgtggt gaaccagaat gcccaggctc tgaacaccct ggtgaagcaa 3960

ctttccagca actttggagc catctcctct gtgctgaatg acatcctgag cagactggac 4020

aaggtggagg ctgaggtcca gattgacaga ctgattacag gcagactcca atccctccaa 4080

acctatgtga cccaacaact tatcagggct gctgagatta gggcatctgc caacctggct 4140

gccaccaaga tgagtgagtg tgtgctggga caaagcaaga gggtggactt ctgtggcaag 4200

ggctaccacc tgatgagttt tccacagtct gcccctcatg gagtggtgtt cctgcatgtg 4260

acctatgtgc ctgcccagga gaagaacttc accacagccc ctgccatctg ccatgatggc 4320

aaggctcact ttccaaggga gggagtgttt gtgagcaatg gcacccactg gtttgtgacc 4380

cagaggaact tctatgaacc acagattatc accacagaca acacctttgt gtctggcaac 4440

tgtgatgtgg tgattggcat tgtgaacaac acagtctatg acccactcca acctgaactg 4500

gactccttca aggaggaact ggacaaatac ttcaagaacc acaccagccc tgatgtggac 4560

ctgggagaca tctctggcat caatgcctct gtggtgaaca tccagaagga gattgacaga 4620

ctgaatgagg tggctaagaa cctgaatgag tccctgattg acctccaaga actgggcaaa 4680

tatgaacaat acatcaagtg gccatgaaaa ttgatcataa tcagccatac cacatttgta 4740

gaggttttac ttgctttaaa aaacctccca cacctccccc tgaacctgaa acataaaatg 4800

aatgcaattg ttgttgttaa cttgtttatt gcagcttata atggttacaa ataaagcaat 4860

agcatcacaa atttcacaaa taaagcattt ttttcactgc attctagttg tggtttgtcc 4920

aaactcatca atgtatctta acgcggatcg ggtaggggag gcgcttttcc caaggcagtc 4980

tggagcatgc gctttagcag ccccgctggg cacttggcgc tacacaagtg gcctctggcc 5040

tcgcacacat tccacatcca ccggtaggcg ccaaccggct ccgttctttg gtggcccctt 5100

cgcgccacct tctactcctc ccctagtcag gaagttcccc cccgccccgc agctcgcgtc 5160

gtgcaggacg tgacaaatgg aagtagcacg tctcactagt ctcgtgcaga tggacagcac 5220

cgctgagcaa tggaagcggg taggcctttg gggcagcggc caatagcagc tttgctcctt 5280

cgctttctgg gctcagaggc tgggaagggg tgggtccggg ggcgggctca ggggcgggct 5340

caggggcggg gcgggcgccc gaaggtcctc cggaggcccg gcattctgca cgcttcaaaa 5400

gcgcacgtct gccgcgctgt tctcctcttc ctcatctccg ggcctttcga aactacccca 5460

agctggccac catgactacg tccggcgttc catttggcat gacactacga ccaacacgat 5520

ctcggttgtc tcggcgcact ccgtacagta gggatcgtct acctcctttt gagacagaaa 5580

cccgcgctac catactggag gatcatccgc tgctgcccga atgtaacact ttgacaatgc 5640

acaacgtgag ttacgtgcga ggtcttccct gcagtgtggg atttacgctg attcaggaat 5700

gggttgttcc ctgggatatg gttctaacgc gggaggagct tgtaatcctg aggaagtgta 5760

tgcacgtgtg cctgtgttgt gccaacattg atatcatgac gagcatgatg atccatggtt 5820

acgagtcctg ggctctccac tgtcattgtt ccagtcccgg ttccctgcag tgtatagccg 5880

gcgggcaggt tttggccagc tggtttagga tggtggtgga tggcgccatg tttaatcaga 5940

ggtttatatg gtaccgggag gtggtgaatt acaacatgcc aaaagaggta atgtttatgt 6000

ccagcgtgtt tatgaggggt cgccacttaa tctacctgcg cttgtggtat gatggccacg 6060

tgggttctgt ggtccccgcc atgagctttg gatacagcgc cttgcactgt gggattttga 6120

acaatattgt ggtgctgtgc tgcagttact gtgctgattt aagtgagatc agggtgcgct 6180

gctgtgcccg gaggacaagg cgccttatgc tgcgggcggt gcgaatcatc gctgaggaga 6240

ccactgccat gttgtattcc tgcaggacgg agcggcggcg gcagcagttt attcgcgcgc 6300

tgctgcagca ccaccgccct atcctgatgc acgattatga ctctaccccc atgtagaagc 6360

ttggggatca attctctaga gctcgctgat cagcctcgac tgtgccttct agttgccagc 6420

catctgttgt ttgcccctcc cccgtgcctt ccttgaccct ggaaggtgcc actcccactg 6480

tcctttccta ataaaatgag gaaattgcat cgcattgtct gagtaggtgt cattctattc 6540

tgggggggtgg ggtggggcag gacagcaagg gggaggattg ggaagacaat agcaggcatg 6600

ctggggatgc ggtgggctct atggcttctg aggaaattgg gcgtggctta agggtgggaa 6660

agaatatata aggtgggggt cttatgtagt tttgtatctg ttttgcagca gccgccgccg 6720

ccatgagcac caactcgttt gatggaagca ttgtgagctc atatttgaca acgcgcatgc 6780

ccccatgggc cggggtgcgt cagaatgtga tgggctccag cattgatggt cgccccgtcc 6840

tgcccgcaaa ctctactacc ttgacctacg agaccgtgtc tggaacgccg ttggagactg 6900

cagcctccgc cgccgcttca gccgctgcag ccaccgcccg cgggattgtg actgactttg 6960

ctttcctgag cccgcttgca agcagtgcag cttcccgttc atccgcccgc gatgacaagt 7020

tgacggctct tttggcacaa ttggattctt tgacccggga acttaatgtc gtttctcagc 7080

agctgttgga tctgcgccag caggtttctg ccctgaaggc ttcctccccc cccaatgcgg 7140

tttaaaacat aaataaaaaa ccagactctg tttggatttg gatcaagcaa gtgtcttgct 7200

gtctttattt aggggttttg cgcgcgcggt aggcccggga ccagcggtct cggtcgttga 7260

gggtcctgtg tatttttcc aggacgtggt aaaggtgact ctggatgttc agatacatgg 7320

gcataagccc gtctctgggg tggaggtagc accactgcag agcttcatgc tgcggggtgg 7380

tgttgtagat gatccagtcg tagcaggagc gctgggcgtg gtgcctaaaa atgtctttca 7440

gtagcaagct gattgccagg ggcaggccct tggtgtaagt gtttacaaag cggttaagct 7500

gggatgggtg catacgtggg gatatgagat gcatcttgga ctgtattttt aggttggcta 7560

tgttcccagc catatccctc cggggattca tgttgtgcag aaccaccagc acagtgtatc 7620

cggtgcactt gggaaatttg tcatgtagct tagaaggaaa tgcgtggaag aacttggaga 7680

cgcccttgtg acctccaaga ttttccatgc attcgtccat aatgatggca atgggcccac 7740

gggcggcggc ctgggcgaag atatttctgg gatcactaac gtcatagttg tgttccagga 7800

tgagatcgtc ataggccatt tttacaaagc gcgggcggag ggtgccagac tgcggtataa 7860

tggttccatc cggcccaggg gcgtagttac cctcacagat ttgcatttcc cacgctttga 7920

gttcagatgg ggggatcatg tctacctgcg gggcgatgaa gaaaacggtt tccggggtag 7980

gggagatcag ctgggaagaa agcaggttcc tgagcagctg cgacttaccg cagccggtgg 8040

gcccgtaaat cacacctatt accggctgca actggtagtt aagagagctg cagctgccgt 8100

catccctgag cagggggggcc acttcgttaa gcatgtccct gactcgcatg ttttccctga 8160

ccaaatccgc cagaaggcgc tcgccgccca gcgatagcag ttcttgcaag gaagcaaagt 8220

ttttcaacgg tttgagaccg tccgccgtag gcatgctttt gagcgtttga ccaagcagtt 8280

ccaggcggtc ccacagctcg gtcacctgct ctacggcatc tcgatccagc atatctcctc 8340

gtttcgcggg ttggggcggc tttcgctgta cggcagtagt cggtgctcgt ccagacgggc 8400

cagggtcatg tctttccacg ggcgcagggt cctcgtcagc gtagtctggg tcacggtgaa 8460

ggggtgcgct ccgggctgcg cgctggccag ggtgcgcttg aggctggtcc tgctggtgct 8520

gaagcgctgc cggtcttcgc cctgcgcgtc ggccaggtag catttgacca tggtgtcata 8580

gtccagcccc tccgcggcgt ggcccttggc gcgcagcttg cccttggagg aggcgccgca 8640

cgaggggcag tgcagacttt tgagggcgta gagcttgggc gcgagaaata ccgattccgg 8700

ggagtaggca tccgcgccgc aggccccgca gacggtctcg cattccacga gccaggtgag 8760

ctctggccgt tcggggtcaa aaaccaggtt tcccccatgc tttttgatgc gtttcttacc 8820

tctggtttcc atgagccggt gtccacgctc ggtgacgaaa aggctgtccg tgtccccgta 8880

tacagacttg agaggcctgt cctcgagcgg tgttccgcgg tcctcctcgt atagaaactc 8940

ggaccactct gagacaaagg ctcgcgtcca ggccagcacg aaggaggcta agtgggaggg 9000

gtagcggtcg ttgtccacta gggggtccac tcgctccagg gtgtgaagac acatgtcgcc 9060

ctcttcggca tcaaggaagg tgattggttt gtaggtgtag gccacgtgac cgggtgttcc 9120

tgaaggggggg ctataaaagg gggtgggggc gcgttcgtcc tcactctctt ccgcatcgct 9180

gtctgcgagg gccagctgtt ggggtgagta ctccctctga aaagcgggca tgacttctgc 9240

gctaagattg tcagtttcca aaaacgagga ggatttgata ttcacctggc ccgcggtgat 9300

gcctttgagg gtggccgcat ccatctggtc agaaaagaca atctttttgt tgtcaagctt 9360

ggtggcaaac gacccgtaga gggcgttgga cagcaacttg gcgatggagc gcagggtttg 9420

gtttttgtcg cgatcggcgc gctccttggc cgcgatgttt agctgcacgt attcgcgcgc 9480

aacgcaccgc cattcgggaa agacggtggt gcgctcgtcg ggcaccaggt gcacgcgcca 9540

accgcggttg tgcagggtga caaggtcaac gctggtggct acctctccgc gtaggcgctc 9600

gttggtccag cagaggcggc cgcccttgcg cgagcagaat ggcggtaggg ggtctagctg 9660

cgtctcgtcc ggggggtctg cgtccacggt aaagaccccg ggcagcaggc gcgcgtcgaa 9720

gtagtctatc ttgcatcctt gcaagtctag cgcctgctgc catgcgcggg cggcaagcgc 9780

gcgctcgtat gggttgagtg ggggacccca tggcatgggg tgggtgagcg cggaggcgta 9840

catgccgcaa atgtcgtaaa cgtagagggg ctctctgagt attccaagat atgtagggta 9900

gcatcttcca ccgcggatgc tggcgcgcac gtaatcgtat agttcgtgcg agggagcgag 9960

gaggtcggga ccgaggttgc tacgggcggg ctgctctgct cggaagacta tctgcctgaa 10020

gatggcatgt gagttggatg atatggttgg acgctggaag acgttgaagc tggcgtctgt 10080

gagacctacc gcgtcacgca cgaaggaggc gtaggagtcg cgcagcttgt tgaccagctc 10140

ggcggtgacc tgcacgtcta gggcgcagta gtccagggtt tccttgatga tgtcatactt 10200

atcctgtccc ttttttttcc acagctcgcg gttgaggaca aactcttcgc ggtctttcca 10260

gtactcttgg atcggaaacc cgtcggcctc cgaacggtaa gagcctagca tgtagaactg 10320

gttgacggcc tggtaggcgc agcatccctt ttctacgggt agcgcgtatg cctgcgcggc 10380

cttccggagc gaggtgtggg tgagcgcaaa ggtgtccctg accatgactt tgaggtactg 10440

gtatttgaag tcagtgtcgt cgcatccgcc ctgctcccag agcaaaaagt ccgtgcgctt 10500

tttggaacgc ggatttggca gggcgaaggt gacatcgttg aagagtatct ttcccgcgcg 10560

aggcataaag ttgcgtgtga tgcggaaggg tcccggcacc tcggaacggt tgttaattac 10620

ctgggcggcg agcacgatct cgtcaaagcc gttgatgttg tggcccacaa tgtaaagttc 10680

caagaagcgc gggatgccct tgatggaagg caatttttta agttcctcgt aggtgagctc 10740

ttcaggggag ctgagcccgt gctctgaaag ggcccagtct gcaagatgag ggttggaagc 10800

gacgaatgag ctccacaggt cacgggccat tagcatttgc aggtggtcgc gaaaggtcct 10860

aaactggcga cctatggcca ttttttctgg ggtgatgcag tagaaggtaa gcgggtcttg 10920

ttcccagcgg tcccatccaa ggttcgcggc taggtctcgc gcggcagtca ctagaggctc 10980

atctccgccg aacttcatga ccagcatgaa gggcacgagc tgcttcccaa aggcccccat 11040

ccaagtatag gtctctacat cgtaggtgac aaagagacgc tcggtgcgag gatgcgagcc 11100

gatcgggaag aactggatct cccgccacca attggaggag tggctattga tgtggtgaaa 11160

gtagaagtcc ctgcgacggg ccgaacactc gtgctggctt ttgtaaaaac gtgcgcagta 11220

ctggcagcgg tgcacgggct gtacatcctg cacgaggttg acctgacgac cgcgcacaag 11280

gaagcagagt gggaatttga gcccctcgcc tggcgggttt ggctggtggt cttctacttc 11340

ggctgcttgt ccttgaccgt ctggctgctc gaggggagtt acggtggatc ggaccaccac 11400

gccgcgcgag cccaaagtcc agatgtccgc gcgcggcggt cggagcttga tgacaacatc 11460

gcgcagatgg gagctgtcca tggtctggag ctcccgcggc gtcaggtcag gcgggagctc 11520

ctgcaggttt acctcgcata gacgggtcag ggcgcgggct agatccaggt gatacctaat 11580

ttccaggggc tggttggtgg cggcgtcgat ggcttgcaag aggccgcatc cccgcggcgc 11640

gactacggta ccgcgcggcg ggcggtgggc cgcgggggtg tccttggatg atgcatctaa 11700

aagcggtgac gcgggcgagc ccccggaggt agggggggct ccggacccgc cgggagaggg 11760

ggcaggggca cgtcggcgcc gcgcgcgggc aggagctggt gctgcgcgcg taggttgctg 11820

gcgaacgcga cgacgcggcg gttgatctcc tgaatctggc gcctctgcgt gaagacgacg 11880

ggcccggtga gcttgaacct gaaagagagt tcgacagaat caatttcggt gtcgttgacg 11940

gcggcctggc gcaaaatctc ctgcacgtct cctgagttgt cttgataggc gatctcggcc 12000

atgaactgct cgatctcttc ctcctggaga tctccgcgtc cggctcgctc cacggtggcg 12060

gcgaggtcgt tggaaatgcg ggccatgagc tgcgagaagg cgttgaggcc tccctcgttc 12120

cagacgcggc tgtagaccac gccccccttcg gcatcgcggg cgcgcatgac cacctgcgcg 12180

agattgagct ccacgtgccg ggcgaagacg gcgtagtttc gcaggcgctg aaagaggtag 12240

ttgagggtgg tggcggtgtg ttctgccacg aagaagtaca taacccagcg tcgcaacgtg 12300

gattcgttga tatcccccaa ggcctcaagg cgctccatgg cctcgtagaa gtccacggcg 12360

aagttgaaaa actgggagtt gcgcgccgac acggttaact cctcctccag aagacggatg 12420

agctcggcga cagtgtcgcg cacctcgcgc tcaaaggcta caggggcctc ttcttcttct 12480

tcaatctcct cttccataag ggcctcccct tcttcttctt ctggcggcgg tgggggaggg 12540

gggacacggc ggcgacgacg gcgcaccggg aggcggtcga caaagcgctc gatcatctcc 12600

ccgcggcgac ggcgcatggt ctcggtgacg gcgcggccgt tctcgcgggg gcgcagttgg 12660

aagacgccgc ccgtcatgtc ccggttatgg gttggcgggg ggctgccatg cggcagggat 12720

acggcgctaa cgatgcatct caacaattgt tgtgtaggta ctccgccgcc gagggacctg 12780

agcgagtccg catcgaccgg atcggaaaac ctctcgagaa aggcgtctaa ccagtcacag 12840

tcgcaaggta ggctgagcac cgtggcgggc ggcagcgggc ggcggtcggg gttgtttctg 12900

gcggaggtgc tgctgatgat gtaattaaag taggcggtct tgagacggcg gatggtcgac 12960

agaagcacca tgtccttggg tccggcctgc tgaatgcgca ggcggtcggc catgccccag 13020

gcttcgtttt gacatcggcg caggtctttg tagtagtctt gcatgagcct ttctaccggc 13080

acttcttctt ctccttcctc ttgtcctgca tctcttgcat ctatcgctgc ggcggcggcg 13140

gagtttggcc gtaggtggcg ccctcttcct cccatgcgtg tgaccccgaa gcccctcatc 13200

ggctgaagca gggctaggtc ggcgacaacg cgctcggcta atatggcctg ctgcacctgc 13260

gtgagggtag actggaagtc atccatgtcc acaaagcggt ggtatgcgcc cgtgttgatg 13320

gtgtaagtgc agttggccat aacggaccag ttaacggtct ggtgacccgg ctgcgagagc 13380

tcggtgtacc tgagacgcga gtaagccctc gagtcaaata cgtagtcgtt gcaagtccgc 13440

accaggtact ggtatcccac caaaaagtgc ggcggcggct ggcggtagag gggccagcgt 13500

agggtggccg gggctccggg ggcgagatct tccaacataa ggcgatgata tccgtagatg 13560

tacctggaca tccaggtgat gccggcggcg gtggtggagg cgcgcggaaa gtcgcggacg 13620

cggttccaga tgttgcgcag cggcaaaaag tgctccatgg tcgggacgct ctggccggtc 13680

aggcgcgcgc aatcgttgac gctctagcgt gcaaaaggag agcctgtaag cgggcactct 13740

tccgtggtct ggtggataaa ttcgcaaggg tatcatggcg gacgaccggg gttcgagccc 13800

cgtatccggc cgtccgccgt gatccatgcg gttaccgccc gcgtgtcgaa cccaggtgtg 13860

cgacgtcaga caacgggggа gtgctccttt tggcttcctt ccaggcgcgg cggctgctgc 13920

gctagctttt ttggccactg gccgcgcgca gcgtaagcgg ttaggctgga aagcgaaagc 13980

attaagtggc tcgctccctg tagccggagg gttattttcc aagggttgag tcgcgggacc 14040

cccggttcga gtctcggacc ggccggactg cggcgaacgg gggtttgcct ccccgtcatg 14100

caagaccccg cttgcaaatt cctccggaaa cagggacgag ccccttttтt gcttttccca 14160

gatgcatccg gtgctgcggc agatgcgccc ccctcctcag cagcggcaag agcaagagca 14220

gcggcagaca tgcagggcac cctcccctcc tcctaccgcg tcaggagggg cgacatccgc 14280

ggttgacgcg gcagcagatg gtgattacga acccccgcgg cgccgggccc ggcactacct 14340

ggacttggag gagggcgagg gcctggcgcg gctaggagcg ccctctcctg agcggcaccc 14400

aagggtgcag ctgaagcgtg atacgcgtga ggcgtacgtg ccgcggcaga acctgtttcg 14460

cgaccgcgag ggagaggagc ccgaggagat gcgggatcga aagttccacg cagggcgcga 14520

gctgcggcat ggcctgaatc gcgagcggtt gctgcgcgag gaggactttg agcccgacgc 14580

gcgaaccggg attagtcccg cgcgcgcaca cgtggcggcc gccgacctgg taaccgcata 14640

cgagcagacg gtgaaccagg agattaactt tcaaaaaagc tttaacaacc acgtgcgtac 14700

gcttgtggcg cgcgaggagg tggctatagg actgatgcat ctgtgggact ttgtaagcgc 14760

gctggagcaa aacccaaata gcaagccgct catggcgcag ctgttcctta tagtgcagca 14820

cagcagggac aacgaggcat tcagggatgc gctgctaaac atagtagagc ccgagggccg 14880

ctggctgctc gatttgataa acatcctgca gagcatagtg gtgcaggagc gcagcttgag 14940

cctggctgac aaggtggccg ccatcaacta ttccatgctt agcctgggca agttttacgc 15000

ccgcaagata taccataccc cttacgttcc catagacaag gaggtaaaga tcgaggggtt 15060

ctacatgcgc atggcgctga aggtgcttac cttgagcgac gacctgggcg tttatcgcaa 15120

cgagcgcatc cacaaggccg tgagcgtgag ccggcggcgc gagctcagcg accgcgagct 15180

gatgcacagc ctgcaaaggg ccctggctgg cacgggcagc ggcgatagag aggccgagtc 15240

ctactttgac gcgggcgctg acctgcgctg ggccccaagc cgacgcgccc tggaggcagc 15300

tggggccgga cctgggctgg cggtggcacc cgcgcgcgct ggcaacgtcg gcggcgtgga 15360

ggaatatgac gaggacgatg agtacgagcc agaggacggc gagtactaag cggtgatgtt 15420

tctgatcaga tgatgcaaga cgcaacggac ccggcggtgc gggcggcgct gcagagccag 15480

ccgtccggcc ttaactccac ggacgactgg cgccaggtca tggaccgcat catgtcgctg 15540

actgcgcgca atcctgacgc gttccggcag cagccgcagg ccaaccggct ctccgcaatt 15600

ctggaagcgg tggtcccggc gcgcgcaaac cccacgcacg agaaggtgct ggcgatcgta 15660

aacgcgctgg ccgaaaacag ggccatccgg cccgacgagg ccggcctggt ctacgacgcg 15720

ctgcttcagc gcgtggctcg ttacaacagc ggcaacgtgc agaccaacct ggaccggctg 15780

gtgggggatg tgcgcgaggc cgtggcgcag cgtgagcgcg cgcagcagca gggcaacctg 15840

ggctccatgg ttgcactaaa cgccttcctg agtacacagc ccgccaacgt gccgcgggga 15900

caggaggact acaccaactt tgtgagcgca ctgcggctaa tggtgactga gacaccgcaa 15960

agtgaggtgt accagtctgg gccagactat tttttccaga ccagtagaca aggcctgcag 16020

accgtaaacc tgagccaggc tttcaaaaac ttgcaggggc tgtgggggggt gcgggctccc 16080

acaggcgacc gcgcgaccgt gtctagcttg ctgacgccca actcgcgcct gttgctgctg 16140

ctaatagcgc ccttcacgga cagtggcagc gtgtcccggg acacatacct aggtcacttg 16200

ctgacactgt accgcgaggc cataggtcag gcgcatgtgg acgagcatac tttccaggag 16260

attacaagtg tcagccgcgc gctggggcag gaggacacgg gcagcctgga ggcaacccta 16320

aactacctgc tgaccaaccg gcggcagaag atcccctcgt tgcacagttt aaacagcgag 16380

gaggagcgca ttttgcgcta cgtgcagcag agcgtgagcc ttaacctgat gcgcgacggg 16440

gtaacgccca gcgtggcgct ggacatgacc gcgcgcaaca tggaaccggg catgtatgcc 16500

tcaaaccggc cgtttatcaa ccgcctaatg gactacttgc atcgcgcggc cgccgtgaac 16560

cccgagtatt tcaccaatgc catcttgaac ccgcactggc taccgccccc tggtttctac 16620

accgggggat tcgaggtgcc cgagggtaac gatggattcc tctgggacga catagacgac 16680

agcgtgtttt ccccgcaacc gcagaccctg ctagagttgc aacagcgcga gcaggcagag 16740

gcggcgctgc gaaaggaaag cttccgcagg ccaagcagct tgtccgatct aggcgctgcg 16800

gccccgcggt cagatgctag tagcccattt ccaagcttga tagggtctct taccagcact 16860

cgcaccaccc gcccgcgcct gctgggcgag gaggagtacc taaacaactc gctgctgcag 16920

ccgcagcgcg aaaaaaacct gcctccggca tttcccaaca acgggataga gagcctagtg 16980

gacaagatga gtagatggaa gacgtacgcg caggagcaca gggacgtgcc aggcccgcgc 17040

ccgcccaccc gtcgtcaaag gcacgaccgt cagcggggtc tggtgtggga ggacgatgac 17100

tcggcagacg acagcagcgt cctggatttg ggagggagtg gcaacccgtt tgcgcacctt 17160

cgccccaggc tggggagaat gttttaaaaa aaaaaaagca tgatgcaaaa taaaaaactc 17220

accaaggcca tggcaccgag cgttggtttt cttgtattcc ccttagtatg cggcgcgcgg 17280

cgatgtatga ggaaggtcct cctccctcct acgagagtgt ggtgagcgcg gcgccagtgg 17340

cggcggcgct gggttctccc ttcgatgctc ccctggaccc gccgtttgtg cctccgcggt 17400

acctgcggcc taccgggggg agaaacagca tccgttactc tgagttggca cccctattcg 17460

acaccacccg tgtgtacctg gtggacaaca agtcaacgga tgtggcatcc ctgaactacc 17520

agaacgacca cagcaacttt ctgaccacgg tcattcaaaa caatgactac agcccggggg 17580

aggcaagcac acagaccatc aatcttgacg accggtcgca ctggggcggc gacctgaaaa 17640

ccatcctgca taccaacatg ccaaatgtga acgagttcat gtttaccaat aagtttaagg 17700

cgcgggtgat ggtgtcgcgc ttgcctacta aggacaatca ggtggagctg aaatacgagt 17760

gggtggagtt cacgctgccc gagggcaact actccgagac catgaccata gaccttatga 17820

acaacgcgat cgtggagcac tacttgaaag tgggcagaca gaacggggtt ctggaaagcg 17880

acatcggggt aaagtttgac acccgcaact tcagactggg gtttgacccc gtcactggtc 17940

ttgtcatgcc tggggtatat acaaacgaag ccttccatcc agacatcatt ttgctgccag 18000

gatgcggggt ggacttcacc cacagccgcc tgagcaactt gttgggcatc cgcaagcggc 18060

aacccttcca ggagggcttt aggatcacct acgatgatct ggagggtggt aacattcccg 18120

cactgttgga tgtggacgcc taccaggcga gcttgaaaga tgacaccgaa cagggcgggg 18180

gtggcgcagg cggcagcaac agcagtggca gcggcgcgga agagaactcc aacgcggcag 18240

ccgcggcaat gcagccggtg gaggacatga acgatcatgc cattcgcggc gacacctttg 18300

ccacacgggc tgaggagaag cgcgctgagg ccgaagcagc ggccgaagct gccgcccccg 18360

ctgcgcaacc cgaggtcgag aagcctcaga agaaaccggt gatcaaaccc ctgacagagg 18420

acagcaagaa acgcagttac aacctaataa gcaatgacag caccttcacc cagtaccgca 18480

gctggtacct tgcatacaac tacggcgacc ctcagaccgg aatccgctca tggaccctgc 18540

tttgcactcc tgacgtaacc tgcggctcgg agcaggtcta ctggtcgttg ccagacatga 18600

tgcaagaccc cgtgaccttc cgctccacgc gccagatcag caactttccg gtggtgggcg 18660

ccgagctgtt gcccgtgcac tccaagagct tctacaacga ccaggccgtc tactcccaac 18720

tcatccgcca gtttacctct ctgacccacg tgttcaatcg ctttcccgag aaccagattt 18780

tggcgcgccc gccagccccc accatcacca ccgtcagtga aaacgttcct gctctcacag 18840

atcacgggac gctaccgctg cgcaacagca tcggaggagt ccagcgagtg accattactg 18900

acgccagacg ccgcacctgc ccctacgttt acaaggccct gggcatagtc tcgccgcgcg 18960

tcctatcgag ccgcactttt tgagcaagca tgtccatcct tatatcgccc agcaataaca 19020

caggctgggg cctgcgcttc ccaagcaaga tgtttggcgg ggccaagaag cgctccgacc 19080

aacacccagt gcgcgtgcgc gggcactacc gcgcgccctg gggcgcgcac aaacgcggcc 19140

gcactgggcg caccaccgtc gatgacgcca tcgacgcggt ggtggaggag gcgcgcaact 19200

acacgcccac gccgccacca gtgtccacag tggacgcggc cattcagacc gtggtgcgcg 19260

gagcccggcg ctatgctaaa atgaagagac ggcggaggcg cgtagcacgt cgccaccgcc 19320

gccgacccgg cactgccgcc caacgcgcgg cggcggccct gcttaaccgc gcacgtcgca 19380

ccggccgacg ggcggccatg cgggccgctc gaaggctggc cgcgggtatt gtcactgtgc 19440

cccccaggtc caggcgacga gcggccgccg cagcagccgc ggccattagt gctatgactc 19500

agggtcgcag gggcaacgtg tattgggtgc gcgactcggt tagcggcctg cgcgtgcccg 19560

tgcgcacccg ccccccgcgc aactagattg caagaaaaaa ctacttagac tcgtactgtt 19620

gtatgtatcc agcggcggcg gcgcgcaacg aagctatgtc caagcgcaaa atcaaagaag 19680

agatgctcca ggtcatcgcg ccggagatct atggcccccc gaagaaggaa gagcaggatt 19740

acaagccccg aaagctaaag cgggtcaaaa agaaaaagaa agatgatgat gatgaacttg 19800

acgacgaggt ggaactgctg cacgctaccg cgcccaggcg acgggtacag tggaaaggtc 19860

gacgcgtaaa acgtgttttg cgacccggca ccaccgtagt ctttacgccc ggtgagcgct 19920

ccacccgcac ctacaagcgc gtgtatgatg aggtgtacgg cgacgaggac ctgcttgagc 19980

aggccaacga gcgcctcggg gagtttgcct acggaaagcg gcataaggac atgctggcgt 20040

tgccgctgga cgagggcaac ccaacaccta gcctaaagcc cgtaacactg cagcaggtgc 20100

tgcccgcgct tgcaccgtcc gaagaaaagc gcggcctaaa gcgcgagtct ggtgacttgg 20160

cacccaccgt gcagctgatg gtacccaagc gccagcgact ggaagatgtc ttggaaaaaa 20220

tgaccgtgga acctgggctg gagcccgagg tccgcgtgcg gccaatcaag caggtggcgc 20280

cgggactggg cgtgcagacc gtggacgttc agatacccac taccagtagc accagtattg 20340

ccaccgccac agagggcatg gagacacaaa cgtccccggt tgcctcagcg gtggcggatg 20400

ccgcggtgca ggcggtcgct gcggccgcgt ccaagacctc tacggaggtg caaacggacc 20460

cgtggatgtt tcgcgtttca gccccccggc gcccgcgccg ttcgaggaag tacggcgccg 20520

ccagcgcgct actgcccgaa tatgccctac atccttccat tgcgcctacc cccggctatc 20580

gtggctacac ctaccgcccc agaagacgag caactacccg acgccgaacc accactggaa 20640

cccgccgccg ccgtcgccgt cgccagcccg tgctggcccc gatttccgtg cgcagggtgg 20700

ctcgcgaagg aggcaggacc ctggtgctgc caacagcgcg ctaccacccc agcatcgttt 20760

aaaagccggt ctttgtggtt cttgcagata tggccctcac ctgccgcctc cgtttcccgg 20820

tgccgggatt ccgaggaaga atgcaccgta ggaggggcat ggccggccac ggcctgacgg 20880

gcggcatgcg tcgtgcgcac caccggcggc ggcgcgcgtc gcaccgtcgc atgcgcggcg 20940

gtatcctgcc cctccttatt ccactgatcg ccgcggcgat tggcgccgtg cccggaattg 21000

catccgtggc cttgcaggcg cagagacact gattaaaaac aagttgcatg tggaaaaatc 21060

aaaataaaaa gtctggactc tcacgctcgc ttggtcctgt aactattttg tagaatggaa 21120

gacatcaact ttgcgtctct ggccccgcga cacggctcgc gcccgttcat gggaaactgg 21180

caagatatcg gcaccagcaa tatgagcggt ggcgccttca gctggggctc gctgtggagc 21240

ggcattaaaa atttcggttc caccgttaag aactatggca gcaaggcctg gaacagcagc 21300

acaggccaga tgctgaggga taagttgaaa gagcaaaatt tccaacaaaa ggtggtagat 21360

ggcctggcct ctggcattag cggggtggtg gacctggcca accaggcagt gcaaaataag 21420

attaacagta agcttgatcc ccgccctccc gtagaggagc ctccaccggc cgtggagaca 21480

gtgtctccag aggggcgtgg cgaaaagcgt ccgcgccccg acagggaaga aactctggtg 21540

acgcaaatag acgagcctcc ctcgtacgag gaggcactaa agcaaggcct gcccaccacc 21600

cgtcccatcg cgcccatggc taccggagtg ctgggccagc acacacccgt aacgctggac 21660

ctgcctcccc ccgccgacac ccagcagaaa cctgtgctgc caggcccgac cgccgttgtt 21720

gtaacccgtc ctagccgcgc gtccctgcgc cgcgccgcca gcggtccgcg atcgttgcgg 21780

cccgtagcca gtggcaactg gcaaagcaca ctgaacagca tcgtgggtct gggggtgcaa 21840

tccctgaagc gccgacgatg cttctgatag ctaacgtgtc gtatgtgtgt catgtatgcg 21900

tccatgtcgc cgccagagga gctgctgagc cgccgcgcgc ccgctttcca agatggctac 21960

cccttcgatg atgccgcagt ggtcttacat gcacatctcg ggccaggacg cctcggagta 22020

cctgagcccc gggctggtgc agtttgcccg cgccaccgag acgtacttca gcctgaataa 22080

caagtttaga aaccccacgg tggcgcctac gcacgacgtg accacagacc ggtcccagcg 22140

tttgacgctg cggttcatcc ctgtggaccg tgaggatact gcgtactcgt acaaggcgcg 22200

gttcacccta gctgtgggtg ataaccgtgt gctggacatg gcttccacgt actttgacat 22260

ccgcggcgtg ctggacaggg gccctacttt taagccctac tctggcactg cctacaacgc 22320

cctggctccc aagggtgccc caaatccttg cgaatgggat gaagctgcta ctgctcttga 22380

aataaaccta gaagaagagg acgatgacaa cgaagacgaa gtagacgagc aagctgagca 22440

gcaaaaaact cacgtatttg ggcaggcgcc ttattctggt ataaatatta caaaggaggg 22500

tattcaaata ggtgtcgaag gtcaaacacc taaatatgcc gataaaacat ttcaacctga 22560

acctcaaata ggagaatctc agtggtacga aacagaaatt aatcatgcag ctgggagagt 22620

cctaaaaaag actaccccaa tgaaaccatg ttacggttca tatgcaaaac ccacaaatga 22680

aaatggaggg caaggcattc ttgtaaagca acaaaatgga aagctagaaa gtcaagtgga 22740

aatgcaattt ttctcaacta ctgaggcagc cgcaggcaat ggtgataact tgactcctaa 22800

agtggtattg tacagtgaag atgtagatat agaaacccca gacactcata tttcttacat 22860

gcccactatt aaggaaggta actcacgaga actaatgggc caacaatcta tgcccaacag 22920

gcctaattac attgctttta gggacaattt tattggtcta atgtattaca acagcacggg 22980

taatatgggt gttctggcgg gccaagcatc gcagttgaat gctgttgtag atttgcaaga 23040

cagaaacaca gagctttcat accagctttt gcttgattcc attggtgata gaaccaggta 23100

cttttctatg tggaatcagg ctgttgacag ctatgatcca gatgttagaa ttattgaaaa 23160

tcatggaact gaagatgaac ttccaaatta ctgctttcca ctgggaggtg tgattaatac 23220

agagactctt accaaggtaa aacctaaaac aggtcaggaa aatggatggg aaaaagatgc 23280

tacagaattt tcagataaaa atgaaataag agttggaaat aattttgcca tggaaatcaa 23340

tctaaatgcc aacctgtgga gaaatttcct gtactccaac atagcgctgt atttgcccga 23400

caagctaaag tacagtcctt ccaacgtaaa aatttctgat aacccaaaca cctacgacta 23460

catgaacaag cgagtggtgg ctcccgggct agtggactgc tacattaacc ttggagcacg 23520

ctggtccctt gactatatgg acaacgtcaa cccatttaac caccaccgca atgctggcct 23580

gcgctaccgc tcaatgttgc tgggcaatgg tcgctatgtg cccttccaca tccaggtgcc 23640

tcagaagttc tttgccatta aaaacctcct tctcctgccg ggctcataca cctacgagtg 23700

gaacttcagg aaggatgtta acatggttct gcagagctcc ctaggaaatg acctaagggt 23760

tgacggagcc agcattaagt ttgatagcat ttgcctttac gccaccttct tccccatggc 23820

ccacaacacc gcctccacgc ttgaggccat gcttagaaac gacaccaacg accagtcctt 23880

taacgactat ctctccgccg ccaacatgct ctaccctata cccgccaacg ctaccaacgt 23940

gcccatatcc atcccctccc gcaactgggc ggctttccgc ggctgggcct tcacgcgcct 24000

taagactaag gaaaccccat cactgggctc gggctacgac ccttattaca cctactctgg 24060

ctctataccc tacctagatg gaacctttta cctcaaccac acctttaaga aggtggccat 24120

taccttgac tcttctgtca gctggcctgg caatgaccgc ctgcttaccc ccaacgagtt 24180

tgaaattaag cgctcagttg acggggaggg ttacaacgtt gcccagtgta acatgaccaa 24240

agactggttc ctggtacaaa tgctagctaa ctataacatt ggctaccagg gcttctatat 24300

cccagagagc tacaaggacc gcatgtactc cttctttaga aacttccagc ccatgagccg 24360

tcaggtggtg gatgatacta aatacaagga ctaccaacag gtgggcatcc tacaccaaca 24420

caacaactct ggatttgttg gctaccttgc ccccaccatg cgcgaaggac aggcctaccc 24480

tgctaacttc ccctatccgc ttataggcaa gaccgcagtt gacagcatta cccagaaaaa 24540

gtttctttgc gatcgcaccc tttggcgcat cccattctcc agtaacttta tgtccatggg 24600

cgcactcaca gacctgggcc aaaaccttct ctacgccaac tccgcccacg cgctagacat 24660

gacttttgag gtggatccca tggacgagcc cacccttctt tatgttttgt ttgaagtctt 24720

tgacgtggtc cgtgtgcacc agccgcaccg cggcgtcatc gaaaccgtgt acctgcgcac 24780

gcccttctcg gccggcaacg ccacaacata aagaagcaag caacatcaac aacagctgcc 24840

gccatgggct ccagtgagca ggaactgaaa gccattgtca aagatcttgg ttgtgggcca 24900

tatttttgg gcacctatga caagcgcttt ccaggctttg tttctccaca caagctcgcc 24960

tgcgccatag tcaatacggc cggtcgcgag actgggggcg tacactggat ggcctttgcc 25020

tggaacccgc actcaaaaac atgctacctc tttgagccct ttggcttttc tgaccagcga 25080

ctcaagcagg tttaccagtt tgagtacgag tcactcctgc gccgtagcgc cattgcttct 25140

tcccccgacc gctgtataac gctggaaaag tccacccaaa gcgtacaggg gcccaactcg 25200

gccgcctgtg gactattctg ctgcatgttt ctccacgcct ttgccaactg gccccaaact 25260

cccatggatc acaaccccac catgaacctt attaccgggg tacccaactc catgctcaac 25320

agtccccagg tacagcccac cctgcgtcgc aaccaggaac agctctacag cttcctggag 25380

cgccactcgc cctacttccg cagccacagt gcgcagatta ggagcgccac ttctttttgt 25440

cacttgaaaa acatgtaaaa ataatgtact agagacactt tcaataaagg caaatgcttt 25500

tatttgtaca ctctcgggtg attatttacc cccacccttg ccgtctgcgc cgtttaaaaa 25560

tcaaaggggt tctgccgcgc atcgctatgc gccactggca gggacacgtt gcgatactgg 25620

tgtttagtgc tccacttaaa ctcaggcaca accatccgcg gcagctcggt gaagttttca 25680

ctccacaggc tgcgcaccat caccaacgcg tttagcaggt cgggcgccga tatcttgaag 25740

tcgcagttgg ggcctccgcc ctgcgcgcgc gagttgcgat acacagggtt gcagcactgg 25800

aacactatca gcgccgggtg gtgcacgctg gccagcacgc tcttgtcgga gatcagatcc 25860

gcgtccaggt cctccgcgtt gctcagggcg aacggagtca actttggtag ctgccttccc 25920

aaaaagggcg cgtgcccagg ctttgagttg cactcgcacc gtagtggcat caaaaggtga 25980

ccgtgcccgg tctgggcgtt aggatacagc gcctgcataa aagccttgat ctgcttaaaa 26040

gccacctgag cctttgcgcc ttcagagaag aacatgccgc aagacttgcc ggaaaactga 26100

ttggccggac aggccgcgtc gtgcacgcag caccttgcgt cggtgttgga gatctgcacc 26160

acatttcggc cccaccggtt cttcacgatc ttggccttgc tagactgctc cttcagcgcg 26220

cgctgcccgt tttcgctcgt cacatccatt tcaatcacgt gctccttatt tatcataatg 26280

cttccgtgta gacacttaag ctcgccttcg atctcagcgc agcggtgcag ccacaacgcg 26340

cagcccgtgg gctcgtgatg cttgtaggtc acctctgcaa acgactgcag gtacgcctgc 26400

aggaatcgcc ccatcatcgt cacaaaggtc ttgttgctgg tgaaggtcag ctgcaacccg 26460

cggtgctcct cgttcagcca ggtcttgcat acggccgcca gagcttccac ttggtcaggc 26520

agtagtttga agttcgcctt tagatcgtta tccacgtggt acttgtccat cagcgcgcgc 26580

gcagcctcca tgcccttctc ccacgcagac acgatcggca cactcagcgg gttcatcacc 26640

gtaatttcac tttccgcttc gctgggctct tcctcttcct cttgcgtccg cataccacgc 26700

gccactgggt cgtcttcatt cagccgccgc actgtgcgct tacctccttt gccatgcttg 26760

attagcaccg gtgggttgct gaaacccacc atttgtagcg ccacatcttc tctttcttcc 26820

tcgctgtcca cgattacctc tggtgatggc gggcgctcgg gcttgggaga agggcgcttc 26880

tttttcttct tgggcgcaat ggccaaatcc gccgccgagg tcgatggccg cgggctgggt 26940

gtgcgcggca ccagcgcgtc ttgtgatgag tcttcctcgt cctcggactc gatacgccgc 27000

ctcatccgct tttttggggg cgcccgggga ggcggcggcg acggggacgg ggacgacacg 27060

tcctccatgg ttgggggacg tcgcgccgca ccgcgtccgc gctcgggggt ggtttcgcgc 27120

tgctcctctt cccgactggc catttccttc tcctataggc agaaaaagat catggagtca 27180

gtcgagaaga aggacagcct aaccgccccc tctgagttcg ccaccaccgc ctccaccgat 27240

gccgccaacg cgcctaccac cttccccgtc gaggcacccc cgcttgagga ggaggaagtg 27300

attatcgagc aggacccagg ttttgtaagc gaagacgacg aggaccgctc agtaccaaca 27360

gaggataaaa agcaagacca ggacaacgca gaggcaaacg aggaacaagt cgggcggggg 27420

gacgaaaggc atggcgacta cctagatgtg ggagacgacg tgctgttgaa gcatctgcag 27480

cgccagtgcg ccattatctg cgacgcgttg caagagcgca gcgatgtgcc cctcgccata 27540

gcggatgtca gccttgccta cgaacgccac ctattctcac cgcgcgtacc ccccaaacgc 27600

caagaaaacg gcacatgcga gcccaacccg cgcctcaact tctaccccgt atttgccgtg 27660

ccagaggtgc ttgccaccta tcacatcttt ttccaaaact gcaagatacc cctatcctgc 27720

cgtgccaacc gcagccgagc ggacaagcag ctggccttgc ggcagggcgc tgtcatacct 27780

gatatcgcct cgctcaacga agtgccaaaa atctttgagg gtcttggacg cgacgagaag 27840

cgcgcggcaa acgctctgca acaggaaaac agcgaaaatg aaagtcactc tggagtgttg 27900

gtggaactcg agggtgacaa cgcgcgccta gccgtactaa aacgcagcat cgaggtcacc 27960

cactttgcct acccggcact taacctaccc cccaaggtca tgagcacagt catgagtgag 28020

ctgatcgtgc gccgtgcgca gcccctggag agggatgcaa atttgcaaga acaaacagag 28080

gagggcctac ccgcagttgg cgacgagcag ctagcgcgct ggcttcaaac gcgcgagcct 28140

gccgacttgg aggagcgacg caaactaatg atggccgcag tgctcgttac cgtggagctt 28200

gagtgcatgc agcggttctt tgctgacccg gagatgcagc gcaagctaga ggaaacattg 28260

cactacacct ttcgacaggg ctacgtacgc caggcctgca agatctccaa cgtggagctc 28320

tgcaacctgg tctcctacct tggaattttg cacgaaaacc gccttgggca aaacgtgctt 28380

cattccacgc tcaagggcga ggcgcgccgc gactacgtcc gcgactgcgt ttacttattt 28440

ctatgctaca cctggcagac ggccatgggc gtttggcagc agtgcttgga ggagtgcaac 28500

ctcaaggagc tgcagaaact gctaaagcaa aacttgaagg acctatggac ggccttcaac 28560

gagcgctccg tggccgcgca cctggcggac atcattttcc ccgaacgcct gcttaaaacc 28620

ctgcaacagg gtctgccaga cttcaccagt caaagcatgt tgcagaactt taggaacttt 28680

atcctagagc gctcaggaat cttgcccgcc acctgctgtg cacttcctag cgactttgtg 28740

cccattaagt accgcgaatg ccctccgccg ctttggggcc actgctacct tctgcagcta 28800

gccaactacc ttgcctacca ctctgacata atggaagacg tgagcggtga cggtctactg 28860

gagtgtcact gtcgctgcaa cctatgcacc ccgcaccgct ccctggtttg caattcgcag 28920

ctgcttaacg aaagtcaaat tatcggtacc tttgagctgc agggtccctc gcctgacgaa 28980

aagtccgcgg ctccggggtt gaaactcact ccggggctgt ggacgtcggc ttaccttcgc 29040

aaatttgtac ctgaggacta ccacgcccac gagattaggt tctacgaaga ccaatcccgc 29100

ccgcctaatg cggagcttac cgcctgcgtc attacccagg gccacattct tggccaattg 29160

caagccatca acaaagcccg ccaagagttt ctgctacgaa agggacgggg ggtttacttg 29220

gacccccagt ccggcgagga gctcaaccca atccccccgc cgccgcagcc ctatcagcag 29280

cagccgcggg cccttgcttc ccaggatggc acccaaaaag aagctgcagc tgccgccgcc 29340

acccacggac gaggaggaat actgggacag tcaggcagag gaggttttgg acgaggagga 29400

ggaggacatg atggaagact gggagagcct agacgaggaa gcttccgagg tcgaagaggt 29460

gtcagacgaa acaccgtcac cctcggtcgc attcccctcg ccggcgcccc agaaatcggc 29520

aaccggttcc agcatggcta caacctccgc tcctcaggcg ccgccggcac tgcccgttcg 29580

ccgacccaac cgtagatggg acaccactgg aaccagggcc ggtaagtcca agcagccgcc 29640

gccgttagcc caagagcaac aacagcgcca aggctaccgc tcatggcgcg ggcacaagaa 29700

cgccatagtt gcttgcttgc aagactgtgg gggcaacatc tccttcgccc gccgctttct 29760

tctctaccat cacggcgtgg ccttcccccg taacatcctg cattactacc gtcatctcta 29820

cagcccatac tgcaccggcg gcagcggcag caacagcagc ggccacacag aagcaaaggc 29880

gaccggatag caagactctg acaaagccca agaaatccac agcggcggca gcagcaggag 29940

gaggagcgct gcgtctggcg cccaacgaac ccgtatcgac ccgcgagctt agaaacagga 30000

tttttcccac tctgtatgct atatttcaac agagcagggg ccaagaacaa gagctgaaaa 30060

taaaaaacag gtctctgcga tccctcaccc gcagctgcct gtatcacaaa agcgaagatc 30120

agcttcggcg cacgctggaa gacgcggagg ctctcttcag taaatactgc gcgctgactc 30180

ttaaggacta gtttcgcgcc ctttctcaaa tttaagcgcg aaaactacgt catctccagc 30240

ggccacaccc ggcgccagca cctgttgtca gcgccattat gagcaaggaa attcccacgc 30300

cctacatgtg gagttaccag ccacaaatgg gacttgcggc tggagctgcc caagactact 30360

caacccgaat aaactacatg agcgcgggac cccacatgat atcccgggtc aacggaatac 30420

gcgcccaccg aaaccgaatt ctcctggaac aggcggctat taccaccaca cctcgtaata 30480

accttaatcc ccgtagttgg cccgctgccc tggtgtacca ggaaagtccc gctcccacca 30540

ctgtggtact tcccagagac gcccaggccg aagttcagat gactaactca ggggcgcagc 30600

ttgcgggcgg ctttcgtcac agggtgcggt cgcccgggca gggtataact cacctgacaa 30660

tcagagggcg aggtattcag ctcaacgacg agtcggtgag ctcctcgctt ggtctccgtc 30720

cggacgggac atttcagatc ggcggcgccg gccgctcttc attcacgcct cgtcaggcaa 30780

tcctaactct gcagacctcg tcctctgagc cgcgctctgg aggcattgga actctgcaat 30840

ttattgagga gtttgtgcca tcggtctact ttaacccctt ctcgggacct cccggccact 30900

atccggatca atttattcct aactttgacg cggtaaagga ctcggcggac ggctacgact 30960

gaatgttaag tggagaggca gagcaactgc gcctgaaaca cctggtccac tgtcgccgcc 31020

acaagtgctt tgcccgcgac tccggtgagt tttgctactt tgaattgccc gaggatcata 31080

tcgagggccc ggcgcacggc gtccggctta ccgcccaggg agagcttgcc cgtagcctga 31140

ttcgggagtt tacccagcgc cccctgctag ttgagcggga caggggaccc tgtgttctca 31200

ctgtgatttg caactgtcct aaccctggat tacatcaaga tcctctagtt aatgtcaggt 31260

cgcctaagtc gattaactag agtacccggg gatcttattc cctttaacta ataaaaaaaa 31320

ataataaagc atcacttact taaaatcagt tagcaaattt ctgtccagtt tattcagcag 31380

cacctccttg ccctcctccc agctctggta ttgcagcttc ctcctggctg caaactttct 31440

ccacaatcta aatggaatgt cagtttcctc ctgttcctgt ccatccgcac ccactatctt 31500

catgttgttg cagatgaagc gcgcaagacc gtctgaagat accttcaacc ccgtgtatcc 31560

atatgacacg gaaaccggtc ctccaactgt gccttttctt actcctccct ttgtatcccc 31620

caatgggttt caagagagtc cccctggggt actctctttg cgcctatccg aacctctagt 31680

tacctccaat ggcatgcttg cgctcaaaat gggcaacggc ctctctctgg acgaggccgg 31740

caaccttacc tcccaaaatg taaccactgt gagcccacct ctcaaaaaaa ccaagtcaaa 31800

cataaacctg gaaatatctg cacccctcac agttacctca gaagccctaa ctgtggctgc 31860

cgccgcacct ctaatggtcg cgggcaacac actcaccatg caatcacagg ccccgctaac 31920

cgtgcacgac tccaaactta gcattgccac ccaaggaccc ctcacagtgt cagaaggaaa 31980

gctagccctg caaacatcag gccccctcac caccaccgat agcagtaccc ttactatcac 32040

tgcctcaccc cctctaacta ctgccactgg tagcttgggc attgacttga aagagcccat 32100

ttatacacaa aatggaaaac taggactaaa gtacggggct cctttgcatg taacagacga 32160

cctaaacact ttgaccgtag caactggtcc aggtgtgact attaataata cttccttgca 32220

aactaaagtt actggagcct tgggttttga ttcacaaggc aatatgcaac ttaatgtagc 32280

aggaggacta aggattgatt ctcaaaacag acgccttata cttgatgtta gttatccgtt 32340

tgatgctcaa aaccaactaa atctaagact aggacagggc cctcttttta taaactcagc 32400

ccacaacttg gatattaact acaacaaagg cctttacttg tttacagctt caaacaattc 32460

caaaaagctt gaggttaacc taagcactgc caaggggttg atgtttgacg ctacagccat 32520

agccattaat gcaggagatg ggcttgaatt tggttcacct aatgcaccaa acacaaatcc 32580

cctcaaaaca aaaattggcc atggcctaga atttgattca aacaaggcta tggttcctaa 32640

actaggaact ggccttagtt ttgacagcac aggtgccatt acagtaggaa acaaaaataa 32700

tgataagcta actttgtgga ccggaataaa ccctccacct aactgtcaaa ttgtggaaaa 32760

cactaataca aatgatggca aacttacttt agtattagta aaaaatggag ggcttgttaa 32820

tggctacgtg tctctagttg gtgtatcaga cactgtgaac caaatgttca cacaaaagac 32880

agcaaacatc caattaagat tatattttga ctcttctgga aatctattaa ctgaggaatc 32940

agacttaaaa attccactta aaaataaatc ttctacagcg accagtgaaa ctgtagccag 33000

cagcaaagcc tttatgccaa gtactacagc ttatcccttc aacaccacta ctagggatag 33060

tgaaaactac attcatggaa tatgttacta catgactagt tatgatagaa gtctatttcc 33120

cttgaacatt tctataatgc taaacagccg tatgatttct tccaatgttg cctatgccat 33180

acaatttgaa tggaatctaa atgcaagtga atctccagaa agcaacatag ctacgctgac 33240

cacatccccc tttttctttt cttacattac agaagacgac aactaaagaa tcgtttgtgt 33300

tatgtttcaa cgtgtttatt tttcaattgc agaaaatttc aagtcatttt tcattcagta 33360

gtatagcccc accaccacat agcttataca gatcaccgta ccttaatcaa actcacagaa 33420

ccctagtatt caacctgcca cctccctccc aacacacaga gtacacagtc ctttctcccc 33480

ggctggcctt aaaaagcatc atatcatggg taacagacat attcttaggt gttatattcc 33540

acacggtttc ctgtcgagcc aaacgctcat cagtgatatt aataaactcc ccgggcagct 33600

cacttaagtt catgtcgctg tccagctgct gagccacagg ctgctgtcca acttgcggtt 33660

gcttaacggg cggcgaagga gaagtccacg ctcagcgaat aaactgctgc cgccgccgct 33720

ccgtcctgca ggaatacaac atggcagtgg tctcctcagc gatgattcgc accgcccgca 33780

gcataaggcg ccttgtcctc cgggcacagc agcgcaccct gatctcactt aaatcagcac 33840

agtaactgca gcacagcacc acaatattgt tcaaaatccc acagtgcaag gcgctgtatc 33900

caaagctcat ggcggggacc acagaaccca cgtggccatc ataccacaag cgcaggtaga 33960

ttaagtggcg acccctcata aacacgctgg acataaacat tacctctttt ggcatgttgt 34020

aattcaccac ctcccggtac catataaacc tctgattaaa catggcgcca tccaccacca 34080

tcctaaacca gctggccaaa acctgcccgc cggctataca ctgcagggaa ccgggactgg 34140

aacaatgaca gtggagagcc caggactcgt aaccatggat catcatgctc gtcatgatat 34200

caatgttggc acaacacagg cacacgtgca tacacttcct caggattaca agctcctccc 34260

gcgttagaac catatcccag ggaacaaccc attcctgaat cagcgtaaat cccacactgc 34320

agggaagacc tcgcacgtaa ctcacgttgt gcattgtcaa agtgttacat tcgggcagca 34380

gcggatgatc ctccagtatg gtagcgcggg tttctgtctc aaaaggaggt agacgatccc 34440

tactgtacgg agtgcgccga gacaaccgag atcgtgttgg tcgtagtgtc atgccaaatg 34500

gaacgccgga cgtagtcata tttcctgaag caaaaccagg tgcgggcgtg acaaacagat 34560

ctgcgtctcc ggtctcgccg cttagatcgc tctgtgtagt agttgtagta tatccactct 34620

ctcaaagcat ccaggcgccc cctggcttcg ggttctatgt aaactccttc atgcgccgct 34680

gccctgataa catccaccac cgcagaataa gccacaccca gccaacctac acattcgttc 34740

tgcgagtcac acacgggagg agcgggaaga gctggaagaa ccatgttttt ttttttattc 34800

caaaagatta tccaaaacct caaaatgaag atctattaag tgaacgcgct cccctccggt 34860

ggcgtggtca aactctacag ccaaagaaca gataatggca tttgtaagat gttgcacaat 34920

ggcttccaaa aggcaaacgg ccctcacgtc caagtggacg taaaggctaa acccttcagg 34980

gtgaatctcc tctataaaca ttccagcacc ttcaaccatg cccaaataat tctcatctcg 35040

ccaccttctc aatatatctc taagcaaatc ccgaatatta agtccggcca ttgtaaaaat 35100

ctgctccaga gcgccctcca ccttcagcct caagcagcga atcatgattg caaaaattca 35160

ggttcctcac agacctgtat aagattcaaa agcggaacat taacaaaaat accgcgatcc 35220

cgtaggtccc ttcgcagggc cagctgaaca taatcgtgca ggtctgcacg gaccagcgcg 35280

gccacttccc cgccaggaac catgacaaaa gaacccacac tgattatgac acgcatactc 35340

ggagctatgc taaccagcgt agccccgatg taagcttgtt gcatgggcgg cgatataaaa 35400

tgcaaggtgc tgctcaaaaa atcaggcaaa gcctcgcgca aaaaagaaag cacatcgtag 35460

tcatgctcat gcagataaag gcaggtaagc tccggaacca ccacagaaaa agacaccatt 35520

tttctctcaa acatgtctgc gggtttctgc ataaacacaa aataaaataa caaaaaaaca 35580

tttaaacatt agaagcctgt cttacaacag gaaaaacaac ccttataagc ataagacgga 35640

ctacggccat gccggcgtga ccgtaaaaaa actggtcacc gtgattaaaa agcaccaccg 35700

acagctcctc ggtcatgtcc ggagtcataa tgtaagactc ggtaaacaca tcaggttgat 35760

tcacatcggt cagtgctaaa aagcgaccga aatagcccgg gggaatacat acccgcaggc 35820

gtagagacaa cattacagcc cccataggag gtataacaaa attaatagga gagaaaaaca 35880

cataaacacc tgaaaaaccc tcctgcctag gcaaaatagc accctcccgc tccagaacaa 35940

catacagcgc ttccacagcg gcagccataa cagtcagcct taccagtaaa aaagaaaacc 36000

tattaaaaaa acaccactcg acacggcacc agctcaatca gtcacagtgt aaaaaagggc 36060

caagtgcaga gcgagtatat ataggactaa aaaatgacgt aacggttaaa gtccacaaaa 36120

aacacccaga aaaccgcacg cgaacctacg cccagaaacg aaagccaaaa aacccacaac 36180

ttcctcaaat cgtcacttcc gttttcccac gttacgtcac ttcccatttt aagaaaacta 36240

caattcccaa cacatacaag ttactccgcc ctaaaaccta cgtcacccgc cccgttccca 36300

cgccccgcgc cacgtcacaa actccacccc ctcattatca tattggcttc aatccaaaat 36360

aaggtatatt attgatgatg 36380

<210> 38
<211> 36119
<212> DNA
<213> Artificial Sequence

<220>
<223> Adk35F2-Spike/E4orf6(mPGK)-E4dl-318(E4re#36)

<400> 38
ttaattaaca tcatcaataa tataccttat tttggattga agccaatatg ataatgaggg 60

ggtggagttt gtgacgtggc gcggggcgtg ggaacggggc gggtgacgta gtagtgtggc 120

ggaagtgtga tgttgcaagt gtggcggaac acatgtaagc gacggatgtg gcaaaagtga 180

cgtttttggt gtgcgccggt gtacacagga agtgacaatt ttcgcgcggt tttaggcgga 240

tgttgtagta aatttgggcg taaccgagta agatttggcc attttcgcgg gaaaactgaa 300

taagaggaag tgaaatctga ataattttgt gttactcata gcgcgtaata atttctgtaa 360

tagtaatcaa ttacggggtc attagttcat agcccatata tggagttccg cgttacataa 420

cttacggtaa atggcccgcc tggctgaccg cccaacgacc cccgcccatt gacgtcaata 480

atgacgtatg ttcccatagt aacgccaata gggactttcc attgacgtca atgggtggag 540

tatttacggt aaactgccca cttggcagta catcaagtgt atcatatgcc aagtacgccc 600

cctattgacg tcaatgacgg taaatggccc gcctggcatt atgcccagta catgacctta 660

tgggactttc ctacttggca gtacatctac gtattagtca tcgctattac catggtgatg 720

cggttttggc agtacatcaa tgggcgtgga tagcggtttg actcacgggg atttccaagt 780

ctccacccca ttgacgtcaa tgggagtttg ttttggcacc aaaatcaacg ggactttcca 840

aaatgtcgta acaactccgc cccattgacg caaatgggcg gtaggcgtgt acggtgggag 900

gtctatataa gcagagctct ccctatcagt gatagagatc tccctatcag tgatagagat 960

cgtcgacgag ctcgtttagt gaaccgtcag atcgcctgga gacgccatcc acgctgtttt 1020

gacctccata gaagacaccg ggaccgatcc agcctccgat ttgccaccat gtttgtgttc 1080

ctggtgctgc tgccactggt gtccagccag tgtgtgaacc tgaccaccag gacccaactt 1140

cctcctgcct acaccaactc cttcaccagg ggagtctact accctgacaa ggtgttcagg 1200

tcctctgtgc tgcacagcac ccaggacctg ttcctgccat tcttcagcaa tgtgacctgg 1260

ttccatgcca tccatgtgtc tggcaccaat ggcaccaaga ggtttgacaa ccctgtgctg 1320

ccattcaatg atggagtcta ctttgccagc acagagaaga gcaacatcat caggggctgg 1380

atttttggca ccaccctgga cagcaagacc cagtccctgc tgattgtgaa caatgccacc 1440

aatgtggtga ttaaggtgtg tgagttccag ttctgtaatg acccattcct gggagtctac 1500

taccacaaga acaacaagtc ctggatggag tctgagttca gggtctactc ctctgccaac 1560

aactgtacct ttgaatatgt gagccaacca ttcctgatgg acttggaggg caagcagggc 1620

aacttcaaga acctgaggga gtttgtgttc aagaacattg atggctactt caagatttac 1680

agcaaacaca caccaatcaa cctggtgagg gacctgccac agggcttctc tgccttggaa 1740

ccactggtgg acctgccaat tggcatcaac atcaccaggt tccagaccct gctggctctg 1800

cacaggtcct acctgacacc tggagactcc tcctctggct ggacagcagg agcagcagcc 1860

tactatgtgg gctacctcca accaaggacc ttcctgctga aatacaatga gaatggcacc 1920

atcacagatg ctgtggactg tgccctggac ccactgtctg agaccaagtg taccctgaaa 1980

tccttcacag tggagaaggg catctaccag accagcaact tcagggtcca accaacagag 2040

agcattgtga ggtttccaaa catcaccaac ctgtgtccat ttggagaggt gttcaatgcc 2100

accaggtttg cctctgtcta tgcctggaac aggaagagga ttagcaactg tgtggctgac 2160

tactctgtgc tctacaactc tgcctccttc agcaccttca agtgttatgg agtgagccca 2220

accaaactga atgacctgtg tttcaccaat gtctatgctg actcctttgt gattagggga 2280

gatgaggtga gacagattgc ccctggacaa acaggcaaga ttgctgacta caactacaaa 2340

ctgcctgatg acttcacagg ctgtgtgatt gcctggaaca gcaacaacct ggacagcaag 2400

gtgggaggca actacaacta cctctacaga ctgttcagga agagcaacct gaaaccattt 2460

gagagggaca tcagcacaga gatttaccag gctggcagca caccatgtaa tggagtggag 2520

ggcttcaact gttactttcc actccaatcc tatggcttcc aaccaaccaa tggagtgggc 2580

taccaaccat acagggtggt ggtgctgtcc tttgaactgc tccatgcccc tgccacagtg 2640

tgtggaccaa agaagagcac caacctggtg aagaacaagt gtgtgaactt caacttcaat 2700

ggactgacag gcacaggagt gctgacagag agcaacaaga agttcctgcc attccaacag 2760

tttggcaggg acattgctga caccacagat gctgtgaggg acccacagac cttggagatt 2820

ctggacatca caccatgttc ctttggagga gtgtctgtga ttacacctgg caccaacacc 2880

agcaaccagg tggctgtgct ctaccaggat gtgaactgta ctgaggtgcc tgtggctatc 2940

catgctgacc aacttacacc aacctggagg gtctacagca caggcagcaa tgtgttccag 3000

accagggctg gctgtctgat tggagcagag catgtgaaca actcctatga gtgtgacatc 3060

ccaattggag caggcatctg tgcctcctac cagacccaga ccggtggcgg tgggtcgagg 3120

tctgtggcaa gccagagcat cattgcctac acaatgagtc tgggagcaga gaactctgtg 3180

gcttacagca acaacagcat tgccatccca accaacttca ccatctctgt gaccacagag 3240

attctgcctg tgagtatgac caagacctct gtggactgta caatgtatat ctgtggagac 3300

agcacagagt gtagcaacct gctgctccaa tatggctcct tctgtaccca acttaacagg 3360

gctctgacag gcattgctgt ggaacaggac aagaacaccc aggaggtgtt tgcccaggtg 3420

aagcagattt acaagacacc tccaatcaag gactttggag gcttcaactt cagccagatt 3480

ctgcctgacc caagcaagcc aagcaagagg tccttcattg aggacctgct gttcaacaag 3540

gtgaccctgg ctgatgctgg cttcatcaag caatatggag actgtctggg agacattgct 3600

gccagggacc tgatttgtgc ccagaagttc aatggactga cagtgctgcc tccactgctg 3660

acagatgaga tgattgccca atacacctct gccctgctgg ctggcaccat cacctctggc 3720

tggacctttg gagcaggagc agccctccaa atcccatttg ctatgcagat ggcttacagg 3780

ttcaatggca ttggagtgac ccagaatgtg ctctatgaga accagaaact gattgccaac 3840

cagttcaact ctgccattgg caagattcag gactccctgt ccagcacagc ctctgccctg 3900

ggcaaactcc aagatgtggt gaaccagaat gcccaggctc tgaacaccct ggtgaagcaa 3960

ctttccagca actttggagc catctcctct gtgctgaatg acatcctgag cagactggac 4020

aaggtggagg ctgaggtcca gattgacaga ctgattacag gcagactcca atccctccaa 4080

acctatgtga cccaacaact tatcagggct gctgagatta gggcatctgc caacctggct 4140

gccaccaaga tgagtgagtg tgtgctggga caaagcaaga gggtggactt ctgtggcaag 4200

ggctaccacc tgatgagttt tccacagtct gcccctcatg gagtggtgtt cctgcatgtg 4260

acctatgtgc ctgcccagga gaagaacttc accacagccc ctgccatctg ccatgatggc 4320

aaggctcact ttccaaggga gggagtgttt gtgagcaatg gcacccactg gtttgtgacc 4380

cagaggaact tctatgaacc acagattatc accacagaca acacctttgt gtctggcaac 4440

tgtgatgtgg tgattggcat tgtgaacaac acagtctatg acccactcca acctgaactg 4500

gactccttca aggaggaact ggacaaatac ttcaagaacc acaccagccc tgatgtggac 4560

ctgggagaca tctctggcat caatgcctct gtggtgaaca tccagaagga gattgacaga 4620

ctgaatgagg tggctaagaa cctgaatgag tccctgattg acctccaaga actgggcaaa 4680

tatgaacaat acatcaagtg gccatgaaaa ttgatcataa tcagccatac cacatttgta 4740

gaggttttac ttgctttaaa aaacctccca cacctccccc tgaacctgaa acataaaatg 4800

aatgcaattg ttgttgttaa cttgtttatt gcagcttata atggttacaa ataaagcaat 4860

agcatcacaa atttcacaaa taaagcattt ttttcactgc attctagttg tggtttgtcc 4920

aaactcatca atgtatctta acgcggatcg ggtaggggag gcgcttttcc caaggcagtc 4980

tggagcatgc gctttagcag ccccgctggg cacttggcgc tacacaagtg gcctctggcc 5040

tcgcacacat tccacatcca ccggtaggcg ccaaccggct ccgttctttg gtggcccctt 5100

cgcgccacct tctactcctc ccctagtcag gaagttcccc cccgccccgc agctcgcgtc 5160

gtgcaggacg tgacaaatgg aagtagcacg tctcactagt ctcgtgcaga tggacagcac 5220

cgctgagcaa tggaagcggg taggcctttg gggcagcggc caatagcagc tttgctcctt 5280

cgctttctgg gctcagaggc tgggaagggg tgggtccggg ggcgggctca ggggcgggct 5340

caggggcggg gcgggcgccc gaaggtcctc cggaggcccg gcattctgca cgcttcaaaa 5400

gcgcacgtct gccgcgctgt tctcctcttc ctcatctccg ggcctttcga aactacccca 5460

agctggccac catgactacg tccggcgttc catttggcat gacactacga ccaacacgat 5520

ctcggttgtc tcggcgcact ccgtacagta gggatcgtct acctcctttt gagacagaaa 5580

cccgcgctac catactggag gatcatccgc tgctgcccga atgtaacact ttgacaatgc 5640

acaacgtgag ttacgtgcga ggtcttccct gcagtgtggg atttacgctg attcaggaat 5700

gggttgttcc ctgggatatg gttctaacgc gggaggagct tgtaatcctg aggaagtgta 5760

tgcacgtgtg cctgtgttgt gccaacattg atatcatgac gagcatgatg atccatggtt 5820

acgagtcctg ggctctccac tgtcattgtt ccagtcccgg ttccctgcag tgtatagccg 5880

gcgggcaggt tttggccagc tggtttagga tggtggtgga tggcgccatg tttaatcaga 5940

ggtttatatg gtaccgggag gtggtgaatt acaacatgcc aaaagaggta atgtttatgt 6000

ccagcgtgtt tatgaggggt cgccacttaa tctacctgcg cttgtggtat gatggccacg 6060

tgggttctgt ggtccccgcc atgagctttg gatacagcgc cttgcactgt gggattttga 6120

acaatattgt ggtgctgtgc tgcagttact gtgctgattt aagtgagatc agggtgcgct 6180

gctgtgcccg gaggacaagg cgccttatgc tgcgggcggt gcgaatcatc gctgaggaga 6240

ccactgccat gttgtattcc tgcaggacgg agcggcggcg gcagcagttt attcgcgcgc 6300

tgctgcagca ccaccgccct atcctgatgc acgattatga ctctaccccc atgtagaagc 6360

ttggggatca attctctaga gctcgctgat cagcctcgac tgtgccttct agttgccagc 6420

catctgttgt ttgcccctcc cccgtgcctt ccttgaccct ggaaggtgcc actcccactg 6480

tcctttccta ataaaatgag gaaattgcat cgcattgtct gagtaggtgt cattctattc 6540

tgggggggtgg ggtggggcag gacagcaagg gggaggattg ggaagacaat agcaggcatg 6600

ctggggatgc ggtgggctct atggcttctg aggaaattgg gcgtggctta agggtgggaa 6660

agaatatata aggtgggggt cttatgtagt tttgtatctg ttttgcagca gccgccgccg 6720

ccatgagcac caactcgttt gatggaagca ttgtgagctc atatttgaca acgcgcatgc 6780

ccccatgggc cggggtgcgt cagaatgtga tgggctccag cattgatggt cgccccgtcc 6840

tgcccgcaaa ctctactacc ttgacctacg agaccgtgtc tggaacgccg ttggagactg 6900

cagcctccgc cgccgcttca gccgctgcag ccaccgcccg cgggattgtg actgactttg 6960

ctttcctgag cccgcttgca agcagtgcag cttcccgttc atccgcccgc gatgacaagt 7020

tgacggctct tttggcacaa ttggattctt tgacccggga acttaatgtc gtttctcagc 7080

agctgttgga tctgcgccag caggtttctg ccctgaaggc ttcctccccc cccaatgcgg 7140

tttaaaacat aaataaaaaa ccagactctg tttggatttg gatcaagcaa gtgtcttgct 7200

gtctttattt aggggttttg cgcgcgcggt aggcccggga ccagcggtct cggtcgttga 7260

gggtcctgtg tatttttcc aggacgtggt aaaggtgact ctggatgttc agatacatgg 7320

gcataagccc gtctctgggg tggaggtagc accactgcag agcttcatgc tgcggggtgg 7380

tgttgtagat gatccagtcg tagcaggagc gctgggcgtg gtgcctaaaa atgtctttca 7440

gtagcaagct gattgccagg ggcaggccct tggtgtaagt gtttacaaag cggttaagct 7500

gggatgggtg catacgtggg gatatgagat gcatcttgga ctgtattttt aggttggcta 7560

tgttcccagc catatccctc cggggattca tgttgtgcag aaccaccagc acagtgtatc 7620

cggtgcactt gggaaatttg tcatgtagct tagaaggaaa tgcgtggaag aacttggaga 7680

cgcccttgtg acctccaaga ttttccatgc attcgtccat aatgatggca atgggcccac 7740

gggcggcggc ctgggcgaag atatttctgg gatcactaac gtcatagttg tgttccagga 7800

tgagatcgtc ataggccatt tttacaaagc gcgggcggag ggtgccagac tgcggtataa 7860

tggttccatc cggcccaggg gcgtagttac cctcacagat ttgcatttcc cacgctttga 7920

gttcagatgg ggggatcatg tctacctgcg gggcgatgaa gaaaacggtt tccggggtag 7980

gggagatcag ctgggaagaa agcaggttcc tgagcagctg cgacttaccg cagccggtgg 8040

gcccgtaaat cacacctatt accggctgca actggtagtt aagagagctg cagctgccgt 8100

catccctgag cagggggggcc acttcgttaa gcatgtccct gactcgcatg ttttccctga 8160

ccaaatccgc cagaaggcgc tcgccgccca gcgatagcag ttcttgcaag gaagcaaagt 8220

ttttcaacgg tttgagaccg tccgccgtag gcatgctttt gagcgtttga ccaagcagtt 8280

ccaggcggtc ccacagctcg gtcacctgct ctacggcatc tcgatccagc atatctcctc 8340

gtttcgcggg ttggggcggc tttcgctgta cggcagtagt cggtgctcgt ccagacgggc 8400

cagggtcatg tctttccacg ggcgcagggt cctcgtcagc gtagtctggg tcacggtgaa 8460

ggggtgcgct ccgggctgcg cgctggccag ggtgcgcttg aggctggtcc tgctggtgct 8520

gaagcgctgc cggtcttcgc cctgcgcgtc ggccaggtag catttgacca tggtgtcata 8580

gtccagcccc tccgcggcgt ggcccttggc gcgcagcttg cccttggagg aggcgccgca 8640

cgaggggcag tgcagacttt tgagggcgta gagcttgggc gcgagaaata ccgattccgg 8700

ggagtaggca tccgcgccgc aggccccgca gacggtctcg cattccacga gccaggtgag 8760

ctctggccgt tcggggtcaa aaaccaggtt tcccccatgc tttttgatgc gtttcttacc 8820

tctggtttcc atgagccggt gtccacgctc ggtgacgaaa aggctgtccg tgtccccgta 8880

tacagacttg agaggcctgt cctcgagcgg tgttccgcgg tcctcctcgt atagaaactc 8940

ggaccactct gagacaaagg ctcgcgtcca ggccagcacg aaggaggcta agtgggaggg 9000

gtagcggtcg ttgtccacta gggggtccac tcgctccagg gtgtgaagac acatgtcgcc 9060

ctcttcggca tcaaggaagg tgattggttt gtaggtgtag gccacgtgac cgggtgttcc 9120

tgaaggggggg ctataaaagg gggtgggggc gcgttcgtcc tcactctctt ccgcatcgct 9180

gtctgcgagg gccagctgtt ggggtgagta ctccctctga aaagcgggca tgacttctgc 9240

gctaagattg tcagtttcca aaaacgagga ggatttgata ttcacctggc ccgcggtgat 9300

gcctttgagg gtggccgcat ccatctggtc agaaaagaca atctttttgt tgtcaagctt 9360

ggtggcaaac gacccgtaga gggcgttgga cagcaacttg gcgatggagc gcagggtttg 9420

gtttttgtcg cgatcggcgc gctccttggc cgcgatgttt agctgcacgt attcgcgcgc 9480

aacgcaccgc cattcgggaa agacggtggt gcgctcgtcg ggcaccaggt gcacgcgcca 9540

accgcggttg tgcagggtga caaggtcaac gctggtggct acctctccgc gtaggcgctc 9600

gttggtccag cagaggcggc cgcccttgcg cgagcagaat ggcggtaggg ggtctagctg 9660

cgtctcgtcc ggggggtctg cgtccacggt aaagaccccg ggcagcaggc gcgcgtcgaa 9720

gtagtctatc ttgcatcctt gcaagtctag cgcctgctgc catgcgcggg cggcaagcgc 9780

gcgctcgtat gggttgagtg ggggacccca tggcatgggg tgggtgagcg cggaggcgta 9840

catgccgcaa atgtcgtaaa cgtagagggg ctctctgagt attccaagat atgtagggta 9900

gcatcttcca ccgcggatgc tggcgcgcac gtaatcgtat agttcgtgcg agggagcgag 9960

gaggtcggga ccgaggttgc tacgggcggg ctgctctgct cggaagacta tctgcctgaa 10020

gatggcatgt gagttggatg atatggttgg acgctggaag acgttgaagc tggcgtctgt 10080

gagacctacc gcgtcacgca cgaaggaggc gtaggagtcg cgcagcttgt tgaccagctc 10140

ggcggtgacc tgcacgtcta gggcgcagta gtccagggtt tccttgatga tgtcatactt 10200

atcctgtccc ttttttttcc acagctcgcg gttgaggaca aactcttcgc ggtctttcca 10260

gtactcttgg atcggaaacc cgtcggcctc cgaacggtaa gagcctagca tgtagaactg 10320

gttgacggcc tggtaggcgc agcatccctt ttctacgggt agcgcgtatg cctgcgcggc 10380

cttccggagc gaggtgtggg tgagcgcaaa ggtgtccctg accatgactt tgaggtactg 10440

gtatttgaag tcagtgtcgt cgcatccgcc ctgctcccag agcaaaaagt ccgtgcgctt 10500

tttggaacgc ggatttggca gggcgaaggt gacatcgttg aagagtatct ttcccgcgcg 10560

aggcataaag ttgcgtgtga tgcggaaggg tcccggcacc tcggaacggt tgttaattac 10620

ctgggcggcg agcacgatct cgtcaaagcc gttgatgttg tggcccacaa tgtaaagttc 10680

caagaagcgc gggatgccct tgatggaagg caatttttta agttcctcgt aggtgagctc 10740

ttcaggggag ctgagcccgt gctctgaaag ggcccagtct gcaagatgag ggttggaagc 10800

gacgaatgag ctccacaggt cacgggccat tagcatttgc aggtggtcgc gaaaggtcct 10860

aaactggcga cctatggcca ttttttctgg ggtgatgcag tagaaggtaa gcgggtcttg 10920

ttcccagcgg tcccatccaa ggttcgcggc taggtctcgc gcggcagtca ctagaggctc 10980

atctccgccg aacttcatga ccagcatgaa gggcacgagc tgcttcccaa aggcccccat 11040

ccaagtatag gtctctacat cgtaggtgac aaagagacgc tcggtgcgag gatgcgagcc 11100

gatcgggaag aactggatct cccgccacca attggaggag tggctattga tgtggtgaaa 11160

gtagaagtcc ctgcgacggg ccgaacactc gtgctggctt ttgtaaaaac gtgcgcagta 11220

ctggcagcgg tgcacgggct gtacatcctg cacgaggttg acctgacgac cgcgcacaag 11280

gaagcagagt gggaatttga gcccctcgcc tggcgggttt ggctggtggt cttctacttc 11340

ggctgcttgt ccttgaccgt ctggctgctc gaggggagtt acggtggatc ggaccaccac 11400

gccgcgcgag cccaaagtcc agatgtccgc gcgcggcggt cggagcttga tgacaacatc 11460

gcgcagatgg gagctgtcca tggtctggag ctcccgcggc gtcaggtcag gcgggagctc 11520

ctgcaggttt acctcgcata gacgggtcag ggcgcgggct agatccaggt gatacctaat 11580

ttccaggggc tggttggtgg cggcgtcgat ggcttgcaag aggccgcatc cccgcggcgc 11640

gactacggta ccgcgcggcg ggcggtgggc cgcgggggtg tccttggatg atgcatctaa 11700

aagcggtgac gcgggcgagc ccccggaggt agggggggct ccggacccgc cgggagaggg 11760

ggcaggggca cgtcggcgcc gcgcgcgggc aggagctggt gctgcgcgcg taggttgctg 11820

gcgaacgcga cgacgcggcg gttgatctcc tgaatctggc gcctctgcgt gaagacgacg 11880

ggcccggtga gcttgaacct gaaagagagt tcgacagaat caatttcggt gtcgttgacg 11940

gcggcctggc gcaaaatctc ctgcacgtct cctgagttgt cttgataggc gatctcggcc 12000

atgaactgct cgatctcttc ctcctggaga tctccgcgtc cggctcgctc cacggtggcg 12060

gcgaggtcgt tggaaatgcg ggccatgagc tgcgagaagg cgttgaggcc tccctcgttc 12120

cagacgcggc tgtagaccac gccccccttcg gcatcgcggg cgcgcatgac cacctgcgcg 12180

agattgagct ccacgtgccg ggcgaagacg gcgtagtttc gcaggcgctg aaagaggtag 12240

ttgagggtgg tggcggtgtg ttctgccacg aagaagtaca taacccagcg tcgcaacgtg 12300

gattcgttga tatcccccaa ggcctcaagg cgctccatgg cctcgtagaa gtccacggcg 12360

aagttgaaaa actgggagtt gcgcgccgac acggttaact cctcctccag aagacggatg 12420

agctcggcga cagtgtcgcg cacctcgcgc tcaaaggcta caggggcctc ttcttcttct 12480

tcaatctcct cttccataag ggcctcccct tcttcttctt ctggcggcgg tgggggaggg 12540

gggacacggc ggcgacgacg gcgcaccggg aggcggtcga caaagcgctc gatcatctcc 12600

ccgcggcgac ggcgcatggt ctcggtgacg gcgcggccgt tctcgcgggg gcgcagttgg 12660

aagacgccgc ccgtcatgtc ccggttatgg gttggcgggg ggctgccatg cggcagggat 12720

acggcgctaa cgatgcatct caacaattgt tgtgtaggta ctccgccgcc gagggacctg 12780

agcgagtccg catcgaccgg atcggaaaac ctctcgagaa aggcgtctaa ccagtcacag 12840

tcgcaaggta ggctgagcac cgtggcgggc ggcagcgggc ggcggtcggg gttgtttctg 12900

gcggaggtgc tgctgatgat gtaattaaag taggcggtct tgagacggcg gatggtcgac 12960

agaagcacca tgtccttggg tccggcctgc tgaatgcgca ggcggtcggc catgccccag 13020

gcttcgtttt gacatcggcg caggtctttg tagtagtctt gcatgagcct ttctaccggc 13080

acttcttctt ctccttcctc ttgtcctgca tctcttgcat ctatcgctgc ggcggcggcg 13140

gagtttggcc gtaggtggcg ccctcttcct cccatgcgtg tgaccccgaa gcccctcatc 13200

ggctgaagca gggctaggtc ggcgacaacg cgctcggcta atatggcctg ctgcacctgc 13260

gtgagggtag actggaagtc atccatgtcc acaaagcggt ggtatgcgcc cgtgttgatg 13320

gtgtaagtgc agttggccat aacggaccag ttaacggtct ggtgacccgg ctgcgagagc 13380

tcggtgtacc tgagacgcga gtaagccctc gagtcaaata cgtagtcgtt gcaagtccgc 13440

accaggtact ggtatcccac caaaaagtgc ggcggcggct ggcggtagag gggccagcgt 13500

agggtggccg gggctccggg ggcgagatct tccaacataa ggcgatgata tccgtagatg 13560

tacctggaca tccaggtgat gccggcggcg gtggtggagg cgcgcggaaa gtcgcggacg 13620

cggttccaga tgttgcgcag cggcaaaaag tgctccatgg tcgggacgct ctggccggtc 13680

aggcgcgcgc aatcgttgac gctctagcgt gcaaaaggag agcctgtaag cgggcactct 13740

tccgtggtct ggtggataaa ttcgcaaggg tatcatggcg gacgaccggg gttcgagccc 13800

cgtatccggc cgtccgccgt gatccatgcg gttaccgccc gcgtgtcgaa cccaggtgtg 13860

cgacgtcaga caacgggggа gtgctccttt tggcttcctt ccaggcgcgg cggctgctgc 13920

gctagctttt ttggccactg gccgcgcgca gcgtaagcgg ttaggctgga aagcgaaagc 13980

attaagtggc tcgctccctg tagccggagg gttattttcc aagggttgag tcgcgggacc 14040

cccggttcga gtctcggacc ggccggactg cggcgaacgg gggtttgcct ccccgtcatg 14100

caagaccccg cttgcaaatt cctccggaaa cagggacgag ccccttttтt gcttttccca 14160

gatgcatccg gtgctgcggc agatgcgccc ccctcctcag cagcggcaag agcaagagca 14220

gcggcagaca tgcagggcac cctcccctcc tcctaccgcg tcaggagggg cgacatccgc 14280

ggttgacgcg gcagcagatg gtgattacga acccccgcgg cgccgggccc ggcactacct 14340

ggacttggag gagggcgagg gcctggcgcg gctaggagcg ccctctcctg agcggcaccc 14400

aagggtgcag ctgaagcgtg atacgcgtga ggcgtacgtg ccgcggcaga acctgtttcg 14460

cgaccgcgag ggagaggagc ccgaggagat gcgggatcga aagttccacg cagggcgcga 14520

gctgcggcat ggcctgaatc gcgagcggtt gctgcgcgag gaggactttg agcccgacgc 14580

gcgaaccggg attagtcccg cgcgcgcaca cgtggcggcc gccgacctgg taaccgcata 14640

cgagcagacg gtgaaccagg agattaactt tcaaaaaagc tttaacaacc acgtgcgtac 14700

gcttgtggcg cgcgaggagg tggctatagg actgatgcat ctgtgggact ttgtaagcgc 14760

gctggagcaa aacccaaata gcaagccgct catggcgcag ctgttcctta tagtgcagca 14820

cagcagggac aacgaggcat tcagggatgc gctgctaaac atagtagagc ccgagggccg 14880

ctggctgctc gatttgataa acatcctgca gagcatagtg gtgcaggagc gcagcttgag 14940

cctggctgac aaggtggccg ccatcaacta ttccatgctt agcctgggca agttttacgc 15000

ccgcaagata taccataccc cttacgttcc catagacaag gaggtaaaga tcgaggggtt 15060

ctacatgcgc atggcgctga aggtgcttac cttgagcgac gacctgggcg tttatcgcaa 15120

cgagcgcatc cacaaggccg tgagcgtgag ccggcggcgc gagctcagcg accgcgagct 15180

gatgcacagc ctgcaaaggg ccctggctgg cacgggcagc ggcgatagag aggccgagtc 15240

ctactttgac gcgggcgctg acctgcgctg ggccccaagc cgacgcgccc tggaggcagc 15300

tggggccgga cctgggctgg cggtggcacc cgcgcgcgct ggcaacgtcg gcggcgtgga 15360

ggaatatgac gaggacgatg agtacgagcc agaggacggc gagtactaag cggtgatgtt 15420

tctgatcaga tgatgcaaga cgcaacggac ccggcggtgc gggcggcgct gcagagccag 15480

ccgtccggcc ttaactccac ggacgactgg cgccaggtca tggaccgcat catgtcgctg 15540

actgcgcgca atcctgacgc gttccggcag cagccgcagg ccaaccggct ctccgcaatt 15600

ctggaagcgg tggtcccggc gcgcgcaaac cccacgcacg agaaggtgct ggcgatcgta 15660

aacgcgctgg ccgaaaacag ggccatccgg cccgacgagg ccggcctggt ctacgacgcg 15720

ctgcttcagc gcgtggctcg ttacaacagc ggcaacgtgc agaccaacct ggaccggctg 15780

gtgggggatg tgcgcgaggc cgtggcgcag cgtgagcgcg cgcagcagca gggcaacctg 15840

ggctccatgg ttgcactaaa cgccttcctg agtacacagc ccgccaacgt gccgcgggga 15900

caggaggact acaccaactt tgtgagcgca ctgcggctaa tggtgactga gacaccgcaa 15960

agtgaggtgt accagtctgg gccagactat tttttccaga ccagtagaca aggcctgcag 16020

accgtaaacc tgagccaggc tttcaaaaac ttgcaggggc tgtgggggggt gcgggctccc 16080

acaggcgacc gcgcgaccgt gtctagcttg ctgacgccca actcgcgcct gttgctgctg 16140

ctaatagcgc ccttcacgga cagtggcagc gtgtcccggg acacatacct aggtcacttg 16200

ctgacactgt accgcgaggc cataggtcag gcgcatgtgg acgagcatac tttccaggag 16260

attacaagtg tcagccgcgc gctggggcag gaggacacgg gcagcctgga ggcaacccta 16320

aactacctgc tgaccaaccg gcggcagaag atcccctcgt tgcacagttt aaacagcgag 16380

gaggagcgca ttttgcgcta cgtgcagcag agcgtgagcc ttaacctgat gcgcgacggg 16440

gtaacgccca gcgtggcgct ggacatgacc gcgcgcaaca tggaaccggg catgtatgcc 16500

tcaaaccggc cgtttatcaa ccgcctaatg gactacttgc atcgcgcggc cgccgtgaac 16560

cccgagtatt tcaccaatgc catcttgaac ccgcactggc taccgccccc tggtttctac 16620

accgggggat tcgaggtgcc cgagggtaac gatggattcc tctgggacga catagacgac 16680

agcgtgtttt ccccgcaacc gcagaccctg ctagagttgc aacagcgcga gcaggcagag 16740

gcggcgctgc gaaaggaaag cttccgcagg ccaagcagct tgtccgatct aggcgctgcg 16800

gccccgcggt cagatgctag tagcccattt ccaagcttga tagggtctct taccagcact 16860

cgcaccaccc gcccgcgcct gctgggcgag gaggagtacc taaacaactc gctgctgcag 16920

ccgcagcgcg aaaaaaacct gcctccggca tttcccaaca acgggataga gagcctagtg 16980

gacaagatga gtagatggaa gacgtacgcg caggagcaca gggacgtgcc aggcccgcgc 17040

ccgcccaccc gtcgtcaaag gcacgaccgt cagcggggtc tggtgtggga ggacgatgac 17100

tcggcagacg acagcagcgt cctggatttg ggagggagtg gcaacccgtt tgcgcacctt 17160

cgccccaggc tggggagaat gttttaaaaa aaaaaaagca tgatgcaaaa taaaaaactc 17220

accaaggcca tggcaccgag cgttggtttt cttgtattcc ccttagtatg cggcgcgcgg 17280

cgatgtatga ggaaggtcct cctccctcct acgagagtgt ggtgagcgcg gcgccagtgg 17340

cggcggcgct gggttctccc ttcgatgctc ccctggaccc gccgtttgtg cctccgcggt 17400

acctgcggcc taccgggggg agaaacagca tccgttactc tgagttggca cccctattcg 17460

acaccacccg tgtgtacctg gtggacaaca agtcaacgga tgtggcatcc ctgaactacc 17520

agaacgacca cagcaacttt ctgaccacgg tcattcaaaa caatgactac agcccggggg 17580

aggcaagcac acagaccatc aatcttgacg accggtcgca ctggggcggc gacctgaaaa 17640

ccatcctgca taccaacatg ccaaatgtga acgagttcat gtttaccaat aagtttaagg 17700

cgcgggtgat ggtgtcgcgc ttgcctacta aggacaatca ggtggagctg aaatacgagt 17760

gggtggagtt cacgctgccc gagggcaact actccgagac catgaccata gaccttatga 17820

acaacgcgat cgtggagcac tacttgaaag tgggcagaca gaacggggtt ctggaaagcg 17880

acatcggggt aaagtttgac acccgcaact tcagactggg gtttgacccc gtcactggtc 17940

ttgtcatgcc tggggtatat acaaacgaag ccttccatcc agacatcatt ttgctgccag 18000

gatgcggggt ggacttcacc cacagccgcc tgagcaactt gttgggcatc cgcaagcggc 18060

aacccttcca ggagggcttt aggatcacct acgatgatct ggagggtggt aacattcccg 18120

cactgttgga tgtggacgcc taccaggcga gcttgaaaga tgacaccgaa cagggcgggg 18180

gtggcgcagg cggcagcaac agcagtggca gcggcgcgga agagaactcc aacgcggcag 18240

ccgcggcaat gcagccggtg gaggacatga acgatcatgc cattcgcggc gacacctttg 18300

ccacacgggc tgaggagaag cgcgctgagg ccgaagcagc ggccgaagct gccgcccccg 18360

ctgcgcaacc cgaggtcgag aagcctcaga agaaaccggt gatcaaaccc ctgacagagg 18420

acagcaagaa acgcagttac aacctaataa gcaatgacag caccttcacc cagtaccgca 18480

gctggtacct tgcatacaac tacggcgacc ctcagaccgg aatccgctca tggaccctgc 18540

tttgcactcc tgacgtaacc tgcggctcgg agcaggtcta ctggtcgttg ccagacatga 18600

tgcaagaccc cgtgaccttc cgctccacgc gccagatcag caactttccg gtggtgggcg 18660

ccgagctgtt gcccgtgcac tccaagagct tctacaacga ccaggccgtc tactcccaac 18720

tcatccgcca gtttacctct ctgacccacg tgttcaatcg ctttcccgag aaccagattt 18780

tggcgcgccc gccagccccc accatcacca ccgtcagtga aaacgttcct gctctcacag 18840

atcacgggac gctaccgctg cgcaacagca tcggaggagt ccagcgagtg accattactg 18900

acgccagacg ccgcacctgc ccctacgttt acaaggccct gggcatagtc tcgccgcgcg 18960

tcctatcgag ccgcactttt tgagcaagca tgtccatcct tatatcgccc agcaataaca 19020

caggctgggg cctgcgcttc ccaagcaaga tgtttggcgg ggccaagaag cgctccgacc 19080

aacacccagt gcgcgtgcgc gggcactacc gcgcgccctg gggcgcgcac aaacgcggcc 19140

gcactgggcg caccaccgtc gatgacgcca tcgacgcggt ggtggaggag gcgcgcaact 19200

acacgcccac gccgccacca gtgtccacag tggacgcggc cattcagacc gtggtgcgcg 19260

gagcccggcg ctatgctaaa atgaagagac ggcggaggcg cgtagcacgt cgccaccgcc 19320

gccgacccgg cactgccgcc caacgcgcgg cggcggccct gcttaaccgc gcacgtcgca 19380

ccggccgacg ggcggccatg cgggccgctc gaaggctggc cgcgggtatt gtcactgtgc 19440

cccccaggtc caggcgacga gcggccgccg cagcagccgc ggccattagt gctatgactc 19500

agggtcgcag gggcaacgtg tattgggtgc gcgactcggt tagcggcctg cgcgtgcccg 19560

tgcgcacccg ccccccgcgc aactagattg caagaaaaaa ctacttagac tcgtactgtt 19620

gtatgtatcc agcggcggcg gcgcgcaacg aagctatgtc caagcgcaaa atcaaagaag 19680

agatgctcca ggtcatcgcg ccggagatct atggcccccc gaagaaggaa gagcaggatt 19740

acaagccccg aaagctaaag cgggtcaaaa agaaaaagaa agatgatgat gatgaacttg 19800

acgacgaggt ggaactgctg cacgctaccg cgcccaggcg acgggtacag tggaaaggtc 19860

gacgcgtaaa acgtgttttg cgacccggca ccaccgtagt ctttacgccc ggtgagcgct 19920

ccacccgcac ctacaagcgc gtgtatgatg aggtgtacgg cgacgaggac ctgcttgagc 19980

aggccaacga gcgcctcggg gagtttgcct acggaaagcg gcataaggac atgctggcgt 20040

tgccgctgga cgagggcaac ccaacaccta gcctaaagcc cgtaacactg cagcaggtgc 20100

tgcccgcgct tgcaccgtcc gaagaaaagc gcggcctaaa gcgcgagtct ggtgacttgg 20160

cacccaccgt gcagctgatg gtacccaagc gccagcgact ggaagatgtc ttggaaaaaa 20220

tgaccgtgga acctgggctg gagcccgagg tccgcgtgcg gccaatcaag caggtggcgc 20280

cgggactggg cgtgcagacc gtggacgttc agatacccac taccagtagc accagtattg 20340

ccaccgccac agagggcatg gagacacaaa cgtccccggt tgcctcagcg gtggcggatg 20400

ccgcggtgca ggcggtcgct gcggccgcgt ccaagacctc tacggaggtg caaacggacc 20460

cgtggatgtt tcgcgtttca gccccccggc gcccgcgccg ttcgaggaag tacggcgccg 20520

ccagcgcgct actgcccgaa tatgccctac atccttccat tgcgcctacc cccggctatc 20580

gtggctacac ctaccgcccc agaagacgag caactacccg acgccgaacc accactggaa 20640

cccgccgccg ccgtcgccgt cgccagcccg tgctggcccc gatttccgtg cgcagggtgg 20700

ctcgcgaagg aggcaggacc ctggtgctgc caacagcgcg ctaccacccc agcatcgttt 20760

aaaagccggt ctttgtggtt cttgcagata tggccctcac ctgccgcctc cgtttcccgg 20820

tgccgggatt ccgaggaaga atgcaccgta ggaggggcat ggccggccac ggcctgacgg 20880

gcggcatgcg tcgtgcgcac caccggcggc ggcgcgcgtc gcaccgtcgc atgcgcggcg 20940

gtatcctgcc cctccttatt ccactgatcg ccgcggcgat tggcgccgtg cccggaattg 21000

catccgtggc cttgcaggcg cagagacact gattaaaaac aagttgcatg tggaaaaatc 21060

aaaataaaaa gtctggactc tcacgctcgc ttggtcctgt aactattttg tagaatggaa 21120

gacatcaact ttgcgtctct ggccccgcga cacggctcgc gcccgttcat gggaaactgg 21180

caagatatcg gcaccagcaa tatgagcggt ggcgccttca gctggggctc gctgtggagc 21240

ggcattaaaa atttcggttc caccgttaag aactatggca gcaaggcctg gaacagcagc 21300

acaggccaga tgctgaggga taagttgaaa gagcaaaatt tccaacaaaa ggtggtagat 21360

ggcctggcct ctggcattag cggggtggtg gacctggcca accaggcagt gcaaaataag 21420

attaacagta agcttgatcc ccgccctccc gtagaggagc ctccaccggc cgtggagaca 21480

gtgtctccag aggggcgtgg cgaaaagcgt ccgcgccccg acagggaaga aactctggtg 21540

acgcaaatag acgagcctcc ctcgtacgag gaggcactaa agcaaggcct gcccaccacc 21600

cgtcccatcg cgcccatggc taccggagtg ctgggccagc acacacccgt aacgctggac 21660

ctgcctcccc ccgccgacac ccagcagaaa cctgtgctgc caggcccgac cgccgttgtt 21720

gtaacccgtc ctagccgcgc gtccctgcgc cgcgccgcca gcggtccgcg atcgttgcgg 21780

cccgtagcca gtggcaactg gcaaagcaca ctgaacagca tcgtgggtct gggggtgcaa 21840

tccctgaagc gccgacgatg cttctgatag ctaacgtgtc gtatgtgtgt catgtatgcg 21900

tccatgtcgc cgccagagga gctgctgagc cgccgcgcgc ccgctttcca agatggctac 21960

cccttcgatg atgccgcagt ggtcttacat gcacatctcg ggccaggacg cctcggagta 22020

cctgagcccc gggctggtgc agtttgcccg cgccaccgag acgtacttca gcctgaataa 22080

caagtttaga aaccccacgg tggcgcctac gcacgacgtg accacagacc ggtcccagcg 22140

tttgacgctg cggttcatcc ctgtggaccg tgaggatact gcgtactcgt acaaggcgcg 22200

gttcacccta gctgtgggtg ataaccgtgt gctggacatg gcttccacgt actttgacat 22260

ccgcggcgtg ctggacaggg gccctacttt taagccctac tctggcactg cctacaacgc 22320

cctggctccc aagggtgccc caaatccttg cgaatgggat gaagctgcta ctgctcttga 22380

aataaaccta gaagaagagg acgatgacaa cgaagacgaa gtagacgagc aagctgagca 22440

gcaaaaaact cacgtatttg ggcaggcgcc ttattctggt ataaatatta caaaggaggg 22500

tattcaaata ggtgtcgaag gtcaaacacc taaatatgcc gataaaacat ttcaacctga 22560

acctcaaata ggagaatctc agtggtacga aacagaaatt aatcatgcag ctgggagagt 22620

cctaaaaaag actaccccaa tgaaaccatg ttacggttca tatgcaaaac ccacaaatga 22680

aaatggaggg caaggcattc ttgtaaagca acaaaatgga aagctagaaa gtcaagtgga 22740

aatgcaattt ttctcaacta ctgaggcagc cgcaggcaat ggtgataact tgactcctaa 22800

agtggtattg tacagtgaag atgtagatat agaaacccca gacactcata tttcttacat 22860

gcccactatt aaggaaggta actcacgaga actaatgggc caacaatcta tgcccaacag 22920

gcctaattac attgctttta gggacaattt tattggtcta atgtattaca acagcacggg 22980

taatatgggt gttctggcgg gccaagcatc gcagttgaat gctgttgtag atttgcaaga 23040

cagaaacaca gagctttcat accagctttt gcttgattcc attggtgata gaaccaggta 23100

cttttctatg tggaatcagg ctgttgacag ctatgatcca gatgttagaa ttattgaaaa 23160

tcatggaact gaagatgaac ttccaaatta ctgctttcca ctgggaggtg tgattaatac 23220

agagactctt accaaggtaa aacctaaaac aggtcaggaa aatggatggg aaaaagatgc 23280

tacagaattt tcagataaaa atgaaataag agttggaaat aattttgcca tggaaatcaa 23340

tctaaatgcc aacctgtgga gaaatttcct gtactccaac atagcgctgt atttgcccga 23400

caagctaaag tacagtcctt ccaacgtaaa aatttctgat aacccaaaca cctacgacta 23460

catgaacaag cgagtggtgg ctcccgggct agtggactgc tacattaacc ttggagcacg 23520

ctggtccctt gactatatgg acaacgtcaa cccatttaac caccaccgca atgctggcct 23580

gcgctaccgc tcaatgttgc tgggcaatgg tcgctatgtg cccttccaca tccaggtgcc 23640

tcagaagttc tttgccatta aaaacctcct tctcctgccg ggctcataca cctacgagtg 23700

gaacttcagg aaggatgtta acatggttct gcagagctcc ctaggaaatg acctaagggt 23760

tgacggagcc agcattaagt ttgatagcat ttgcctttac gccaccttct tccccatggc 23820

ccacaacacc gcctccacgc ttgaggccat gcttagaaac gacaccaacg accagtcctt 23880

taacgactat ctctccgccg ccaacatgct ctaccctata cccgccaacg ctaccaacgt 23940

gcccatatcc atcccctccc gcaactgggc ggctttccgc ggctgggcct tcacgcgcct 24000

taagactaag gaaaccccat cactgggctc gggctacgac ccttattaca cctactctgg 24060

ctctataccc tacctagatg gaacctttta cctcaaccac acctttaaga aggtggccat 24120

taccttgac tcttctgtca gctggcctgg caatgaccgc ctgcttaccc ccaacgagtt 24180

tgaaattaag cgctcagttg acggggaggg ttacaacgtt gcccagtgta acatgaccaa 24240

agactggttc ctggtacaaa tgctagctaa ctataacatt ggctaccagg gcttctatat 24300

cccagagagc tacaaggacc gcatgtactc cttctttaga aacttccagc ccatgagccg 24360

tcaggtggtg gatgatacta aatacaagga ctaccaacag gtgggcatcc tacaccaaca 24420

caacaactct ggatttgttg gctaccttgc ccccaccatg cgcgaaggac aggcctaccc 24480

tgctaacttc ccctatccgc ttataggcaa gaccgcagtt gacagcatta cccagaaaaa 24540

gtttctttgc gatcgcaccc tttggcgcat cccattctcc agtaacttta tgtccatggg 24600

cgcactcaca gacctgggcc aaaaccttct ctacgccaac tccgcccacg cgctagacat 24660

gacttttgag gtggatccca tggacgagcc cacccttctt tatgttttgt ttgaagtctt 24720

tgacgtggtc cgtgtgcacc agccgcaccg cggcgtcatc gaaaccgtgt acctgcgcac 24780

gcccttctcg gccggcaacg ccacaacata aagaagcaag caacatcaac aacagctgcc 24840

gccatgggct ccagtgagca ggaactgaaa gccattgtca aagatcttgg ttgtgggcca 24900

tatttttgg gcacctatga caagcgcttt ccaggctttg tttctccaca caagctcgcc 24960

tgcgccatag tcaatacggc cggtcgcgag actgggggcg tacactggat ggcctttgcc 25020

tggaacccgc actcaaaaac atgctacctc tttgagccct ttggcttttc tgaccagcga 25080

ctcaagcagg tttaccagtt tgagtacgag tcactcctgc gccgtagcgc cattgcttct 25140

tcccccgacc gctgtataac gctggaaaag tccacccaaa gcgtacaggg gcccaactcg 25200

gccgcctgtg gactattctg ctgcatgttt ctccacgcct ttgccaactg gccccaaact 25260

cccatggatc acaaccccac catgaacctt attaccgggg tacccaactc catgctcaac 25320

agtccccagg tacagcccac cctgcgtcgc aaccaggaac agctctacag cttcctggag 25380

cgccactcgc cctacttccg cagccacagt gcgcagatta ggagcgccac ttctttttgt 25440

cacttgaaaa acatgtaaaa ataatgtact agagacactt tcaataaagg caaatgcttt 25500

tatttgtaca ctctcgggtg attatttacc cccacccttg ccgtctgcgc cgtttaaaaa 25560

tcaaaggggt tctgccgcgc atcgctatgc gccactggca gggacacgtt gcgatactgg 25620

tgtttagtgc tccacttaaa ctcaggcaca accatccgcg gcagctcggt gaagttttca 25680

ctccacaggc tgcgcaccat caccaacgcg tttagcaggt cgggcgccga tatcttgaag 25740

tcgcagttgg ggcctccgcc ctgcgcgcgc gagttgcgat acacagggtt gcagcactgg 25800

aacactatca gcgccgggtg gtgcacgctg gccagcacgc tcttgtcgga gatcagatcc 25860

gcgtccaggt cctccgcgtt gctcagggcg aacggagtca actttggtag ctgccttccc 25920

aaaaagggcg cgtgcccagg ctttgagttg cactcgcacc gtagtggcat caaaaggtga 25980

ccgtgcccgg tctgggcgtt aggatacagc gcctgcataa aagccttgat ctgcttaaaa 26040

gccacctgag cctttgcgcc ttcagagaag aacatgccgc aagacttgcc ggaaaactga 26100

ttggccggac aggccgcgtc gtgcacgcag caccttgcgt cggtgttgga gatctgcacc 26160

acatttcggc cccaccggtt cttcacgatc ttggccttgc tagactgctc cttcagcgcg 26220

cgctgcccgt tttcgctcgt cacatccatt tcaatcacgt gctccttatt tatcataatg 26280

cttccgtgta gacacttaag ctcgccttcg atctcagcgc agcggtgcag ccacaacgcg 26340

cagcccgtgg gctcgtgatg cttgtaggtc acctctgcaa acgactgcag gtacgcctgc 26400

aggaatcgcc ccatcatcgt cacaaaggtc ttgttgctgg tgaaggtcag ctgcaacccg 26460

cggtgctcct cgttcagcca ggtcttgcat acggccgcca gagcttccac ttggtcaggc 26520

agtagtttga agttcgcctt tagatcgtta tccacgtggt acttgtccat cagcgcgcgc 26580

gcagcctcca tgcccttctc ccacgcagac acgatcggca cactcagcgg gttcatcacc 26640

gtaatttcac tttccgcttc gctgggctct tcctcttcct cttgcgtccg cataccacgc 26700

gccactgggt cgtcttcatt cagccgccgc actgtgcgct tacctccttt gccatgcttg 26760

attagcaccg gtgggttgct gaaacccacc atttgtagcg ccacatcttc tctttcttcc 26820

tcgctgtcca cgattacctc tggtgatggc gggcgctcgg gcttgggaga agggcgcttc 26880

tttttcttct tgggcgcaat ggccaaatcc gccgccgagg tcgatggccg cgggctgggt 26940

gtgcgcggca ccagcgcgtc ttgtgatgag tcttcctcgt cctcggactc gatacgccgc 27000

ctcatccgct tttttggggg cgcccgggga ggcggcggcg acggggacgg ggacgacacg 27060

tcctccatgg ttgggggacg tcgcgccgca ccgcgtccgc gctcgggggt ggtttcgcgc 27120

tgctcctctt cccgactggc catttccttc tcctataggc agaaaaagat catggagtca 27180

gtcgagaaga aggacagcct aaccgccccc tctgagttcg ccaccaccgc ctccaccgat 27240

gccgccaacg cgcctaccac cttccccgtc gaggcacccc cgcttgagga ggaggaagtg 27300

attatcgagc aggacccagg ttttgtaagc gaagacgacg aggaccgctc agtaccaaca 27360

gaggataaaa agcaagacca ggacaacgca gaggcaaacg aggaacaagt cgggcggggg 27420

gacgaaaggc atggcgacta cctagatgtg ggagacgacg tgctgttgaa gcatctgcag 27480

cgccagtgcg ccattatctg cgacgcgttg caagagcgca gcgatgtgcc cctcgccata 27540

gcggatgtca gccttgccta cgaacgccac ctattctcac cgcgcgtacc ccccaaacgc 27600

caagaaaacg gcacatgcga gcccaacccg cgcctcaact tctaccccgt atttgccgtg 27660

ccagaggtgc ttgccaccta tcacatcttt ttccaaaact gcaagatacc cctatcctgc 27720

cgtgccaacc gcagccgagc ggacaagcag ctggccttgc ggcagggcgc tgtcatacct 27780

gatatcgcct cgctcaacga agtgccaaaa atctttgagg gtcttggacg cgacgagaag 27840

cgcgcggcaa acgctctgca acaggaaaac agcgaaaatg aaagtcactc tggagtgttg 27900

gtggaactcg agggtgacaa cgcgcgccta gccgtactaa aacgcagcat cgaggtcacc 27960

cactttgcct acccggcact taacctaccc cccaaggtca tgagcacagt catgagtgag 28020

ctgatcgtgc gccgtgcgca gcccctggag agggatgcaa atttgcaaga acaaacagag 28080

gagggcctac ccgcagttgg cgacgagcag ctagcgcgct ggcttcaaac gcgcgagcct 28140

gccgacttgg aggagcgacg caaactaatg atggccgcag tgctcgttac cgtggagctt 28200

gagtgcatgc agcggttctt tgctgacccg gagatgcagc gcaagctaga ggaaacattg 28260

cactacacct ttcgacaggg ctacgtacgc caggcctgca agatctccaa cgtggagctc 28320

tgcaacctgg tctcctacct tggaattttg cacgaaaacc gccttgggca aaacgtgctt 28380

cattccacgc tcaagggcga ggcgcgccgc gactacgtcc gcgactgcgt ttacttattt 28440

ctatgctaca cctggcagac ggccatgggc gtttggcagc agtgcttgga ggagtgcaac 28500

ctcaaggagc tgcagaaact gctaaagcaa aacttgaagg acctatggac ggccttcaac 28560

gagcgctccg tggccgcgca cctggcggac atcattttcc ccgaacgcct gcttaaaacc 28620

ctgcaacagg gtctgccaga cttcaccagt caaagcatgt tgcagaactt taggaacttt 28680

atcctagagc gctcaggaat cttgcccgcc acctgctgtg cacttcctag cgactttgtg 28740

cccattaagt accgcgaatg ccctccgccg ctttggggcc actgctacct tctgcagcta 28800

gccaactacc ttgcctacca ctctgacata atggaagacg tgagcggtga cggtctactg 28860

gagtgtcact gtcgctgcaa cctatgcacc ccgcaccgct ccctggtttg caattcgcag 28920

ctgcttaacg aaagtcaaat tatcggtacc tttgagctgc agggtccctc gcctgacgaa 28980

aagtccgcgg ctccggggtt gaaactcact ccggggctgt ggacgtcggc ttaccttcgc 29040

aaatttgtac ctgaggacta ccacgcccac gagattaggt tctacgaaga ccaatcccgc 29100

ccgcctaatg cggagcttac cgcctgcgtc attacccagg gccacattct tggccaattg 29160

caagccatca acaaagcccg ccaagagttt ctgctacgaa agggacgggg ggtttacttg 29220

gacccccagt ccggcgagga gctcaaccca atccccccgc cgccgcagcc ctatcagcag 29280

cagccgcggg cccttgcttc ccaggatggc acccaaaaag aagctgcagc tgccgccgcc 29340

acccacggac gaggaggaat actgggacag tcaggcagag gaggttttgg acgaggagga 29400

ggaggacatg atggaagact gggagagcct agacgaggaa gcttccgagg tcgaagaggt 29460

gtcagacgaa acaccgtcac cctcggtcgc attcccctcg ccggcgcccc agaaatcggc 29520

aaccggttcc agcatggcta caacctccgc tcctcaggcg ccgccggcac tgcccgttcg 29580

ccgacccaac cgtagatggg acaccactgg aaccagggcc ggtaagtcca agcagccgcc 29640

gccgttagcc caagagcaac aacagcgcca aggctaccgc tcatggcgcg ggcacaagaa 29700

cgccatagtt gcttgcttgc aagactgtgg gggcaacatc tccttcgccc gccgctttct 29760

tctctaccat cacggcgtgg ccttcccccg taacatcctg cattactacc gtcatctcta 29820

cagcccatac tgcaccggcg gcagcggcag caacagcagc ggccacacag aagcaaaggc 29880

gaccggatag caagactctg acaaagccca agaaatccac agcggcggca gcagcaggag 29940

gaggagcgct gcgtctggcg cccaacgaac ccgtatcgac ccgcgagctt agaaacagga 30000

tttttcccac tctgtatgct atatttcaac agagcagggg ccaagaacaa gagctgaaaa 30060

taaaaaacag gtctctgcga tccctcaccc gcagctgcct gtatcacaaa agcgaagatc 30120

agcttcggcg cacgctggaa gacgcggagg ctctcttcag taaatactgc gcgctgactc 30180

ttaaggacta gtttcgcgcc ctttctcaaa tttaagcgcg aaaactacgt catctccagc 30240

ggccacaccc ggcgccagca cctgttgtca gcgccattat gagcaaggaa attcccacgc 30300

cctacatgtg gagttaccag ccacaaatgg gacttgcggc tggagctgcc caagactact 30360

caacccgaat aaactacatg agcgcgggac cccacatgat atcccgggtc aacggaatac 30420

gcgcccaccg aaaccgaatt ctcctggaac aggcggctat taccaccaca cctcgtaata 30480

accttaatcc ccgtagttgg cccgctgccc tggtgtacca ggaaagtccc gctcccacca 30540

ctgtggtact tcccagagac gcccaggccg aagttcagat gactaactca ggggcgcagc 30600

ttgcgggcgg ctttcgtcac agggtgcggt cgcccgggca gggtataact cacctgacaa 30660

tcagagggcg aggtattcag ctcaacgacg agtcggtgag ctcctcgctt ggtctccgtc 30720

cggacgggac atttcagatc ggcggcgccg gccgctcttc attcacgcct cgtcaggcaa 30780

tcctaactct gcagacctcg tcctctgagc cgcgctctgg aggcattgga actctgcaat 30840

ttattgagga gtttgtgcca tcggtctact ttaacccctt ctcgggacct cccggccact 30900

atccggatca atttattcct aactttgacg cggtaaagga ctcggcggac ggctacgact 30960

gaatgttaag tggagaggca gagcaactgc gcctgaaaca cctggtccac tgtcgccgcc 31020

acaagtgctt tgcccgcgac tccggtgagt tttgctactt tgaattgccc gaggatcata 31080

tcgagggccc ggcgcacggc gtccggctta ccgcccaggg agagcttgcc cgtagcctga 31140

ttcgggagtt tacccagcgc cccctgctag ttgagcggga caggggaccc tgtgttctca 31200

ctgtgatttg caactgtcct aaccctggat tacatcaaga tcctctagtt aatgtcaggt 31260

cgcctaagtc gattaactag agtacccggg gatcttattc cctttaacta ataaaaaaaa 31320

ataataaagc atcacttact taaaatcagt tagcaaattt ctgtccagtt tattcagcag 31380

cacctccttg ccctcctccc agctctggta ttgcagcttc ctcctggctg caaactttct 31440

ccacaatcta aatggaatgt cagtttcctc ctgttcctgt ccatccgcac ccactatctt 31500

catgttgttg cagatgaagc gcgcaagacc gtctgaagat accttcaacc ccgtgtatcc 31560

atatgacacg gaaaccggtc ctccaactgt gccttttctt actcctccct ttgtatcccc 31620

caatgggttt caagagagtc cccctggggt actctctttg cgcctatccg aacctctagt 31680

tacctccaat ggcatgcttg cgctcaaaat gggcaacggc ctctctctgg acgaggccgg 31740

caaccttacc tcccaaaatg taaccactgt gagcccacct ctcaaaaaaa ccaagtcaaa 31800

cataaacctg gaaatatctg cacccctcac agttacctca gaagccctaa ctgtggctgc 31860

cgccgcacct ctaatggtcg cgggcaacac actcaccatg caatcacagg ccccgctaac 31920

cgtgcacgac tccaaactta gcattgccac ccaaggaccc ctcacagtgt cagaaggaaa 31980

gctagccctg caaacatcag gccccctcac caccaccgat agcagtaccc ttactatcac 32040

tgcctcaccc cctctaacta ctgccactgg tagcttgggc attgacttga aagagcccat 32100

ttatacacaa aatggaaaac taggactaaa gtacggggct cctttgcatg taacagacga 32160

cctaaacact ttgaccgtag caactggtcc aggtgtgact attaataata cttccttgca 32220

aactaaagtt actggagcct tgggttttga ttcacaaggc aatatgcaac ttaatgtagc 32280

aggaggacta aggattgatt ctcaaaacag acgccttata cttgatgtta gttatccgtt 32340

tgatgctcaa aaccaactaa atctaagact aggacagggc cctcttttta taaactcagc 32400

ccacaacttg gatattaact acaacaaagg cctttacttg tttacagctt caaacaattc 32460

caaaaagctt gaggttaacc taagcactgc caaggggttg atgtttgacg ctacagccat 32520

agccattaat gcaggagatg ggcttgaatt tggttcacct aatgcaccaa acacaaatcc 32580

cctcaaaaca aaaattggcc atggcctaga atttgattca aacaaggcta tggttcctaa 32640

actaggaact ggccttagtt ttgacagcac aggtgccatt acagtaggaa acaaaaataa 32700

tgataagcta actttgtgga ccggaataaa ccctccacct aactgtcaaa ttgtggaaaa 32760

cactaataca aatgatggca aacttacttt agtattagta aaaaatggag ggcttgttaa 32820

tggctacgtg tctctagttg gtgtatcaga cactgtgaac caaatgttca cacaaaagac 32880

agcaaacatc caattaagat tatattttga ctcttctgga aatctattaa ctgaggaatc 32940

agacttaaaa attccactta aaaataaatc ttctacagcg accagtgaaa ctgtagccag 33000

cagcaaagcc tttatgccaa gtactacagc ttatcccttc aacaccacta ctagggatag 33060

tgaaaactac attcatggaa tatgttacta catgactagt tatgatagaa gtctatttcc 33120

cttgaacatt tctataatgc taaacagccg tatgatttct tccaatgttg cctatgccat 33180

acaatttgaa tggaatctaa atgcaagtga atctccagaa agcaacatag ctacgctgac 33240

cacatccccc tttttctttt cttacattac agaagacgac aactaaagaa tcgtttgtgt 33300

tatgtttcaa cgtgtttatt tttcaattgc agaaaatttc aagtcatttt tcattcagta 33360

gtatagcccc accaccacat agcttataca gatcaccgta ccttaatcaa actcacagaa 33420

ccctagtatt caacctgcca cctccctccc aacacacaga gtacacagtc ctttctcccc 33480

ggctggcctt aaaaagcatc atatcatggg taacagacat attcttaggt gttatattcc 33540

acacggtttc ctgtcgagcc aaacgctcat cagtgatatt aataaactcc ccgggcagct 33600

cacttaagtt catgtcgctg tccagctgct gagccacagg ctgctgtcca acttgcggtt 33660

gcttaacggg cggcgaagga gaagtccacg ctcagtagat taagtggcga cccctcataa 33720

acacgctgga cataaacatt acctcttttg gcatgttgta attcaccacc tcccggtacc 33780

atataaacct ctgattaaac atggcgccat ccaccaccat cctaaaccag ctggccaaaa 33840

cctgcccgcc ggctatacac tgcagggaac cgggactgga acaatgacag tggagagccc 33900

aggactcgta accatggatc atcatgctcg tcatgatatc aatgttggca caacacaggc 33960

acacgtgcat acacttcctc aggattacaa gctcctcccg cgttagaacc atatcccagg 34020

gaacaaccca ttcctgaatc agcgtaaatc ccacactgca gggaagacct cgcacgtaac 34080

tcacgttgtg cattgtcaaa gtgttacatt cgggcagcag cggatgatcc tccagtatgg 34140

tagcgcgggt ttctgtctca aaaggaggta gacgatccct actgtacgga gtgcgccgag 34200

acaaccgaga tcgtgttggt cgtagtgtca tgccaaatgg aacgccggac gtagtcatat 34260

ttcctgaagc aaaaccaggt gcgggcgtga caaacagatc tgcgtctccg gtctcgccgc 34320

ttagatcgct ctgtgtagta gttgtagtat atccactctc tcaaagcatc caggcgcccc 34380

ctggcttcgg gttctatgta aactccttca tgcgccgctg ccctgataac atccaccacc 34440

gcagaataag ccacacccag ccaacctaca cattcgttct gcgagtcaca cacgggagga 34500

gcgggaagag ctggaagaac catgtttttt tttttattcc aaaagattat ccaaaacctc 34560

aaaatgaaga tctattaagt gaacgcgctc ccctccggtg gcgtggtcaa actctacagc 34620

caaagaacag ataatggcat ttgtaagatg ttgcacaatg gcttccaaaa ggcaaacggc 34680

cctcacgtcc aagtggacgt aaaggctaaa cccttcaggg tgaatctcct ctataaacat 34740

tccagcacct tcaaccatgc ccaaataatt ctcatctcgc caccttctca atatatctct 34800

aagcaaatcc cgaatattaa gtccggccat tgtaaaaatc tgctccagag cgccctccac 34860

cttcagcctc aagcagcgaa tcatgattgc aaaaattcag gttcctcaca gacctgtata 34920

agattcaaaa gcggaacatt aacaaaaata ccgcgatccc gtaggtccct tcgcagggcc 34980

agctgaacat aatcgtgcag gtctgcacgg accagcgcgg ccacttcccc gccaggaacc 35040

atgacaaaag aacccacact gattatgaca cgcatactcg gagctatgct aaccagcgta 35100

gccccgatgt aagcttgttg catgggcggc gatataaaat gcaaggtgct gctcaaaaaa 35160

tcaggcaaag cctcgcgcaa aaaagaaagc acatcgtagt catgctcatg cagataaagg 35220

caggtaagct ccggaaccac cacagaaaaa gacaccattt ttctctcaaa catgtctgcg 35280

ggtttctgca taaacacaaa ataaaataac aaaaaaacat ttaaacatta gaagcctgtc 35340

ttacaacagg aaaaacaacc cttataagca taagacggac tacggccatg ccggcgtgac 35400

cgtaaaaaaa ctggtcaccg tgattaaaaa gcaccaccga cagctcctcg gtcatgtccg 35460

gagtcataat gtaagactcg gtaaacacat caggttgatt cacatcggtc agtgctaaaa 35520

agcgaccgaa atagcccggg ggaatacata cccgcaggcg tagagacaac attacagccc 35580

ccataggagg tataacaaaa ttaataggag agaaaaacac ataaacacct gaaaaaccct 35640

cctgcctagg caaaatagca ccctcccgct ccagaacaac atacagcgct tccacagcgg 35700

cagccataac agtcagcctt accagtaaaa aagaaaacct attaaaaaaa caccactcga 35760

cacggcacca gctcaatcag tcacagtgta aaaaagggcc aagtgcagag cgagtatata 35820

taggactaaa aaatgacgta acggttaaag tccacaaaaa acacccagaa aaccgcacgc 35880

gaacctacgc ccagaaacga aagccaaaaa acccacaact tcctcaaatc gtcacttccg 35940

ttttcccacg ttacgtcact tcccatttta agaaaactac aattcccaac acatacaagt 36000

tactccgccc taaaacctac gtcacccgcc ccgttcccac gccccgcgcc acgtcacaaa 36060

ctccaccccc tcattatcat attggcttca atccaaaata aggtatatta ttgatgatg 36119

<210> 39
<211> 36023
<212> DNA
<213> Artificial Sequence

<220>
<223> Adk35F2-Spike/E4orf6(mPGK)-E4dl-421(E4re#37)

<400> 39
ttaattaaca tcatcaataa tataccttat tttggattga agccaatatg ataatgaggg 60

ggtggagttt gtgacgtggc gcggggcgtg ggaacggggc gggtgacgta gtagtgtggc 120

ggaagtgtga tgttgcaagt gtggcggaac acatgtaagc gacggatgtg gcaaaagtga 180

cgtttttggt gtgcgccggt gtacacagga agtgacaatt ttcgcgcggt tttaggcgga 240

tgttgtagta aatttgggcg taaccgagta agatttggcc attttcgcgg gaaaactgaa 300

taagaggaag tgaaatctga ataattttgt gttactcata gcgcgtaata atttctgtaa 360

tagtaatcaa ttacggggtc attagttcat agcccatata tggagttccg cgttacataa 420

cttacggtaa atggcccgcc tggctgaccg cccaacgacc cccgcccatt gacgtcaata 480

atgacgtatg ttcccatagt aacgccaata gggactttcc attgacgtca atgggtggag 540

tatttacggt aaactgccca cttggcagta catcaagtgt atcatatgcc aagtacgccc 600

cctattgacg tcaatgacgg taaatggccc gcctggcatt atgcccagta catgacctta 660

tgggactttc ctacttggca gtacatctac gtattagtca tcgctattac catggtgatg 720

cggttttggc agtacatcaa tgggcgtgga tagcggtttg actcacgggg atttccaagt 780

ctccacccca ttgacgtcaa tgggagtttg ttttggcacc aaaatcaacg ggactttcca 840

aaatgtcgta acaactccgc cccattgacg caaatgggcg gtaggcgtgt acggtgggag 900

gtctatataa gcagagctct ccctatcagt gatagagatc tccctatcag tgatagagat 960

cgtcgacgag ctcgtttagt gaaccgtcag atcgcctgga gacgccatcc acgctgtttt 1020

gacctccata gaagacaccg ggaccgatcc agcctccgat ttgccaccat gtttgtgttc 1080

ctggtgctgc tgccactggt gtccagccag tgtgtgaacc tgaccaccag gacccaactt 1140

cctcctgcct acaccaactc cttcaccagg ggagtctact accctgacaa ggtgttcagg 1200

tcctctgtgc tgcacagcac ccaggacctg ttcctgccat tcttcagcaa tgtgacctgg 1260

ttccatgcca tccatgtgtc tggcaccaat ggcaccaaga ggtttgacaa ccctgtgctg 1320

ccattcaatg atggagtcta ctttgccagc acagagaaga gcaacatcat caggggctgg 1380

atttttggca ccaccctgga cagcaagacc cagtccctgc tgattgtgaa caatgccacc 1440

aatgtggtga ttaaggtgtg tgagttccag ttctgtaatg acccattcct gggagtctac 1500

taccacaaga acaacaagtc ctggatggag tctgagttca gggtctactc ctctgccaac 1560

aactgtacct ttgaatatgt gagccaacca ttcctgatgg acttggaggg caagcagggc 1620

aacttcaaga acctgaggga gtttgtgttc aagaacattg atggctactt caagatttac 1680

agcaaacaca caccaatcaa cctggtgagg gacctgccac agggcttctc tgccttggaa 1740

ccactggtgg acctgccaat tggcatcaac atcaccaggt tccagaccct gctggctctg 1800

cacaggtcct acctgacacc tggagactcc tcctctggct ggacagcagg agcagcagcc 1860

tactatgtgg gctacctcca accaaggacc ttcctgctga aatacaatga gaatggcacc 1920

atcacagatg ctgtggactg tgccctggac ccactgtctg agaccaagtg taccctgaaa 1980

tccttcacag tggagaaggg catctaccag accagcaact tcagggtcca accaacagag 2040

agcattgtga ggtttccaaa catcaccaac ctgtgtccat ttggagaggt gttcaatgcc 2100

accaggtttg cctctgtcta tgcctggaac aggaagagga ttagcaactg tgtggctgac 2160

tactctgtgc tctacaactc tgcctccttc agcaccttca agtgttatgg agtgagccca 2220

accaaactga atgacctgtg tttcaccaat gtctatgctg actcctttgt gattagggga 2280

gatgaggtga gacagattgc ccctggacaa acaggcaaga ttgctgacta caactacaaa 2340

ctgcctgatg acttcacagg ctgtgtgatt gcctggaaca gcaacaacct ggacagcaag 2400

gtgggaggca actacaacta cctctacaga ctgttcagga agagcaacct gaaaccattt 2460

gagagggaca tcagcacaga gatttaccag gctggcagca caccatgtaa tggagtggag 2520

ggcttcaact gttactttcc actccaatcc tatggcttcc aaccaaccaa tggagtgggc 2580

taccaaccat acagggtggt ggtgctgtcc tttgaactgc tccatgcccc tgccacagtg 2640

tgtggaccaa agaagagcac caacctggtg aagaacaagt gtgtgaactt caacttcaat 2700

ggactgacag gcacaggagt gctgacagag agcaacaaga agttcctgcc attccaacag 2760

tttggcaggg acattgctga caccacagat gctgtgaggg acccacagac cttggagatt 2820

ctggacatca caccatgttc ctttggagga gtgtctgtga ttacacctgg caccaacacc 2880

agcaaccagg tggctgtgct ctaccaggat gtgaactgta ctgaggtgcc tgtggctatc 2940

catgctgacc aacttacacc aacctggagg gtctacagca caggcagcaa tgtgttccag 3000

accagggctg gctgtctgat tggagcagag catgtgaaca actcctatga gtgtgacatc 3060

ccaattggag caggcatctg tgcctcctac cagacccaga ccggtggcgg tgggtcgagg 3120

tctgtggcaa gccagagcat cattgcctac acaatgagtc tgggagcaga gaactctgtg 3180

gcttacagca acaacagcat tgccatccca accaacttca ccatctctgt gaccacagag 3240

attctgcctg tgagtatgac caagacctct gtggactgta caatgtatat ctgtggagac 3300

agcacagagt gtagcaacct gctgctccaa tatggctcct tctgtaccca acttaacagg 3360

gctctgacag gcattgctgt ggaacaggac aagaacaccc aggaggtgtt tgcccaggtg 3420

aagcagattt acaagacacc tccaatcaag gactttggag gcttcaactt cagccagatt 3480

ctgcctgacc caagcaagcc aagcaagagg tccttcattg aggacctgct gttcaacaag 3540

gtgaccctgg ctgatgctgg cttcatcaag caatatggag actgtctggg agacattgct 3600

gccagggacc tgatttgtgc ccagaagttc aatggactga cagtgctgcc tccactgctg 3660

acagatgaga tgattgccca atacacctct gccctgctgg ctggcaccat cacctctggc 3720

tggacctttg gagcaggagc agccctccaa atcccatttg ctatgcagat ggcttacagg 3780

ttcaatggca ttggagtgac ccagaatgtg ctctatgaga accagaaact gattgccaac 3840

cagttcaact ctgccattgg caagattcag gactccctgt ccagcacagc ctctgccctg 3900

ggcaaactcc aagatgtggt gaaccagaat gcccaggctc tgaacaccct ggtgaagcaa 3960

ctttccagca actttggagc catctcctct gtgctgaatg acatcctgag cagactggac 4020

aaggtggagg ctgaggtcca gattgacaga ctgattacag gcagactcca atccctccaa 4080

acctatgtga cccaacaact tatcagggct gctgagatta gggcatctgc caacctggct 4140

gccaccaaga tgagtgagtg tgtgctggga caaagcaaga gggtggactt ctgtggcaag 4200

ggctaccacc tgatgagttt tccacagtct gcccctcatg gagtggtgtt cctgcatgtg 4260

acctatgtgc ctgcccagga gaagaacttc accacagccc ctgccatctg ccatgatggc 4320

aaggctcact ttccaaggga gggagtgttt gtgagcaatg gcacccactg gtttgtgacc 4380

cagaggaact tctatgaacc acagattatc accacagaca acacctttgt gtctggcaac 4440

tgtgatgtgg tgattggcat tgtgaacaac acagtctatg acccactcca acctgaactg 4500

gactccttca aggaggaact ggacaaatac ttcaagaacc acaccagccc tgatgtggac 4560

ctgggagaca tctctggcat caatgcctct gtggtgaaca tccagaagga gattgacaga 4620

ctgaatgagg tggctaagaa cctgaatgag tccctgattg acctccaaga actgggcaaa 4680

tatgaacaat acatcaagtg gccatgaaaa ttgatcataa tcagccatac cacatttgta 4740

gaggttttac ttgctttaaa aaacctccca cacctccccc tgaacctgaa acataaaatg 4800

aatgcaattg ttgttgttaa cttgtttatt gcagcttata atggttacaa ataaagcaat 4860

agcatcacaa atttcacaaa taaagcattt ttttcactgc attctagttg tggtttgtcc 4920

aaactcatca atgtatctta acgcggatcg ggtaggggag gcgcttttcc caaggcagtc 4980

tggagcatgc gctttagcag ccccgctggg cacttggcgc tacacaagtg gcctctggcc 5040

tcgcacacat tccacatcca ccggtaggcg ccaaccggct ccgttctttg gtggcccctt 5100

cgcgccacct tctactcctc ccctagtcag gaagttcccc cccgccccgc agctcgcgtc 5160

gtgcaggacg tgacaaatgg aagtagcacg tctcactagt ctcgtgcaga tggacagcac 5220

cgctgagcaa tggaagcggg taggcctttg gggcagcggc caatagcagc tttgctcctt 5280

cgctttctgg gctcagaggc tgggaagggg tgggtccggg ggcgggctca ggggcgggct 5340

caggggcggg gcgggcgccc gaaggtcctc cggaggcccg gcattctgca cgcttcaaaa 5400

gcgcacgtct gccgcgctgt tctcctcttc ctcatctccg ggcctttcga aactacccca 5460

agctggccac catgactacg tccggcgttc catttggcat gacactacga ccaacacgat 5520

ctcggttgtc tcggcgcact ccgtacagta gggatcgtct acctccttt gagacagaaa 5580

cccgcgctac catactggag gatcatccgc tgctgcccga atgtaacact ttgacaatgc 5640

acaacgtgag ttacgtgcga ggtcttccct gcagtgtggg atttacgctg attcaggaat 5700

gggttgttcc ctgggatatg gttctaacgc gggaggagct tgtaatcctg aggaagtgta 5760

tgcacgtgtg cctgtgttgt gccaacattg atatcatgac gagcatgatg atccatggtt 5820

acgagtcctg ggctctccac tgtcattgtt ccagtcccgg ttccctgcag tgtatagccg 5880

gcgggcaggt tttggccagc tggtttagga tggtggtgga tggcgccatg tttaatcaga 5940

ggtttatatg gtaccgggag gtggtgaatt acaacatgcc aaaagaggta atgtttatgt 6000

ccagcgtgtt tatgaggggt cgccacttaa tctacctgcg cttgtggtat gatggccacg 6060

tgggttctgt ggtccccgcc atgagctttg gatacagcgc cttgcactgt gggattttga 6120

acaatattgt ggtgctgtgc tgcagttact gtgctgattt aagtgagatc agggtgcgct 6180

gctgtgcccg gaggacaagg cgccttatgc tgcgggcggt gcgaatcatc gctgaggaga 6240

ccactgccat gttgtattcc tgcaggacgg agcggcggcg gcagcagttt attcgcgcgc 6300

tgctgcagca ccaccgccct atcctgatgc acgattatga ctctaccccc atgtagaagc 6360

ttggggatca attctctaga gctcgctgat cagcctcgac tgtgccttct agttgccagc 6420

catctgttgt ttgcccctcc cccgtgcctt ccttgaccct ggaaggtgcc actcccactg 6480

tcctttccta ataaaatgag gaaattgcat cgcattgtct gagtaggtgt cattctattc 6540

tgggggggtgg ggtggggcag gacagcaagg gggaggattg ggaagacaat agcaggcatg 6600

ctggggatgc ggtgggctct atggcttctg aggaaattgg gcgtggctta agggtgggaa 6660

agaatatata aggtgggggt cttatgtagt tttgtatctg ttttgcagca gccgccgccg 6720

ccatgagcac caactcgttt gatggaagca ttgtgagctc atatttgaca acgcgcatgc 6780

ccccatgggc cggggtgcgt cagaatgtga tgggctccag cattgatggt cgccccgtcc 6840

tgcccgcaaa ctctactacc ttgacctacg agaccgtgtc tggaacgccg ttggagactg 6900

cagcctccgc cgccgcttca gccgctgcag ccaccgcccg cgggattgtg actgactttg 6960

ctttcctgag cccgcttgca agcagtgcag cttcccgttc atccgcccgc gatgacaagt 7020

tgacggctct tttggcacaa ttggattctt tgacccggga acttaatgtc gtttctcagc 7080

agctgttgga tctgcgccag caggtttctg ccctgaaggc ttcctccct cccaatgcgg 7140

tttaaaacat aaataaaaaa ccagactctg tttggatttg gatcaagcaa gtgtcttgct 7200

gtctttattt aggggttttg cgcgcgcggt aggcccggga ccagcggtct cggtcgttga 7260

gggtcctgtg tatttttcc aggacgtggt aaaggtgact ctggatgttc agatacatgg 7320

gcataagccc gtctctgggg tggaggtagc accactgcag agcttcatgc tgcggggtgg 7380

tgttgtagat gatccagtcg tagcaggagc gctgggcgtg gtgcctaaaa atgtctttca 7440

gtagcaagct gattgccagg ggcaggccct tggtgtaagt gtttacaaag cggttaagct 7500

gggatgggtg catacgtggg gatatgagat gcatcttgga ctgtattttt aggttggcta 7560

tgttcccagc catatccctc cggggattca tgttgtgcag aaccaccagc acagtgtatc 7620

cggtgcactt gggaaatttg tcatgtagct tagaaggaaa tgcgtggaag aacttggaga 7680

cgcccttgtg acctccaaga ttttccatgc attcgtccat aatgatggca atgggcccac 7740

gggcggcggc ctgggcgaag atatttctgg gatcactaac gtcatagttg tgttccagga 7800

tgagatcgtc ataggccatt tttacaaagc gcgggcggag ggtgccagac tgcggtataa 7860

tggttccatc cggcccaggg gcgtagttac cctcacagat ttgcatttcc cacgctttga 7920

gttcagatgg ggggatcatg tctacctgcg gggcgatgaa gaaaacggtt tccggggtag 7980

gggagatcag ctgggaagaa agcaggttcc tgagcagctg cgacttaccg cagccggtgg 8040

gcccgtaaat cacacctatt accggctgca actggtagtt aagagagctg cagctgccgt 8100

catccctgag cagggggggcc acttcgttaa gcatgtccct gactcgcatg ttttccctga 8160

ccaaatccgc cagaaggcgc tcgccgccca gcgatagcag ttcttgcaag gaagcaaagt 8220

ttttcaacgg tttgagaccg tccgccgtag gcatgctttt gagcgtttga ccaagcagtt 8280

ccaggcggtc ccacagctcg gtcacctgct ctacggcatc tcgatccagc atatctcctc 8340

gtttcgcggg ttggggcggc tttcgctgta cggcagtagt cggtgctcgt ccagacgggc 8400

cagggtcatg tctttccacg ggcgcagggt cctcgtcagc gtagtctggg tcacggtgaa 8460

ggggtgcgct ccgggctgcg cgctggccag ggtgcgcttg aggctggtcc tgctggtgct 8520

gaagcgctgc cggtcttcgc cctgcgcgtc ggccaggtag catttgacca tggtgtcata 8580

gtccagcccc tccgcggcgt ggcccttggc gcgcagcttg cccttggagg aggcgccgca 8640

cgaggggcag tgcagacttt tgagggcgta gagcttgggc gcgagaaata ccgattccgg 8700

ggagtaggca tccgcgccgc aggccccgca gacggtctcg cattccacga gccaggtgag 8760

ctctggccgt tcggggtcaa aaaccaggtt tcccccatgc tttttgatgc gtttcttacc 8820

tctggtttcc atgagccggt gtccacgctc ggtgacgaaa aggctgtccg tgtccccgta 8880

tacagacttg agaggcctgt cctcgagcgg tgttccgcgg tcctcctcgt atagaaactc 8940

ggaccactct gagacaaagg ctcgcgtcca ggccagcacg aaggaggcta agtgggaggg 9000

gtagcggtcg ttgtccacta gggggtccac tcgctccagg gtgtgaagac acatgtcgcc 9060

ctcttcggca tcaaggaagg tgattggttt gtaggtgtag gccacgtgac cgggtgttcc 9120

tgaaggggggg ctataaaagg gggtgggggc gcgttcgtcc tcactctctt ccgcatcgct 9180

gtctgcgagg gccagctgtt ggggtgagta ctccctctga aaagcgggca tgacttctgc 9240

gctaagattg tcagtttcca aaaacgagga ggatttgata ttcacctggc ccgcggtgat 9300

gcctttgagg gtggccgcat ccatctggtc agaaaagaca atctttttgt tgtcaagctt 9360

ggtggcaaac gacccgtaga gggcgttgga cagcaacttg gcgatggagc gcagggtttg 9420

gtttttgtcg cgatcggcgc gctccttggc cgcgatgttt agctgcacgt attcgcgcgc 9480

aacgcaccgc cattcgggaa agacggtggt gcgctcgtcg ggcaccaggt gcacgcgcca 9540

accgcggttg tgcagggtga caaggtcaac gctggtggct acctctccgc gtaggcgctc 9600

gttggtccag cagaggcggc cgcccttgcg cgagcagaat ggcggtaggg ggtctagctg 9660

cgtctcgtcc ggggggtctg cgtccacggt aaagaccccg ggcagcaggc gcgcgtcgaa 9720

gtagtctatc ttgcatcctt gcaagtctag cgcctgctgc catgcgcggg cggcaagcgc 9780

gcgctcgtat gggttgagtg ggggacccca tggcatgggg tgggtgagcg cggaggcgta 9840

catgccgcaa atgtcgtaaa cgtagagggg ctctctgagt attccaagat atgtagggta 9900

gcatcttcca ccgcggatgc tggcgcgcac gtaatcgtat agttcgtgcg agggagcgag 9960

gaggtcggga ccgaggttgc tacgggcggg ctgctctgct cggaagacta tctgcctgaa 10020

gatggcatgt gagttggatg atatggttgg acgctggaag acgttgaagc tggcgtctgt 10080

gagacctacc gcgtcacgca cgaaggaggc gtaggagtcg cgcagcttgt tgaccagctc 10140

ggcggtgacc tgcacgtcta gggcgcagta gtccagggtt tccttgatga tgtcatactt 10200

atcctgtccc tttttttttcc acagctcgcg gttgaggaca aactcttcgc ggtctttcca 10260

gtactcttgg atcggaaacc cgtcggcctc cgaacggtaa gagcctagca tgtagaactg 10320

gttgacggcc tggtaggcgc agcatccctt ttctacgggt agcgcgtatg cctgcgcggc 10380

cttccggagc gaggtgtggg tgagcgcaaa ggtgtccctg accatgactt tgaggtactg 10440

gtatttgaag tcagtgtcgt cgcatccgcc ctgctcccag agcaaaaagt ccgtgcgctt 10500

tttggaacgc ggatttggca gggcgaaggt gacatcgttg aagagtatct ttcccgcgcg 10560

aggcataaag ttgcgtgtga tgcggaaggg tcccggcacc tcggaacggt tgttaattac 10620

ctgggcggcg agcacgatct cgtcaaagcc gttgatgttg tggcccacaa tgtaaagttc 10680

caagaagcgc gggatgccct tgatggaagg caatttttta agttcctcgt aggtgagctc 10740

ttcaggggag ctgagcccgt gctctgaaag ggcccagtct gcaagatgag ggttggaagc 10800

gacgaatgag ctccacaggt cacgggccat tagcatttgc aggtggtcgc gaaaggtcct 10860

aaactggcga cctatggcca ttttttctgg ggtgatgcag tagaaggtaa gcgggtcttg 10920

ttcccagcgg tcccatccaa ggttcgcggc taggtctcgc gcggcagtca ctagaggctc 10980

atctccgccg aacttcatga ccagcatgaa gggcacgagc tgcttcccaa aggcccccat 11040

ccaagtatag gtctctacat cgtaggtgac aaagagacgc tcggtgcgag gatgcgagcc 11100

gatcgggaag aactggatct cccgccacca attggaggag tggctattga tgtggtgaaa 11160

gtagaagtcc ctgcgacggg ccgaacactc gtgctggctt ttgtaaaaac gtgcgcagta 11220

ctggcagcgg tgcacgggct gtacatcctg cacgaggttg acctgacgac cgcgcacaag 11280

gaagcagagt gggaatttga gcccctcgcc tggcgggttt ggctggtggt cttctacttc 11340

ggctgcttgt ccttgaccgt ctggctgctc gaggggagtt acggtggatc ggaccaccac 11400

gccgcgcgag cccaaagtcc agatgtccgc gcgcggcggt cggagcttga tgacaacatc 11460

gcgcagatgg gagctgtcca tggtctggag ctcccgcggc gtcaggtcag gcgggagctc 11520

ctgcaggttt acctcgcata gacgggtcag ggcgcgggct agatccaggt gatacctaat 11580

ttccaggggc tggttggtgg cggcgtcgat ggcttgcaag aggccgcatc cccgcggcgc 11640

gactacggta ccgcgcggcg ggcggtgggc cgcgggggtg tccttggatg atgcatctaa 11700

aagcggtgac gcgggcgagc ccccggaggt agggggggct ccggacccgc cgggagaggg 11760

ggcaggggca cgtcggcgcc gcgcgcgggc aggagctggt gctgcgcgcg taggttgctg 11820

gcgaacgcga cgacgcggcg gttgatctcc tgaatctggc gcctctgcgt gaagacgacg 11880

ggcccggtga gcttgaacct gaaagagagt tcgacagaat caatttcggt gtcgttgacg 11940

gcggcctggc gcaaaatctc ctgcacgtct cctgagttgt cttgataggc gatctcggcc 12000

atgaactgct cgatctcttc ctcctggaga tctccgcgtc cggctcgctc cacggtggcg 12060

gcgaggtcgt tggaaatgcg ggccatgagc tgcgagaagg cgttgaggcc tccctcgttc 12120

cagacgcggc tgtagaccac gccccccttcg gcatcgcggg cgcgcatgac cacctgcgcg 12180

agattgagct ccacgtgccg ggcgaagacg gcgtagtttc gcaggcgctg aaagaggtag 12240

ttgagggtgg tggcggtgtg ttctgccacg aagaagtaca taacccagcg tcgcaacgtg 12300

gattcgttga tatcccccaa ggcctcaagg cgctccatgg cctcgtagaa gtccacggcg 12360

aagttgaaaa actgggagtt gcgcgccgac acggttaact cctcctccag aagacggatg 12420

agctcggcga cagtgtcgcg cacctcgcgc tcaaaggcta caggggcctc ttcttcttct 12480

tcaatctcct cttccataag ggcctcccct tcttcttctt ctggcggcgg tgggggaggg 12540

gggacacggc ggcgacgacg gcgcaccggg aggcggtcga caaagcgctc gatcatctcc 12600

ccgcggcgac ggcgcatggt ctcggtgacg gcgcggccgt tctcgcgggg gcgcagttgg 12660

aagacgccgc ccgtcatgtc ccggttatgg gttggcgggg ggctgccatg cggcagggat 12720

acggcgctaa cgatgcatct caacaattgt tgtgtaggta ctccgccgcc gagggacctg 12780

agcgagtccg catcgaccgg atcggaaaac ctctcgagaa aggcgtctaa ccagtcacag 12840

tcgcaaggta ggctgagcac cgtggcgggc ggcagcgggc ggcggtcggg gttgtttctg 12900

gcggaggtgc tgctgatgat gtaattaaag taggcggtct tgagacggcg gatggtcgac 12960

agaagcacca tgtccttggg tccggcctgc tgaatgcgca ggcggtcggc catgccccag 13020

gcttcgtttt gacatcggcg caggtctttg tagtagtctt gcatgagcct ttctaccggc 13080

acttcttctt ctccttcctc ttgtcctgca tctcttgcat ctatcgctgc ggcggcggcg 13140

gagtttggcc gtaggtggcg ccctcttcct cccatgcgtg tgaccccgaa gcccctcatc 13200

ggctgaagca gggctaggtc ggcgacaacg cgctcggcta atatggcctg ctgcacctgc 13260

gtgagggtag actggaagtc atccatgtcc acaaagcggt ggtatgcgcc cgtgttgatg 13320

gtgtaagtgc agttggccat aacggaccag ttaacggtct ggtgacccgg ctgcgagagc 13380

tcggtgtacc tgagacgcga gtaagccctc gagtcaaata cgtagtcgtt gcaagtccgc 13440

accaggtact ggtatcccac caaaaagtgc ggcggcggct ggcggtagag gggccagcgt 13500

agggtggccg gggctccggg ggcgagatct tccaacataa ggcgatgata tccgtagatg 13560

tacctggaca tccaggtgat gccggcggcg gtggtggagg cgcgcggaaa gtcgcggacg 13620

cggttccaga tgttgcgcag cggcaaaaag tgctccatgg tcgggacgct ctggccggtc 13680

aggcgcgcgc aatcgttgac gctctagcgt gcaaaaggag agcctgtaag cgggcactct 13740

tccgtggtct ggtggataaa ttcgcaaggg tatcatggcg gacgaccggg gttcgagccc 13800

cgtatccggc cgtccgccgt gatccatgcg gttaccgccc gcgtgtcgaa cccaggtgtg 13860

cgacgtcaga caacgggggа gtgctccttt tggcttcctt ccaggcgcgg cggctgctgc 13920

gctagctttt ttggccactg gccgcgcgca gcgtaagcgg ttaggctgga aagcgaaagc 13980

attaagtggc tcgctccctg tagccggagg gttattttcc aagggttgag tcgcgggacc 14040

cccggttcga gtctcggacc ggccggactg cggcgaacgg gggtttgcct ccccgtcatg 14100

caagaccccg cttgcaaatt cctccggaaa cagggacgag ccccttttt gcttttccca 14160

gatgcatccg gtgctgcggc agatgcgccc ccctcctcag cagcggcaag agcaagagca 14220

gcggcagaca tgcagggcac cctcccctcc tcctaccgcg tcaggagggg cgacatccgc 14280

ggttgacgcg gcagcagatg gtgattacga acccccgcgg cgccgggccc ggcactacct 14340

ggacttggag gagggcgagg gcctggcgcg gctaggagcg ccctctcctg agcggcaccc 14400

aagggtgcag ctgaagcgtg atacgcgtga ggcgtacgtg ccgcggcaga acctgtttcg 14460

cgaccgcgag ggagaggagc ccgaggagat gcgggatcga aagttccacg cagggcgcga 14520

gctgcggcat ggcctgaatc gcgagcggtt gctgcgcgag gaggactttg agcccgacgc 14580

gcgaaccggg attagtcccg cgcgcgcaca cgtggcggcc gccgacctgg taaccgcata 14640

cgagcagacg gtgaaccagg agattaactt tcaaaaaagc tttaacaacc acgtgcgtac 14700

gcttgtggcg cgcgaggagg tggctatagg actgatgcat ctgtgggact ttgtaagcgc 14760

gctggagcaa aacccaaata gcaagccgct catggcgcag ctgttcctta tagtgcagca 14820

cagcagggac aacgaggcat tcagggatgc gctgctaaac atagtagagc ccgagggccg 14880

ctggctgctc gatttgataa acatcctgca gagcatagtg gtgcaggagc gcagcttgag 14940

cctggctgac aaggtggccg ccatcaacta ttccatgctt agcctgggca agttttacgc 15000

ccgcaagata taccataccc cttacgttcc catagacaag gaggtaaaga tcgaggggtt 15060

ctacatgcgc atggcgctga aggtgcttac cttgagcgac gacctgggcg tttatcgcaa 15120

cgagcgcatc cacaaggccg tgagcgtgag ccggcggcgc gagctcagcg accgcgagct 15180

gatgcacagc ctgcaaaggg ccctggctgg cacgggcagc ggcgatagag aggccgagtc 15240

ctactttgac gcgggcgctg acctgcgctg ggccccaagc cgacgcgccc tggaggcagc 15300

tggggccgga cctgggctgg cggtggcacc cgcgcgcgct ggcaacgtcg gcggcgtgga 15360

ggaatatgac gaggacgatg agtacgagcc agaggacggc gagtactaag cggtgatgtt 15420

tctgatcaga tgatgcaaga cgcaacggac ccggcggtgc gggcggcgct gcagagccag 15480

ccgtccggcc ttaactccac ggacgactgg cgccaggtca tggaccgcat catgtcgctg 15540

actgcgcgca atcctgacgc gttccggcag cagccgcagg ccaaccggct ctccgcaatt 15600

ctggaagcgg tggtcccggc gcgcgcaaac cccacgcacg agaaggtgct ggcgatcgta 15660

aacgcgctgg ccgaaaacag ggccatccgg cccgacgagg ccggcctggt ctacgacgcg 15720

ctgcttcagc gcgtggctcg ttacaacagc ggcaacgtgc agaccaacct ggaccggctg 15780

gtgggggatg tgcgcgaggc cgtggcgcag cgtgagcgcg cgcagcagca gggcaacctg 15840

ggctccatgg ttgcactaaa cgccttcctg agtacacagc ccgccaacgt gccgcgggga 15900

caggaggact acaccaactt tgtgagcgca ctgcggctaa tggtgactga gacaccgcaa 15960

agtgaggtgt accagtctgg gccagactat tttttccaga ccagtagaca aggcctgcag 16020

accgtaaacc tgagccaggc tttcaaaaac ttgcaggggc tgtgggggggt gcgggctccc 16080

acaggcgacc gcgcgaccgt gtctagcttg ctgacgccca actcgcgcct gttgctgctg 16140

ctaatagcgc ccttcacgga cagtggcagc gtgtcccggg acacatacct aggtcacttg 16200

ctgacactgt accgcgaggc cataggtcag gcgcatgtgg acgagcatac tttccaggag 16260

attacaagtg tcagccgcgc gctggggcag gaggacacgg gcagcctgga ggcaacccta 16320

aactacctgc tgaccaaccg gcggcagaag atcccctcgt tgcacagttt aaacagcgag 16380

gaggagcgca ttttgcgcta cgtgcagcag agcgtgagcc ttaacctgat gcgcgacggg 16440

gtaacgccca gcgtggcgct ggacatgacc gcgcgcaaca tggaaccggg catgtatgcc 16500

tcaaaccggc cgtttatcaa ccgcctaatg gactacttgc atcgcgcggc cgccgtgaac 16560

cccgagtatt tcaccaatgc catcttgaac ccgcactggc taccgccccc tggtttctac 16620

accgggggat tcgaggtgcc cgagggtaac gatggattcc tctgggacga catagacgac 16680

agcgtgtttt ccccgcaacc gcagaccctg ctagagttgc aacagcgcga gcaggcagag 16740

gcggcgctgc gaaaggaaag cttccgcagg ccaagcagct tgtccgatct aggcgctgcg 16800

gccccgcggt cagatgctag tagcccattt ccaagcttga tagggtctct taccagcact 16860

cgcaccaccc gcccgcgcct gctgggcgag gaggagtacc taaacaactc gctgctgcag 16920

ccgcagcgcg aaaaaaacct gcctccggca tttcccaaca acgggataga gagcctagtg 16980

gacaagatga gtagatggaa gacgtacgcg caggagcaca gggacgtgcc aggcccgcgc 17040

ccgcccaccc gtcgtcaaag gcacgaccgt cagcggggtc tggtgtggga ggacgatgac 17100

tcggcagacg acagcagcgt cctggatttg ggagggagtg gcaacccgtt tgcgcacctt 17160

cgccccaggc tggggagaat gttttaaaaa aaaaaaagca tgatgcaaaa taaaaaactc 17220

accaaggcca tggcaccgag cgttggtttt cttgtattcc ccttagtatg cggcgcgcgg 17280

cgatgtatga ggaaggtcct cctccctcct acgagagtgt ggtgagcgcg gcgccagtgg 17340

cggcggcgct gggttctccc ttcgatgctc ccctggaccc gccgtttgtg cctccgcggt 17400

acctgcggcc taccgggggg agaaacagca tccgttactc tgagttggca cccctattcg 17460

acaccacccg tgtgtacctg gtggacaaca agtcaacgga tgtggcatcc ctgaactacc 17520

agaacgacca cagcaacttt ctgaccacgg tcattcaaaa caatgactac agcccggggg 17580

aggcaagcac acagaccatc aatcttgacg accggtcgca ctggggcggc gacctgaaaa 17640

ccatcctgca taccaacatg ccaaatgtga acgagttcat gtttaccaat aagtttaagg 17700

cgcgggtgat ggtgtcgcgc ttgcctacta aggacaatca ggtggagctg aaatacgagt 17760

gggtggagtt cacgctgccc gagggcaact actccgagac catgaccata gaccttatga 17820

acaacgcgat cgtggagcac tacttgaaag tgggcagaca gaacggggtt ctggaaagcg 17880

acatcggggt aaagtttgac acccgcaact tcagactggg gtttgacccc gtcactggtc 17940

ttgtcatgcc tggggtatat acaaacgaag ccttccatcc agacatcatt ttgctgccag 18000

gatgcggggt ggacttcacc cacagccgcc tgagcaactt gttgggcatc cgcaagcggc 18060

aacccttcca ggagggcttt aggatcacct acgatgatct ggagggtggt aacattcccg 18120

cactgttgga tgtggacgcc taccaggcga gcttgaaaga tgacaccgaa cagggcgggg 18180

gtggcgcagg cggcagcaac agcagtggca gcggcgcgga agagaactcc aacgcggcag 18240

ccgcggcaat gcagccggtg gaggacatga acgatcatgc cattcgcggc gacacctttg 18300

ccacacgggc tgaggagaag cgcgctgagg ccgaagcagc ggccgaagct gccgcccccg 18360

ctgcgcaacc cgaggtcgag aagcctcaga agaaaccggt gatcaaaccc ctgacagagg 18420

acagcaagaa acgcagttac aacctaataa gcaatgacag caccttcacc cagtaccgca 18480

gctggtacct tgcatacaac tacggcgacc ctcagaccgg aatccgctca tggaccctgc 18540

tttgcactcc tgacgtaacc tgcggctcgg agcaggtcta ctggtcgttg ccagacatga 18600

tgcaagaccc cgtgaccttc cgctccacgc gccagatcag caactttccg gtggtgggcg 18660

ccgagctgtt gcccgtgcac tccaagagct tctacaacga ccaggccgtc tactcccaac 18720

tcatccgcca gtttacctct ctgacccacg tgttcaatcg ctttcccgag aaccagattt 18780

tggcgcgccc gccagccccc accatcacca ccgtcagtga aaacgttcct gctctcacag 18840

atcacgggac gctaccgctg cgcaacagca tcggaggagt ccagcgagtg accattactg 18900

acgccagacg ccgcacctgc ccctacgttt acaaggccct gggcatagtc tcgccgcgcg 18960

tcctatcgag ccgcactttt tgagcaagca tgtccatcct tatatcgccc agcaataaca 19020

caggctgggg cctgcgcttc ccaagcaaga tgtttggcgg ggccaagaag cgctccgacc 19080

aacacccagt gcgcgtgcgc gggcactacc gcgcgccctg gggcgcgcac aaacgcggcc 19140

gcactgggcg caccaccgtc gatgacgcca tcgacgcggt ggtggaggag gcgcgcaact 19200

acacgcccac gccgccacca gtgtccacag tggacgcggc cattcagacc gtggtgcgcg 19260

gagcccggcg ctatgctaaa atgaagagac ggcggaggcg cgtagcacgt cgccaccgcc 19320

gccgacccgg cactgccgcc caacgcgcgg cggcggccct gcttaaccgc gcacgtcgca 19380

ccggccgacg ggcggccatg cgggccgctc gaaggctggc cgcgggtatt gtcactgtgc 19440

cccccaggtc caggcgacga gcggccgccg cagcagccgc ggccattagt gctatgactc 19500

agggtcgcag gggcaacgtg tattgggtgc gcgactcggt tagcggcctg cgcgtgcccg 19560

tgcgcacccg ccccccgcgc aactagattg caagaaaaaa ctacttagac tcgtactgtt 19620

gtatgtatcc agcggcggcg gcgcgcaacg aagctatgtc caagcgcaaa atcaaagaag 19680

agatgctcca ggtcatcgcg ccggagatct atggcccccc gaagaaggaa gagcaggatt 19740

acaagccccg aaagctaaag cgggtcaaaa agaaaaagaa agatgatgat gatgaacttg 19800

acgacgaggt ggaactgctg cacgctaccg cgcccaggcg acgggtacag tggaaaggtc 19860

gacgcgtaaa acgtgttttg cgacccggca ccaccgtagt ctttacgccc ggtgagcgct 19920

ccacccgcac ctacaagcgc gtgtatgatg aggtgtacgg cgacgaggac ctgcttgagc 19980

aggccaacga gcgcctcggg gagtttgcct acggaaagcg gcataaggac atgctggcgt 20040

tgccgctgga cgagggcaac ccaacaccta gcctaaagcc cgtaacactg cagcaggtgc 20100

tgcccgcgct tgcaccgtcc gaagaaaagc gcggcctaaa gcgcgagtct ggtgacttgg 20160

cacccaccgt gcagctgatg gtacccaagc gccagcgact ggaagatgtc ttggaaaaaa 20220

tgaccgtgga acctgggctg gagcccgagg tccgcgtgcg gccaatcaag caggtggcgc 20280

cgggactggg cgtgcagacc gtggacgttc agatacccac taccagtagc accagtattg 20340

ccaccgccac agagggcatg gagacacaaa cgtccccggt tgcctcagcg gtggcggatg 20400

ccgcggtgca ggcggtcgct gcggccgcgt ccaagacctc tacggaggtg caaacggacc 20460

cgtggatgtt tcgcgtttca gccccccggc gcccgcgccg ttcgaggaag tacggcgccg 20520

ccagcgcgct actgcccgaa tatgccctac atccttccat tgcgcctacc cccggctatc 20580

gtggctacac ctaccgcccc agaagacgag caactacccg acgccgaacc accactggaa 20640

cccgccgccg ccgtcgccgt cgccagcccg tgctggcccc gatttccgtg cgcagggtgg 20700

ctcgcgaagg aggcaggacc ctggtgctgc caacagcgcg ctaccacccc agcatcgttt 20760

aaaagccggt ctttgtggtt cttgcagata tggccctcac ctgccgcctc cgtttcccgg 20820

tgccgggatt ccgaggaaga atgcaccgta ggaggggcat ggccggccac ggcctgacgg 20880

gcggcatgcg tcgtgcgcac caccggcggc ggcgcgcgtc gcaccgtcgc atgcgcggcg 20940

gtatcctgcc cctccttatt ccactgatcg ccgcggcgat tggcgccgtg cccggaattg 21000

catccgtggc cttgcaggcg cagagacact gattaaaaac aagttgcatg tggaaaaatc 21060

aaaataaaaa gtctggactc tcacgctcgc ttggtcctgt aactattttg tagaatggaa 21120

gacatcaact ttgcgtctct ggccccgcga cacggctcgc gcccgttcat gggaaactgg 21180

caagatatcg gcaccagcaa tatgagcggt ggcgccttca gctggggctc gctgtggagc 21240

ggcattaaaa atttcggttc caccgttaag aactatggca gcaaggcctg gaacagcagc 21300

acaggccaga tgctgaggga taagttgaaa gagcaaaatt tccaacaaaa ggtggtagat 21360

ggcctggcct ctggcattag cggggtggtg gacctggcca accaggcagt gcaaaataag 21420

attaacagta agcttgatcc ccgccctccc gtagaggagc ctccaccggc cgtggagaca 21480

gtgtctccag aggggcgtgg cgaaaagcgt ccgcgccccg acagggaaga aactctggtg 21540

acgcaaatag acgagcctcc ctcgtacgag gaggcactaa agcaaggcct gcccaccacc 21600

cgtcccatcg cgcccatggc taccggagtg ctgggccagc acacacccgt aacgctggac 21660

ctgcctcccc ccgccgacac ccagcagaaa cctgtgctgc caggcccgac cgccgttgtt 21720

gtaacccgtc ctagccgcgc gtccctgcgc cgcgccgcca gcggtccgcg atcgttgcgg 21780

cccgtagcca gtggcaactg gcaaagcaca ctgaacagca tcgtgggtct gggggtgcaa 21840

tccctgaagc gccgacgatg cttctgatag ctaacgtgtc gtatgtgtgt catgtatgcg 21900

tccatgtcgc cgccagagga gctgctgagc cgccgcgcgc ccgctttcca agatggctac 21960

cccttcgatg atgccgcagt ggtcttacat gcacatctcg ggccaggacg cctcggagta 22020

cctgagcccc gggctggtgc agtttgcccg cgccaccgag acgtacttca gcctgaataa 22080

caagtttaga aaccccacgg tggcgcctac gcacgacgtg accacagacc ggtcccagcg 22140

tttgacgctg cggttcatcc ctgtggaccg tgaggatact gcgtactcgt acaaggcgcg 22200

gttcacccta gctgtgggtg ataaccgtgt gctggacatg gcttccacgt actttgacat 22260

ccgcggcgtg ctggacaggg gccctacttt taagccctac tctggcactg cctacaacgc 22320

cctggctccc aagggtgccc caaatccttg cgaatgggat gaagctgcta ctgctcttga 22380

aataaaccta gaagaagagg acgatgacaa cgaagacgaa gtagacgagc aagctgagca 22440

gcaaaaaact cacgtatttg ggcaggcgcc ttattctggt ataaatatta caaaggaggg 22500

tattcaaata ggtgtcgaag gtcaaacacc taaatatgcc gataaaacat ttcaacctga 22560

acctcaaata ggagaatctc agtggtacga aacagaaatt aatcatgcag ctgggagagt 22620

cctaaaaaag actaccccaa tgaaaccatg ttacggttca tatgcaaaac ccacaaatga 22680

aaatggaggg caaggcattc ttgtaaagca acaaaatgga aagctagaaa gtcaagtgga 22740

aatgcaattt ttctcaacta ctgaggcagc cgcaggcaat ggtgataact tgactcctaa 22800

agtggtattg tacagtgaag atgtagatat agaaacccca gacactcata tttcttacat 22860

gcccactatt aaggaaggta actcacgaga actaatgggc caacaatcta tgcccaacag 22920

gcctaattac attgctttta gggacaattt tattggtcta atgtattaca acagcacggg 22980

taatatgggt gttctggcgg gccaagcatc gcagttgaat gctgttgtag atttgcaaga 23040

cagaaacaca gagctttcat accagctttt gcttgattcc attggtgata gaaccaggta 23100

cttttctatg tggaatcagg ctgttgacag ctatgatcca gatgttagaa ttattgaaaa 23160

tcatggaact gaagatgaac ttccaaatta ctgctttcca ctgggaggtg tgattaatac 23220

agagactctt accaaggtaa aacctaaaac aggtcaggaa aatggatggg aaaaagatgc 23280

tacagaattt tcagataaaa atgaaataag agttggaaat aattttgcca tggaaatcaa 23340

tctaaatgcc aacctgtgga gaaatttcct gtactccaac atagcgctgt atttgcccga 23400

caagctaaag tacagtcctt ccaacgtaaa aatttctgat aacccaaaca cctacgacta 23460

catgaacaag cgagtggtgg ctcccgggct agtggactgc tacattaacc ttggagcacg 23520

ctggtccctt gactatatgg acaacgtcaa cccatttaac caccaccgca atgctggcct 23580

gcgctaccgc tcaatgttgc tgggcaatgg tcgctatgtg cccttccaca tccaggtgcc 23640

tcagaagttc tttgccatta aaaacctcct tctcctgccg ggctcataca cctacgagtg 23700

gaacttcagg aaggatgtta acatggttct gcagagctcc ctaggaaatg acctaagggt 23760

tgacggagcc agcattaagt ttgatagcat ttgcctttac gccaccttct tccccatggc 23820

ccacaacacc gcctccacgc ttgaggccat gcttagaaac gacaccaacg accagtcctt 23880

taacgactat ctctccgccg ccaacatgct ctaccctata cccgccaacg ctaccaacgt 23940

gcccatatcc atcccctccc gcaactgggc ggctttccgc ggctgggcct tcacgcgcct 24000

taagactaag gaaaccccat cactgggctc gggctacgac ccttattaca cctactctgg 24060

ctctataccc tacctagatg gaacctttta cctcaaccac acctttaaga aggtggccat 24120

tacctttgac tcttctgtca gctggcctgg caatgaccgc ctgcttaccc ccaacgagtt 24180

tgaaattaag cgctcagttg acggggaggg ttacaacgtt gcccagtgta acatgaccaa 24240

agactggttc ctggtacaaa tgctagctaa ctataacatt ggctaccagg gcttctatat 24300

cccagagagc tacaaggacc gcatgtactc cttctttaga aacttccagc ccatgagccg 24360

tcaggtggtg gatgatacta aatacaagga ctaccaacag gtgggcatcc tacaccaaca 24420

caacaactct ggatttgttg gctaccttgc ccccaccatg cgcgaaggac aggcctaccc 24480

tgctaacttc ccctatccgc ttataggcaa gaccgcagtt gacagcatta cccagaaaaa 24540

gtttctttgc gatcgcaccc tttggcgcat cccattctcc agtaacttta tgtccatggg 24600

cgcactcaca gacctgggcc aaaaccttct ctacgccaac tccgcccacg cgctagacat 24660

gacttttgag gtggatccca tggacgagcc cacccttctt tatgttttgt ttgaagtctt 24720

tgacgtggtc cgtgtgcacc agccgcaccg cggcgtcatc gaaaccgtgt acctgcgcac 24780

gcccttctcg gccggcaacg ccacaacata aagaagcaag caacatcaac aacagctgcc 24840

gccatgggct ccagtgagca ggaactgaaa gccattgtca aagatcttgg ttgtgggcca 24900

tatttttgg gcacctatga caagcgcttt ccaggctttg tttctccaca caagctcgcc 24960

tgcgccatag tcaatacggc cggtcgcgag actgggggcg tacactggat ggcctttgcc 25020

tggaacccgc actcaaaaac atgctacctc tttgagccct ttggcttttc tgaccagcga 25080

ctcaagcagg tttaccagtt tgagtacgag tcactcctgc gccgtagcgc cattgcttct 25140

tcccccgacc gctgtataac gctggaaaag tccacccaaa gcgtacaggg gcccaactcg 25200

gccgcctgtg gactattctg ctgcatgttt ctccacgcct ttgccaactg gccccaaact 25260

cccatggatc acaaccccac catgaacctt attaccgggg tacccaactc catgctcaac 25320

agtccccagg tacagcccac cctgcgtcgc aaccaggaac agctctacag cttcctggag 25380

cgccactcgc cctacttccg cagccacagt gcgcagatta ggagcgccac ttctttttgt 25440

cacttgaaaa acatgtaaaa ataatgtact agagacactt tcaataaagg caaatgcttt 25500

tatttgtaca ctctcgggtg attatttacc cccacccttg ccgtctgcgc cgtttaaaaa 25560

tcaaaggggt tctgccgcgc atcgctatgc gccactggca gggacacgtt gcgatactgg 25620

tgtttagtgc tccacttaaa ctcaggcaca accatccgcg gcagctcggt gaagttttca 25680

ctccacaggc tgcgcaccat caccaacgcg tttagcaggt cgggcgccga tatcttgaag 25740

tcgcagttgg ggcctccgcc ctgcgcgcgc gagttgcgat acacagggtt gcagcactgg 25800

aacactatca gcgccgggtg gtgcacgctg gccagcacgc tcttgtcgga gatcagatcc 25860

gcgtccaggt cctccgcgtt gctcagggcg aacggagtca actttggtag ctgccttccc 25920

aaaaagggcg cgtgcccagg ctttgagttg cactcgcacc gtagtggcat caaaaggtga 25980

ccgtgcccgg tctgggcgtt aggatacagc gcctgcataa aagccttgat ctgcttaaaa 26040

gccacctgag cctttgcgcc ttcagagaag aacatgccgc aagacttgcc ggaaaactga 26100

ttggccggac aggccgcgtc gtgcacgcag caccttgcgt cggtgttgga gatctgcacc 26160

acatttcggc cccaccggtt cttcacgatc ttggccttgc tagactgctc cttcagcgcg 26220

cgctgcccgt tttcgctcgt cacatccatt tcaatcacgt gctccttatt tatcataatg 26280

cttccgtgta gacacttaag ctcgccttcg atctcagcgc agcggtgcag ccacaacgcg 26340

cagcccgtgg gctcgtgatg cttgtaggtc acctctgcaa acgactgcag gtacgcctgc 26400

aggaatcgcc ccatcatcgt cacaaaggtc ttgttgctgg tgaaggtcag ctgcaacccg 26460

cggtgctcct cgttcagcca ggtcttgcat acggccgcca gagcttccac ttggtcaggc 26520

agtagtttga agttcgcctt tagatcgtta tccacgtggt acttgtccat cagcgcgcgc 26580

gcagcctcca tgcccttctc ccacgcagac acgatcggca cactcagcgg gttcatcacc 26640

gtaatttcac tttccgcttc gctgggctct tcctcttcct cttgcgtccg cataccacgc 26700

gccactgggt cgtcttcatt cagccgccgc actgtgcgct tacctccttt gccatgcttg 26760

attagcaccg gtgggttgct gaaacccacc atttgtagcg ccacatcttc tctttcttcc 26820

tcgctgtcca cgattacctc tggtgatggc gggcgctcgg gcttgggaga agggcgcttc 26880

tttttcttct tgggcgcaat ggccaaatcc gccgccgagg tcgatggccg cgggctgggt 26940

gtgcgcggca ccagcgcgtc ttgtgatgag tcttcctcgt cctcggactc gatacgccgc 27000

ctcatccgct tttttggggg cgcccgggga ggcggcggcg acggggacgg ggacgacacg 27060

tcctccatgg ttgggggacg tcgcgccgca ccgcgtccgc gctcgggggt ggtttcgcgc 27120

tgctcctctt cccgactggc catttccttc tcctataggc agaaaaagat catggagtca 27180

gtcgagaaga aggacagcct aaccgccccc tctgagttcg ccaccaccgc ctccaccgat 27240

gccgccaacg cgcctaccac cttccccgtc gaggcacccc cgcttgagga ggaggaagtg 27300

attatcgagc aggacccagg ttttgtaagc gaagacgacg aggaccgctc agtaccaaca 27360

gaggataaaa agcaagacca ggacaacgca gaggcaaacg aggaacaagt cgggcggggg 27420

gacgaaaggc atggcgacta cctagatgtg ggagacgacg tgctgttgaa gcatctgcag 27480

cgccagtgcg ccattatctg cgacgcgttg caagagcgca gcgatgtgcc cctcgccata 27540

gcggatgtca gccttgccta cgaacgccac ctattctcac cgcgcgtacc ccccaaacgc 27600

caagaaaacg gcacatgcga gcccaacccg cgcctcaact tctaccccgt atttgccgtg 27660

ccagaggtgc ttgccaccta tcacatcttt ttccaaaact gcaagatacc cctatcctgc 27720

cgtgccaacc gcagccgagc ggacaagcag ctggccttgc ggcagggcgc tgtcatacct 27780

gatatcgcct cgctcaacga agtgccaaaa atctttgagg gtcttggacg cgacgagaag 27840

cgcgcggcaa acgctctgca acaggaaaac agcgaaaatg aaagtcactc tggagtgttg 27900

gtggaactcg agggtgacaa cgcgcgccta gccgtactaa aacgcagcat cgaggtcacc 27960

cactttgcct acccggcact taacctaccc cccaaggtca tgagcacagt catgagtgag 28020

ctgatcgtgc gccgtgcgca gcccctggag agggatgcaa atttgcaaga acaaacagag 28080

gagggcctac ccgcagttgg cgacgagcag ctagcgcgct ggcttcaaac gcgcgagcct 28140

gccgacttgg aggagcgacg caaactaatg atggccgcag tgctcgttac cgtggagctt 28200

gagtgcatgc agcggttctt tgctgacccg gagatgcagc gcaagctaga ggaaacattg 28260

cactacacct ttcgacaggg ctacgtacgc caggcctgca agatctccaa cgtggagctc 28320

tgcaacctgg tctcctacct tggaattttg cacgaaaacc gccttgggca aaacgtgctt 28380

cattccacgc tcaagggcga ggcgcgccgc gactacgtcc gcgactgcgt ttacttattt 28440

ctatgctaca cctggcagac ggccatgggc gtttggcagc agtgcttgga ggagtgcaac 28500

ctcaaggagc tgcagaaact gctaaagcaa aacttgaagg acctatggac ggccttcaac 28560

gagcgctccg tggccgcgca cctggcggac atcattttcc ccgaacgcct gcttaaaacc 28620

ctgcaacagg gtctgccaga cttcaccagt caaagcatgt tgcagaactt taggaacttt 28680

atcctagagc gctcaggaat cttgcccgcc acctgctgtg cacttcctag cgactttgtg 28740

cccattaagt accgcgaatg ccctccgccg ctttggggcc actgctacct tctgcagcta 28800

gccaactacc ttgcctacca ctctgacata atggaagacg tgagcggtga cggtctactg 28860

gagtgtcact gtcgctgcaa cctatgcacc ccgcaccgct ccctggtttg caattcgcag 28920

ctgcttaacg aaagtcaaat tatcggtacc tttgagctgc agggtccctc gcctgacgaa 28980

aagtccgcgg ctccggggtt gaaactcact ccggggctgt ggacgtcggc ttaccttcgc 29040

aaatttgtac ctgaggacta ccacgcccac gagattaggt tctacgaaga ccaatcccgc 29100

ccgcctaatg cggagcttac cgcctgcgtc attacccagg gccacattct tggccaattg 29160

caagccatca acaaagcccg ccaagagttt ctgctacgaa agggacgggg ggtttacttg 29220

gacccccagt ccggcgagga gctcaaccca atccccccgc cgccgcagcc ctatcagcag 29280

cagccgcggg cccttgcttc ccaggatggc acccaaaaag aagctgcagc tgccgccgcc 29340

acccacggac gaggaggaat actgggacag tcaggcagag gaggttttgg acgaggagga 29400

ggaggacatg atggaagact gggagagcct agacgaggaa gcttccgagg tcgaagaggt 29460

gtcagacgaa acaccgtcac cctcggtcgc attcccctcg ccggcgcccc agaaatcggc 29520

aaccggttcc agcatggcta caacctccgc tcctcaggcg ccgccggcac tgcccgttcg 29580

ccgacccaac cgtagatggg acaccactgg aaccagggcc ggtaagtcca agcagccgcc 29640

gccgttagcc caagagcaac aacagcgcca aggctaccgc tcatggcgcg ggcacaagaa 29700

cgccatagtt gcttgcttgc aagactgtgg gggcaacatc tccttcgccc gccgctttct 29760

tctctaccat cacggcgtgg ccttcccccg taacatcctg cattactacc gtcatctcta 29820

cagcccatac tgcaccggcg gcagcggcag caacagcagc ggccacacag aagcaaaggc 29880

gaccggatag caagactctg acaaagccca agaaatccac agcggcggca gcagcaggag 29940

gaggagcgct gcgtctggcg cccaacgaac ccgtatcgac ccgcgagctt agaaacagga 30000

tttttcccac tctgtatgct atatttcaac agagcagggg ccaagaacaa gagctgaaaa 30060

taaaaaacag gtctctgcga tccctcaccc gcagctgcct gtatcacaaa agcgaagatc 30120

agcttcggcg cacgctggaa gacgcggagg ctctcttcag taaatactgc gcgctgactc 30180

ttaaggacta gtttcgcgcc ctttctcaaa tttaagcgcg aaaactacgt catctccagc 30240

ggccacaccc ggcgccagca cctgttgtca gcgccattat gagcaaggaa attcccacgc 30300

cctacatgtg gagttaccag ccacaaatgg gacttgcggc tggagctgcc caagactact 30360

caacccgaat aaactacatg agcgcgggac cccacatgat atcccgggtc aacggaatac 30420

gcgcccaccg aaaccgaatt ctcctggaac aggcggctat taccaccaca cctcgtaata 30480

accttaatcc ccgtagttgg cccgctgccc tggtgtacca ggaaagtccc gctcccacca 30540

ctgtggtact tcccagagac gcccaggccg aagttcagat gactaactca ggggcgcagc 30600

ttgcgggcgg ctttcgtcac agggtgcggt cgcccgggca gggtataact cacctgacaa 30660

tcagagggcg aggtattcag ctcaacgacg agtcggtgag ctcctcgctt ggtctccgtc 30720

cggacgggac atttcagatc ggcggcgccg gccgctcttc attcacgcct cgtcaggcaa 30780

tcctaactct gcagacctcg tcctctgagc cgcgctctgg aggcattgga actctgcaat 30840

ttattgagga gtttgtgcca tcggtctact ttaacccctt ctcgggacct cccggccact 30900

atccggatca atttattcct aactttgacg cggtaaagga ctcggcggac ggctacgact 30960

gaatgttaag tggagaggca gagcaactgc gcctgaaaca cctggtccac tgtcgccgcc 31020

acaagtgctt tgcccgcgac tccggtgagt tttgctactt tgaattgccc gaggatcata 31080

tcgagggccc ggcgcacggc gtccggctta ccgcccaggg agagcttgcc cgtagcctga 31140

ttcgggagtt tacccagcgc cccctgctag ttgagcggga caggggaccc tgtgttctca 31200

ctgtgatttg caactgtcct aaccctggat tacatcaaga tcctctagtt aatgtcaggt 31260

cgcctaagtc gattaactag agtacccggg gatcttattc cctttaacta ataaaaaaaa 31320

ataataaagc atcacttact taaaatcagt tagcaaattt ctgtccagtt tattcagcag 31380

cacctccttg ccctcctccc agctctggta ttgcagcttc ctcctggctg caaactttct 31440

ccacaatcta aatggaatgt cagtttcctc ctgttcctgt ccatccgcac ccactatctt 31500

catgttgttg cagatgaagc gcgcaagacc gtctgaagat accttcaacc ccgtgtatcc 31560

atatgacacg gaaaccggtc ctccaactgt gccttttctt actcctccct ttgtatcccc 31620

caatgggttt caagagagtc cccctggggt actctctttg cgcctatccg aacctctagt 31680

tacctccaat ggcatgcttg cgctcaaaat gggcaacggc ctctctctgg acgaggccgg 31740

caaccttacc tcccaaaatg taaccactgt gagcccacct ctcaaaaaaa ccaagtcaaa 31800

cataaacctg gaaatatctg cacccctcac agttacctca gaagccctaa ctgtggctgc 31860

cgccgcacct ctaatggtcg cgggcaacac actcaccatg caatcacagg ccccgctaac 31920

cgtgcacgac tccaaactta gcattgccac ccaaggaccc ctcacagtgt cagaaggaaa 31980

gctagccctg caaacatcag gccccctcac caccaccgat agcagtaccc ttactatcac 32040

tgcctcaccc cctctaacta ctgccactgg tagcttgggc attgacttga aagagcccat 32100

ttatacacaa aatggaaaac taggactaaa gtacggggct cctttgcatg taacagacga 32160

cctaaacact ttgaccgtag caactggtcc aggtgtgact attaataata cttccttgca 32220

aactaaagtt actggagcct tgggttttga ttcacaaggc aatatgcaac ttaatgtagc 32280

aggaggacta aggattgatt ctcaaaacag acgccttata cttgatgtta gttatccgtt 32340

tgatgctcaa aaccaactaa atctaagact aggacagggc cctcttttta taaactcagc 32400

ccacaacttg gatattaact acaacaaagg cctttacttg tttacagctt caaacaattc 32460

caaaaagctt gaggttaacc taagcactgc caaggggttg atgtttgacg ctacagccat 32520

agccattaat gcaggagatg ggcttgaatt tggttcacct aatgcaccaa acacaaatcc 32580

cctcaaaaca aaaattggcc atggcctaga atttgattca aacaaggcta tggttcctaa 32640

actaggaact ggccttagtt ttgacagcac aggtgccatt acagtaggaa acaaaaataa 32700

tgataagcta actttgtgga ccggaataaa ccctccacct aactgtcaaa ttgtggaaaa 32760

cactaataca aatgatggca aacttacttt agtattagta aaaaatggag ggcttgttaa 32820

tggctacgtg tctctagttg gtgtatcaga cactgtgaac caaatgttca cacaaaagac 32880

agcaaacatc caattaagat tatattttga ctcttctgga aatctattaa ctgaggaatc 32940

agacttaaaa attccactta aaaataaatc ttctacagcg accagtgaaa ctgtagccag 33000

cagcaaagcc tttatgccaa gtactacagc ttatcccttc aacaccacta ctagggatag 33060

tgaaaactac attcatggaa tatgttacta catgactagt tatgatagaa gtctatttcc 33120

cttgaacatt tctataatgc taaacagccg tatgatttct tccaatgttg cctatgccat 33180

acaatttgaa tggaatctaa atgcaagtga atctccagaa agcaacatag ctacgctgac 33240

cacatccccc tttttctttt cttacattac agaagacgac aactaaagaa tcgtttgtgt 33300

tatgtttcaa cgtgtttatt tttcaattgc agaaaatttc aagtcatttt tcattcagta 33360

gtatagcccc accaccacat agcttataca gatcaccgta ccttaatcaa actcacagaa 33420

ccctagtatt caacctgcca cctccctccc aacacacaga gtacacagtc ctttctcccc 33480

ggctggcctt aaaaagcatc atatcatggg taacagacat attcttaggt gttatattcc 33540

acacggtttc ctgtcgagcc aaacgctcat cagtgatatt aataaactcc ccgggcagct 33600

cacttaagtt catgtcgctg tccagctgct gagccacagg ctgctgtcca acttgcggtt 33660

gcttaacggg cggcgaagga gaagtccacg ctcactgatt aaacatggcg ccatccacca 33720

ccatcctaaa ccagctggcc aaaacctgcc cgccggctat acactgcagg gaaccgggac 33780

tggaacaatg acagtggaga gcccaggact cgtaaccatg gatcatcatg ctcgtcatga 33840

tatcaatgtt ggcacaacac aggcacacgt gcatacactt cctcaggatt acaagctcct 33900

cccgcgttag aaccatatcc cagggaacaa cccattcctg aatcagcgta aatcccacac 33960

tgcagggaag acctcgcacg taactcacgt tgtgcattgt caaagtgtta cattcgggca 34020

gcagcggatg atcctccagt atggtagcgc gggtttctgt ctcaaaagga ggtagacgat 34080

ccctactgta cggagtgcgc cgagacaacc gagatcgtgt tggtcgtagt gtcatgccaa 34140

atggaacgcc ggacgtagtc atatttcctg aagcaaaacc aggtgcgggc gtgacaaaca 34200

gatctgcgtc tccggtctcg ccgcttagat cgctctgtgt agtagttgta gtatatccac 34260

tctctcaaag catccaggcg ccccctggct tcgggttcta tgtaaactcc ttcatgcgcc 34320

gctgccctga taacatccac caccgcagaa taagccacac ccagccaacc tacacattcg 34380

ttctgcgagt cacacacggg aggagcggga agagctggaa gaaccatgtt ttttttttta 34440

ttccaaaaga ttatccaaaa cctcaaaatg aagatctatt aagtgaacgc gctcccctcc 34500

ggtggcgtgg tcaaactcta cagccaaaga acagataatg gcatttgtaa gatgttgcac 34560

aatggcttcc aaaaggcaaa cggccctcac gtccaagtgg acgtaaaggc taaacccttc 34620

agggtgaatc tcctctataa acattccagc accttcaacc atgcccaaat aattctcatc 34680

tcgccacctt ctcaatatat ctctaagcaa atcccgaata ttaagtccgg ccattgtaaa 34740

aatctgctcc agagcgccct ccaccttcag cctcaagcag cgaatcatga ttgcaaaaat 34800

tcaggttcct cacagacctg tataagattc aaaagcggaa cattaacaaa aataccgcga 34860

tcccgtaggt cccttcgcag ggccagctga acataatcgt gcaggtctgc acggaccagc 34920

gcggccactt ccccgccagg aaccatgaca aaagaaccca cactgattat gacacgcata 34980

ctcggagcta tgctaaccag cgtagccccg atgtaagctt gttgcatggg cggcgatata 35040

aaatgcaagg tgctgctcaa aaaatcaggc aaagcctcgc gcaaaaaaga aagcacatcg 35100

tagtcatgct catgcagata aaggcaggta agctccggaa ccaccacaga aaaagacacc 35160

atttttctct caaacatgtc tgcgggtttc tgcataaaca caaaataaaa taacaaaaaa 35220

acatttaaac attagaagcc tgtcttacaa caggaaaaac aacccttata agcataagac 35280

ggactacggc catgccggcg tgaccgtaaa aaaactggtc accgtgatta aaaagcacca 35340

ccgacagctc ctcggtcatg tccggagtca taatgtaaga ctcggtaaac acatcaggtt 35400

gattcacatc ggtcagtgct aaaaagcgac cgaaatagcc cgggggaata catacccgca 35460

ggcgtagaga caacattaca gcccccatag gaggtataac aaaattaata ggagagaaaa 35520

acacataaac acctgaaaaa ccctcctgcc taggcaaaat agcaccctcc cgctccagaa 35580

caacatacag cgcttccaca gcggcagcca taacagtcag ccttaccagt aaaaaagaaa 35640

acctattaaa aaaacaccac tcgacacggc accagctcaa tcagtcacag tgtaaaaaag 35700

ggccaagtgc agagcgagta tatataggac taaaaaatga cgtaacggtt aaagtccaca 35760

aaaaacaccc agaaaaccgc acgcgaacct acgcccagaa acgaaagcca aaaaacccac 35820

aacttcctca aatcgtcact tccgttttcc cacgttacgt cacttcccat tttaagaaaa 35880

ctacaattcc caacacatac aagttactcc gccctaaaac ctacgtcacc cgccccgttc 35940

ccacgccccg cgccacgtca caaactccac cccctcatta tcatattggc ttcaatccaa 36000

aataaggtat attattgatg atg 36023

<210> 40
<211> 36445
<212> DNA
<213> Artificial Sequence

<220>
<223> Adk35F2-S04/E4O6(mPGK)(nokozak)-E4dl-355(E4re#38)

<400> 40
ttaattaaca tcatcaataa tataccttat tttggattga agccaatatg ataatgaggg 60

ggtggagttt gtgacgtggc gcggggcgtg ggaacggggc gggtgacgta gtagtgtggc 120

ggaagtgtga tgttgcaagt gtggcggaac acatgtaagc gacggatgtg gcaaaagtga 180

cgtttttggt gtgcgccggt gtacacagga agtgacaatt ttcgcgcggt tttaggcgga 240

tgttgtagta aatttgggcg taaccgagta agatttggcc attttcgcgg gaaaactgaa 300

taagaggaag tgaaatctga ataattttgt gttactcata gcgcgtaata atttctgtaa 360

tagtaatcaa ttacggggtc attagttcat agcccatata tggagttccg cgttacataa 420

cttacggtaa atggcccgcc tggctgaccg cccaacgacc cccgcccatt gacgtcaata 480

atgacgtatg ttcccatagt aacgccaata gggactttcc attgacgtca atgggtggag 540

tatttacggt aaactgccca cttggcagta catcaagtgt atcatatgcc aagtacgccc 600

cctattgacg tcaatgacgg taaatggccc gcctggcatt atgcccagta catgacctta 660

tgggactttc ctacttggca gtacatctac gtattagtca tcgctattac catggtgatg 720

cggttttggc agtacatcaa tgggcgtgga tagcggtttg actcacgggg atttccaagt 780

ctccacccca ttgacgtcaa tgggagtttg ttttggcacc aaaatcaacg ggactttcca 840

aaatgtcgta acaactccgc cccattgacg caaatgggcg gtaggcgtgt acggtgggag 900

gtctatataa gcagagctct ccctatcagt gatagagatc tccctatcag tgatagagat 960

cgtcgacgag ctcgtttagt gaaccgtcag atcgcctgga gacgccatcc acgctgtttt 1020

gacctccata gaagacaccg ggaccgatcc agcctccgat ttgccaccat gtttgtgttc 1080

ctggtgctgc tgccactggt gtccagccag tgtgtgaacc tgaccaccag gacccaactt 1140

cctcctgcct acaccaactc cttcaccagg ggagtctact accctgacaa ggtgttcagg 1200

tcctctgtgc tgcacagcac ccaggacctg ttcctgccat tcttcagcaa tgtgacctgg 1260

ttccatgcca tccatgtgtc tggcaccaat ggcaccaaga ggtttgacaa ccctgtgctg 1320

ccattcaatg atggagtcta ctttgccagc acagagaaga gcaacatcat caggggctgg 1380

atttttggca ccaccctgga cagcaagacc cagtccctgc tgattgtgaa caatgccacc 1440

aatgtggtga ttaaggtgtg tgagttccag ttctgtaatg acccattcct gggagtctac 1500

taccacaaga acaacaagtc ctggatggag tctgagttca gggtctactc ctctgccaac 1560

aactgtacct ttgaatatgt gagccaacca ttcctgatgg acttggaggg caagcagggc 1620

aacttcaaga acctgaggga gtttgtgttc aagaacattg atggctactt caagatttac 1680

agcaaacaca caccaatcaa cctggtgagg gacctgccac agggcttctc tgccttggaa 1740

ccactggtgg acctgccaat tggcatcaac atcaccaggt tccagaccct gctggctctg 1800

cacaggtcct acctgacacc tggagactcc tcctctggct ggacagcagg agcagcagcc 1860

tactatgtgg gctacctcca accaaggacc ttcctgctga aatacaatga gaatggcacc 1920

atcacagatg ctgtggactg tgccctggac ccactgtctg agaccaagtg taccctgaaa 1980

tccttcacag tggagaaggg catctaccag accagcaact tcagggtcca accaacagag 2040

agcattgtga ggtttccaaa catcaccaac ctgtgtccat ttggagaggt gttcaatgcc 2100

accaggtttg cctctgtcta tgcctggaac aggaagagga ttagcaactg tgtggctgac 2160

tactctgtgc tctacaactc tgcctccttc agcaccttca agtgttatgg agtgagccca 2220

accaaactga atgacctgtg tttcaccaat gtctatgctg actcctttgt gattagggga 2280

gatgaggtga gacagattgc ccctggacaa acaggcaaga ttgctgacta caactacaaa 2340

ctgcctgatg acttcacagg ctgtgtgatt gcctggaaca gcaacaacct ggacagcaag 2400

gtgggaggca actacaacta cctctacaga ctgttcagga agagcaacct gaaaccattt 2460

gagagggaca tcagcacaga gatttaccag gctggcagca caccatgtaa tggagtggag 2520

ggcttcaact gttactttcc actccaatcc tatggcttcc aaccaaccaa tggagtgggc 2580

taccaaccat acagggtggt ggtgctgtcc tttgaactgc tccatgcccc tgccacagtg 2640

tgtggaccaa agaagagcac caacctggtg aagaacaagt gtgtgaactt caacttcaat 2700

ggactgacag gcacaggagt gctgacagag agcaacaaga agttcctgcc attccaacag 2760

tttggcaggg acattgctga caccacagat gctgtgaggg acccacagac cttggagatt 2820

ctggacatca caccatgttc ctttggagga gtgtctgtga ttacacctgg caccaacacc 2880

agcaaccagg tggctgtgct ctaccaggat gtgaactgta ctgaggtgcc tgtggctatc 2940

catgctgacc aacttacacc aacctggagg gtctacagca caggcagcaa tgtgttccag 3000

accagggctg gctgtctgat tggagcagag catgtgaaca actcctatga gtgtgacatc 3060

ccaattggag caggcatctg tgcctcctac cagacccaga ccggtggcgg tgggtcgagg 3120

tctgtggcaa gccagagcat cattgcctac acaatgagtc tgggagcaga gaactctgtg 3180

gcttacagca acaacagcat tgccatccca accaacttca ccatctctgt gaccacagag 3240

attctgcctg tgagtatgac caagacctct gtggactgta caatgtatat ctgtggagac 3300

agcacagagt gtagcaacct gctgctccaa tatggctcct tctgtaccca acttaacagg 3360

gctctgacag gcattgctgt ggaacaggac aagaacaccc aggaggtgtt tgcccaggtg 3420

aagcagattt acaagacacc tccaatcaag gactttggag gcttcaactt cagccagatt 3480

ctgcctgacc caagcaagcc aagcaagagg tccttcattg aggacctgct gttcaacaag 3540

gtgaccctgg ctgatgctgg cttcatcaag caatatggag actgtctggg agacattgct 3600

gccagggacc tgatttgtgc ccagaagttc aatggactga cagtgctgcc tccactgctg 3660

acagatgaga tgattgccca atacacctct gccctgctgg ctggcaccat cacctctggc 3720

tggacctttg gagcaggagc agccctccaa atcccatttg ctatgcagat ggcttacagg 3780

ttcaatggca ttggagtgac ccagaatgtg ctctatgaga accagaaact gattgccaac 3840

cagttcaact ctgccattgg caagattcag gactccctgt ccagcacagc ctctgccctg 3900

ggcaaactcc aagatgtggt gaaccagaat gcccaggctc tgaacaccct ggtgaagcaa 3960

ctttccagca actttggagc catctcctct gtgctgaatg acatcctgag cagactggac 4020

aaggtggagg ctgaggtcca gattgacaga ctgattacag gcagactcca atccctccaa 4080

acctatgtga cccaacaact tatcagggct gctgagatta gggcatctgc caacctggct 4140

gccaccaaga tgagtgagtg tgtgctggga caaagcaaga gggtggactt ctgtggcaag 4200

ggctaccacc tgatgagttt tccacagtct gcccctcatg gagtggtgtt cctgcatgtg 4260

acctatgtgc ctgcccagga gaagaacttc accacagccc ctgccatctg ccatgatggc 4320

aaggctcact ttccaaggga gggagtgttt gtgagcaatg gcacccactg gtttgtgacc 4380

cagaggaact tctatgaacc acagattatc accacagaca acacctttgt gtctggcaac 4440

tgtgatgtgg tgattggcat tgtgaacaac acagtctatg acccactcca acctgaactg 4500

gactccttca aggaggaact ggacaaatac ttcaagaacc acaccagccc tgatgtggac 4560

ctgggagaca tctctggcat caatgcctct gtggtgaaca tccagaagga gattgacaga 4620

ctgaatgagg tggctaagaa cctgaatgag tccctgattg acctccaaga actgggcaaa 4680

tatgaacaat acatcaagtg gccatgaaaa ttgatcataa tcagccatac cacatttgta 4740

gaggttttac ttgctttaaa aaacctccca cacctccccc tgaacctgaa acataaaatg 4800

aatgcaattg ttgttgttaa cttgtttatt gcagcttata atggttacaa ataaagcaat 4860

agcatcacaa atttcacaaa taaagcattt ttttcactgc attctagttg tggtttgtcc 4920

aaactcatca atgtatctta acgcggatcg ggtaggggag gcgcttttcc caaggcagtc 4980

tggagcatgc gctttagcag ccccgctggg cacttggcgc tacacaagtg gcctctggcc 5040

tcgcacacat tccacatcca ccggtaggcg ccaaccggct ccgttctttg gtggcccctt 5100

cgcgccacct tctactcctc ccctagtcag gaagttcccc cccgccccgc agctcgcgtc 5160

gtgcaggacg tgacaaatgg aagtagcacg tctcactagt ctcgtgcaga tggacagcac 5220

cgctgagcaa tggaagcggg taggcctttg gggcagcggc caatagcagc tttgctcctt 5280

cgctttctgg gctcagaggc tgggaagggg tgggtccggg ggcgggctca ggggcgggct 5340

caggggcggg gcgggcgccc gaaggtcctc cggaggcccg gcattctgca cgcttcaaaa 5400

gcgcacgtct gccgcgctgt tctcctcttc ctcatctccg ggcctttcga aactacccca 5460

agctggcctc tgaggccacc atggctcgag tttatgacta cgtccggcgt tccatttggc 5520

atgacactac gaccaacacg atctcggttg tctcggcgca ctccgtacag tagggatcgt 5580

ctacctcctt ttgagacaga aacccgcgct accatactgg aggatcatcc gctgctgccc 5640

gaatgtaaca ctttgacaat gcacaacgtg agttacgtgc gaggtcttcc ctgcagtgtg 5700

ggatttacgc tgattcagga atgggttgtt ccctgggata tggttctaac gcgggaggag 5760

cttgtaatcc tgaggaagtg tatgcacgtg tgcctgtgtt gtgccaacat tgatatcatg 5820

acgagcatga tgatccatgg ttacgagtcc tgggctctcc actgtcattg ttccagtccc 5880

ggttccctgc agtgtatagc cggcgggcag gttttggcca gctggtttag gatggtggtg 5940

gatggcgcca tgtttaatca gaggtttata tggtaccggg aggtggtgaa ttacaacatg 6000

ccaaaagagg taatgtttat gtccagcgtg tttatgaggg gtcgccactt aatctacctg 6060

cgcttgtggt atgatggcca cgtgggttct gtggtccccg ccatgagctt tggatacagc 6120

gccttgcact gtgggatttt gaacaatatt gtggtgctgt gctgcagtta ctgtgctgat 6180

ttaagtgaga tcagggtgcg ctgctgtgcc cggaggacaa ggcgccttat gctgcgggcg 6240

gtgcgaatca tcgctgagga gaccactgcc atgttgtatt cctgcaggac ggagcggcgg 6300

cggcagcagt ttattcgcgc gctgctgcag caccaccgcc ctatcctgat gcacgattat 6360

gactctaccc ccatgtagaa gcttggggat caattctcta gagctcgctg atcagcctcg 6420

actgtgcctt ctagttgcca gccatctgtt gtttgcccct cccccgtgcc ttccttgacc 6480

ctggaaggtg ccactcccac tgtcctttcc taataaaatg aggaaattgc atcgcattgt 6540

ctgagtaggt gtcattctat tctgggggt ggggtggggc aggacagcaa gggggaggat 6600

tgggaagaca atagcaggca tgctggggat gcggtgggct ctatggcttc tgaggaaatt 6660

gggcgtggct taagggtggg aaagaatata taaggtgggg gtcttatgta gttttgtatc 6720

tgttttgcag cagccgccgc cgccatgagc accaactcgt ttgatggaag cattgtgagc 6780

tcatatttga caacgcgcat gcccccatgg gccggggtgc gtcagaatgt gatgggctcc 6840

agcattgatg gtcgccccgt cctgcccgca aactctacta ccttgaccta cgagaccgtg 6900

tctggaacgc cgttggagac tgcagcctcc gccgccgctt cagccgctgc agccaccgcc 6960

cgcgggattg tgactgactt tgctttcctg agcccgcttg caagcagtgc agcttcccgt 7020

tcatccgccc gcgatgacaa gttgacggct cttttggcac aattggattc tttgacccgg 7080

gaacttaatg tcgtttctca gcagctgttg gatctgcgcc agcaggtttc tgccctgaag 7140

gcttcctccc ctcccaatgc ggtttaaaac ataaataaaa aaccagactc tgtttggatt 7200

tggatcaagc aagtgtcttg ctgtctttat ttaggggttt tgcgcgcgcg gtaggcccgg 7260

gaccagcggt ctcggtcgtt gagggtcctg tgtatttttt ccaggacgtg gtaaaggtga 7320

ctctggatgt tcagatacat gggcataagc ccgtctctgg ggtggaggta gcaccactgc 7380

agagcttcat gctgcggggt ggtgttgtag atgatccagt cgtagcagga gcgctgggcg 7440

tggtgcctaa aaatgtcttt cagtagcaag ctgattgcca ggggcaggcc cttggtgtaa 7500

gtgtttacaa agcggttaag ctgggatggg tgcatacgtg gggatatgag atgcatcttg 7560

gactgtattt ttaggttggc tatgttccca gccatatccc tccggggatt catgttgtgc 7620

agaaccacca gcacagtgta tccggtgcac ttgggaaatt tgtcatgtag cttagaagga 7680

aatgcgtgga agaacttgga gacgcccttg tgacctccaa gattttccat gcattcgtcc 7740

ataatgatgg caatgggccc acgggcggcg gcctgggcga agatatttct gggatcacta 7800

acgtcatagt tgtgttccag gatgagatcg tcataggcca tttttacaaa gcgcgggcgg 7860

agggtgccag actgcggtat aatggttcca tccggcccag gggcgtagtt accctcacag 7920

atttgcattt cccacgcttt gagttcagat ggggggatca tgtctacctg cggggcgatg 7980

aagaaaacgg tttccggggt aggggagatc agctgggaag aaagcaggtt cctgagcagc 8040

tgcgacttac cgcagccggt gggcccgtaa atcacaccta ttaccgggtg caactggtag 8100

ttaagagagc tgcagctgcc gtcatccctg agcaggggggg ccacttcgtt aagcatgtcc 8160

ctgactcgca tgttttccct gaccaaatcc gccagaaggc gctcgccgcc cagcgatagc 8220

agttcttgca aggaagcaaa gtttttcaac ggtttgagac cgtccgccgt aggcatgctt 8280

ttgagcgttt gaccaagcag ttccaggcgg tcccacagct cggtcacctg ctctacggca 8340

tctcgatcca gcatatctcc tcgtttcgcg ggttggggcg gctttcgctg tacggcagta 8400

gtcggtgctc gtccagacgg gccagggtca tgtctttcca cgggcgcagg gtcctcgtca 8460

gcgtagtctg ggtcacggtg aaggggtgcg ctccgggctg cgcgctggcc agggtgcgct 8520

tgaggctggt cctgctggtg ctgaagcgct gccggtcttc gccctgcgcg tcggccaggt 8580

agcatttgac catggtgtca tagtccagcc cctccgcggc gtggcccttg gcgcgcagct 8640

tgcccttgga ggaggcgccg cacgaggggc agtgcagact tttgagggcg tagagcttgg 8700

gcgcgagaaa taccgattcc ggggagtagg catccgcgcc gcaggccccg cagacggtct 8760

cgcattccac gagccaggtg agctctggcc gttcggggtc aaaaaccagg tttcccccat 8820

gctttttgat gcgtttctta cctctggttt ccatgagccg gtgtccacgc tcggtgacga 8880

aaaggctgtc cgtgtccccg tatacagact tgagaggcct gtcctcgagc ggtgttccgc 8940

ggtcctcctc gtatagaaac tcggaccact ctgagacaaa ggctcgcgtc caggccagca 9000

cgaaggaggc taagtgggag gggtagcggt cgttgtccac tagggggtcc actcgctcca 9060

gggtgtgaag acacatgtcg ccctcttcgg catcaaggaa ggtgattggt ttgtaggtgt 9120

aggccacgtg accgggtgtt cctgaagggg ggctataaaa gggggtgggg gcgcgttcgt 9180

cctcactctc ttccgcatcg ctgtctgcga gggccagctg ttggggtgag tactccctct 9240

gaaaagcggg catgacttct gcgctaagat tgtcagtttc caaaaacgag gaggatttga 9300

tattcacctg gcccgcggtg atgcctttga gggtggccgc atccatctgg tcagaaaaga 9360

caatcttttt gttgtcaagc ttggtggcaa acgacccgta gagggcgttg gacagcaact 9420

tggcgatgga gcgcagggtt tggtttttgt cgcgatcggc gcgctccttg gccgcgatgt 9480

ttagctgcac gtattcgcgc gcaacgcacc gccattcggg aaagacggtg gtgcgctcgt 9540

cgggcaccag gtgcacgcgc caaccgcggt tgtgcagggt gacaaggtca acgctggtgg 9600

ctacctctcc gcgtaggcgc tcgttggtcc agcagaggcg gccgcccttg cgcgagcaga 9660

atggcggtag ggggtctagc tgcgtctcgt ccgggggggtc tgcgtccacg gtaaagaccc 9720

cgggcagcag gcgcgcgtcg aagtagtcta tcttgcatcc ttgcaagtct agcgcctgct 9780

gccatgcgcg ggcggcaagc gcgcgctcgt atgggttgag tgggggaccc catggcatgg 9840

ggtgggtgag cgcggaggcg tacatgccgc aaatgtcgta aacgtagagg ggctctctga 9900

gtattccaag atatgtaggg tagcatcttc caccgcggat gctggcgcgc acgtaatcgt 9960

atagttcgtg cgagggagcg aggaggtcgg gaccgaggtt gctacgggcg ggctgctctg 10020

ctcggaagac tatctgcctg aagatggcat gtgagttgga tgatatggtt ggacgctgga 10080

agacgttgaa gctggcgtct gtgagaccta ccgcgtcacg cacgaaggag gcgtaggagt 10140

cgcgcagctt gttgaccagc tcggcggtga cctgcacgtc tagggcgcag tagtccaggg 10200

tttccttgat gatgtcatac ttatcctgtc cctttttttt ccacagctcg cggttgagga 10260

caaactcttc gcggtctttc cagtactctt ggatcggaaa cccgtcggcc tccgaacggt 10320

aagagcctag catgtagaac tggttgacgg cctggtaggc gcagcatccc ttttctacgg 10380

gtagcgcgta tgcctgcgcg gccttccgga gcgaggtgtg ggtgagcgca aaggtgtccc 10440

tgaccatgac tttgaggtac tggtatttga agtcagtgtc gtcgcatccg ccctgctccc 10500

agagcaaaaa gtccgtgcgc tttttggaac gcggatttgg cagggcgaag gtgacatcgt 10560

tgaagagtat ctttcccgcg cgaggcataa agttgcgtgt gatgcggaag ggtcccggca 10620

cctcggaacg gttgttaatt acctgggcgg cgagcacgat ctcgtcaaag ccgttgatgt 10680

tgtggcccac aatgtaaagt tccaagaagc gcgggatgcc cttgatggaa ggcaattttt 10740

taagttcctc gtaggtgagc tcttcagggg agctgagccc gtgctctgaa agggcccagt 10800

ctgcaagatg agggttggaa gcgacgaatg agctccacag gtcacgggcc attagcattt 10860

gcaggtggtc gcgaaaggtc ctaaactggc gacctatggc catttttct ggggtgatgc 10920

agtagaaggt aagcgggtct tgttcccagc ggtcccatcc aaggttcgcg gctaggtctc 10980

gcgcggcagt cactagaggc tcatctccgc cgaacttcat gaccagcatg aagggcacga 11040

gctgcttccc aaaggccccc atccaagtat aggtctctac atcgtaggtg acaaagagac 11100

gctcggtgcg aggatgcgag ccgatcggga agaactggat ctcccgccac caattggagg 11160

agtggctatt gatgtggtga aagtagaagt ccctgcgacg ggccgaacac tcgtgctggc 11220

ttttgtaaaa acgtgcgcag tactggcagc ggtgcacggg ctgtacatcc tgcacgaggt 11280

tgacctgacg accgcgcaca aggaagcaga gtgggaattt gagcccctcg cctggcgggt 11340

ttggctggtg gtcttctact tcggctgctt gtccttgacc gtctggctgc tcgaggggag 11400

ttacggtgga tcggaccacc acgccgcgcg agcccaaagt ccagatgtcc gcgcgcggcg 11460

gtcggagctt gatgacaaca tcgcgcagat gggagctgtc catggtctgg agctcccgcg 11520

gcgtcaggtc aggcgggagc tcctgcaggt ttacctcgca tagacgggtc agggcgcggg 11580

ctagatccag gtgataccta atttccaggg gctggttggt ggcggcgtcg atggcttgca 11640

agaggccgca tccccgcggc gcgactacgg taccgcgcgg cgggcggtgg gccgcggggg 11700

tgtccttgga tgatgcatct aaaagcggtg acgcgggcga gcccccggag gtaggggggg 11760

ctccggaccc gccgggagag ggggcagggg cacgtcggcg ccgcgcgcgg gcaggagctg 11820

gtgctgcgcg cgtaggttgc tggcgaacgc gacgacgcgg cggttgatct cctgaatctg 11880

gcgcctctgc gtgaagacga cgggcccggt gagcttgaac ctgaaagaga gttcgacaga 11940

atcaatttcg gtgtcgttga cggcggcctg gcgcaaaatc tcctgcacgt ctcctgagtt 12000

gtcttgatag gcgatctcgg ccatgaactg ctcgatctct tcctcctgga gatctccgcg 12060

tccggctcgc tccacggtgg cggcgaggtc gttggaaatg cgggccatga gctgcgagaa 12120

ggcgttgagg cctccctcgt tccagacgcg gctgtagacc acgccccctt cggcatcgcg 12180

ggcgcgcatg accacctgcg cgagattgag ctccacgtgc cgggcgaaga cggcgtagtt 12240

tcgcaggcgc tgaaagaggt agttgagggt ggtggcggtg tgttctgcca cgaagaagta 12300

cataacccag cgtcgcaacg tggattcgtt gatatccccc aaggcctcaa ggcgctccat 12360

ggcctcgtag aagtccacgg cgaagttgaa aaactgggag ttgcgcgccg acacggttaa 12420

ctcctcctcc agaagacgga tgagctcggc gacagtgtcg cgcacctcgc gctcaaaggc 12480

tacaggggcc tcttcttctt cttcaatctc ctcttccata agggcctccc cttcttcttc 12540

ttctggcggc ggtgggggag gggggacacg gcggcgacga cggcgcaccg ggaggcggtc 12600

gacaaagcgc tcgatcatct ccccgcggcg acggcgcatg gtctcggtga cggcgcggcc 12660

gttctcgcgg gggcgcagtt ggaagacgcc gcccgtcatg tcccggttat gggttggcgg 12720

ggggctgcca tgcggcaggg atacggcgct aacgatgcat ctcaacaatt gttgtgtagg 12780

tactccgccg ccgagggacc tgagcgagtc cgcatcgacc ggatcggaaa acctctcgag 12840

aaaggcgtct aaccagtcac agtcgcaagg taggctgagc accgtggcgg gcggcagcgg 12900

gcggcggtcg gggttgtttc tggcggaggt gctgctgatg atgtaattaa agtaggcggt 12960

cttgagacgg cggatggtcg acagaagcac catgtccttg ggtccggcct gctgaatgcg 13020

caggcggtcg gccatgcccc aggcttcgtt ttgacatcgg cgcaggtctt tgtagtagtc 13080

ttgcatgagc ctttctaccg gcacttcttc ttctccttcc tcttgtcctg catctcttgc 13140

atctatcgct gcggcggcgg cggagtttgg ccgtaggtgg cgccctcttc ctcccatgcg 13200

tgtgaccccg aagcccctca tcggctgaag cagggctagg tcggcgacaa cgcgctcggc 13260

taatatggcc tgctgcacct gcgtgagggt agactggaag tcatccatgt ccacaaagcg 13320

gtggtatgcg cccgtgttga tggtgtaagt gcagttggcc ataacggacc agttaacggt 13380

ctggtgaccc ggctgcgaga gctcggtgta cctgagacgc gagtaagccc tcgagtcaaa 13440

tacgtagtcg ttgcaagtcc gcaccaggta ctggtatccc accaaaaagt gcggcggcgg 13500

ctggcggtag aggggccagc gtagggtggc cggggctccg ggggcgagat cttccaacat 13560

aaggcgatga tatccgtaga tgtacctgga catccaggtg atgccggcgg cggtggtgga 13620

ggcgcgcgga aagtcgcgga cgcggttcca gatgttgcgc agcggcaaaa agtgctccat 13680

ggtcgggacg ctctggccgg tcaggcgcgc gcaatcgttg acgctctagc gtgcaaaagg 13740

agagcctgta agcgggcact cttccgtggt ctggtggata aattcgcaag ggtatcatgg 13800

cggacgaccg gggttcgagc cccgtatccg gccgtccgcc gtgatccatg cggttaccgc 13860

ccgcgtgtcg aacccaggtg tgcgacgtca gacaacgggg gagtgctcct tttggcttcc 13920

ttccaggcgc ggcggctgct gcgctagctt ttttggccac tggccgcgcg cagcgtaagc 13980

ggttaggctg gaaagcgaaa gcattaagtg gctcgctccc tgtagccgga gggttatttt 14040

ccaagggttg agtcgcggga cccccggttc gagtctcgga ccggccggac tgcggcgaac 14100

gggggtttgc ctccccgtca tgcaagaccc cgcttgcaaa ttcctccgga aacagggacg 14160

agccccttt ttgcttttcc cagatgcatc cggtgctgcg gcagatgcgc ccccctcctc 14220

agcagcggca agagcaagag cagcggcaga catgcagggc accctcccct cctcctaccg 14280

cgtcaggagg ggcgacatcc gcggttgacg cggcagcaga tggtgattac gaacccccgc 14340

ggcgccgggc ccggcactac ctggacttgg aggagggcga gggcctggcg cggctaggag 14400

cgccctctcc tgagcggcac ccaagggtgc agctgaagcg tgatacgcgt gaggcgtacg 14460

tgccgcggca gaacctgttt cgcgaccgcg agggagagga gcccgaggag atgcgggatc 14520

gaaagttcca cgcagggcgc gagctgcggc atggcctgaa tcgcgagcgg ttgctgcgcg 14580

aggaggactt tgagcccgac gcgcgaaccg ggattagtcc cgcgcgcgca cacgtggcgg 14640

ccgccgacct ggtaaccgca tacgagcaga cggtgaacca ggagattaac tttcaaaaaa 14700

gctttaacaa ccacgtgcgt acgcttgtgg cgcgcgagga ggtggctata ggactgatgc 14760

atctgtggga ctttgtaagc gcgctggagc aaaacccaaa tagcaagccg ctcatggcgc 14820

agctgttcct tatagtgcag cacagcaggg acaacgaggc attcagggat gcgctgctaa 14880

acatagtaga gcccgagggc cgctggctgc tcgatttgat aaacatcctg cagagcatag 14940

tggtgcagga gcgcagcttg agcctggctg acaaggtggc cgccatcaac tattccatgc 15000

ttagcctggg caagttttac gcccgcaaga tataccatac cccttacgtt cccatagaca 15060

aggaggtaaa gatcgagggg ttctacatgc gcatggcgct gaaggtgctt accttgagcg 15120

acgacctggg cgtttatcgc aacgagcgca tccacaaggc cgtgagcgtg agccggcggc 15180

gcgagctcag cgaccgcgag ctgatgcaca gcctgcaaag ggccctggct ggcacgggca 15240

gcggcgatag agaggccgag tcctactttg acgcgggcgc tgacctgcgc tgggccccaa 15300

gccgacgcgc cctggaggca gctggggccg gacctgggct ggcggtggca cccgcgcgcg 15360

ctggcaacgt cggcggcgtg gaggaatatg acgaggacga tgagtacgag ccagaggacg 15420

gcgagtacta agcggtgatg tttctgatca gatgatgcaa gacgcaacgg acccggcggt 15480

gcgggcggcg ctgcagagcc agccgtccgg ccttaactcc acggacgact ggcgccaggt 15540

catggaccgc atcatgtcgc tgactgcgcg caatcctgac gcgttccggc agcagccgca 15600

ggccaaccgg ctctccgcaa ttctggaagc ggtggtcccg gcgcgcgcaa accccacgca 15660

cgagaaggtg ctggcgatcg taaacgcgct ggccgaaaac agggccatcc ggcccgacga 15720

ggccggcctg gtctacgacg cgctgcttca gcgcgtggct cgttacaaca gcggcaacgt 15780

gcagaccaac ctggaccggc tggtggggga tgtgcgcgag gccgtggcgc agcgtgagcg 15840

cgcgcagcag cagggcaacc tgggctccat ggttgcacta aacgccttcc tgagtacaca 15900

gcccgccaac gtgccgcggg gacaggagga ctacaccaac tttgtgagcg cactgcggct 15960

aatggtgact gagacaccgc aaagtgaggt gtaccagtct gggccagact atttttcca 16020

gaccagtaga caaggcctgc agaccgtaaa cctgagccag gctttcaaaa acttgcaggg 16080

gctgtggggg gtgcgggctc ccacaggcga ccgcgcgacc gtgtctagct tgctgacgcc 16140

caactcgcgc ctgttgctgc tgctaatagc gcccttcacg gacagtggca gcgtgtcccg 16200

ggacacatac ctaggtcact tgctgacact gtaccgcgag gccataggtc aggcgcatgt 16260

ggacgagcat actttccagg agattacaag tgtcagccgc gcgctggggc aggaggacac 16320

gggcagcctg gaggcaaccc taaactacct gctgaccaac cggcggcaga agatcccctc 16380

gttgcacagt ttaaacagcg aggaggagcg cattttgcgc tacgtgcagc agagcgtgag 16440

ccttaacctg atgcgcgacg gggtaacgcc cagcgtggcg ctggacatga ccgcgcgcaa 16500

catggaaccg ggcatgtatg cctcaaaccg gccgtttatc aaccgcctaa tggactactt 16560

gcatcgcgcg gccgccgtga accccgagta tttcaccaat gccatcttga acccgcactg 16620

gctaccgccc cctggtttct acaccggggg attcgaggtg cccgagggta acgatggatt 16680

cctctgggac gacatagacg acagcgtgtt ttccccgcaa ccgcagaccc tgctagagtt 16740

gcaacagcgc gagcaggcag aggcggcgct gcgaaaggaa agcttccgca ggccaagcag 16800

cttgtccgat ctaggcgctg cggccccgcg gtcagatgct agtagcccat ttccaagctt 16860

gatagggtct cttaccagca ctcgcaccac ccgcccgcgc ctgctgggcg aggaggagta 16920

cctaaacaac tcgctgctgc agccgcagcg cgaaaaaaac ctgcctccgg catttcccaa 16980

caacgggata gagagcctag tggacaagat gagtagatgg aagacgtacg cgcaggagca 17040

cagggacgtg ccaggcccgc gcccgcccac ccgtcgtcaa aggcacgacc gtcagcgggg 17100

tctggtgtgg gaggacgatg actcggcaga cgacagcagc gtcctggatt tgggagggag 17160

tggcaacccg tttgcgcacc ttcgccccag gctggggaga atgttttaaa aaaaaaaaag 17220

catgatgcaa aataaaaaac tcaccaaggc catggcaccg agcgttggtt ttcttgtatt 17280

ccccttagta tgcggcgcgc ggcgatgtat gaggaaggtc ctcctccctc ctacgagagt 17340

gtggtgagcg cggcgccagt ggcggcggcg ctgggttctc ccttcgatgc tcccctggac 17400

ccgccgtttg tgcctccgcg gtacctgcgg cctaccgggg ggagaaacag catccgttac 17460

tctgagttgg cacccctatt cgacaccacc cgtgtgtacc tggtggacaa caagtcaacg 17520

gatgtggcat ccctgaacta ccagaacgac cacagcaact ttctgaccac ggtcattcaa 17580

aacaatgact acagcccggg ggaggcaagc acacagacca tcaatcttga cgaccggtcg 17640

cactggggcg gcgacctgaa aaccatcctg cataccaaca tgccaaatgt gaacgagttc 17700

atgtttacca ataagtttaa ggcgcgggtg atggtgtcgc gcttgcctac taaggacaat 17760

caggtggagc tgaaatacga gtgggtggag ttcacgctgc ccgagggcaa ctactccgag 17820

accatgacca tagaccttat gaacaacgcg atcgtggagc actacttgaa agtgggcaga 17880

cagaacgggg ttctggaaag cgacatcggg gtaaagtttg acacccgcaa cttcagactg 17940

gggtttgacc ccgtcactgg tcttgtcatg cctggggtat atacaaacga agccttccat 18000

ccagacatca ttttgctgcc aggatgcggg gtggacttca cccacagccg cctgagcaac 18060

ttgttgggca tccgcaagcg gcaacccttc caggagggct ttaggatcac ctacgatgat 18120

ctggagggtg gtaacattcc cgcactgttg gatgtggacg cctaccaggc gagcttgaaa 18180

gatgacaccg aacagggcgg gggtggcgca ggcggcagca acagcagtgg cagcggcgcg 18240

gaagagaact ccaacgcggc agccgcggca atgcagccgg tggaggacat gaacgatcat 18300

gccattcgcg gcgacacctt tgccacacgg gctgaggaga agcgcgctga ggccgaagca 18360

gcggccgaag ctgccgcccc cgctgcgcaa cccgaggtcg agaagcctca gaagaaaccg 18420

gtgatcaaac ccctgacaga ggacagcaag aaacgcagtt acaacctaat aagcaatgac 18480

agcaccttca cccagtaccg cagctggtac cttgcataca actacggcga ccctcagacc 18540

ggaatccgct catggaccct gctttgcact cctgacgtaa cctgcggctc ggagcaggtc 18600

tactggtcgt tgccagacat gatgcaagac cccgtgacct tccgctccac gcgccagatc 18660

agcaactttc cggtggtggg cgccgagctg ttgcccgtgc actccaagag cttctacaac 18720

gaccaggccg tctactccca actcatccgc cagtttacct ctctgaccca cgtgttcaat 18780

cgctttcccg agaaccagat tttggcgcgc ccgccagccc ccaccatcac caccgtcagt 18840

gaaaacgttc ctgctctcac agatcacggg acgctaccgc tgcgcaacag catcggagga 18900

gtccagcgag tgaccattac tgacgccaga cgccgcacct gcccctacgt ttacaaggcc 18960

ctgggcatag tctcgccgcg cgtcctatcg agccgcactt tttgagcaag catgtccatc 19020

cttatatcgc ccagcaataa cacaggctgg ggcctgcgct tcccaagcaa gatgtttggc 19080

ggggccaaga agcgctccga ccaacaccca gtgcgcgtgc gcgggcacta ccgcgcgccc 19140

tggggcgcgc acaaacgcgg ccgcactggg cgcaccaccg tcgatgacgc catcgacgcg 19200

gtggtggagg aggcgcgcaa ctacacgccc acgccgccac cagtgtccac agtggacgcg 19260

gccattcaga ccgtggtgcg cggagcccgg cgctatgcta aaatgaagag acggcggagg 19320

cgcgtagcac gtcgccaccg ccgccgaccc ggcactgccg cccaacgcgc ggcggcggcc 19380

ctgcttaacc gcgcacgtcg caccggccga cgggcggcca tgcgggccgc tcgaaggctg 19440

gccgcgggta ttgtcactgt gccccccagg tccaggcgac gagcggccgc cgcagcagcc 19500

gcggccatta gtgctatgac tcagggtcgc aggggcaacg tgtattgggt gcgcgactcg 19560

gttagcggcc tgcgcgtgcc cgtgcgcacc cgcccccgc gcaactagat tgcaagaaaa 19620

aactacttag actcgtactg ttgtatgtat ccagcggcgg cggcgcgcaa cgaagctatg 19680

tccaagcgca aaatcaaaga agagatgctc caggtcatcg cgccggagat ctatggcccc 19740

ccgaagaagg aagagcagga ttacaagccc cgaaagctaa agcgggtcaa aaagaaaaag 19800

aaagatgatg atgatgaact tgacgacgag gtggaactgc tgcacgctac cgcgcccagg 19860

cgacgggtac agtggaaagg tcgacgcgta aaacgtgttt tgcgacccgg caccaccgta 19920

gtctttacgc ccggtgagcg ctccacccgc acctacaagc gcgtgtatga tgaggtgtac 19980

ggcgacgagg acctgcttga gcaggccaac gagcgcctcg gggagtttgc ctacggaaag 20040

cggcataagg acatgctggc gttgccgctg gacgagggca acccaacacc tagcctaaag 20100

cccgtaacac tgcagcaggt gctgcccgcg cttgcaccgt ccgaagaaaa gcgcggccta 20160

aagcgcgagt ctggtgactt ggcacccacc gtgcagctga tggtacccaa gcgccagcga 20220

ctggaagatg tcttggaaaa aatgaccgtg gaacctgggc tggagcccga ggtccgcgtg 20280

cggccaatca agcaggtggc gccgggactg ggcgtgcaga ccgtggacgt tcagataccc 20340

actaccagta gcaccagtat tgccaccgcc acagagggca tggagacaca aacgtccccg 20400

gttgcctcag cggtggcgga tgccgcggtg caggcggtcg ctgcggccgc gtccaagacc 20460

tctacggagg tgcaaacgga cccgtggatg tttcgcgttt cagcccccg gcgcccgcgc 20520

cgttcgagga agtacggcgc cgccagcgcg ctactgcccg aatatgccct acatccttcc 20580

attgcgccta cccccggcta tcgtggctac acctaccgcc ccagaagacg agcaactacc 20640

cgacgccgaa ccaccactgg aacccgccgc cgccgtcgcc gtcgccagcc cgtgctggcc 20700

ccgatttccg tgcgcagggt ggctcgcgaa ggaggcagga ccctggtgct gccaacagcg 20760

cgctaccacc ccagcatcgt ttaaaagccg gtctttgtgg ttcttgcaga tatggccctc 20820

acctgccgcc tccgtttccc ggtgccggga ttccgaggaa gaatgcaccg taggaggggc 20880

atggccggcc acggcctgac gggcggcatg cgtcgtgcgc accaccggcg gcggcgcgcg 20940

tcgcaccgtc gcatgcgcgg cggtatcctg cccctcctta ttccactgat cgccgcggcg 21000

attggcgccg tgcccggaat tgcatccgtg gccttgcagg cgcagagaca ctgattaaaa 21060

acaagttgca tgtggaaaaa tcaaaataaa aagtctggac tctcacgctc gcttggtcct 21120

gtaactattt tgtagaatgg aagacatcaa ctttgcgtct ctggccccgc gacacggctc 21180

gcgcccgttc atgggaaact ggcaagatat cggcaccagc aatatgagcg gtggcgcctt 21240

cagctggggc tcgctgtgga gcggcattaa aaatttcggt tccaccgtta agaactatgg 21300

cagcaaggcc tggaacagca gcacaggcca gatgctgagg gataagttga aagagcaaaa 21360

tttccaacaa aaggtggtag atggcctggc ctctggcatt agcggggtgg tggacctggc 21420

caaccaggca gtgcaaaata agattaacag taagcttgat ccccgccctc ccgtagagga 21480

gcctccaccg gccgtggaga cagtgtctcc agaggggcgt ggcgaaaagc gtccgcgccc 21540

cgacagggaa gaaactctgg tgacgcaaat agacgagcct ccctcgtacg aggaggcact 21600

aaagcaaggc ctgcccacca cccgtcccat cgcgcccatg gctaccggag tgctgggcca 21660

gcacacaccc gtaacgctgg acctgcctcc ccccgccgac acccagcaga aacctgtgct 21720

gccaggcccg accgccgttg ttgtaacccg tcctagccgc gcgtccctgc gccgcgccgc 21780

cagcggtccg cgatcgttgc ggcccgtagc cagtggcaac tggcaaagca cactgaacag 21840

catcgtgggt ctgggggtgc aatccctgaa gcgccgacga tgcttctgat agctaacgtg 21900

tcgtatgtgt gtcatgtatg cgtccatgtc gccgccagag gagctgctga gccgccgcgc 21960

gcccgctttc caagatggct acccccttcga tgatgccgca gtggtcttac atgcacatct 22020

cgggccagga cgcctcggag tacctgagcc ccgggctggt gcagtttgcc cgcgccaccg 22080

agacgtactt cagcctgaat aacaagttta gaaaccccac ggtggcgcct acgcacgacg 22140

tgaccacaga ccggtcccag cgtttgacgc tgcggttcat ccctgtggac cgtgaggata 22200

ctgcgtactc gtacaaggcg cggttcaccc tagctgtggg tgataaccgt gtgctggaca 22260

tggcttccac gtactttgac atccgcggcg tgctggacag gggccctact tttaagccct 22320

actctggcac tgcctacaac gccctggctc ccaagggtgc cccaaatcct tgcgaatggg 22380

atgaagctgc tactgctctt gaaataaacc tagaagaaga ggacgatgac aacgaagacg 22440

aagtagacga gcaagctgag cagcaaaaaa ctcacgtatt tgggcaggcg ccttattctg 22500

gtataaatat tacaaaggag ggtattcaaa taggtgtcga aggtcaaaca cctaaatatg 22560

ccgataaaac atttcaacct gaacctcaaa taggagaatc tcagtggtac gaaacagaaa 22620

ttaatcatgc agctgggaga gtcctaaaaa agactacccc aatgaaacca tgttacggtt 22680

catatgcaaa acccacaaat gaaaatggag ggcaaggcat tcttgtaaag caacaaaatg 22740

gaaagctaga aagtcaagtg gaaatgcaat ttttctcaac tactgaggca gccgcaggca 22800

atggtgataa cttgactcct aaagtggtat tgtacagtga agatgtagat atagaaaccc 22860

cagacactca tatttcttac atgcccacta ttaaggaagg taactcacga gaactaatgg 22920

gccaacaatc tatgcccaac aggcctaatt acattgcttt tagggacaat tttattggtc 22980

taatgtatta caacagcacg ggtaatatgg gtgttctggc gggccaagca tcgcagttga 23040

atgctgttgt agatttgcaa gacagaaaca cagagctttc ataccagctt ttgcttgatt 23100

ccattggtga tagaaccagg tacttttcta tgtggaatca ggctgttgac agctatgatc 23160

cagatgttag aattattgaa aatcatggaa ctgaagatga acttccaaat tactgctttc 23220

cactgggagg tgtgattaat acagagactc ttaccaaggt aaaacctaaa acaggtcagg 23280

aaaatggatg ggaaaaagat gctacagaat tttcagataa aaatgaaata agagttggaa 23340

ataattttgc catggaaatc aatctaaatg ccaacctgtg gagaaatttc ctgtactcca 23400

acatagcgct gtatttgccc gacaagctaa agtacagtcc ttccaacgta aaaatttctg 23460

ataacccaaa cacctacgac tacatgaaca agcgagtggt ggctcccggg ctagtggact 23520

gctacattaa ccttggagca cgctggtccc ttgactatat ggacaacgtc aacccattta 23580

accaccaccg caatgctggc ctgcgctacc gctcaatgtt gctgggcaat ggtcgctatg 23640

tgcccttcca catccaggtg cctcagaagt tctttgccat taaaaacctc cttctcctgc 23700

cgggctcata cacctacgag tggaacttca ggaaggatgt taacatggtt ctgcagagct 23760

ccctaggaaa tgacctaagg gttgacggag ccagcattaa gtttgatagc atttgccttt 23820

acgccacctt cttccccatg gcccacaaca ccgcctccac gcttgaggcc atgcttagaa 23880

acgacaccaa cgaccagtcc tttaacgact atctctccgc cgccaacatg ctctacccta 23940

tacccgccaa cgctaccaac gtgcccatat ccatcccctc ccgcaactgg gcggctttcc 24000

gcggctgggc cttcacgcgc cttaagacta aggaaacccc atcactgggc tcgggctacg 24060

acccttatta cacctactct ggctctatac cctacctaga tggaaccttt tacctcaacc 24120

acacctttaa gaaggtggcc attacctttg actcttctgt cagctggcct ggcaatgacc 24180

gcctgcttac ccccaacgag tttgaaatta agcgctcagt tgacggggag ggttacaacg 24240

ttgcccagtg taacatgacc aaagactggt tcctggtaca aatgctagct aactataaca 24300

ttggctacca gggcttctat atcccagaga gctacaagga ccgcatgtac tccttcttta 24360

gaaacttcca gcccatgagc cgtcaggtgg tggatgatac taaatacaag gactaccaac 24420

aggtgggcat cctacaccaa cacaacaact ctggatttgt tggctacctt gcccccacca 24480

tgcgcgaagg acaggcctac cctgctaact tcccctatcc gcttataggc aagaccgcag 24540

ttgacagcat tacccagaaa aagtttcttt gcgatcgcac cctttggcgc atcccattct 24600

ccagtaactt tatgtccatg ggcgcactca cagacctggg ccaaaacctt ctctacgcca 24660

actccgccca cgcgctagac atgacttttg aggtggatcc catggacgag cccacccttc 24720

tttatgtttt gtttgaagtc tttgacgtgg tccgtgtgca ccagccgcac cgcggcgtca 24780

tcgaaaccgt gtacctgcgc acgcccttct cggccggcaa cgccacaaca taaagaagca 24840

agcaacatca acaacagctg ccgccatggg ctccagtgag caggaactga aagccattgt 24900

caaagatctt ggttgtgggc catatttttt gggcacctat gacaagcgct ttccaggctt 24960

tgtttctcca cacaagctcg cctgcgccat agtcaatacg gccggtcgcg agactggggg 25020

cgtacactgg atggcctttg cctggaaccc gcactcaaaa acatgctacc tctttgagcc 25080

ctttggcttt tctgaccagc gactcaagca ggtttaccag tttgagtacg agtcactcct 25140

gcgccgtagc gccattgctt cttcccccga ccgctgtata acgctggaaa agtccaccca 25200

aagcgtacag gggcccaact cggccgcctg tggactattc tgctgcatgt ttctccacgc 25260

ctttgccaac tggccccaaa ctcccatgga tcacaacccc accatgaacc ttattaccgg 25320

ggtacccaac tccatgctca acagtcccca ggtacagccc accctgcgtc gcaaccagga 25380

acagctctac agcttcctgg agcgccactc gccctacttc cgcagccaca gtgcgcagat 25440

taggagcgcc acttcttttt gtcacttgaa aaacatgtaa aaataatgta ctagagacac 25500

tttcaataaa ggcaaatgct tttatttgta cactctcggg tgattattta cccccaccct 25560

tgccgtctgc gccgtttaaa aatcaaaggg gttctgccgc gcatcgctat gcgccactgg 25620

cagggacacg ttgcgatact ggtgtttagt gctccactta aactcaggca caaccatccg 25680

cggcagctcg gtgaagtttt cactccacag gctgcgcacc atcaccaacg cgtttagcag 25740

gtcgggcgcc gatatcttga agtcgcagtt ggggcctccg ccctgcgcgc gcgagttgcg 25800

atacacaggg ttgcagcact ggaacactat cagcgccggg tggtgcacgc tggccagcac 25860

gctcttgtcg gagatcagat ccgcgtccag gtcctccgcg ttgctcaggg cgaacggagt 25920

caactttggt agctgccttc ccaaaaaggg cgcgtgccca ggctttgagt tgcactcgca 25980

ccgtagtggc atcaaaaggt gaccgtgccc ggtctgggcg ttaggataca gcgcctgcat 26040

aaaagccttg atctgcttaa aagccacctg agcctttgcg ccttcagaga agaacatgcc 26100

gcaagacttg ccggaaaact gattggccgg acaggccgcg tcgtgcacgc agcaccttgc 26160

gtcggtgttg gagatctgca ccacatttcg gccccaccgg ttcttcacga tcttggcctt 26220

gctagactgc tccttcagcg cgcgctgccc gttttcgctc gtcacatcca tttcaatcac 26280

gtgctcctta tttatcataa tgcttccgtg tagacactta agctcgcctt cgatctcagc 26340

gcagcggtgc agccacaacg cgcagcccgt gggctcgtga tgcttgtagg tcacctctgc 26400

aaacgactgc aggtacgcct gcaggaatcg ccccatcatc gtcacaaagg tcttgttgct 26460

ggtgaaggtc agctgcaacc cgcggtgctc ctcgttcagc caggtcttgc atacggccgc 26520

cagagcttcc acttggtcag gcagtagttt gaagttcgcc tttagatcgt tatccacgtg 26580

gtacttgtcc atcagcgcgc gcgcagcctc catgcccttc tcccacgcag acacgatcgg 26640

cacactcagc gggttcatca ccgtaatttc actttccgct tcgctgggct cttcctcttc 26700

ctcttgcgtc cgcataccac gcgccactgg gtcgtcttca ttcagccgcc gcactgtgcg 26760

cttacctcct ttgccatgct tgattagcac cggtgggttg ctgaaaccca ccatttgtag 26820

cgccacatct tctctttctt cctcgctgtc cacgattacc tctggtgatg gcgggcgctc 26880

gggcttggga gaagggcgct tctttttctt cttgggcgca atggccaaat ccgccgccga 26940

ggtcgatggc cgcgggctgg gtgtgcgcgg caccagcgcg tcttgtgatg agtcttcctc 27000

gtcctcggac tcgatacgcc gcctcatccg ctttttttggg ggcgcccggg gaggcggcgg 27060

cgacggggac ggggacgaca cgtcctccat ggttgggggа cgtcgcgccg caccgcgtcc 27120

gcgctcgggg gtggtttcgc gctgctcctc ttcccgactg gccatttcct tctcctatag 27180

gcagaaaaag atcatggagt cagtcgagaa gaaggacagc ctaaccgccc cctctgagtt 27240

cgccaccacc gcctccaccg atgccgccaa cgcgcctacc accttccccg tcgaggcacc 27300

cccgcttgag gaggaggaag tgattatcga gcaggaccca ggttttgtaa gcgaagacga 27360

cgaggaccgc tcagtaccaa cagaggataa aaagcaagac caggacaacg cagaggcaaa 27420

cgaggaacaa gtcgggcggg gggacgaaag gcatggcgac tacctagatg tgggagacga 27480

cgtgctgttg aagcatctgc agcgccagtg cgccattatc tgcgacgcgt tgcaagagcg 27540

cagcgatgtg cccctcgcca tagcggatgt cagccttgcc tacgaacgcc acctattctc 27600

accgcgcgta ccccccaaac gccaagaaaa cggcacatgc gagcccaacc cgcgcctcaa 27660

cttctacccc gtatttgccg tgccagaggt gcttgccacc tatcacatct ttttccaaaa 27720

ctgcaagata cccctatcct gccgtgccaa ccgcagccga gcggacaagc agctggcctt 27780

gcggcagggc gctgtcatac ctgatatcgc ctcgctcaac gaagtgccaa aaatctttga 27840

gggtcttgga cgcgacgaga agcgcgcggc aaacgctctg caacaggaaa acagcgaaaa 27900

tgaaagtcac tctggagtgt tggtggaact cgagggtgac aacgcgcgcc tagccgtact 27960

aaaacgcagc atcgaggtca cccactttgc ctacccggca cttaacctac cccccaaggt 28020

catgagcaca gtcatgagtg agctgatcgt gcgccgtgcg cagcccctgg agagggatgc 28080

aaatttgcaa gaacaaacag aggagggcct acccgcagtt ggcgacgagc agctagcgcg 28140

ctggcttcaa acgcgcgagc ctgccgactt ggaggagcga cgcaaactaa tgatggccgc 28200

agtgctcgtt accgtggagc ttgagtgcat gcagcggttc tttgctgacc cggagatgca 28260

gcgcaagcta gaggaaacat tgcactacac ctttcgacag ggctacgtac gccaggcctg 28320

caagatctcc aacgtggagc tctgcaacct ggtctcctac cttggaattt tgcacgaaaa 28380

ccgccttggg caaaacgtgc ttcattccac gctcaagggc gaggcgcgcc gcgactacgt 28440

ccgcgactgc gtttacttat ttctatgcta cacctggcag acggccatgg gcgtttggca 28500

gcagtgcttg gaggagtgca acctcaagga gctgcagaaa ctgctaaagc aaaacttgaa 28560

ggacctatgg acggccttca acgagcgctc cgtggccgcg cacctggcgg acatcatttt 28620

ccccgaacgc ctgcttaaaa ccctgcaaca gggtctgcca gacttcacca gtcaaagcat 28680

gttgcagaac tttaggaact ttatcctaga gcgctcagga atcttgcccg ccacctgctg 28740

tgcacttcct agcgactttg tgcccattaa gtaccgcgaa tgccctccgc cgctttgggg 28800

ccactgctac cttctgcagc tagccaacta ccttgcctac cactctgaca taatggaaga 28860

cgtgagcggt gacggtctac tggagtgtca ctgtcgctgc aacctatgca ccccgcaccg 28920

ctccctggtt tgcaattcgc agctgcttaa cgaaagtcaa attatcggta cctttgagct 28980

gcagggtccc tcgcctgacg aaaagtccgc ggctccgggg ttgaaactca ctccggggct 29040

gtggacgtcg gcttaccttc gcaaatttgt acctgaggac taccacgccc acgagattag 29100

gttctacgaa gaccaatccc gcccgcctaa tgcggagctt accgcctgcg tcattaccca 29160

gggccacatt cttggccaat tgcaagccat caacaaagcc cgccaagagt ttctgctacg 29220

aaagggacgg ggggtttact tggaccccca gtccggcgag gagctcaacc caatcccccc 29280

gccgccgcag ccctatcagc agcagccgcg ggcccttgct tcccaggatg gcacccaaaa 29340

agaagctgca gctgccgccg ccacccacgg acgaggagga atactgggac agtcaggcag 29400

aggaggtttt ggacgaggag gaggaggaca tgatggaaga ctgggagagc ctagacgagg 29460

aagcttccga ggtcgaagag gtgtcagacg aaacaccgtc accctcggtc gcattccccc 29520

cgccggcgcc ccagaaatcg gcaaccggtt ccagcatggc tacaacctcc gctcctcagg 29580

cgccgccggc actgcccgtt cgccgaccca accgtagatg ggacaccact ggaaccaggg 29640

ccggtaagtc caagcagccg ccgccgttag cccaagagca acaacagcgc caaggctacc 29700

gctcatggcg cgggcacaag aacgccatag ttgcttgctt gcaagactgt gggggcaaca 29760

tctccttcgc ccgccgcttt cttctctacc atcacggcgt ggccttcccc cgtaacatcc 29820

tgcattacta ccgtcatctc tacagcccat actgcaccgg cggcagcggc agcaacagca 29880

gcggccacac agaagcaaag gcgaccggat agcaagactc tgacaaagcc caagaaatcc 29940

acagcggcgg cagcagcagg aggaggagcg ctgcgtctgg cgcccaacga acccgtatcg 30000

acccgcgagc ttagaaacag gatttttccc actctgtatg ctatatttca acagagcagg 30060

ggccaagaac aagagctgaa aataaaaaac aggtctctgc gatccctcac ccgcagctgc 30120

ctgtatcaca aaagcgaaga tcagcttcgg cgcacgctgg aagacgcgga ggctctcttc 30180

agtaaatact gcgcgctgac tcttaaggac tagtttcgcg ccctttctca aatttaagcg 30240

cgaaaactac gtcatctcca gcggccacac ccggcgccag cacctgttgt cagcgccatt 30300

atgagcaagg aaattcccac gccctacatg tggagttacc agccacaaat gggacttgcg 30360

gctggagctg cccaagacta ctcaacccga ataaactaca tgagcgcggg accccacatg 30420

atatcccggg tcaacggaat acgcgcccac cgaaaccgaa ttctcctgga acaggcggct 30480

attaccacca cacctcgtaa taaccttaat ccccgtagtt ggcccgctgc cctggtgtac 30540

caggaaagtc ccgctcccac cactgtggta cttcccagag acgcccaggc cgaagttcag 30600

atgactaact caggggcgca gcttgcgggc ggctttcgtc acagggtgcg gtcgcccggg 30660

cagggtataa ctcacctgac aatcagaggg cgaggtattc agctcaacga cgagtcggtg 30720

agctcctcgc ttggtctccg tccggacggg acatttcaga tcggcggcgc cggccgctct 30780

tcattcacgc ctcgtcaggc aatcctaact ctgcagacct cgtcctctga gccgcgctct 30840

ggaggcattg gaactctgca atttattgag gagtttgtgc catcggtcta ctttaacccc 30900

ttctcgggac ctcccggcca ctatccggat caatttattc ctaactttga cgcggtaaag 30960

gactcggcgg acggctacga ctgaatgtta agtggagagg cagagcaact gcgcctgaaa 31020

cacctggtcc actgtcgccg ccacaagtgc tttgcccgcg actccggtga gttttgctac 31080

tttgaattgc ccgaggatca tatcgagggc ccggcgcacg gcgtccggct taccgcccag 31140

ggagagcttg cccgtagcct gattcgggag tttacccagc gccccctgct agttgagcgg 31200

gacaggggac cctgtgttct cactgtgatt tgcaactgtc ctaaccctgg attacatcaa 31260

gatcctctag ttaatgtcag gtcgcctaag tcgattaact agagtacccg gggatcttat 31320

tccctttaac taataaaaaa aaataataaa gcatcactta cttaaaatca gttagcaaat 31380

ttctgtccag tttattcagc agcacctcct tgccctcctc ccagctctgg tattgcagct 31440

tcctcctggc tgcaaacttt ctccacaatc taaatggaat gtcagtttcc tcctgttcct 31500

gtccatccgc acccactatc ttcatgttgt tgcagatgaa gcgcgcaaga ccgtctgaag 31560

ataccttcaa ccccgtgtat ccatatgaca cggaaaccgg tcctccaact gtgccttttc 31620

ttactcctcc ctttgtatcc cccaatgggt ttcaagagag tccccctggg gtactctctt 31680

tgcgcctatc cgaacctcta gttacctcca atggcatgct tgcgctcaaa atgggcaacg 31740

gcctctctct ggacgaggcc ggcaacctta cctcccaaaa tgtaaccact gtgagcccac 31800

ctctcaaaaa aaccaagtca aacataaacc tggaaatatc tgcacccctc acagttacct 31860

cagaagccct aactgtggct gccgccgcac ctctaatggt cgcgggcaac acactcacca 31920

tgcaatcaca ggccccgcta accgtgcacg actccaaact tagcattgcc acccaaggac 31980

ccctcacagt gtcagaagga aagctagccc tgcaaacatc aggccccctc accaccaccg 32040

atagcagtac ccttactatc actgcctcac cccctctaac tactgccact ggtagcttgg 32100

gcattgactt gaaagagccc atttatacac aaaatggaaa actaggacta aagtacgggg 32160

ctcctttgca tgtaacagac gacctaaaca ctttgaccgt agcaactggt ccaggtgtga 32220

ctattaataa tacttccttg caaactaaag ttactggagc cttgggtttt gattcacaag 32280

gcaatatgca acttaatgta gcaggaggac taaggattga ttctcaaaac agacgcctta 32340

tacttgatgt tagttatccg tttgatgctc aaaaccaact aaatctaaga ctaggacagg 32400

gccctctttt tataaactca gcccacaact tggatattaa ctacaacaaa ggcctttact 32460

tgtttacagc ttcaaacaat tccaaaaagc ttgaggttaa cctaagcact gccaaggggt 32520

tgatgtttga cgctacagcc atagccatta atgcaggaga tgggcttgaa tttggttcac 32580

ctaatgcacc aaacacaaat cccctcaaaa caaaaattgg ccatggccta gaatttgatt 32640

caaacaaggc tatggttcct aaactaggaa ctggccttag ttttgacagc acaggtgcca 32700

ttacagtagg aaacaaaaat aatgataagc taactttgtg gaccggaata aaccctccac 32760

ctaactgtca aattgtggaa aacactaata caaatgatgg caaacttact ttagtattag 32820

taaaaaatgg agggcttgtt aatggctacg tgtctctagt tggtgtatca gacactgtga 32880

accaaatgtt cacacaaaag acagcaaaca tccaattaag attatatttt gactcttctg 32940

gaaatctatt aactgaggaa tcagacttaa aaattccact taaaaataaa tcttctacag 33000

cgaccagtga aactgtagcc agcagcaaag cctttatgcc aagtactaca gcttatccct 33060

tcaacaccac tactagggat agtgaaaact acattcatgg aatatgttac tacatgacta 33120

gttatgatag aagtctattt cccttgaaca tttctataat gctaaacagc cgtatgattt 33180

cttccaatgt tgcctatgcc atacaatttg aatggaatct aaatgcaagt gaatctccag 33240

aaagcaacat agctacgctg accacatccc ccttttttctt ttcttacatt acagaagacg 33300

acaactaaag aatcgtttgt gttatgtttc aacgtgttta tttttcaatt gcagaaaatt 33360

tcaagtcatt tttcattcag tagtatagcc ccaccaccac atagcttata cagatcaccg 33420

taccttaatc aaactcacag aaccctagta ttcaacctgc cacctccctc ccaacacaca 33480

gagtacacag tcctttctcc ccggctggcc ttaaaaagca tcatatcatg ggtaacagac 33540

atattcttag gtgttatatt ccacacggtt tcctgtcgag ccaaacgctc atcagtgata 33600

ttaataaact ccccgggcag ctcacttaag ttcatgtcgc tgtccagctg ctgagccaca 33660

ggctgctgtc caacttgcgg ttgcttaacg ggcggcgaag gagaagtcca cgcctacatg 33720

ggggtagagt cataatcgtg catcaggata gggcggtggt gctgcagcag cgcgcgaata 33780

aactgctgcc gccgccgctc cgtcctgcag gaatacaaca tggcagtggt ctcctcagcg 33840

atgattcgca ccgcccgcag cataaggcgc cttgtcctcc gggcacagca gcgcaccctg 33900

atctcactta aatcagcaca gtaactgcag cacagcacca caatattgtt caaaatccca 33960

cagtgcaagg cgctgtatcc aaagctcatg gcgggggacca cagaacccac gtggccatca 34020

taccacaagc gcaggtagat taagtggcga cccctcataa acacgctgga cataaacatt 34080

acctcttttg gcatgttgta attcaccacc tcccctctga ttaaacatgg cgccatccac 34140

caccatccta aaccagctgg ccaaaacctg cccgccggct atacactgca gggaaccggg 34200

actggaacaa tgacagtgga gagcccagga ctcgtaacca tggatcatca tgctcgtcat 34260

gatatcaatg ttggcacaac acaggcacac gtgcatacac ttcctcagga ttacaagctc 34320

ctcccgcgtt agaaccatat cccagggaac aacccattcc tgaatcagcg taaatcccac 34380

actgcaggga agacctcgca cgtaactcac gttgtgcatt gtcaaagtgt tacattcggg 34440

cagcagcgga tgatcctcca gtatggtagc gcgggtttct gtctcaaaag gaggtagacg 34500

atccctactg tacggagtgc gccgagacaa ccgagatcgt gttggtcgta gtgtcatgcc 34560

aaatggaacg ccggacgtag tcatatttcc tgaagcaaaa ccaggtgcgg gcgtgacaaa 34620

cagatctgcg tctccggtct cgccgcttag atcgctctgt gtagtagttg tagtatatcc 34680

actctctcaa agcatccagg cgccccctgg cttcgggttc tatgtaaact ccttcatgcg 34740

ccgctgccct gataacatcc accaccgcag aataagccac acccagccaa cctacacatt 34800

cgttctgcga gtcacacacg ggaggagcgg gaagagctgg aagaaccatg ttttttttt 34860

tattccaaaa gattatccaa aacctcaaaa tgaagatcta ttaagtgaac gcgctcccct 34920

ccggtggcgt ggtcaaactc tacagccaaa gaacagataa tggcatttgt aagatgttgc 34980

acaatggctt ccaaaaggca aacggccctc acgtccaagt ggacgtaaag gctaaaccct 35040

tcagggtgaa tctcctctat aaacattcca gcaccttcaa ccatgcccaa ataattctca 35100

tctcgccacc ttctcaatat atctctaagc aaatcccgaa tattaagtcc ggccattgta 35160

aaaatctgct ccagagcgcc ctccaccttc agcctcaagc agcgaatcat gattgcaaaa 35220

attcaggttc ctcacagacc tgtataagat tcaaaagcgg aacattaaca aaaataccgc 35280

gatcccgtag gtcccttcgc agggccagct gaacataatc gtgcaggtct gcacggacca 35340

gcgcggccac ttccccgcca ggaaccatga caaaagaacc cacactgatt atgacacgca 35400

tactcggagc tatgctaacc agcgtagccc cgatgtaagc ttgttgcatg ggcggcgata 35460

taaaatgcaa ggtgctgctc aaaaaatcag gcaaagcctc gcgcaaaaaa gaaagcacat 35520

cgtagtcatg ctcatgcaga taaaggcagg taagctccgg aaccaccaca gaaaaagaca 35580

ccatttttct ctcaaacatg tctgcgggtt tctgcataaa cacaaaataa aataacaaaa 35640

aaacatttaa acattagaag cctgtcttac aacaggaaaa acaaccctta taagcataag 35700

acggactacg gccatgccgg cgtgaccgta aaaaaactgg tcaccgtgat taaaaagcac 35760

caccgacagc tcctcggtca tgtccggagt cataatgtaa gactcggtaa acacatcagg 35820

ttgattcaca tcggtcagtg ctaaaaagcg accgaaatag cccgggggaa tacatacccg 35880

caggcgtaga gacaacatta cagcccccat aggaggtata acaaaattaa taggagagaa 35940

aaacacataa acacctgaaa aaccctcctg cctaggcaaa atagcaccct cccgctccag 36000

aacaacatac agcgcttcca cagcggcagc cataacagtc agccttacca gtaaaaaaga 36060

aaacctatta aaaaaacacc actcgacacg gcaccagctc aatcagtcac agtgtaaaaa 36120

agggccaagt gcagagcgag tatatatagg actaaaaaat gacgtaacgg ttaaagtcca 36180

caaaaaacac ccagaaaacc gcacgcgaac ctacgcccag aaacgaaagc caaaaaaccc 36240

acaacttcct caaatcgtca cttccgtttt cccacgttac gtcacttccc attttaagaa 36300

aactacaatt cccaacacat acaagttact ccgccctaaa acctacgtca cccgccccgt 36360

tcccacgccc cgcgccacgt cacaaactcc acccccctcat tatcatattg gcttcaatcc 36420

aaaataaggt atattattga tgatg 36445

<210> 41
<211> 36153
<212> DNA
<213> Artificial Sequence

<220>
<223> Adk35RF-Spike/E4orf6(RSV)-E4dl-12(E4re#39)

<400> 41
ttaattaaca tcatcaataa tataccttat tttggattga agccaatatg ataatgaggg 60

ggtggagttt gtgacgtggc gcggggcgtg ggaacggggc gggtgacgta gtagtgtggc 120

ggaagtgtga tgttgcaagt gtggcggaac acatgtaagc gacggatgtg gcaaaagtga 180

cgtttttggt gtgcgccggt gtacacagga agtgacaatt ttcgcgcggt tttaggcgga 240

tgttgtagta aatttgggcg taaccgagta agatttggcc attttcgcgg gaaaactgaa 300

taagaggaag tgaaatctga ataattttgt gttactcata gcgcgtaata atttgatccg 360

cgttaagata cattgatgag tttggacaaa ccacaactag aatgcagtga aaaaaatgct 420

ttatttgtga aatttgtgat gctattgctt tatttgtaac cattataagc tgcaataaac 480

aagttaacaa caacaattgc attcatttta tgtttcaggt tcaggggggag gtgtgggagg 540

ttttttaaag caagtaaaac ctctacaaat gtggtatggc tgattatgat caattttcat 600

ggccacttga tgtattgttc atatttgccc agttcttgga ggtcaatcag ggactcattc 660

aggttcttag ccacctcatt cagtctgtca atctccttct ggatgttcac cacagaggca 720

ttgatgccag agatgtctcc caggtccaca tcagggctgg tgtggttctt gaagtatttg 780

tccagttcct ccttgaagga gtccagttca ggttggagtg ggtcatagac tgtgttgttc 840

acaatgccaa tcaccacatc acagttgcca gacacaaagg tgttgtctgt ggtgataatc 900

tgtggttcat agaagttcct ctgggtcaca aaccagtggg tgccattgct cacaaacact 960

ccctcccttg gaaagtgagc cttgccatca tggcagatgg caggggctgt ggtgaagttc 1020

ttctcctggg caggcacata ggtcacatgc aggaacacca ctccatgagg ggcagactgt 1080

ggaaaactca tcaggtggta gcccttgcca cagaagtcca ccctcttgct ttgtcccagc 1140

acacactcac tcatcttggt ggcagccagg ttggcagatg ccctaatctc agcagccctg 1200

ataagttgtt gggtcacata ggtttggagg gattggagtc tgcctgtaat cagtctgtca 1260

atctggacct cagcctccac cttgtccagt ctgctcagga tgtcattcag cacagaggag 1320

atggctccaa agttgctgga aagttgcttc accagggtgt tcagagcctg ggcattctgg 1380

ttcaccacat cttggagttt gcccagggca gaggctgtgc tggacaggga gtcctgaatc 1440

ttgccaatgg cagagttgaa ctggttggca atcagtttct ggttctcata gagcacattc 1500

tgggtcactc caatgccatt gaacctgtaa gccatctgca tagcaaatgg gatttggagg 1560

gctgctcctg ctccaaaggt ccagccagag gtgatggtgc cagccagcag ggcagaggtg 1620

tattgggcaa tcatctcatc tgtcagcagt ggaggcagca ctgtcagtcc attgaacttc 1680

tgggcacaaa tcaggtccct ggcagcaatg tctcccagac agtctccata ttgcttgatg 1740

aagccagcat cagccagggt caccttgttg aacagcaggt cctcaatgaa ggacctcttg 1800

cttggcttgc ttgggtcagg cagaatctgg ctgaagttga agcctccaaa gtccttgatt 1860

ggaggtgtct tgtaaatctg cttcacctgg gcaaacacct cctgggtgtt cttgtcctgt 1920

tccacagcaa tgcctgtcag agccctgtta agttgggtac agaaggagcc atattggagc 1980

agcaggttgc tacactctgt gctgtctcca cagatataca ttgtacagtc cacagaggtc 2040

ttggtcatac tcacaggcag aatctctgtg gtcacagaga tggtgaagtt ggttgggatg 2100

gcaatgctgt tgttgctgta agccacagag ttctctgctc ccagactcat tgtgtaggca 2160

atgatgctct ggcttgccac agacctcgac ccaccgccac cggtctgggt ctggtaggag 2220

gcacagatgc ctgctccaat tgggatgtca cactcatagg agttgttcac atgctctgct 2280

ccaatcagac agccagccct ggtctggaac acattgctgc ctgtgctgta gaccctccag 2340

gttggtgtaa gttggtcagc atggatagcc acaggcacct cagtacagtt cacatcctgg 2400

tagagcacag ccacctggtt gctggtgttg gtgccaggtg taatcacaga cactcctcca 2460

aaggaacatg gtgtgatgtc cagaatctcc aaggtctgtg ggtccctcac agcatctgtg 2520

gtgtcagcaa tgtccctgcc aaactgttgg aatggcagga acttcttgtt gctctctgtc 2580

agcactcctg tgcctgtcag tccattgaag ttgaagttca cacacttgtt cttcaccagg 2640

ttggtgctct tctttggtcc acacactgtg gcaggggcat ggagcagttc aaaggacagc 2700

accaccaccc tgtatggttg gtagcccact ccattggttg gttggaagcc ataggattgg 2760

agtggaaagt aacagttgaa gccctccact ccattacatg gtgtgctgcc agcctggtaa 2820

atctctgtgc tgatgtccct ctcaaatggt ttcaggttgc tcttcctgaa cagtctgtag 2880

aggtagttgt agttgcctcc caccttgctg tccaggttgt tgctgttcca ggcaatcaca 2940

cagcctgtga agtcatcagg cagtttgtag ttgtagtcag caatcttgcc tgtttgtcca 3000

ggggcaatct gtctcacctc atctccccta atcacaaagg agtcagcata gacattggtg 3060

aaacacaggt cattcagttt ggttgggctc actccataac acttgaaggt gctgaaggag 3120

gcagagttgt agagcacaga gtagtcagcc acacagttgc taatcctctt cctgttccag 3180

gcatagacag aggcaaacct ggtggcattg aacacctctc caaatggaca caggttggtg 3240

atgtttggaa acctcacaat gctctctgtt ggttggaccc tgaagttgct ggtctggtag 3300

atgcccttct ccactgtgaa ggatttcagg gtacacttgg tctcagacag tgggtccagg 3360

gcacagtcca cagcatctgt gatggtgcca ttctcattgt atttcagcag gaaggtcctt 3420

ggttggaggt agcccacata gtaggctgct gctcctgctg tccagccaga ggaggagtct 3480

ccaggtgtca ggtaggacct gtgcagagcc agcagggtct ggaacctggt gatgttgatg 3540

ccaattggca ggtccaccag tggttccaag gcagagaagc cctgtggcag gtccctcacc 3600

aggttgattg gtgtgtgttt gctgtaaatc ttgaagtagc catcaatgtt cttgaacaca 3660

aactccctca ggttcttgaa gttgccctgc ttgccctcca agtccatcag gaatggttgg 3720

ctcacatatt caaaggtaca gttgttggca gaggagtaga ccctgaactc agactccatc 3780

caggacttgt tgttcttgtg gtagtagact cccaggaatg ggtcattaca gaactggaac 3840

tcacacacct taatcaccac attggtggca ttgttcacaa tcagcaggga ctgggtcttg 3900

ctgtccaggg tggtgccaaa aatccagccc ctgatgatgt tgctcttctc tgtgctggca 3960

aagtagactc catcattgaa tggcagcaca gggttgtcaa acctcttggt gccattggtg 4020

ccagacacat ggatggcatg gaaccaggtc acattgctga agaatggcag gaacaggtcc 4080

tgggtgctgt gcagcacaga ggacctgaac accttgtcag ggtagtagac tcccctggtg 4140

aaggagttgg tgtaggcagg aggaagttgg gtcctggtgg tcaggttcac acactggctg 4200

gacaccagtg gcagcagcac caggaacaca aacatggtgg caaatcggag gctggatcgg 4260

tcccggtgtc ttctatggag gtcaaaacag cgtggatggc gtctccaggc gatctgacgg 4320

ttcactaaac gagctcgtcg acgatctcta tcactgatag ggagatctct atcactgata 4380

gggagagctc tgcttatata gacctcccac cgtacacgcc taccgcccat ttgcgtcaat 4440

ggggcggagt tgttacgaca ttttggaaag tcccgttgat tttggtgcca aaacaaactc 4500

ccattgacgt caatggggtg gagacttgga aatccccgtg agtcaaaccg ctatccacgc 4560

ccattgatgt actgccaaaa ccgcatcacc atggtaatag cgatgactaa tacgtagatg 4620

tactgccaag taggaaagtc ccataaggtc atgtactggg cataatgcca ggcgggccat 4680

ttaccgtcat tgacgtcaat aggggggcgta cttggcatat gatacacttg atgtactgcc 4740

aagtgggcag tttaccgtaa atactccacc cattgacgtc aatggaaagt ccctattggc 4800

gttactatgg gaacatacgt cattattgac gtcaatgggc gggggtcgtt gggcggtcag 4860

ccaggcgggc catttaccgt aagttatgta acgcggaact ccatatatgg gctatgaact 4920

aatgaccccg taattgatta ctattacagt gtagtcttat gcaatactct tgtagtcttg 4980

caacatggta acgatgagtt agcaacatgc cttacaagga gagaaaaagc accgtgcatg 5040

ccgattggtg gaagtaaggt ggtacgatcg tgccttatta ggaaggcaac agacgggtct 5100

gacatggatt ggacgaacca ctgaattgcc gcattgcaga gatattgtat ttaagtgcct 5160

agctcgatac ataaacaaac taccccaagc tggccaccat gactacgtcc ggcgttccat 5220

ttggcatgac actacgacca acacgatctc ggttgtctcg gcgcactccg tacagtaggg 5280

atcgtctacc tccttttgag acagaaaccc gcgctaccat actggaggat catccgctgc 5340

tgcccgaatg taacactttg acaatgcaca acgtgagtta cgtgcgaggt cttccctgca 5400

gtgtgggatt tacgctgatt caggaatggg ttgttccctg ggatatggtt ctaacgcggg 5460

aggagcttgt aatcctgagg aagtgtatgc acgtgtgcct gtgttgtgcc aacattgata 5520

tcatgacgag catgatgatc catggttacg agtcctgggc tctccactgt cattgttcca 5580

gtcccggttc cctgcagtgt atagccggcg ggcaggtttt ggccagctgg tttaggatgg 5640

tggtggatgg cgccatgttt aatcagaggt ttatatggta ccgggaggtg gtgaattaca 5700

acatgccaaa agaggtaatg tttatgtcca gcgtgtttat gaggggtcgc cacttaatct 5760

acctgcgctt gtggtatgat ggccacgtgg gttctgtggt ccccgccatg agctttggat 5820

acagcgcctt gcactgtggg attttgaaca atattgtggt gctgtgctgc agttactgtg 5880

ctgatttaag tgagatcagg gtgcgctgct gtgcccggag gacaaggcgc cttatgctgc 5940

gggcggtgcg aatcatcgct gaggagacca ctgccatgtt gtattcctgc aggacggagc 6000

ggcggcggca gcagtttatt cgcgcgctgc tgcagcacca ccgccctatc ctgatgcacg 6060

attatgactc tacccccatg tagaagcttg gggatcaatt ctctagagct cgctgatcag 6120

cctcgactgt gccttctagt tgccagccat ctgttgtttg cccctccccc gtgccttcct 6180

tgaccctgga aggtgccact cccactgtcc tttcctaata aaatgaggaa attgcatcgc 6240

attgtctgag taggtgtcat tctattctgg ggggtggggt ggggcaggac agcaaggggg 6300

aggattggga agacaatagc aggcatgctg gggatgcggt gggctctatg gcttctgagg 6360

caaattgggc gtggcttaag ggtgggaaag aatatataag gtgggggtct tatgtagttt 6420

tgtatctgtt ttgcagcagc cgccgccgcc atgagcacca actcgtttga tggaagcatt 6480

gtgagctcat atttgacaac gcgcatgccc ccatgggccg gggtgcgtca gaatgtgatg 6540

ggctccagca ttgatggtcg ccccgtcctg cccgcaaact ctactacctt gacctacgag 6600

accgtgtctg gaacgccgtt ggagactgca gcctccgccg ccgcttcagc cgctgcagcc 6660

accgcccgcg ggattgtgac tgactttgct ttcctgagcc cgcttgcaag cagtgcagct 6720

tcccgttcat ccgcccgcga tgacaagttg acggctcttt tggcacaatt ggattctttg 6780

acccgggaac ttaatgtcgt ttctcagcag ctgttggatc tgcgccagca ggtttctgcc 6840

ctgaaggctt cctcccctcc caatgcggtt taaaacataa ataaaaaacc agactctgtt 6900

tggatttgga tcaagcaagt gtcttgctgt ctttatttag gggttttgcg cgcgcggtag 6960

gcccgggacc agcggtctcg gtcgttgagg gtcctgtgta ttttttccag gacgtggtaa 7020

aggtgactct ggatgttcag atacatgggc ataagcccgt ctctggggtg gaggtagcac 7080

cactgcagag cttcatgctg cggggtggtg ttgtagatga tccagtcgta gcaggagcgc 7140

tgggcgtggt gcctaaaaat gtctttcagt agcaagctga ttgccagggg caggcccttg 7200

gtgtaagtgt ttacaaagcg gttaagctgg gatgggtgca tacgtgggga tatgagatgc 7260

atcttggact gtatttttag gttggctatg ttcccagcca tatccctccg gggattcatg 7320

ttgtgcagaa ccaccagcac agtgtatccg gtgcacttgg gaaatttgtc atgtagctta 7380

gaaggaaatg cgtggaagaa cttggagacg cccttgtgac ctccaagatt ttccatgcat 7440

tcgtccataa tgatggcaat gggcccacgg gcggcggcct gggcgaagat atttctggga 7500

tcactaacgt catagttgtg ttccaggatg agatcgtcat aggccatttt tacaaagcgc 7560

gggcggaggg tgccagactg cggtataatg gttccatccg gcccaggggc gtagttaccc 7620

tcacagattt gcatttccca cgctttgagt tcagatgggg ggatcatgtc tacctgcggg 7680

gcgatgaaga aaacggtttc cggggtaggg gagatcagct gggaagaaag caggttcctg 7740

agcagctgcg acttaccgca gccggtgggc ccgtaaatca cacctattac cggctgcaac 7800

tggtagttaa gagagctgca gctgccgtca tccctgagca ggggggccac ttcgttaagc 7860

atgtccctga ctcgcatgtt ttccctgacc aaatccgcca gaaggcgctc gccgcccagc 7920

gatagcagtt cttgcaagga agcaaagttt ttcaacggtt tgagaccgtc cgccgtaggc 7980

atgcttttga gcgtttgacc aagcagttcc aggcggtccc acagctcggt cacctgctct 8040

acggcatctc gatccagcat atctcctcgt ttcgcgggtt ggggcggctt tcgctgtacg 8100

gcagtagtcg gtgctcgtcc agacgggcca gggtcatgtc tttccacggg cgcagggtcc 8160

tcgtcagcgt agtctgggtc acggtgaagg ggtgcgctcc gggctgcgcg ctggccaggg 8220

tgcgcttgag gctggtcctg ctggtgctga agcgctgccg gtcttcgccc tgcgcgtcgg 8280

ccaggtagca tttgaccatg gtgtcatagt ccagcccctc cgcggcgtgg cccttggcgc 8340

gcagcttgcc cttggaggag gcgccgcacg aggggcagtg cagacttttg agggcgtaga 8400

gcttgggcgc gagaaatacc gattccgggg agtaggcatc cgcgccgcag gccccgcaga 8460

cggtctcgca ttccacgagc caggtgagct ctggccgttc ggggtcaaaa accaggtttc 8520

ccccatgctt tttgatgcgt ttcttacctc tggtttccat gagccggtgt ccacgctcgg 8580

tgacgaaaag gctgtccgtg tccccgtata cagacttgag aggcctgtcc tcgagcggtg 8640

ttccgcggtc ctcctcgtat agaaactcgg accactctga gacaaaggct cgcgtccagg 8700

ccagcacgaa ggaggctaag tgggaggggt agcggtcgtt gtccactagg gggtccactc 8760

gctccagggt gtgaagacac atgtcgccct cttcggcatc aaggaaggtg attggtttgt 8820

aggtgtaggc cacgtgaccg ggtgttcctg aaggggggct ataaaagggg gtgggggcgc 8880

gttcgtcctc actctcttcc gcatcgctgt ctgcgagggc cagctgttgg ggtgagtact 8940

ccctctgaaa agcgggcatg acttctgcgc taagattgtc agtttccaaa aacgaggagg 9000

atttgatatt cacctggccc gcggtgatgc ctttgagggt ggccgcatcc atctggtcag 9060

aaaagacaat ctttttgttg tcaagcttgg tggcaaacga cccgtagagg gcgttggaca 9120

gcaacttggc gatggagcgc agggtttggt ttttgtcgcg atcggcgcgc tccttggccg 9180

cgatgtttag ctgcacgtat tcgcgcgcaa cgcaccgcca ttcgggaaag acggtggtgc 9240

gctcgtcggg caccaggtgc acgcgccaac cgcggttgtg cagggtgaca aggtcaacgc 9300

tggtggctac ctctccgcgt aggcgctcgt tggtccagca gaggcggccg cccttgcgcg 9360

agcagaatgg cggtaggggg tctagctgcg tctcgtccgg ggggtctgcg tccacggtaa 9420

agaccccggg cagcaggcgc gcgtcgaagt agtctatctt gcatccttgc aagtctagcg 9480

cctgctgcca tgcgcgggcg gcaagcgcgc gctcgtatgg gttgagtggg ggaccccatg 9540

gcatggggtg ggtgagcgcg gaggcgtaca tgccgcaaat gtcgtaaacg tagaggggct 9600

ctctgagtat tccaagatat gtagggtagc atcttccacc gcggatgctg gcgcgcacgt 9660

aatcgtatag ttcgtgcgag ggagcgagga ggtcgggacc gaggttgcta cgggcgggct 9720

gctctgctcg gaagactatc tgcctgaaga tggcatgtga gttggatgat atggttggac 9780

gctggaagac gttgaagctg gcgtctgtga gacctaccgc gtcacgcacg aaggaggcgt 9840

aggagtcgcg cagcttgttg accagctcgg cggtgacctg cacgtctagg gcgcagtagt 9900

ccagggtttc cttgatgatg tcatacttat cctgtccctt ttttttccac agctcgcggt 9960

tgaggacaaa ctcttcgcgg tctttccagt actcttggat cggaaacccg tcggcctccg 10020

aacggtaaga gcctagcatg tagaactggt tgacggcctg gtaggcgcag catccctttt 10080

ctacgggtag cgcgtatgcc tgcgcggcct tccggagcga ggtgtgggtg agcgcaaagg 10140

tgtccctgac catgactttg aggtactggt atttgaagtc agtgtcgtcg catccgccct 10200

gctcccagag caaaaagtcc gtgcgctttt tggaacgcgg atttggcagg gcgaaggtga 10260

catcgttgaa gagtatcttt cccgcgcgag gcataaagtt gcgtgtgatg cggaagggtc 10320

ccggcacctc ggaacggttg ttaattacct gggcggcgag cacgatctcg tcaaagccgt 10380

tgatgttgtg gcccacaatg taaagttcca agaagcgcgg gatgcccttg atggaaggca 10440

atttttaag ttcctcgtag gtgagctctt caggggagct gagcccgtgc tctgaaaggg 10500

cccagtctgc aagatgaggg ttggaagcga cgaatgagct ccacaggtca cgggccatta 10560

gcatttgcag gtggtcgcga aaggtcctaa actggcgacc tatggccatt ttttctgggg 10620

tgatgcagta gaaggtaagc gggtcttgtt cccagcggtc ccatccaagg ttcgcggcta 10680

ggtctcgcgc ggcagtcact agaggctcat ctccgccgaa cttcatgacc agcatgaagg 10740

gcacgagctg cttcccaaag gcccccatcc aagtataggt ctctacatcg taggtgacaa 10800

agagacgctc ggtgcgagga tgcgagccga tcgggaagaa ctggatctcc cgccaccaat 10860

tggaggagtg gctattgatg tggtgaaagt agaagtccct gcgacgggcc gaacactcgt 10920

gctggctttt gtaaaaacgt gcgcagtact ggcagcggtg cacgggctgt acatcctgca 10980

cgaggttgac ctgacgaccg cgcacaagga agcagagtgg gaatttgagc ccctcgcctg 11040

gcgggtttgg ctggtggtct tctacttcgg ctgcttgtcc ttgaccgtct ggctgctcga 11100

ggggagttac ggtggatcgg accaccacgc cgcgcgagcc caaagtccag atgtccgcgc 11160

gcggcggtcg gagcttgatg acaacatcgc gcagatggga gctgtccatg gtctggagct 11220

cccgcggcgt caggtcaggc gggagctcct gcaggtttac ctcgcataga cgggtcaggg 11280

cgcgggctag atccaggtga tacctaattt ccaggggctg gttggtggcg gcgtcgatgg 11340

cttgcaagag gccgcatccc cgcggcgcga ctacggtacc gcgcggcggg cggtgggccg 11400

cgggggtgtc cttggatgat gcatctaaaa gcggtgacgc gggcgagccc ccggaggtag 11460

gggggctcc ggacccgccg ggagaggggg caggggcacg tcggcgccgc gcgcgggcag 11520

gagctggtgc tgcgcgcgta ggttgctggc gaacgcgacg acgcggcggt tgatctcctg 11580

aatctggcgc ctctgcgtga agacgacggg cccggtgagc ttgaacctga aagagagttc 11640

gacagaatca atttcggtgt cgttgacggc ggcctggcgc aaaatctcct gcacgtctcc 11700

tgagttgtct tgataggcga tctcggccat gaactgctcg atctcttcct cctggagatc 11760

tccgcgtccg gctcgctcca cggtggcggc gaggtcgttg gaaatgcggg ccatgagctg 11820

cgagaaggcg ttgaggcctc cctcgttcca gacgcggctg tagaccacgc ccccttcggc 11880

atcgcgggcg cgcatgacca cctgcgcgag attgagctcc acgtgccggg cgaagacggc 11940

gtagtttcgc aggcgctgaa agaggtagtt gagggtggtg gcggtgtgtt ctgccacgaa 12000

gaagtacata acccagcgtc gcaacgtgga ttcgttgata tcccccaagg cctcaaggcg 12060

ctccatggcc tcgtagaagt ccacggcgaa gttgaaaaac tgggagttgc gcgccgacac 12120

ggttaactcc tcctccagaa gacggatgag ctcggcgaca gtgtcgcgca cctcgcgctc 12180

aaaggctaca ggggcctctt cttcttcttc aatctcctct tccataaggg cctccccttc 12240

ttcttcttct ggcggcggtg ggggaggggg gacacggcgg cgacgacggc gcaccgggag 12300

gcggtcgaca aagcgctcga tcatctcccc gcggcgacgg cgcatggtct cggtgacggc 12360

gcggccgttc tcgcgggggc gcagttggaa gacgccgccc gtcatgtccc ggttatgggt 12420

tggcgggggg ctgccatgcg gcagggatac ggcgctaacg atgcatctca acaattgttg 12480

tgtaggtact ccgccgccga gggacctgag cgagtccgca tcgaccggat cggaaaacct 12540

ctcgagaaag gcgtctaacc agtcacagtc gcaaggtagg ctgagcaccg tggcgggcgg 12600

cagcgggcgg cggtcggggt tgtttctggc ggaggtgctg ctgatgatgt aattaaagta 12660

ggcggtcttg agacggcgga tggtcgacag aagcaccatg tccttgggtc cggcctgctg 12720

aatgcgcagg cggtcggcca tgccccaggc ttcgttttga catcggcgca ggtctttgta 12780

gtagtcttgc atgagccttt ctaccggcac ttcttcttct ccttcctctt gtcctgcatc 12840

tcttgcatct atcgctgcgg cggcggcgga gtttggccgt aggtggcgcc ctcttcctcc 12900

catgcgtgtg accccgaagc ccctcatcgg ctgaagcagg gctaggtcgg cgacaacgcg 12960

ctcggctaat atggcctgct gcacctgcgt gagggtagac tggaagtcat ccatgtccac 13020

aaagcggtgg tatgcgcccg tgttgatggt gtaagtgcag ttggccataa cggaccagtt 13080

aacggtctgg tgacccggct gcgagagctc ggtgtacctg agacgcgagt aagccctcga 13140

gtcaaatacg tagtcgttgc aagtccgcac caggtactgg tatcccacca aaaagtgcgg 13200

cggcggctgg cggtagaggg gccagcgtag ggtggccggg gctccggggg cgagatcttc 13260

caacataagg cgatgatatc cgtagatgta cctggacatc caggtgatgc cggcggcggt 13320

ggtggaggcg cgcggaaagt cgcggacgcg gttccagatg ttgcgcagcg gcaaaaagtg 13380

ctccatggtc gggacgctct ggccggtcag gcgcgcgcaa tcgttgacgc tctagcgtgc 13440

aaaaggagag cctgtaagcg ggcactcttc cgtggtctgg tggataaatt cgcaagggta 13500

tcatggcgga cgaccggggt tcgagccccg tatccggccg tccgccgtga tccatgcggt 13560

taccgcccgc gtgtcgaacc caggtgtgcg acgtcagaca acgggggagt gctccttttg 13620

gcttccttcc aggcgcggcg gctgctgcgc tagcttttt ggccactggc cgcgcgcagc 13680

gtaagcggtt aggctggaaa gcgaaagcat taagtggctc gctccctgta gccggagggt 13740

tattttccaa gggttgagtc gcgggacccc cggttcgagt ctcggaccgg ccggactgcg 13800

gcgaacgggg gtttgcctcc ccgtcatgca agaccccgct tgcaaattcc tccggaaaca 13860

gggacgagcc ccttttttgc ttttcccaga tgcatccggt gctgcggcag atgcgccccc 13920

ctcctcagca gcggcaagag caagagcagc ggcagacatg cagggcaccc tcccctcctc 13980

ctaccgcgtc aggaggggcg acatccgcgg ttgacgcggc agcagatggt gattacgaac 14040

ccccgcggcg ccgggcccgg cactacctgg acttggagga gggcgagggc ctggcgcggc 14100

taggagcgcc ctctcctgag cggcacccaa gggtgcagct gaagcgtgat acgcgtgagg 14160

cgtacgtgcc gcggcagaac ctgtttcgcg accgcgaggg agaggagccc gaggagatgc 14220

gggatcgaaa gttccacgca gggcgcgagc tgcggcatgg cctgaatcgc gagcggttgc 14280

tgcgcgagga ggactttgag cccgacgcgc gaaccgggat tagtcccgcg cgcgcacacg 14340

tggcggccgc cgacctggta accgcatacg agcagacggt gaaccaggag attaactttc 14400

aaaaaagctt taacaaccac gtgcgtacgc ttgtggcgcg cgaggaggtg gctataggac 14460

tgatgcatct gtgggacttt gtaagcgcgc tggagcaaaa cccaaatagc aagccgctca 14520

tggcgcagct gttccttata gtgcagcaca gcagggacaa cgaggcattc agggatgcgc 14580

tgctaaacat agtagagccc gagggccgct ggctgctcga tttgataaac atcctgcaga 14640

gcatagtggt gcaggagcgc agcttgagcc tggctgacaa ggtggccgcc atcaactatt 14700

ccatgcttag cctgggcaag ttttacgccc gcaagatata ccatacccct tacgttccca 14760

tagacaagga ggtaaagatc gaggggttct acatgcgcat ggcgctgaag gtgcttacct 14820

tgagcgacga cctgggcgtt tatcgcaacg agcgcatcca caaggccgtg agcgtgagcc 14880

ggcggcgcga gctcagcgac cgcgagctga tgcacagcct gcaaagggcc ctggctggca 14940

cgggcagcgg cgatagagag gccgagtcct actttgacgc gggcgctgac ctgcgctggg 15000

ccccaagccg acgcgccctg gaggcagctg gggccggacc tgggctggcg gtggcacccg 15060

cgcgcgctgg caacgtcggc ggcgtggagg aatatgacga ggacgatgag tacgagccag 15120

aggacggcga gtactaagcg gtgatgtttc tgatcagatg atgcaagacg caacggaccc 15180

ggcggtgcgg gcggcgctgc agagccagcc gtccggcctt aactccacgg acgactggcg 15240

ccaggtcatg gaccgcatca tgtcgctgac tgcgcgcaat cctgacgcgt tccggcagca 15300

gccgcaggcc aaccggctct ccgcaattct ggaagcggtg gtcccggcgc gcgcaaaccc 15360

cacgcacgag aaggtgctgg cgatcgtaaa cgcgctggcc gaaaacaggg ccatccggcc 15420

cgacgaggcc ggcctggtct acgacgcgct gcttcagcgc gtggctcgtt acaacagcgg 15480

caacgtgcag accaacctgg accggctggt gggggatgtg cgcgaggccg tggcgcagcg 15540

tgagcgcgcg cagcagcagg gcaacctggg ctccatggtt gcactaaacg ccttcctgag 15600

tacacagccc gccaacgtgc cgcggggaca ggaggactac accaactttg tgagcgcact 15660

gcggctaatg gtgactgaga caccgcaaag tgaggtgtac cagtctgggc cagactattt 15720

tttccagacc agtagacaag gcctgcagac cgtaaacctg agccaggctt tcaaaaactt 15780

gcaggggctg tgggggtgc gggctcccac aggcgaccgc gcgaccgtgt ctagcttgct 15840

gacgcccaac tcgcgcctgt tgctgctgct aatagcgccc ttcacggaca gtggcagcgt 15900

gtcccgggac acatacctag gtcacttgct gacactgtac cgcgaggcca taggtcaggc 15960

gcatgtggac gagcatactt tccaggagat tacaagtgtc agccgcgcgc tggggcagga 16020

ggacacgggc agcctggagg caaccctaaa ctacctgctg accaaccggc ggcagaagat 16080

cccctcgttg cacagtttaa acagcgagga ggagcgcatt ttgcgctacg tgcagcagag 16140

cgtgagcctt aacctgatgc gcgacggggt aacgcccagc gtggcgctgg acatgaccgc 16200

gcgcaacatg gaaccgggca tgtatgcctc aaaccggccg tttatcaacc gcctaatgga 16260

ctacttgcat cgcgcggccg ccgtgaaccc cgagtatttc accaatgcca tcttgaaccc 16320

gcactggcta ccgccccctg gtttctacac cgggggattc gaggtgcccg agggtaacga 16380

tggattcctc tgggacgaca tagacgacag cgtgttttcc ccgcaaccgc agaccctgct 16440

agagttgcaa cagcgcgagc aggcagaggc ggcgctgcga aaggaaagct tccgcaggcc 16500

aagcagcttg tccgatctag gcgctgcggc cccgcggtca gatgctagta gcccatttcc 16560

aagcttgata gggtctctta ccagcactcg caccacccgc ccgcgcctgc tgggcgagga 16620

ggagtaccta aacaactcgc tgctgcagcc gcagcgcgaa aaaaacctgc ctccggcatt 16680

tcccaacaac gggatagaga gcctagtgga caagatgagt agatggaaga cgtacgcgca 16740

ggagcacagg gacgtgccag gcccgcgccc gcccacccgt cgtcaaaggc acgaccgtca 16800

gcggggtctg gtgtgggagg acgatgactc ggcagacgac agcagcgtcc tggatttggg 16860

agggagtggc aacccgtttg cgcaccttcg ccccaggctg gggagaatgt tttaaaaaaa 16920

aaaaagcatg atgcaaaata aaaaactcac caaggccatg gcaccgagcg ttggttttct 16980

tgtattcccc ttagtatgcg gcgcgcggcg atgtatgagg aaggtcctcc tccctcctac 17040

gagagtgtgg tgagcgcggc gccagtggcg gcggcgctgg gttctccctt cgatgctccc 17100

ctggacccgc cgtttgtgcc tccgcggtac ctgcggccta ccgggggggag aaacagcatc 17160

cgttactctg agttggcacc cctattcgac accacccgtg tgtacctggt ggacaacaag 17220

tcaacggatg tggcatccct gaactaccag aacgaccaca gcaactttct gaccacggtc 17280

attcaaaaca atgactacag cccgggggag gcaagcacac agaccatcaa tcttgacgac 17340

cggtcgcact ggggcggcga cctgaaaacc atcctgcata ccaacatgcc aaatgtgaac 17400

gagttcatgt ttaccaataa gtttaaggcg cgggtgatgg tgtcgcgctt gcctactaag 17460

gacaatcagg tggagctgaa atacgagtgg gtggagttca cgctgcccga gggcaactac 17520

tccgagacca tgaccataga ccttatgaac aacgcgatcg tggagcacta cttgaaagtg 17580

ggcagacaga acggggttct ggaaagcgac atcggggtaa agtttgacac ccgcaacttc 17640

agactggggt ttgaccccgt cactggtctt gtcatgcctg gggtatatac aaacgaagcc 17700

ttccatccag acatcatttt gctgccagga tgcggggtgg acttcaccca cagccgcctg 17760

agcaacttgt tgggcatccg caagcggcaa cccttccagg agggctttag gatcacctac 17820

gatgatctgg agggtggtaa cattcccgca ctgttggatg tggacgccta ccaggcgagc 17880

ttgaaagatg acaccgaaca gggcgggggt ggcgcaggcg gcagcaacag cagtggcagc 17940

ggcgcggaag agaactccaa cgcggcagcc gcggcaatgc agccggtgga ggacatgaac 18000

gatcatgcca ttcgcggcga cacctttgcc acacgggctg aggagaagcg cgctgaggcc 18060

gaagcagcgg ccgaagctgc cgcccccgct gcgcaacccg aggtcgagaa gcctcagaag 18120

aaaccggtga tcaaacccct gacagaggac agcaagaaac gcagttacaa cctaataagc 18180

aatgacagca ccttcaccca gtaccgcagc tggtaccttg catacaacta cggcgaccct 18240

cagaccggaa tccgctcatg gaccctgctt tgcactcctg acgtaacctg cggctcggag 18300

caggtctact ggtcgttgcc agacatgatg caagaccccg tgaccttccg ctccacgcgc 18360

cagatcagca actttccggt ggtgggcgcc gagctgttgc ccgtgcactc caagagcttc 18420

tacaacgacc aggccgtcta ctcccaactc atccgccagt ttacctctct gacccacgtg 18480

ttcaatcgct ttcccgagaa ccagattttg gcgcgcccgc cagcccccac catcaccacc 18540

gtcagtgaaa acgttcctgc tctcacagat cacgggacgc taccgctgcg caacagcatc 18600

ggaggagtcc agcgagtgac cattactgac gccagacgcc gcacctgccc ctacgtttac 18660

aaggccctgg gcatagtctc gccgcgcgtc ctatcgagcc gcacttttg agcaagcatg 18720

tccatcctta tatcgcccag caataacaca ggctggggcc tgcgcttccc aagcaagatg 18780

tttggcgggg ccaagaagcg ctccgaccaa cacccagtgc gcgtgcgcgg gcactaccgc 18840

gcgccctggg gcgcgcacaa acgcggccgc actgggcgca ccaccgtcga tgacgccatc 18900

gacgcggtgg tggaggaggc gcgcaactac acgcccacgc cgccaccagt gtccacagtg 18960

gacgcggcca ttcagaccgt ggtgcgcgga gcccggcgct atgctaaaat gaagagacgg 19020

cggaggcgcg tagcacgtcg ccaccgccgc cgacccggca ctgccgccca acgcgcggcg 19080

gcggccctgc ttaaccgcgc acgtcgcacc ggccgacggg cggccatgcg ggccgctcga 19140

aggctggccg cgggtattgt cactgtgccc cccaggtcca ggcgacgagc ggccgccgca 19200

gcagccgcgg ccattagtgc tatgactcag ggtcgcaggg gcaacgtgta ttgggtgcgc 19260

gactcggtta gcggcctgcg cgtgcccgtg cgcacccgcc ccccgcgcaa ctagattgca 19320

agaaaaaact acttagactc gtactgttgt atgtatccag cggcggcggc gcgcaacgaa 19380

gctatgtcca agcgcaaaat caaagaagag atgctccagg tcatcgcgcc ggagatctat 19440

ggcccccga agaaggaaga gcaggattac aagccccgaa agctaaagcg ggtcaaaaag 19500

aaaaagaaag atgatgatga tgaacttgac gacgaggtgg aactgctgca cgctaccgcg 19560

cccaggcgac gggtacagtg gaaaggtcga cgcgtaaaac gtgttttgcg acccggcacc 19620

accgtagtct ttacgcccgg tgagcgctcc acccgcacct acaagcgcgt gtatgatgag 19680

gtgtacggcg acgaggacct gcttgagcag gccaacgagc gcctcgggga gtttgcctac 19740

ggaaagcggc ataaggacat gctggcgttg ccgctggacg agggcaaccc aacacctagc 19800

ctaaagcccg taacactgca gcaggtgctg cccgcgcttg caccgtccga agaaaagcgc 19860

ggcctaaagc gcgagtctgg tgacttggca cccaccgtgc agctgatggt acccaagcgc 19920

cagcgactgg aagatgtctt ggaaaaaatg accgtggaac ctgggctgga gcccgaggtc 19980

cgcgtgcggc caatcaagca ggtggcgccg ggactgggcg tgcagaccgt ggacgttcag 20040

atacccacta ccagtagcac cagtattgcc accgccacag agggcatgga gacacaaacg 20100

tccccggttg cctcagcggt ggcggatgcc gcggtgcagg cggtcgctgc ggccgcgtcc 20160

aagacctcta cggaggtgca aacggacccg tggatgtttc gcgtttcagc cccccggcgc 20220

ccgcgccgtt cgaggaagta cggcgccgcc agcgcgctac tgcccgaata tgccctacat 20280

ccttccattg cgcctacccc cggctatcgt ggctacacct accgccccag aagacgagca 20340

actacccgac gccgaaccac cactggaacc cgccgccgcc gtcgccgtcg ccagcccgtg 20400

ctggccccga tttccgtgcg cagggtggct cgcgaaggag gcaggaccct ggtgctgcca 20460

acagcgcgct accaccccag catcgtttaa aagccggtct ttgtggttct tgcagatatg 20520

gccctcacct gccgcctccg tttcccggtg ccgggattcc gaggaagaat gcaccgtagg 20580

aggggcatgg ccggccacgg cctgacgggc ggcatgcgtc gtgcgcacca ccggcggcgg 20640

cgcgcgtcgc accgtcgcat gcgcggcggt atcctgcccc tccttattcc actgatcgcc 20700

gcggcgattg gcgccgtgcc cggaattgca tccgtggcct tgcaggcgca gagacactga 20760

ttaaaaacaa gttgcatgtg gaaaaatcaa aataaaaagt ctggactctc acgctcgctt 20820

ggtcctgtaa ctattttgta gaatggaaga catcaacttt gcgtctctgg ccccgcgaca 20880

cggctcgcgc ccgttcatgg gaaactggca agatatcggc accagcaata tgagcggtgg 20940

cgccttcagc tggggctcgc tgtggagcgg cattaaaaat ttcggttcca ccgttaagaa 21000

ctatggcagc aaggcctgga acagcagcac aggccagatg ctgagggata agttgaaaga 21060

gcaaaatttc caacaaaagg tggtagatgg cctggcctct ggcattagcg gggtggtgga 21120

cctggccaac caggcagtgc aaaataagat taacagtaag cttgatcccc gccctcccgt 21180

agaggagcct ccaccggccg tggagacagt gtctccagag gggcgtggcg aaaagcgtcc 21240

gcgccccgac agggaagaaa ctctggtgac gcaaatagac gagcctccct cgtacgagga 21300

ggcactaaag caaggcctgc ccaccacccg tcccatcgcg cccatggcta ccggagtgct 21360

gggccagcac acacccgtaa cgctggacct gcctcccccc gccgacaccc agcagaaacc 21420

tgtgctgcca ggcccgaccg ccgttgttgt aacccgtcct agccgcgcgt ccctgcgccg 21480

cgccgccagc ggtccgcgat cgttgcggcc cgtagccagt ggcaactggc aaagcacact 21540

gaacagcatc gtgggtctgg gggtgcaatc cctgaagcgc cgacgatgct tctgatagct 21600

aacgtgtcgt atgtgtgtca tgtatgcgtc catgtcgccg ccagaggagc tgctgagccg 21660

ccgcgcgccc gctttccaag atggctaccc cttcgatgat gccgcagtgg tcttacatgc 21720

acatctcggg ccaggacgcc tcggagtacc tgagccccgg gctggtgcag tttgcccgcg 21780

ccaccgagac gtacttcagc ctgaataaca agtttagaaa ccccacggtg gcgcctacgc 21840

acgacgtgac cacagaccgg tcccagcgtt tgacgctgcg gttcatccct gtggaccgtg 21900

aggatactgc gtactcgtac aaggcgcggt tcaccctagc tgtgggtgat aaccgtgtgc 21960

tggacatggc ttccacgtac tttgacatcc gcggcgtgct ggacaggggc cctactttta 22020

agccctactc tggcactgcc tacaacgccc tggctcccaa gggtgcccca aatccttgcg 22080

aatgggatga agctgctact gctcttgaaa taaacctaga agaagaggac gatgacaacg 22140

aagacgaagt agacgagcaa gctgagcagc aaaaaactca cgtatttggg caggcgcctt 22200

attctggtat aaatattaca aaggagggta ttcaaatagg tgtcgaaggt caaacaccta 22260

aatatgccga taaaacattt caacctgaac ctcaaatagg agaatctcag tggtacgaaa 22320

cagaaattaa tcatgcagct gggagagtcc taaaaaagac taccccaatg aaaccatgtt 22380

acggttcata tgcaaaaccc acaaatgaaa atggagggca aggcattctt gtaaagcaac 22440

aaaatggaaa gctagaaagt caagtggaaa tgcaattttt ctcaactact gaggcagccg 22500

caggcaatgg tgataacttg actcctaaag tggtattgta cagtgaagat gtagatatag 22560

aaaccccaga cactcatatt tcttacatgc ccactattaa ggaaggtaac tcacgagaac 22620

taatgggcca acaatctatg cccaacaggc ctaattacat tgcttttagg gacaatttta 22680

ttggtctaat gtattacaac agcacgggta atatgggtgt tctggcgggc caagcatcgc 22740

agttgaatgc tgttgtagat ttgcaagaca gaaacacaga gctttcatac cagcttttgc 22800

ttgattccat tggtgataga accaggtact tttctatgtg gaatcaggct gttgacagct 22860

atgatccaga tgttagaatt attgaaaatc atggaactga agatgaactt ccaaattact 22920

gctttccact gggaggtgtg attaatacag agactcttac caaggtaaaa cctaaaacag 22980

gtcaggaaaa tggatgggaa aaagatgcta cagaattttc agataaaaat gaaataagag 23040

ttggaaataa ttttgccatg gaaatcaatc taaatgccaa cctgtggaga aatttcctgt 23100

actccaacat agcgctgtat ttgcccgaca agctaaagta cagtccttcc aacgtaaaaa 23160

tttctgataa cccaaacacc tacgactaca tgaacaagcg agtggtggct cccgggctag 23220

tggactgcta cattaacctt ggagcacgct ggtcccttga ctatatggac aacgtcaacc 23280

catttaacca ccaccgcaat gctggcctgc gctaccgctc aatgttgctg ggcaatggtc 23340

gctatgtgcc cttccacatc caggtgcctc agaagttctt tgccattaaa aacctccttc 23400

tcctgccggg ctcatacacc tacgagtgga acttcaggaa ggatgttaac atggttctgc 23460

agagctccct aggaaatgac ctaagggttg acggagccag cattaagttt gatagcattt 23520

gcctttacgc caccttcttc cccatggccc acaacaccgc ctccacgctt gaggccatgc 23580

ttagaaacga caccaacgac cagtccttta acgactatct ctccgccgcc aacatgctct 23640

accctatacc cgccaacgct accaacgtgc ccatatccat cccctcccgc aactgggcgg 23700

ctttccgcgg ctgggccttc acgcgcctta agactaagga aaccccatca ctgggctcgg 23760

gctacgaccc ttattacacc tactctggct ctatacccta cctagatgga acctttacc 23820

tcaaccacac ctttaagaag gtggccatta cctttgactc ttctgtcagc tggcctggca 23880

atgaccgcct gcttaccccc aacgagtttg aaattaagcg ctcagttgac ggggagggtt 23940

acaacgttgc ccagtgtaac atgaccaaag actggttcct ggtacaaatg ctagctaact 24000

ataacattgg ctaccagggc ttctatatcc cagagagcta caaggaccgc atgtactcct 24060

tctttagaaa cttccagccc atgagccgtc aggtggtgga tgatactaaa tacaaggact 24120

accaacaggt gggcatccta caccaacaca acaactctgg atttgttggc taccttgccc 24180

ccaccatgcg cgaaggacag gcctaccctg ctaacttccc ctatccgctt ataggcaaga 24240

ccgcagttga cagcattacc cagaaaaagt ttctttgcga tcgcaccctt tggcgcatcc 24300

cattctccag taactttatg tccatgggcg cactcacaga cctgggccaa aaccttctct 24360

acgccaactc cgcccacgcg ctagacatga cttttgaggt ggatcccatg gacgagccca 24420

cccttcttta tgttttgttt gaagtctttg acgtggtccg tgtgcaccag ccgcaccgcg 24480

gcgtcatcga aaccgtgtac ctgcgcacgc ccttctcggc cggcaacgcc acaacataaa 24540

gaagcaagca acatcaacaa cagctgccgc catgggctcc agtgagcagg aactgaaagc 24600

cattgtcaaa gatcttggtt gtgggccata ttttttgggc acctatgaca agcgctttcc 24660

aggctttgtt tctccacaca agctcgcctg cgccatagtc aatacggccg gtcgcgagac 24720

tgggggcgta cactggatgg cctttgcctg gaacccgcac tcaaaaacat gctacctctt 24780

tgagcccttt ggcttttctg accagcgact caagcaggtt taccagtttg agtacgagtc 24840

actcctgcgc cgtagcgcca ttgcttcttc ccccgaccgc tgtataacgc tggaaaagtc 24900

cacccaaagc gtacaggggc ccaactcggc cgcctgtgga ctattctgct gcatgtttct 24960

ccacgccttt gccaactggc cccaaactcc catggatcac aaccccacca tgaaccttat 25020

taccggggta cccaactcca tgctcaacag tccccaggta cagcccaccc tgcgtcgcaa 25080

ccaggaacag ctctacagct tcctggagcg ccactcgccc tacttccgca gccacagtgc 25140

gcagattagg agcgccactt ctttttgtca cttgaaaaac atgtaaaaat aatgtactag 25200

agacactttc aataaaggca aatgctttta tttgtacact ctcgggtgat tatttacccc 25260

caccttgcc gtctgcgccg tttaaaaatc aaaggggttc tgccgcgcat cgctatgcgc 25320

cactggcagg gacacgttgc gatactggtg tttagtgctc cacttaaact caggcacaac 25380

catccgcggc agctcggtga agttttcact ccacaggctg cgcaccatca ccaacgcgtt 25440

tagcaggtcg ggcgccgata tcttgaagtc gcagttgggg cctccgccct gcgcgcgcga 25500

gttgcgatac acagggttgc agcactggaa cactatcagc gccgggtggt gcacgctggc 25560

cagcacgctc ttgtcggaga tcagatccgc gtccaggtcc tccgcgttgc tcagggcgaa 25620

cggagtcaac tttggtagct gccttcccaa aaagggcgcg tgcccaggct ttgagttgca 25680

ctcgcaccgt agtggcatca aaaggtgacc gtgcccggtc tgggcgttag gatacagcgc 25740

ctgcataaaa gccttgatct gcttaaaagc cacctgagcc tttgcgcctt cagagaagaa 25800

catgccgcaa gacttgccgg aaaactgatt ggccggacag gccgcgtcgt gcacgcagca 25860

ccttgcgtcg gtgttggaga tctgcaccac atttcggccc caccggttct tcacgatctt 25920

ggccttgcta gactgctcct tcagcgcgcg ctgcccgttt tcgctcgtca catccatttc 25980

aatcacgtgc tccttattta tcataatgct tccgtgtaga cacttaagct cgccttcgat 26040

ctcagcgcag cggtgcagcc acaacgcgca gcccgtgggc tcgtgatgct tgtaggtcac 26100

ctctgcaaac gactgcaggt acgcctgcag gaatcgcccc atcatcgtca caaaggtctt 26160

gttgctggtg aaggtcagct gcaacccgcg gtgctcctcg ttcagccagg tcttgcatac 26220

ggccgccaga gcttccactt ggtcaggcag tagtttgaag ttcgccttta gatcgttatc 26280

cacgtggtac ttgtccatca gcgcgcgcgc agcctccatg cccttctccc acgcagacac 26340

gatcggcaca ctcagcgggt tcatcaccgt aatttcactt tccgcttcgc tgggctcttc 26400

ctcttcctct tgcgtccgca taccacgcgc cactgggtcg tcttcattca gccgccgcac 26460

tgtgcgctta cctcctttgc catgcttgat tagcaccggt gggttgctga aacccaccat 26520

ttgtagcgcc acatcttctc tttcttcctc gctgtccacg attacctctg gtgatggcgg 26580

gcgctcgggc ttgggagaag ggcgcttctt tttcttcttg ggcgcaatgg ccaaatccgc 26640

cgccgaggtc gatggccgcg ggctgggtgt gcgcggcacc agcgcgtctt gtgatgagtc 26700

ttcctcgtcc tcggactcga tacgccgcct catccgcttt tttgggggcg cccggggagg 26760

cggcggcgac ggggacgggg acgacacgtc ctccatggtt gggggacgtc gcgccgcacc 26820

gcgtccgcgc tcgggggtgg tttcgcgctg ctcctcttcc cgactggcca tttccttctc 26880

ctataggcag aaaaagatca tggagtcagt cgagaagaag gacagcctaa ccgccccctc 26940

tgagttcgcc accaccgcct ccaccgatgc cgccaacgcg cctaccacct tccccgtcga 27000

ggcacccccg cttgaggagg aggaagtgat tatcgagcag gacccaggtt ttgtaagcga 27060

agacgacgag gaccgctcag taccaacaga ggataaaaag caagaccagg acaacgcaga 27120

ggcaaacgag gaacaagtcg ggcgggggga cgaaaggcat ggcgactacc tagatgtggg 27180

agacgacgtg ctgttgaagc atctgcagcg ccagtgcgcc attatctgcg acgcgttgca 27240

agagcgcagc gatgtgcccc tcgccatagc ggatgtcagc cttgcctacg aacgccacct 27300

attctcaccg cgcgtacccc ccaaacgcca agaaaacggc acatgcgagc ccaacccgcg 27360

cctcaacttc taccccgtat ttgccgtgcc agaggtgctt gccacctatc acatcttttt 27420

ccaaaactgc aagatacccc tatcctgccg tgccaaccgc agccgagcgg acaagcagct 27480

ggccttgcgg cagggcgctg tcatacctga tatcgcctcg ctcaacgaag tgccaaaaat 27540

ctttgagggt cttggacgcg acgagaagcg cgcggcaaac gctctgcaac aggaaaacag 27600

cgaaaatgaa agtcactctg gagtgttggt ggaactcgag ggtgacaacg cgcgcctagc 27660

cgtactaaaa cgcagcatcg aggtcaccca ctttgcctac ccggcactta acctaccccc 27720

caaggtcatg agcacagtca tgagtgagct gatcgtgcgc cgtgcgcagc ccctggagag 27780

ggatgcaaat ttgcaagaac aaacagagga gggcctaccc gcagttggcg acgagcagct 27840

agcgcgctgg cttcaaacgc gcgagcctgc cgacttggag gagcgacgca aactaatgat 27900

ggccgcagtg ctcgttaccg tggagcttga gtgcatgcag cggttctttg ctgacccgga 27960

gatgcagcgc aagctagagg aaacattgca ctacaccttt cgacagggct acgtacgcca 28020

ggcctgcaag atctccaacg tggagctctg caacctggtc tcctaccttg gaattttgca 28080

cgaaaaccgc cttgggcaaa acgtgcttca ttccacgctc aagggcgagg cgcgccgcga 28140

ctacgtccgc gactgcgttt acttatttct atgctacacc tggcagacgg ccatgggcgt 28200

ttggcagcag tgcttggagg agtgcaacct caaggagctg cagaaactgc taaagcaaaa 28260

cttgaaggac ctatggacgg ccttcaacga gcgctccgtg gccgcgcacc tggcggacat 28320

cattttcccc gaacgcctgc ttaaaaccct gcaacagggt ctgccagact tcaccagtca 28380

aagcatgttg cagaacttta ggaactttat cctagagcgc tcaggaatct tgcccgccac 28440

ctgctgtgca cttcctagcg actttgtgcc cattaagtac cgcgaatgcc ctccgccgct 28500

ttggggccac tgctaccttc tgcagctagc caactacctt gcctaccact ctgacataat 28560

ggaagacgtg agcggtgacg gtctactgga gtgtcactgt cgctgcaacc tatgcacccc 28620

gcaccgctcc ctggtttgca attcgcagct gcttaacgaa agtcaaatta tcggtacctt 28680

tgagctgcag ggtccctcgc ctgacgaaaa gtccgcggct ccggggttga aactcactcc 28740

ggggctgtgg acgtcggctt accttcgcaa atttgtacct gaggactacc acgcccacga 28800

gattaggttc tacgaagacc aatcccgccc gcctaatgcg gagcttaccg cctgcgtcat 28860

tacccagggc cacattcttg gccaattgca agccatcaac aaagcccgcc aagagtttct 28920

gctacgaaag ggacgggggg tttacttgga cccccagtcc ggcgaggagc tcaacccaat 28980

ccccccgccg ccgcagccct atcagcagca gccgcgggcc cttgcttccc aggatggcac 29040

ccaaaaagaa gctgcagctg ccgccgccac ccacggacga ggaggaatac tgggacagtc 29100

aggcagagga ggttttggac gaggaggagg aggacatgat ggaagactgg gagagcctag 29160

acgaggaagc ttccgaggtc gaagaggtgt cagacgaaac accgtcaccc tcggtcgcat 29220

tcccctcgcc ggcgccccag aaatcggcaa ccggttccag catggctaca acctccgctc 29280

ctcaggcgcc gccggcactg cccgttcgcc gacccaaccg tagatgggac accactggaa 29340

ccagggccgg taagtccaag cagccgccgc cgttagccca agagcaacaa cagcgccaag 29400

gctaccgctc atggcgcggg cacaagaacg ccatagttgc ttgcttgcaa gactgtgggg 29460

gcaacatctc cttcgcccgc cgctttcttc tctaccatca cggcgtggcc ttcccccgta 29520

acatcctgca ttactaccgt catctctaca gcccatactg caccggcggc agcggcagca 29580

acagcagcgg ccacacagaa gcaaaggcga ccggatagca agactctgac aaagcccaag 29640

aaatccacag cggcggcagc agcaggagga ggagcgctgc gtctggcgcc caacgaaccc 29700

gtatcgaccc gcgagcttag aaacaggatt tttcccactc tgtatgctat atttcaacag 29760

agcaggggcc aagaacaaga gctgaaaata aaaaacaggt ctctgcgatc cctcacccgc 29820

agctgcctgt atcacaaaag cgaagatcag cttcggcgca cgctggaaga cgcggaggct 29880

ctcttcagta aatactgcgc gctgactctt aaggactagt ttcgcgccct ttctcaaatt 29940

taagcgcgaa aactacgtca tctccagcgg ccacacccgg cgccagcacc tgttgtcagc 30000

gccattatga gcaaggaaat tcccacgccc tacatgtgga gttaccagcc acaaatggga 30060

cttgcggctg gagctgccca agactactca acccgaataa actacatgag cgcgggaccc 30120

cacatgatat cccgggtcaa cggaatacgc gcccaccgaa accgaattct cctggaacag 30180

gcggctatta ccaccacacc tcgtaataac cttaatcccc gtagttggcc cgctgccctg 30240

gtgtaccagg aaagtcccgc tcccaccact gtggtacttc ccagagacgc ccaggccgaa 30300

gttcagatga ctaactcagg ggcgcagctt gcgggcggct ttcgtcacag ggtgcggtcg 30360

cccgggcagg gtataactca cctgacaatc agagggcgag gtattcagct caacgacgag 30420

tcggtgagct cctcgcttgg tctccgtccg gacgggacat ttcagatcgg cggcgccggc 30480

cgctcttcat tcacgcctcg tcaggcaatc ctaactctgc agacctcgtc ctctgagccg 30540

cgctctggag gcattggaac tctgcaattt attgaggagt ttgtgccatc ggtctacttt 30600

aaccccttct cgggacctcc cggccactat ccggatcaat ttattcctaa ctttgacgcg 30660

gtaaaggact cggcggacgg ctacgactga atgttaagtg gagaggcaga gcaactgcgc 30720

ctgaaacacc tggtccactg tcgccgccac aagtgctttg cccgcgactc cggtgagttt 30780

tgctactttg aattgcccga ggatcatatc gagggcccgg cgcacggcgt ccggcttacc 30840

gcccagggag agcttgcccg tagcctgatt cgggagttta cccagcgccc cctgctagtt 30900

gagcgggaca ggggaccctg tgttctcact gtgatttgca actgtcctaa ccctggatta 30960

catcaagatc ctctagttaa tgtcaggtcg cctaagtcga ttaactagag tacccgggga 31020

tcttattccc tttaactaat aaaaaaaaat aataaagcat cacttactta aaatcagtta 31080

gcaaatttct gtccagttta ttcagcagca cctccttgcc ctcctcccag ctctggtatt 31140

gcagcttcct cctggctgca aactttctcc acaatctaaa tggaatgtca gtttcctcct 31200

gttcctgtcc atccgcaccc actatcttca tgttgttgca gatgaagcgc gcaagaccgt 31260

ctgaagatac cttcaacccc gtgtatccat atgacacgga aaccggtcct ccaactgtgc 31320

cttttcttac tcctcccttt gtatccccca atgggtttca agagagtccc cctggggtac 31380

tctctttgcg cctatccgaa cctctagtta cctccaatgg catgcttgcg ctcaaaatgg 31440

gcaacggcct ctctctggac gaggccggca accttacctc ccaaaatgta accactgtga 31500

gcccacctct caaaaaaacc aagtcaaaca taaacctgga aatatctgca cccctcacag 31560

ttacctcaga agccctaact gtggctgccg ccgcacctct aatggtcgcg ggcaacacac 31620

tcaccatgca atcacaggcc ccgctaaccg tgcacgactc caaacttagc attgccaccc 31680

aaggacccct cacagtgtca gaaggaaagc tagccctgca aacatcaggc cccctcacca 31740

ccaccgatag cagtaccctt actatcactg cctcaccccc tctaactact gccactggta 31800

gcttgggcat tgacttgaaa gagcccattt atacacaaaa tggaaaacta ggactaaagt 31860

acggggctcc tttgcatgta acagacgacc taaacacttt gaccgtagca actggtccag 31920

gtgtgactat taataatact tccttgcaaa ctaaagttac tggagccttg ggttttgatt 31980

cacaaggcaa tatgcaactt aatgtagcag gaggactaag gattgattct caaaacagac 32040

gccttatact tgatgttagt tatccgtttg atgctcaaaa ccaactaaat ctaagactag 32100

gacagggccc tctttttata aactcagccc acaacttgga tattaactac aacaaaggcc 32160

tttacttgtt tacagcttca aacaattcca aaaagcttga ggttaaccta agcactgcca 32220

aggggttgat gtttgacgct acagccatag ccattaatgc aggagatggg cttgaatttg 32280

gttcacctaa tgcaccaaac acaaatcccc tcaaaacaaa aattggccat ggcctagaat 32340

ttgattcaaa caaggctatg gttcctaaac taggaactgg ccttagtttt gacagcacag 32400

gtgccattac agtaggaaac aaaaataatg ataagctaac tttgtggacc ggaataaacc 32460

ctccacctaa ctgtcaaatt gtggaaaaca ctaatacaaa tgatggcaaa cttactttag 32520

tattagtaaa aaatggaggg cttgttaatg gctacgtgtc tctagttggt gtatcagaca 32580

ctgtgaacca aatgttcaca caaaagacag caaacatcca attaagatta tattttgact 32640

cttctggaaa tctattaact gaggaatcag acttaaaaat tccacttaaa aataaatctt 32700

ctacagcgac cagtgaaact gtagccagca gcaaagcctt tatgccaagt actacagctt 32760

atcccttcaa caccactact agggatagtg aaaactacat tcatggaata tgttactaca 32820

tgactagtta tgatagaagt ctatttccct tgaacatttc tataatgcta aacagccgta 32880

tgatttcttc caatgttgcc tatgccatac aatttgaatg gaatctaaat gcaagtgaat 32940

ctccagaaag caacatagct acgctgacca catccccctt tttcttttct tacattacag 33000

aagacgacaa ctaaagaatc gtttgtgtta tgtttcaacg tgtttatttt tcaattgcag 33060

aaaatttcaa gtcatttttc attcagtagt atagccccac caccacatag cttatacaga 33120

tcaccgtacc ttaatcaaac tcacagaacc ctagtattca acctgccacc tccctcccaa 33180

cacacagagt acacagtcct ttctccccgg ctggccttaa aaagcatcat atcatgggta 33240

acagacatat tcttaggtgt tatattccac acggtttcct gtcgagccaa acgctcatca 33300

gtgatattaa taaactcccc gggcagctca cttaagttca tgtcgctgtc cagctgctga 33360

gccacaggct gctgtccaac ttgcggttgc ttaacgggcg gcgaaggaga agtccacgct 33420

cagtcataat cgtgcatcag gatagggcgg tggtgctgca gcagcgcgcg aataaactgc 33480

tgccgccgcc gctccgtcct gcaggaatac aacatggcag tggtctcctc agcgatgatt 33540

cgcaccgccc gcagcataag gcgccttgtc ctccgggcac agcagcgcac cctgatctca 33600

cttaaatcag cacagtaact gcagcacagc accacaatat tgttcaaaat cccacagtgc 33660

aaggcgctgt atccaaagct catggcgggg accacagaac ccacgtggcc atcataccac 33720

aagcgcaggt agattaagtg gcgacccctc ataaacacgc tggacataaa cattacctct 33780

tttggcatgt tgtaattcac cacctcccgg taccatataa acctctgatt aaacatggcg 33840

ccatccacca ccatcctaaa ccagctggcc aaaacctgcc cgccggctat acactgcagg 33900

gaaccgggac tggaacaatg acagtggaga gcccaggact cgtaaccatg gatcatcatg 33960

ctcgtcatga tatcaatgtt ggcacaacac aggcacacgt gcatacactt cctcaggatt 34020

acaagctcct cccgcgttag aaccatatcc cagggaacaa cccattcctg aatcagcgta 34080

aatcccacac tgcagggaag acctcgcacg taactcacgt tgtgcattgt caaagtgtta 34140

cattcgggca gcagcggatg atcctccagt atggtagcgc gggtttctgt ctcaaaagga 34200

ggtagacgat ccctactgta cggagtgcgc cgagacaacc gagatcgtgt tggtcgtagt 34260

gtcatgccaa atggaacgcc ggacgtagtc atatttcctg aagcaaaacc aggtgcgggc 34320

gtgacaaaca gatctgcgtc tccggtctcg ccgcttagat cgctctgtgt agtagttgta 34380

gtatatccac tctctcaaag catccaggcg ccccctggct tcgggttcta tgtaaactcc 34440

ttcatgcgcc gctgccctga taacatccac caccgcagaa taagccacac ccagccaacc 34500

tacacattcg ttctgcgagt cacacacggg aggagcggga agagctggaa gaaccatgtt 34560

ttttttttta ttccaaaaga ttatccaaaa cctcaaaatg aagatctatt aagtgaacgc 34620

gctcccctcc ggtggcgtgg tcaaactcta cagccaaaga acagataatg gcatttgtaa 34680

gatgttgcac aatggcttcc aaaaggcaaa cggccctcac gtccaagtgg acgtaaaggc 34740

taaacccttc agggtgaatc tcctctataa acattccagc accttcaacc atgcccaaat 34800

aattctcatc tcgccacctt ctcaatatat ctctaagcaa atcccgaata ttaagtccgg 34860

ccattgtaaa aatctgctcc agagcgccct ccaccttcag cctcaagcag cgaatcatga 34920

ttgcaaaaat tcaggttcct cacagacctg tataagattc aaaagcggaa cattaacaaa 34980

aataccgcga tcccgtaggt cccttcgcag ggccagctga acataatcgt gcaggtctgc 35040

acggaccagc gcggccactt ccccgccagg aaccatgaca aaagaaccca cactgattat 35100

gacacgcata ctcggagcta tgctaaccag cgtagccccg atgtaagctt gttgcatggg 35160

cggcgatata aaatgcaagg tgctgctcaa aaaatcaggc aaagcctcgc gcaaaaaaga 35220

aagcacatcg tagtcatgct catgcagata aaggcaggta agctccggaa ccaccacaga 35280

aaaagacacc atttttctct caaacatgtc tgcgggtttc tgcataaaca caaaataaaa 35340

taacaaaaaa acatttaaac attagaagcc tgtcttacaa caggaaaaac aacccttata 35400

agcataagac ggactacggc catgccggcg tgaccgtaaa aaaactggtc accgtgatta 35460

aaaagcacca ccgacagctc ctcggtcatg tccggagtca taatgtaaga ctcggtaaac 35520

acatcaggtt gattcacatc ggtcagtgct aaaaagcgac cgaaatagcc cgggggaata 35580

catacccgca ggcgtagaga caacattaca gcccccatag gaggtataac aaaattaata 35640

ggagagaaaa acacataaac acctgaaaaa ccctcctgcc taggcaaaat agcaccctcc 35700

cgctccagaa caacatacag cgcttccaca gcggcagcca taacagtcag ccttaccagt 35760

aaaaaagaaa acctattaaa aaaacaccac tcgacacggc accagctcaa tcagtcacag 35820

tgtaaaaaag ggccaagtgc agagcgagta tatataggac taaaaaatga cgtaacggtt 35880

aaagtccaca aaaaacaccc agaaaaccgc acgcgaacct acgcccagaa acgaaagcca 35940

aaaaacccac aacttcctca aatcgtcact tccgttttcc cacgttacgt cacttcccat 36000

tttaagaaaa ctacaattcc caacacatac aagttactcc gccctaaaac ctacgtcacc 36060

cgccccgttc ccacgccccg cgccacgtca caaactccac cccctcatta tcatattggc 36120

ttcaatccaa aataaggtat attattgatg atg 36153

<210> 42
<211> 36138
<212> DNA
<213> Artificial Sequence

<220>
<223> Adk35RF-Spike/E4orf6(RSV)-E4dl-27(E4re#40)

<400> 42
ttaattaaca tcatcaataa tataccttat tttggattga agccaatatg ataatgaggg 60

ggtggagttt gtgacgtggc gcggggcgtg ggaacggggc gggtgacgta gtagtgtggc 120

ggaagtgtga tgttgcaagt gtggcggaac acatgtaagc gacggatgtg gcaaaagtga 180

cgtttttggt gtgcgccggt gtacacagga agtgacaatt ttcgcgcggt ttaggcgga 240

tgttgtagta aatttgggcg taaccgagta agatttggcc attttcgcgg gaaaactgaa 300

taagaggaag tgaaatctga ataattttgt gttactcata gcgcgtaata atttgatccg 360

cgttaagata cattgatgag tttggacaaa ccacaactag aatgcagtga aaaaaatgct 420

ttatttgtga aatttgtgat gctattgctt tatttgtaac cattataagc tgcaataaac 480

aagttaacaa caacaattgc attcatttta tgtttcaggt tcaggggggag gtgtgggagg 540

ttttttaaag caagtaaaac ctctacaaat gtggtatggc tgattatgat caattttcat 600

ggccacttga tgtattgttc atatttgccc agttcttgga ggtcaatcag ggactcattc 660

aggttcttag ccacctcatt cagtctgtca atctccttct ggatgttcac cacagaggca 720

ttgatgccag agatgtctcc caggtccaca tcagggctgg tgtggttctt gaagtatttg 780

tccagttcct ccttgaagga gtccagttca ggttggagtg ggtcatagac tgtgttgttc 840

acaatgccaa tcaccacatc acagttgcca gacacaaagg tgttgtctgt ggtgataatc 900

tgtggttcat agaagttcct ctgggtcaca aaccagtggg tgccattgct cacaaacact 960

ccctcccttg gaaagtgagc cttgccatca tggcagatgg caggggctgt ggtgaagttc 1020

ttctcctggg caggcacata ggtcacatgc aggaacacca ctccatgagg ggcagactgt 1080

ggaaaactca tcaggtggta gcccttgcca cagaagtcca ccctcttgct ttgtcccagc 1140

acacactcac tcatcttggt ggcagccagg ttggcagatg ccctaatctc agcagccctg 1200

ataagttgtt gggtcacata ggtttggagg gattggagtc tgcctgtaat cagtctgtca 1260

atctggacct cagcctccac cttgtccagt ctgctcagga tgtcattcag cacagaggag 1320

atggctccaa agttgctgga aagttgcttc accagggtgt tcagagcctg ggcattctgg 1380

ttcaccacat cttggagttt gcccagggca gaggctgtgc tggacaggga gtcctgaatc 1440

ttgccaatgg cagagttgaa ctggttggca atcagtttct ggttctcata gagcacattc 1500

tgggtcactc caatgccatt gaacctgtaa gccatctgca tagcaaatgg gatttggagg 1560

gctgctcctg ctccaaaggt ccagccagag gtgatggtgc cagccagcag ggcagaggtg 1620

tattgggcaa tcatctcatc tgtcagcagt ggaggcagca ctgtcagtcc attgaacttc 1680

tgggcacaaa tcaggtccct ggcagcaatg tctcccagac agtctccata ttgcttgatg 1740

aagccagcat cagccagggt caccttgttg aacagcaggt cctcaatgaa ggacctcttg 1800

cttggcttgc ttgggtcagg cagaatctgg ctgaagttga agcctccaaa gtccttgatt 1860

ggaggtgtct tgtaaatctg cttcacctgg gcaaacacct cctgggtgtt cttgtcctgt 1920

tccacagcaa tgcctgtcag agccctgtta agttgggtac agaaggagcc atattggagc 1980

agcaggttgc tacactctgt gctgtctcca cagatataca ttgtacagtc cacagaggtc 2040

ttggtcatac tcacaggcag aatctctgtg gtcacagaga tggtgaagtt ggttgggatg 2100

gcaatgctgt tgttgctgta agccacagag ttctctgctc ccagactcat tgtgtaggca 2160

atgatgctct ggcttgccac agacctcgac ccaccgccac cggtctgggt ctggtaggag 2220

gcacagatgc ctgctccaat tgggatgtca cactcatagg agttgttcac atgctctgct 2280

ccaatcagac agccagccct ggtctggaac acattgctgc ctgtgctgta gaccctccag 2340

gttggtgtaa gttggtcagc atggatagcc acaggcacct cagtacagtt cacatcctgg 2400

tagagcacag ccacctggtt gctggtgttg gtgccaggtg taatcacaga cactcctcca 2460

aaggaacatg gtgtgatgtc cagaatctcc aaggtctgtg ggtccctcac agcatctgtg 2520

gtgtcagcaa tgtccctgcc aaactgttgg aatggcagga acttcttgtt gctctctgtc 2580

agcactcctg tgcctgtcag tccattgaag ttgaagttca cacacttgtt cttcaccagg 2640

ttggtgctct tctttggtcc acacactgtg gcaggggcat ggagcagttc aaaggacagc 2700

accaccaccc tgtatggttg gtagcccact ccattggttg gttggaagcc ataggattgg 2760

agtggaaagt aacagttgaa gccctccact ccattacatg gtgtgctgcc agcctggtaa 2820

atctctgtgc tgatgtccct ctcaaatggt ttcaggttgc tcttcctgaa cagtctgtag 2880

aggtagttgt agttgcctcc caccttgctg tccaggttgt tgctgttcca ggcaatcaca 2940

cagcctgtga agtcatcagg cagtttgtag ttgtagtcag caatcttgcc tgtttgtcca 3000

ggggcaatct gtctcacctc atctccccta atcacaaagg agtcagcata gacattggtg 3060

aaacacaggt cattcagttt ggttgggctc actccataac acttgaaggt gctgaaggag 3120

gcagagttgt agagcacaga gtagtcagcc acacagttgc taatcctctt cctgttccag 3180

gcatagacag aggcaaacct ggtggcattg aacacctctc caaatggaca caggttggtg 3240

atgtttggaa acctcacaat gctctctgtt ggttggaccc tgaagttgct ggtctggtag 3300

atgcccttct ccactgtgaa ggatttcagg gtacacttgg tctcagacag tgggtccagg 3360

gcacagtcca cagcatctgt gatggtgcca ttctcattgt atttcagcag gaaggtcctt 3420

ggttggaggt agcccacata gtaggctgct gctcctgctg tccagccaga ggaggagtct 3480

ccaggtgtca ggtaggacct gtgcagagcc agcagggtct ggaacctggt gatgttgatg 3540

ccaattggca ggtccaccag tggttccaag gcagagaagc cctgtggcag gtccctcacc 3600

aggttgattg gtgtgtgttt gctgtaaatc ttgaagtagc catcaatgtt cttgaacaca 3660

aactccctca ggttcttgaa gttgccctgc ttgccctcca agtccatcag gaatggttgg 3720

ctcacatatt caaaggtaca gttgttggca gaggagtaga ccctgaactc agactccatc 3780

caggacttgt tgttcttgtg gtagtagact cccaggaatg ggtcattaca gaactggaac 3840

tcacacacct taatcaccac attggtggca ttgttcacaa tcagcaggga ctgggtcttg 3900

ctgtccaggg tggtgccaaa aatccagccc ctgatgatgt tgctcttctc tgtgctggca 3960

aagtagactc catcattgaa tggcagcaca gggttgtcaa acctcttggt gccattggtg 4020

ccagacacat ggatggcatg gaaccaggtc acattgctga agaatggcag gaacaggtcc 4080

tgggtgctgt gcagcacaga ggacctgaac accttgtcag ggtagtagac tcccctggtg 4140

aaggagttgg tgtaggcagg aggaagttgg gtcctggtgg tcaggttcac acactggctg 4200

gacaccagtg gcagcagcac caggaacaca aacatggtgg caaatcggag gctggatcgg 4260

tcccggtgtc ttctatggag gtcaaaacag cgtggatggc gtctccaggc gatctgacgg 4320

ttcactaaac gagctcgtcg acgatctcta tcactgatag ggagatctct atcactgata 4380

gggagagctc tgcttatata gacctcccac cgtacacgcc taccgcccat ttgcgtcaat 4440

ggggcggagt tgttacgaca ttttggaaag tcccgttgat tttggtgcca aaacaaactc 4500

ccattgacgt caatggggtg gagacttgga aatccccgtg agtcaaaccg ctatccacgc 4560

ccattgatgt actgccaaaa ccgcatcacc atggtaatag cgatgactaa tacgtagatg 4620

tactgccaag taggaaagtc ccataaggtc atgtactggg cataatgcca ggcgggccat 4680

ttaccgtcat tgacgtcaat agggggcgta cttggcatat gatacacttg atgtactgcc 4740

aagtgggcag tttaccgtaa atactccacc cattgacgtc aatggaaagt ccctattggc 4800

gttactatgg gaacatacgt cattattgac gtcaatgggc gggggtcgtt gggcggtcag 4860

ccaggcgggc catttaccgt aagttatgta acgcggaact ccatatatgg gctatgaact 4920

aatgaccccg taattgatta ctattacagt gtagtcttat gcaatactct tgtagtcttg 4980

caacatggta acgatgagtt agcaacatgc cttacaagga gagaaaaagc accgtgcatg 5040

ccgattggtg gaagtaaggt ggtacgatcg tgccttatta ggaaggcaac agacgggtct 5100

gacatggatt ggacgaacca ctgaattgcc gcattgcaga gatattgtat ttaagtgcct 5160

agctcgatac ataaacaaac taccccaagc tggccaccat gactacgtcc ggcgttccat 5220

ttggcatgac actacgacca acacgatctc ggttgtctcg gcgcactccg tacagtaggg 5280

atcgtctacc tccttttgag acagaaaccc gcgctaccat actggaggat catccgctgc 5340

tgcccgaatg taacactttg acaatgcaca acgtgagtta cgtgcgaggt cttccctgca 5400

gtgtgggatt tacgctgatt caggaatggg ttgttccctg ggatatggtt ctaacgcggg 5460

aggagcttgt aatcctgagg aagtgtatgc acgtgtgcct gtgttgtgcc aacattgata 5520

tcatgacgag catgatgatc catggttacg agtcctgggc tctccactgt cattgttcca 5580

gtcccggttc cctgcagtgt atagccggcg ggcaggtttt ggccagctgg tttaggatgg 5640

tggtggatgg cgccatgttt aatcagaggt ttatatggta ccgggaggtg gtgaattaca 5700

acatgccaaa agaggtaatg tttatgtcca gcgtgtttat gaggggtcgc cacttaatct 5760

acctgcgctt gtggtatgat ggccacgtgg gttctgtggt ccccgccatg agctttggat 5820

acagcgcctt gcactgtggg attttgaaca atattgtggt gctgtgctgc agttactgtg 5880

ctgatttaag tgagatcagg gtgcgctgct gtgcccggag gacaaggcgc cttatgctgc 5940

gggcggtgcg aatcatcgct gaggagacca ctgccatgtt gtattcctgc aggacggagc 6000

ggcggcggca gcagtttatt cgcgcgctgc tgcagcacca ccgccctatc ctgatgcacg 6060

attatgactc tacccccatg tagaagcttg gggatcaatt ctctagagct cgctgatcag 6120

cctcgactgt gccttctagt tgccagccat ctgttgtttg cccctccccc gtgccttcct 6180

tgaccctgga aggtgccact cccactgtcc tttcctaata aaatgaggaa attgcatcgc 6240

attgtctgag taggtgtcat tctattctgg ggggtggggt ggggcaggac agcaaggggg 6300

aggattggga agacaatagc aggcatgctg gggatgcggt gggctctatg gcttctgagg 6360

caaattgggc gtggcttaag ggtgggaaag aatatataag gtgggggtct tatgtagttt 6420

tgtatctgtt ttgcagcagc cgccgccgcc atgagcacca actcgtttga tggaagcatt 6480

gtgagctcat atttgacaac gcgcatgccc ccatgggccg gggtgcgtca gaatgtgatg 6540

ggctccagca ttgatggtcg ccccgtcctg cccgcaaact ctactacctt gacctacgag 6600

accgtgtctg gaacgccgtt ggagactgca gcctccgccg ccgcttcagc cgctgcagcc 6660

accgcccgcg ggattgtgac tgactttgct ttcctgagcc cgcttgcaag cagtgcagct 6720

tcccgttcat ccgcccgcga tgacaagttg acggctcttt tggcacaatt ggattctttg 6780

acccgggaac ttaatgtcgt ttctcagcag ctgttggatc tgcgccagca ggtttctgcc 6840

ctgaaggctt cctcccctcc caatgcggtt taaaacataa ataaaaaacc agactctgtt 6900

tggatttgga tcaagcaagt gtcttgctgt ctttatttag gggttttgcg cgcgcggtag 6960

gcccgggacc agcggtctcg gtcgttgagg gtcctgtgta ttttttccag gacgtggtaa 7020

aggtgactct ggatgttcag atacatgggc ataagcccgt ctctggggtg gaggtagcac 7080

cactgcagag cttcatgctg cggggtggtg ttgtagatga tccagtcgta gcaggagcgc 7140

tgggcgtggt gcctaaaaat gtctttcagt agcaagctga ttgccagggg caggcccttg 7200

gtgtaagtgt ttacaaagcg gttaagctgg gatgggtgca tacgtgggga tatgagatgc 7260

atcttggact gtatttttag gttggctatg ttcccagcca tatccctccg gggattcatg 7320

ttgtgcagaa ccaccagcac agtgtatccg gtgcacttgg gaaatttgtc atgtagctta 7380

gaaggaaatg cgtggaagaa cttggagacg cccttgtgac ctccaagatt ttccatgcat 7440

tcgtccataa tgatggcaat gggcccacgg gcggcggcct gggcgaagat atttctggga 7500

tcactaacgt catagttgtg ttccaggatg agatcgtcat aggccatttt tacaaagcgc 7560

gggcggaggg tgccagactg cggtataatg gttccatccg gcccaggggc gtagttaccc 7620

tcacagattt gcatttccca cgctttgagt tcagatgggg ggatcatgtc tacctgcggg 7680

gcgatgaaga aaacggtttc cggggtaggg gagatcagct gggaagaaag caggttcctg 7740

agcagctgcg acttaccgca gccggtgggc ccgtaaatca cacctattac cggctgcaac 7800

tggtagttaa gagagctgca gctgccgtca tccctgagca ggggggccac ttcgttaagc 7860

atgtccctga ctcgcatgtt ttccctgacc aaatccgcca gaaggcgctc gccgcccagc 7920

gatagcagtt cttgcaagga agcaaagttt ttcaacggtt tgagaccgtc cgccgtaggc 7980

atgcttttga gcgtttgacc aagcagttcc aggcggtccc acagctcggt cacctgctct 8040

acggcatctc gatccagcat atctcctcgt ttcgcgggtt ggggcggctt tcgctgtacg 8100

gcagtagtcg gtgctcgtcc agacgggcca gggtcatgtc tttccacggg cgcagggtcc 8160

tcgtcagcgt agtctgggtc acggtgaagg ggtgcgctcc gggctgcgcg ctggccaggg 8220

tgcgcttgag gctggtcctg ctggtgctga agcgctgccg gtcttcgccc tgcgcgtcgg 8280

ccaggtagca tttgaccatg gtgtcatagt ccagcccctc cgcggcgtgg cccttggcgc 8340

gcagcttgcc cttggaggag gcgccgcacg aggggcagtg cagacttttg agggcgtaga 8400

gcttgggcgc gagaaatacc gattccgggg agtaggcatc cgcgccgcag gccccgcaga 8460

cggtctcgca ttccacgagc caggtgagct ctggccgttc ggggtcaaaa accaggtttc 8520

ccccatgctt tttgatgcgt ttcttacctc tggtttccat gagccggtgt ccacgctcgg 8580

tgacgaaaag gctgtccgtg tccccgtata cagacttgag aggcctgtcc tcgagcggtg 8640

ttccgcggtc ctcctcgtat agaaactcgg accactctga gacaaaggct cgcgtccagg 8700

ccagcacgaa ggaggctaag tgggaggggt agcggtcgtt gtccactagg gggtccactc 8760

gctccagggt gtgaagacac atgtcgccct cttcggcatc aaggaaggtg attggtttgt 8820

aggtgtaggc cacgtgaccg ggtgttcctg aaggggggct ataaaagggg gtgggggcgc 8880

gttcgtcctc actctcttcc gcatcgctgt ctgcgagggc cagctgttgg ggtgagtact 8940

ccctctgaaa agcgggcatg acttctgcgc taagattgtc agtttccaaa aacgaggagg 9000

atttgatatt cacctggccc gcggtgatgc ctttgagggt ggccgcatcc atctggtcag 9060

aaaagacaat ctttttgttg tcaagcttgg tggcaaacga cccgtagagg gcgttggaca 9120

gcaacttggc gatggagcgc agggtttggt ttttgtcgcg atcggcgcgc tccttggccg 9180

cgatgtttag ctgcacgtat tcgcgcgcaa cgcaccgcca ttcgggaaag acggtggtgc 9240

gctcgtcggg caccaggtgc acgcgccaac cgcggttgtg cagggtgaca aggtcaacgc 9300

tggtggctac ctctccgcgt aggcgctcgt tggtccagca gaggcggccg cccttgcgcg 9360

agcagaatgg cggtaggggg tctagctgcg tctcgtccgg ggggtctgcg tccacggtaa 9420

agaccccggg cagcaggcgc gcgtcgaagt agtctatctt gcatccttgc aagtctagcg 9480

cctgctgcca tgcgcgggcg gcaagcgcgc gctcgtatgg gttgagtggg ggaccccatg 9540

gcatggggtg ggtgagcgcg gaggcgtaca tgccgcaaat gtcgtaaacg tagaggggct 9600

ctctgagtat tccaagatat gtagggtagc atcttccacc gcggatgctg gcgcgcacgt 9660

aatcgtatag ttcgtgcgag ggagcgagga ggtcgggacc gaggttgcta cgggcgggct 9720

gctctgctcg gaagactatc tgcctgaaga tggcatgtga gttggatgat atggttggac 9780

gctggaagac gttgaagctg gcgtctgtga gacctaccgc gtcacgcacg aaggaggcgt 9840

aggagtcgcg cagcttgttg accagctcgg cggtgacctg cacgtctagg gcgcagtagt 9900

ccagggtttc cttgatgatg tcatacttat cctgtccctt ttttttccac agctcgcggt 9960

tgaggacaaa ctcttcgcgg tctttccagt actcttggat cggaaacccg tcggcctccg 10020

aacggtaaga gcctagcatg tagaactggt tgacggcctg gtaggcgcag catccctttt 10080

ctacgggtag cgcgtatgcc tgcgcggcct tccggagcga ggtgtgggtg agcgcaaagg 10140

tgtccctgac catgactttg aggtactggt atttgaagtc agtgtcgtcg catccgccct 10200

gctcccagag caaaaagtcc gtgcgctttt tggaacgcgg atttggcagg gcgaaggtga 10260

catcgttgaa gagtatcttt cccgcgcgag gcataaagtt gcgtgtgatg cggaagggtc 10320

ccggcacctc ggaacggttg ttaattacct gggcggcgag cacgatctcg tcaaagccgt 10380

tgatgttgtg gcccacaatg taaagttcca agaagcgcgg gatgcccttg atggaaggca 10440

atttttaag ttcctcgtag gtgagctctt caggggagct gagcccgtgc tctgaaaggg 10500

cccagtctgc aagatgaggg ttggaagcga cgaatgagct ccacaggtca cgggccatta 10560

gcatttgcag gtggtcgcga aaggtcctaa actggcgacc tatggccatt ttttctgggg 10620

tgatgcagta gaaggtaagc gggtcttgtt cccagcggtc ccatccaagg ttcgcggcta 10680

ggtctcgcgc ggcagtcact agaggctcat ctccgccgaa cttcatgacc agcatgaagg 10740

gcacgagctg cttcccaaag gcccccatcc aagtataggt ctctacatcg taggtgacaa 10800

agagacgctc ggtgcgagga tgcgagccga tcgggaagaa ctggatctcc cgccaccaat 10860

tggaggagtg gctattgatg tggtgaaagt agaagtccct gcgacgggcc gaacactcgt 10920

gctggctttt gtaaaaacgt gcgcagtact ggcagcggtg cacgggctgt acatcctgca 10980

cgaggttgac ctgacgaccg cgcacaagga agcagagtgg gaatttgagc ccctcgcctg 11040

gcgggtttgg ctggtggtct tctacttcgg ctgcttgtcc ttgaccgtct ggctgctcga 11100

ggggagttac ggtggatcgg accaccacgc cgcgcgagcc caaagtccag atgtccgcgc 11160

gcggcggtcg gagcttgatg acaacatcgc gcagatggga gctgtccatg gtctggagct 11220

cccgcggcgt caggtcaggc gggagctcct gcaggtttac ctcgcataga cgggtcaggg 11280

cgcgggctag atccaggtga tacctaattt ccaggggctg gttggtggcg gcgtcgatgg 11340

cttgcaagag gccgcatccc cgcggcgcga ctacggtacc gcgcggcggg cggtgggccg 11400

cgggggtgtc cttggatgat gcatctaaaa gcggtgacgc gggcgagccc ccggaggtag 11460

gggggctcc ggacccgccg ggagaggggg caggggcacg tcggcgccgc gcgcgggcag 11520

gagctggtgc tgcgcgcgta ggttgctggc gaacgcgacg acgcggcggt tgatctcctg 11580

aatctggcgc ctctgcgtga agacgacggg cccggtgagc ttgaacctga aagagagttc 11640

gacagaatca atttcggtgt cgttgacggc ggcctggcgc aaaatctcct gcacgtctcc 11700

tgagttgtct tgataggcga tctcggccat gaactgctcg atctcttcct cctggagatc 11760

tccgcgtccg gctcgctcca cggtggcggc gaggtcgttg gaaatgcggg ccatgagctg 11820

cgagaaggcg ttgaggcctc cctcgttcca gacgcggctg tagaccacgc ccccttcggc 11880

atcgcgggcg cgcatgacca cctgcgcgag attgagctcc acgtgccggg cgaagacggc 11940

gtagtttcgc aggcgctgaa agaggtagtt gagggtggtg gcggtgtgtt ctgccacgaa 12000

gaagtacata acccagcgtc gcaacgtgga ttcgttgata tcccccaagg cctcaaggcg 12060

ctccatggcc tcgtagaagt ccacggcgaa gttgaaaaac tgggagttgc gcgccgacac 12120

ggttaactcc tcctccagaa gacggatgag ctcggcgaca gtgtcgcgca cctcgcgctc 12180

aaaggctaca ggggcctctt cttcttcttc aatctcctct tccataaggg cctccccttc 12240

ttcttcttct ggcggcggtg ggggaggggg gacacggcgg cgacgacggc gcaccgggag 12300

gcggtcgaca aagcgctcga tcatctcccc gcggcgacgg cgcatggtct cggtgacggc 12360

gcggccgttc tcgcgggggc gcagttggaa gacgccgccc gtcatgtccc ggttatgggt 12420

tggcgggggg ctgccatgcg gcagggatac ggcgctaacg atgcatctca acaattgttg 12480

tgtaggtact ccgccgccga gggacctgag cgagtccgca tcgaccggat cggaaaacct 12540

ctcgagaaag gcgtctaacc agtcacagtc gcaaggtagg ctgagcaccg tggcgggcgg 12600

cagcgggcgg cggtcggggt tgtttctggc ggaggtgctg ctgatgatgt aattaaagta 12660

ggcggtcttg agacggcgga tggtcgacag aagcaccatg tccttgggtc cggcctgctg 12720

aatgcgcagg cggtcggcca tgccccaggc ttcgttttga catcggcgca ggtctttgta 12780

gtagtcttgc atgagccttt ctaccggcac ttcttcttct ccttcctctt gtcctgcatc 12840

tcttgcatct atcgctgcgg cggcggcgga gtttggccgt aggtggcgcc ctcttcctcc 12900

catgcgtgtg accccgaagc ccctcatcgg ctgaagcagg gctaggtcgg cgacaacgcg 12960

ctcggctaat atggcctgct gcacctgcgt gagggtagac tggaagtcat ccatgtccac 13020

aaagcggtgg tatgcgcccg tgttgatggt gtaagtgcag ttggccataa cggaccagtt 13080

aacggtctgg tgacccggct gcgagagctc ggtgtacctg agacgcgagt aagccctcga 13140

gtcaaatacg tagtcgttgc aagtccgcac caggtactgg tatcccacca aaaagtgcgg 13200

cggcggctgg cggtagaggg gccagcgtag ggtggccggg gctccggggg cgagatcttc 13260

caacataagg cgatgatatc cgtagatgta cctggacatc caggtgatgc cggcggcggt 13320

ggtggaggcg cgcggaaagt cgcggacgcg gttccagatg ttgcgcagcg gcaaaaagtg 13380

ctccatggtc gggacgctct ggccggtcag gcgcgcgcaa tcgttgacgc tctagcgtgc 13440

aaaaggagag cctgtaagcg ggcactcttc cgtggtctgg tggataaatt cgcaagggta 13500

tcatggcgga cgaccggggt tcgagccccg tatccggccg tccgccgtga tccatgcggt 13560

taccgcccgc gtgtcgaacc caggtgtgcg acgtcagaca acgggggagt gctccttttg 13620

gcttccttcc aggcgcggcg gctgctgcgc tagcttttt ggccactggc cgcgcgcagc 13680

gtaagcggtt aggctggaaa gcgaaagcat taagtggctc gctccctgta gccggagggt 13740

tattttccaa gggttgagtc gcgggacccc cggttcgagt ctcggaccgg ccggactgcg 13800

gcgaacgggg gtttgcctcc ccgtcatgca agaccccgct tgcaaattcc tccggaaaca 13860

gggacgagcc ccttttttgc ttttcccaga tgcatccggt gctgcggcag atgcgccccc 13920

ctcctcagca gcggcaagag caagagcagc ggcagacatg cagggcaccc tcccctcctc 13980

ctaccgcgtc aggaggggcg acatccgcgg ttgacgcggc agcagatggt gattacgaac 14040

ccccgcggcg ccgggcccgg cactacctgg acttggagga gggcgagggc ctggcgcggc 14100

taggagcgcc ctctcctgag cggcacccaa gggtgcagct gaagcgtgat acgcgtgagg 14160

cgtacgtgcc gcggcagaac ctgtttcgcg accgcgaggg agaggagccc gaggagatgc 14220

gggatcgaaa gttccacgca gggcgcgagc tgcggcatgg cctgaatcgc gagcggttgc 14280

tgcgcgagga ggactttgag cccgacgcgc gaaccgggat tagtcccgcg cgcgcacacg 14340

tggcggccgc cgacctggta accgcatacg agcagacggt gaaccaggag attaactttc 14400

aaaaaagctt taacaaccac gtgcgtacgc ttgtggcgcg cgaggaggtg gctataggac 14460

tgatgcatct gtgggacttt gtaagcgcgc tggagcaaaa cccaaatagc aagccgctca 14520

tggcgcagct gttccttata gtgcagcaca gcagggacaa cgaggcattc agggatgcgc 14580

tgctaaacat agtagagccc gagggccgct ggctgctcga tttgataaac atcctgcaga 14640

gcatagtggt gcaggagcgc agcttgagcc tggctgacaa ggtggccgcc atcaactatt 14700

ccatgcttag cctgggcaag ttttacgccc gcaagatata ccatacccct tacgttccca 14760

tagacaagga ggtaaagatc gaggggttct acatgcgcat ggcgctgaag gtgcttacct 14820

tgagcgacga cctgggcgtt tatcgcaacg agcgcatcca caaggccgtg agcgtgagcc 14880

ggcggcgcga gctcagcgac cgcgagctga tgcacagcct gcaaagggcc ctggctggca 14940

cgggcagcgg cgatagagag gccgagtcct actttgacgc gggcgctgac ctgcgctggg 15000

ccccaagccg acgcgccctg gaggcagctg gggccggacc tgggctggcg gtggcacccg 15060

cgcgcgctgg caacgtcggc ggcgtggagg aatatgacga ggacgatgag tacgagccag 15120

aggacggcga gtactaagcg gtgatgtttc tgatcagatg atgcaagacg caacggaccc 15180

ggcggtgcgg gcggcgctgc agagccagcc gtccggcctt aactccacgg acgactggcg 15240

ccaggtcatg gaccgcatca tgtcgctgac tgcgcgcaat cctgacgcgt tccggcagca 15300

gccgcaggcc aaccggctct ccgcaattct ggaagcggtg gtcccggcgc gcgcaaaccc 15360

cacgcacgag aaggtgctgg cgatcgtaaa cgcgctggcc gaaaacaggg ccatccggcc 15420

cgacgaggcc ggcctggtct acgacgcgct gcttcagcgc gtggctcgtt acaacagcgg 15480

caacgtgcag accaacctgg accggctggt gggggatgtg cgcgaggccg tggcgcagcg 15540

tgagcgcgcg cagcagcagg gcaacctggg ctccatggtt gcactaaacg ccttcctgag 15600

tacacagccc gccaacgtgc cgcggggaca ggaggactac accaactttg tgagcgcact 15660

gcggctaatg gtgactgaga caccgcaaag tgaggtgtac cagtctgggc cagactattt 15720

tttccagacc agtagacaag gcctgcagac cgtaaacctg agccaggctt tcaaaaactt 15780

gcaggggctg tgggggtgc gggctcccac aggcgaccgc gcgaccgtgt ctagcttgct 15840

gacgcccaac tcgcgcctgt tgctgctgct aatagcgccc ttcacggaca gtggcagcgt 15900

gtcccgggac acatacctag gtcacttgct gacactgtac cgcgaggcca taggtcaggc 15960

gcatgtggac gagcatactt tccaggagat tacaagtgtc agccgcgcgc tggggcagga 16020

ggacacgggc agcctggagg caaccctaaa ctacctgctg accaaccggc ggcagaagat 16080

cccctcgttg cacagtttaa acagcgagga ggagcgcatt ttgcgctacg tgcagcagag 16140

cgtgagcctt aacctgatgc gcgacggggt aacgcccagc gtggcgctgg acatgaccgc 16200

gcgcaacatg gaaccgggca tgtatgcctc aaaccggccg tttatcaacc gcctaatgga 16260

ctacttgcat cgcgcggccg ccgtgaaccc cgagtatttc accaatgcca tcttgaaccc 16320

gcactggcta ccgccccctg gtttctacac cgggggattc gaggtgcccg agggtaacga 16380

tggattcctc tgggacgaca tagacgacag cgtgttttcc ccgcaaccgc agaccctgct 16440

agagttgcaa cagcgcgagc aggcagaggc ggcgctgcga aaggaaagct tccgcaggcc 16500

aagcagcttg tccgatctag gcgctgcggc cccgcggtca gatgctagta gcccatttcc 16560

aagcttgata gggtctctta ccagcactcg caccacccgc ccgcgcctgc tgggcgagga 16620

ggagtaccta aacaactcgc tgctgcagcc gcagcgcgaa aaaaacctgc ctccggcatt 16680

tcccaacaac gggatagaga gcctagtgga caagatgagt agatggaaga cgtacgcgca 16740

ggagcacagg gacgtgccag gcccgcgccc gcccacccgt cgtcaaaggc acgaccgtca 16800

gcggggtctg gtgtgggagg acgatgactc ggcagacgac agcagcgtcc tggatttggg 16860

agggagtggc aacccgtttg cgcaccttcg ccccaggctg gggagaatgt tttaaaaaaa 16920

aaaaagcatg atgcaaaata aaaaactcac caaggccatg gcaccgagcg ttggttttct 16980

tgtattcccc ttagtatgcg gcgcgcggcg atgtatgagg aaggtcctcc tccctcctac 17040

gagagtgtgg tgagcgcggc gccagtggcg gcggcgctgg gttctccctt cgatgctccc 17100

ctggacccgc cgtttgtgcc tccgcggtac ctgcggccta ccgggggggag aaacagcatc 17160

cgttactctg agttggcacc cctattcgac accacccgtg tgtacctggt ggacaacaag 17220

tcaacggatg tggcatccct gaactaccag aacgaccaca gcaactttct gaccacggtc 17280

attcaaaaca atgactacag cccgggggag gcaagcacac agaccatcaa tcttgacgac 17340

cggtcgcact ggggcggcga cctgaaaacc atcctgcata ccaacatgcc aaatgtgaac 17400

gagttcatgt ttaccaataa gtttaaggcg cgggtgatgg tgtcgcgctt gcctactaag 17460

gacaatcagg tggagctgaa atacgagtgg gtggagttca cgctgcccga gggcaactac 17520

tccgagacca tgaccataga ccttatgaac aacgcgatcg tggagcacta cttgaaagtg 17580

ggcagacaga acggggttct ggaaagcgac atcggggtaa agtttgacac ccgcaacttc 17640

agactggggt ttgaccccgt cactggtctt gtcatgcctg gggtatatac aaacgaagcc 17700

ttccatccag acatcatttt gctgccagga tgcggggtgg acttcaccca cagccgcctg 17760

agcaacttgt tgggcatccg caagcggcaa cccttccagg agggctttag gatcacctac 17820

gatgatctgg agggtggtaa cattcccgca ctgttggatg tggacgccta ccaggcgagc 17880

ttgaaagatg acaccgaaca gggcgggggt ggcgcaggcg gcagcaacag cagtggcagc 17940

ggcgcggaag agaactccaa cgcggcagcc gcggcaatgc agccggtgga ggacatgaac 18000

gatcatgcca ttcgcggcga cacctttgcc acacgggctg aggagaagcg cgctgaggcc 18060

gaagcagcgg ccgaagctgc cgcccccgct gcgcaacccg aggtcgagaa gcctcagaag 18120

aaaccggtga tcaaacccct gacagaggac agcaagaaac gcagttacaa cctaataagc 18180

aatgacagca ccttcaccca gtaccgcagc tggtaccttg catacaacta cggcgaccct 18240

cagaccggaa tccgctcatg gaccctgctt tgcactcctg acgtaacctg cggctcggag 18300

caggtctact ggtcgttgcc agacatgatg caagaccccg tgaccttccg ctccacgcgc 18360

cagatcagca actttccggt ggtgggcgcc gagctgttgc ccgtgcactc caagagcttc 18420

tacaacgacc aggccgtcta ctcccaactc atccgccagt ttacctctct gacccacgtg 18480

ttcaatcgct ttcccgagaa ccagattttg gcgcgcccgc cagcccccac catcaccacc 18540

gtcagtgaaa acgttcctgc tctcacagat cacgggacgc taccgctgcg caacagcatc 18600

ggaggagtcc agcgagtgac cattactgac gccagacgcc gcacctgccc ctacgtttac 18660

aaggccctgg gcatagtctc gccgcgcgtc ctatcgagcc gcacttttg agcaagcatg 18720

tccatcctta tatcgcccag caataacaca ggctggggcc tgcgcttccc aagcaagatg 18780

tttggcgggg ccaagaagcg ctccgaccaa cacccagtgc gcgtgcgcgg gcactaccgc 18840

gcgccctggg gcgcgcacaa acgcggccgc actgggcgca ccaccgtcga tgacgccatc 18900

gacgcggtgg tggaggaggc gcgcaactac acgcccacgc cgccaccagt gtccacagtg 18960

gacgcggcca ttcagaccgt ggtgcgcgga gcccggcgct atgctaaaat gaagagacgg 19020

cggaggcgcg tagcacgtcg ccaccgccgc cgacccggca ctgccgccca acgcgcggcg 19080

gcggccctgc ttaaccgcgc acgtcgcacc ggccgacggg cggccatgcg ggccgctcga 19140

aggctggccg cgggtattgt cactgtgccc cccaggtcca ggcgacgagc ggccgccgca 19200

gcagccgcgg ccattagtgc tatgactcag ggtcgcaggg gcaacgtgta ttgggtgcgc 19260

gactcggtta gcggcctgcg cgtgcccgtg cgcacccgcc ccccgcgcaa ctagattgca 19320

agaaaaaact acttagactc gtactgttgt atgtatccag cggcggcggc gcgcaacgaa 19380

gctatgtcca agcgcaaaat caaagaagag atgctccagg tcatcgcgcc ggagatctat 19440

ggcccccga agaaggaaga gcaggattac aagccccgaa agctaaagcg ggtcaaaaag 19500

aaaaagaaag atgatgatga tgaacttgac gacgaggtgg aactgctgca cgctaccgcg 19560

cccaggcgac gggtacagtg gaaaggtcga cgcgtaaaac gtgttttgcg acccggcacc 19620

accgtagtct ttacgcccgg tgagcgctcc acccgcacct acaagcgcgt gtatgatgag 19680

gtgtacggcg acgaggacct gcttgagcag gccaacgagc gcctcgggga gtttgcctac 19740

ggaaagcggc ataaggacat gctggcgttg ccgctggacg agggcaaccc aacacctagc 19800

ctaaagcccg taacactgca gcaggtgctg cccgcgcttg caccgtccga agaaaagcgc 19860

ggcctaaagc gcgagtctgg tgacttggca cccaccgtgc agctgatggt acccaagcgc 19920

cagcgactgg aagatgtctt ggaaaaaatg accgtggaac ctgggctgga gcccgaggtc 19980

cgcgtgcggc caatcaagca ggtggcgccg ggactgggcg tgcagaccgt ggacgttcag 20040

atacccacta ccagtagcac cagtattgcc accgccacag agggcatgga gacacaaacg 20100

tccccggttg cctcagcggt ggcggatgcc gcggtgcagg cggtcgctgc ggccgcgtcc 20160

aagacctcta cggaggtgca aacggacccg tggatgtttc gcgtttcagc cccccggcgc 20220

ccgcgccgtt cgaggaagta cggcgccgcc agcgcgctac tgcccgaata tgccctacat 20280

ccttccattg cgcctacccc cggctatcgt ggctacacct accgccccag aagacgagca 20340

actacccgac gccgaaccac cactggaacc cgccgccgcc gtcgccgtcg ccagcccgtg 20400

ctggccccga tttccgtgcg cagggtggct cgcgaaggag gcaggaccct ggtgctgcca 20460

acagcgcgct accaccccag catcgtttaa aagccggtct ttgtggttct tgcagatatg 20520

gccctcacct gccgcctccg tttcccggtg ccgggattcc gaggaagaat gcaccgtagg 20580

aggggcatgg ccggccacgg cctgacgggc ggcatgcgtc gtgcgcacca ccggcggcgg 20640

cgcgcgtcgc accgtcgcat gcgcggcggt atcctgcccc tccttattcc actgatcgcc 20700

gcggcgattg gcgccgtgcc cggaattgca tccgtggcct tgcaggcgca gagacactga 20760

ttaaaaacaa gttgcatgtg gaaaaatcaa aataaaaagt ctggactctc acgctcgctt 20820

ggtcctgtaa ctattttgta gaatggaaga catcaacttt gcgtctctgg ccccgcgaca 20880

cggctcgcgc ccgttcatgg gaaactggca agatatcggc accagcaata tgagcggtgg 20940

cgccttcagc tggggctcgc tgtggagcgg cattaaaaat ttcggttcca ccgttaagaa 21000

ctatggcagc aaggcctgga acagcagcac aggccagatg ctgagggata agttgaaaga 21060

gcaaaatttc caacaaaagg tggtagatgg cctggcctct ggcattagcg gggtggtgga 21120

cctggccaac caggcagtgc aaaataagat taacagtaag cttgatcccc gccctcccgt 21180

agaggagcct ccaccggccg tggagacagt gtctccagag gggcgtggcg aaaagcgtcc 21240

gcgccccgac agggaagaaa ctctggtgac gcaaatagac gagcctccct cgtacgagga 21300

ggcactaaag caaggcctgc ccaccacccg tcccatcgcg cccatggcta ccggagtgct 21360

gggccagcac acacccgtaa cgctggacct gcctcccccc gccgacaccc agcagaaacc 21420

tgtgctgcca ggcccgaccg ccgttgttgt aacccgtcct agccgcgcgt ccctgcgccg 21480

cgccgccagc ggtccgcgat cgttgcggcc cgtagccagt ggcaactggc aaagcacact 21540

gaacagcatc gtgggtctgg gggtgcaatc cctgaagcgc cgacgatgct tctgatagct 21600

aacgtgtcgt atgtgtgtca tgtatgcgtc catgtcgccg ccagaggagc tgctgagccg 21660

ccgcgcgccc gctttccaag atggctaccc cttcgatgat gccgcagtgg tcttacatgc 21720

acatctcggg ccaggacgcc tcggagtacc tgagccccgg gctggtgcag tttgcccgcg 21780

ccaccgagac gtacttcagc ctgaataaca agtttagaaa ccccacggtg gcgcctacgc 21840

acgacgtgac cacagaccgg tcccagcgtt tgacgctgcg gttcatccct gtggaccgtg 21900

aggatactgc gtactcgtac aaggcgcggt tcaccctagc tgtgggtgat aaccgtgtgc 21960

tggacatggc ttccacgtac tttgacatcc gcggcgtgct ggacaggggc cctactttta 22020

agccctactc tggcactgcc tacaacgccc tggctcccaa gggtgcccca aatccttgcg 22080

aatgggatga agctgctact gctcttgaaa taaacctaga agaagaggac gatgacaacg 22140

aagacgaagt agacgagcaa gctgagcagc aaaaaactca cgtatttggg caggcgcctt 22200

attctggtat aaatattaca aaggagggta ttcaaatagg tgtcgaaggt caaacaccta 22260

aatatgccga taaaacattt caacctgaac ctcaaatagg agaatctcag tggtacgaaa 22320

cagaaattaa tcatgcagct gggagagtcc taaaaaagac taccccaatg aaaccatgtt 22380

acggttcata tgcaaaaccc acaaatgaaa atggagggca aggcattctt gtaaagcaac 22440

aaaatggaaa gctagaaagt caagtggaaa tgcaattttt ctcaactact gaggcagccg 22500

caggcaatgg tgataacttg actcctaaag tggtattgta cagtgaagat gtagatatag 22560

aaaccccaga cactcatatt tcttacatgc ccactattaa ggaaggtaac tcacgagaac 22620

taatgggcca acaatctatg cccaacaggc ctaattacat tgcttttagg gacaatttta 22680

ttggtctaat gtattacaac agcacgggta atatgggtgt tctggcgggc caagcatcgc 22740

agttgaatgc tgttgtagat ttgcaagaca gaaacacaga gctttcatac cagcttttgc 22800

ttgattccat tggtgataga accaggtact tttctatgtg gaatcaggct gttgacagct 22860

atgatccaga tgttagaatt attgaaaatc atggaactga agatgaactt ccaaattact 22920

gctttccact gggaggtgtg attaatacag agactcttac caaggtaaaa cctaaaacag 22980

gtcaggaaaa tggatgggaa aaagatgcta cagaattttc agataaaaat gaaataagag 23040

ttggaaataa ttttgccatg gaaatcaatc taaatgccaa cctgtggaga aatttcctgt 23100

actccaacat agcgctgtat ttgcccgaca agctaaagta cagtccttcc aacgtaaaaa 23160

tttctgataa cccaaacacc tacgactaca tgaacaagcg agtggtggct cccgggctag 23220

tggactgcta cattaacctt ggagcacgct ggtcccttga ctatatggac aacgtcaacc 23280

catttaacca ccaccgcaat gctggcctgc gctaccgctc aatgttgctg ggcaatggtc 23340

gctatgtgcc cttccacatc caggtgcctc agaagttctt tgccattaaa aacctccttc 23400

tcctgccggg ctcatacacc tacgagtgga acttcaggaa ggatgttaac atggttctgc 23460

agagctccct aggaaatgac ctaagggttg acggagccag cattaagttt gatagcattt 23520

gcctttacgc caccttcttc cccatggccc acaacaccgc ctccacgctt gaggccatgc 23580

ttagaaacga caccaacgac cagtccttta acgactatct ctccgccgcc aacatgctct 23640

accctatacc cgccaacgct accaacgtgc ccatatccat cccctcccgc aactgggcgg 23700

ctttccgcgg ctgggccttc acgcgcctta agactaagga aaccccatca ctgggctcgg 23760

gctacgaccc ttattacacc tactctggct ctatacccta cctagatgga acctttacc 23820

tcaaccacac ctttaagaag gtggccatta cctttgactc ttctgtcagc tggcctggca 23880

atgaccgcct gcttaccccc aacgagtttg aaattaagcg ctcagttgac ggggagggtt 23940

acaacgttgc ccagtgtaac atgaccaaag actggttcct ggtacaaatg ctagctaact 24000

ataacattgg ctaccagggc ttctatatcc cagagagcta caaggaccgc atgtactcct 24060

tctttagaaa cttccagccc atgagccgtc aggtggtgga tgatactaaa tacaaggact 24120

accaacaggt gggcatccta caccaacaca acaactctgg atttgttggc taccttgccc 24180

ccaccatgcg cgaaggacag gcctaccctg ctaacttccc ctatccgctt ataggcaaga 24240

ccgcagttga cagcattacc cagaaaaagt ttctttgcga tcgcaccctt tggcgcatcc 24300

cattctccag taactttatg tccatgggcg cactcacaga cctgggccaa aaccttctct 24360

acgccaactc cgcccacgcg ctagacatga cttttgaggt ggatcccatg gacgagccca 24420

cccttcttta tgttttgttt gaagtctttg acgtggtccg tgtgcaccag ccgcaccgcg 24480

gcgtcatcga aaccgtgtac ctgcgcacgc ccttctcggc cggcaacgcc acaacataaa 24540

gaagcaagca acatcaacaa cagctgccgc catgggctcc agtgagcagg aactgaaagc 24600

cattgtcaaa gatcttggtt gtgggccata ttttttgggc acctatgaca agcgctttcc 24660

aggctttgtt tctccacaca agctcgcctg cgccatagtc aatacggccg gtcgcgagac 24720

tgggggcgta cactggatgg cctttgcctg gaacccgcac tcaaaaacat gctacctctt 24780

tgagcccttt ggcttttctg accagcgact caagcaggtt taccagtttg agtacgagtc 24840

actcctgcgc cgtagcgcca ttgcttcttc ccccgaccgc tgtataacgc tggaaaagtc 24900

cacccaaagc gtacaggggc ccaactcggc cgcctgtgga ctattctgct gcatgtttct 24960

ccacgccttt gccaactggc cccaaactcc catggatcac aaccccacca tgaaccttat 25020

taccggggta cccaactcca tgctcaacag tccccaggta cagcccaccc tgcgtcgcaa 25080

ccaggaacag ctctacagct tcctggagcg ccactcgccc tacttccgca gccacagtgc 25140

gcagattagg agcgccactt ctttttgtca cttgaaaaac atgtaaaaat aatgtactag 25200

agacactttc aataaaggca aatgctttta tttgtacact ctcgggtgat tatttacccc 25260

caccttgcc gtctgcgccg tttaaaaatc aaaggggttc tgccgcgcat cgctatgcgc 25320

cactggcagg gacacgttgc gatactggtg tttagtgctc cacttaaact caggcacaac 25380

catccgcggc agctcggtga agttttcact ccacaggctg cgcaccatca ccaacgcgtt 25440

tagcaggtcg ggcgccgata tcttgaagtc gcagttgggg cctccgccct gcgcgcgcga 25500

gttgcgatac acagggttgc agcactggaa cactatcagc gccgggtggt gcacgctggc 25560

cagcacgctc ttgtcggaga tcagatccgc gtccaggtcc tccgcgttgc tcagggcgaa 25620

cggagtcaac tttggtagct gccttcccaa aaagggcgcg tgcccaggct ttgagttgca 25680

ctcgcaccgt agtggcatca aaaggtgacc gtgcccggtc tgggcgttag gatacagcgc 25740

ctgcataaaa gccttgatct gcttaaaagc cacctgagcc tttgcgcctt cagagaagaa 25800

catgccgcaa gacttgccgg aaaactgatt ggccggacag gccgcgtcgt gcacgcagca 25860

ccttgcgtcg gtgttggaga tctgcaccac atttcggccc caccggttct tcacgatctt 25920

ggccttgcta gactgctcct tcagcgcgcg ctgcccgttt tcgctcgtca catccatttc 25980

aatcacgtgc tccttattta tcataatgct tccgtgtaga cacttaagct cgccttcgat 26040

ctcagcgcag cggtgcagcc acaacgcgca gcccgtgggc tcgtgatgct tgtaggtcac 26100

ctctgcaaac gactgcaggt acgcctgcag gaatcgcccc atcatcgtca caaaggtctt 26160

gttgctggtg aaggtcagct gcaacccgcg gtgctcctcg ttcagccagg tcttgcatac 26220

ggccgccaga gcttccactt ggtcaggcag tagtttgaag ttcgccttta gatcgttatc 26280

cacgtggtac ttgtccatca gcgcgcgcgc agcctccatg cccttctccc acgcagacac 26340

gatcggcaca ctcagcgggt tcatcaccgt aatttcactt tccgcttcgc tgggctcttc 26400

ctcttcctct tgcgtccgca taccacgcgc cactgggtcg tcttcattca gccgccgcac 26460

tgtgcgctta cctcctttgc catgcttgat tagcaccggt gggttgctga aacccaccat 26520

ttgtagcgcc acatcttctc tttcttcctc gctgtccacg attacctctg gtgatggcgg 26580

gcgctcgggc ttgggagaag ggcgcttctt tttcttcttg ggcgcaatgg ccaaatccgc 26640

cgccgaggtc gatggccgcg ggctgggtgt gcgcggcacc agcgcgtctt gtgatgagtc 26700

ttcctcgtcc tcggactcga tacgccgcct catccgcttt tttgggggcg cccggggagg 26760

cggcggcgac ggggacgggg acgacacgtc ctccatggtt gggggacgtc gcgccgcacc 26820

gcgtccgcgc tcgggggtgg tttcgcgctg ctcctcttcc cgactggcca tttccttctc 26880

ctataggcag aaaaagatca tggagtcagt cgagaagaag gacagcctaa ccgccccctc 26940

tgagttcgcc accaccgcct ccaccgatgc cgccaacgcg cctaccacct tccccgtcga 27000

ggcacccccg cttgaggagg aggaagtgat tatcgagcag gacccaggtt ttgtaagcga 27060

agacgacgag gaccgctcag taccaacaga ggataaaaag caagaccagg acaacgcaga 27120

ggcaaacgag gaacaagtcg ggcgggggga cgaaaggcat ggcgactacc tagatgtggg 27180

agacgacgtg ctgttgaagc atctgcagcg ccagtgcgcc attatctgcg acgcgttgca 27240

agagcgcagc gatgtgcccc tcgccatagc ggatgtcagc cttgcctacg aacgccacct 27300

attctcaccg cgcgtacccc ccaaacgcca agaaaacggc acatgcgagc ccaacccgcg 27360

cctcaacttc taccccgtat ttgccgtgcc agaggtgctt gccacctatc acatcttttt 27420

ccaaaactgc aagatacccc tatcctgccg tgccaaccgc agccgagcgg acaagcagct 27480

ggccttgcgg cagggcgctg tcatacctga tatcgcctcg ctcaacgaag tgccaaaaat 27540

ctttgagggt cttggacgcg acgagaagcg cgcggcaaac gctctgcaac aggaaaacag 27600

cgaaaatgaa agtcactctg gagtgttggt ggaactcgag ggtgacaacg cgcgcctagc 27660

cgtactaaaa cgcagcatcg aggtcaccca ctttgcctac ccggcactta acctaccccc 27720

caaggtcatg agcacagtca tgagtgagct gatcgtgcgc cgtgcgcagc ccctggagag 27780

ggatgcaaat ttgcaagaac aaacagagga gggcctaccc gcagttggcg acgagcagct 27840

agcgcgctgg cttcaaacgc gcgagcctgc cgacttggag gagcgacgca aactaatgat 27900

ggccgcagtg ctcgttaccg tggagcttga gtgcatgcag cggttctttg ctgacccgga 27960

gatgcagcgc aagctagagg aaacattgca ctacaccttt cgacagggct acgtacgcca 28020

ggcctgcaag atctccaacg tggagctctg caacctggtc tcctaccttg gaattttgca 28080

cgaaaaccgc cttgggcaaa acgtgcttca ttccacgctc aagggcgagg cgcgccgcga 28140

ctacgtccgc gactgcgttt acttatttct atgctacacc tggcagacgg ccatgggcgt 28200

ttggcagcag tgcttggagg agtgcaacct caaggagctg cagaaactgc taaagcaaaa 28260

cttgaaggac ctatggacgg ccttcaacga gcgctccgtg gccgcgcacc tggcggacat 28320

cattttcccc gaacgcctgc ttaaaaccct gcaacagggt ctgccagact tcaccagtca 28380

aagcatgttg cagaacttta ggaactttat cctagagcgc tcaggaatct tgcccgccac 28440

ctgctgtgca cttcctagcg actttgtgcc cattaagtac cgcgaatgcc ctccgccgct 28500

ttggggccac tgctaccttc tgcagctagc caactacctt gcctaccact ctgacataat 28560

ggaagacgtg agcggtgacg gtctactgga gtgtcactgt cgctgcaacc tatgcacccc 28620

gcaccgctcc ctggtttgca attcgcagct gcttaacgaa agtcaaatta tcggtacctt 28680

tgagctgcag ggtccctcgc ctgacgaaaa gtccgcggct ccggggttga aactcactcc 28740

ggggctgtgg acgtcggctt accttcgcaa atttgtacct gaggactacc acgcccacga 28800

gattaggttc tacgaagacc aatcccgccc gcctaatgcg gagcttaccg cctgcgtcat 28860

tacccagggc cacattcttg gccaattgca agccatcaac aaagcccgcc aagagtttct 28920

gctacgaaag ggacgggggg tttacttgga cccccagtcc ggcgaggagc tcaacccaat 28980

ccccccgccg ccgcagccct atcagcagca gccgcgggcc cttgcttccc aggatggcac 29040

ccaaaaagaa gctgcagctg ccgccgccac ccacggacga ggaggaatac tgggacagtc 29100

aggcagagga ggttttggac gaggaggagg aggacatgat ggaagactgg gagagcctag 29160

acgaggaagc ttccgaggtc gaagaggtgt cagacgaaac accgtcaccc tcggtcgcat 29220

tcccctcgcc ggcgccccag aaatcggcaa ccggttccag catggctaca acctccgctc 29280

ctcaggcgcc gccggcactg cccgttcgcc gacccaaccg tagatgggac accactggaa 29340

ccagggccgg taagtccaag cagccgccgc cgttagccca agagcaacaa cagcgccaag 29400

gctaccgctc atggcgcggg cacaagaacg ccatagttgc ttgcttgcaa gactgtgggg 29460

gcaacatctc cttcgcccgc cgctttcttc tctaccatca cggcgtggcc ttcccccgta 29520

acatcctgca ttactaccgt catctctaca gcccatactg caccggcggc agcggcagca 29580

acagcagcgg ccacacagaa gcaaaggcga ccggatagca agactctgac aaagcccaag 29640

aaatccacag cggcggcagc agcaggagga ggagcgctgc gtctggcgcc caacgaaccc 29700

gtatcgaccc gcgagcttag aaacaggatt tttcccactc tgtatgctat atttcaacag 29760

agcaggggcc aagaacaaga gctgaaaata aaaaacaggt ctctgcgatc cctcacccgc 29820

agctgcctgt atcacaaaag cgaagatcag cttcggcgca cgctggaaga cgcggaggct 29880

ctcttcagta aatactgcgc gctgactctt aaggactagt ttcgcgccct ttctcaaatt 29940

taagcgcgaa aactacgtca tctccagcgg ccacacccgg cgccagcacc tgttgtcagc 30000

gccattatga gcaaggaaat tcccacgccc tacatgtgga gttaccagcc acaaatggga 30060

cttgcggctg gagctgccca agactactca acccgaataa actacatgag cgcgggaccc 30120

cacatgatat cccgggtcaa cggaatacgc gcccaccgaa accgaattct cctggaacag 30180

gcggctatta ccaccacacc tcgtaataac cttaatcccc gtagttggcc cgctgccctg 30240

gtgtaccagg aaagtcccgc tcccaccact gtggtacttc ccagagacgc ccaggccgaa 30300

gttcagatga ctaactcagg ggcgcagctt gcgggcggct ttcgtcacag ggtgcggtcg 30360

cccgggcagg gtataactca cctgacaatc agagggcgag gtattcagct caacgacgag 30420

tcggtgagct cctcgcttgg tctccgtccg gacgggacat ttcagatcgg cggcgccggc 30480

cgctcttcat tcacgcctcg tcaggcaatc ctaactctgc agacctcgtc ctctgagccg 30540

cgctctggag gcattggaac tctgcaattt attgaggagt ttgtgccatc ggtctacttt 30600

aaccccttct cgggacctcc cggccactat ccggatcaat ttattcctaa ctttgacgcg 30660

gtaaaggact cggcggacgg ctacgactga atgttaagtg gagaggcaga gcaactgcgc 30720

ctgaaacacc tggtccactg tcgccgccac aagtgctttg cccgcgactc cggtgagttt 30780

tgctactttg aattgcccga ggatcatatc gagggcccgg cgcacggcgt ccggcttacc 30840

gcccagggag agcttgcccg tagcctgatt cgggagttta cccagcgccc cctgctagtt 30900

gagcgggaca ggggaccctg tgttctcact gtgatttgca actgtcctaa ccctggatta 30960

catcaagatc ctctagttaa tgtcaggtcg cctaagtcga ttaactagag tacccgggga 31020

tcttattccc tttaactaat aaaaaaaaat aataaagcat cacttactta aaatcagtta 31080

gcaaatttct gtccagttta ttcagcagca cctccttgcc ctcctcccag ctctggtatt 31140

gcagcttcct cctggctgca aactttctcc acaatctaaa tggaatgtca gtttcctcct 31200

gttcctgtcc atccgcaccc actatcttca tgttgttgca gatgaagcgc gcaagaccgt 31260

ctgaagatac cttcaacccc gtgtatccat atgacacgga aaccggtcct ccaactgtgc 31320

cttttcttac tcctcccttt gtatccccca atgggtttca agagagtccc cctggggtac 31380

tctctttgcg cctatccgaa cctctagtta cctccaatgg catgcttgcg ctcaaaatgg 31440

gcaacggcct ctctctggac gaggccggca accttacctc ccaaaatgta accactgtga 31500

gcccacctct caaaaaaacc aagtcaaaca taaacctgga aatatctgca cccctcacag 31560

ttacctcaga agccctaact gtggctgccg ccgcacctct aatggtcgcg ggcaacacac 31620

tcaccatgca atcacaggcc ccgctaaccg tgcacgactc caaacttagc attgccaccc 31680

aaggacccct cacagtgtca gaaggaaagc tagccctgca aacatcaggc cccctcacca 31740

ccaccgatag cagtaccctt actatcactg cctcaccccc tctaactact gccactggta 31800

gcttgggcat tgacttgaaa gagcccattt atacacaaaa tggaaaacta ggactaaagt 31860

acggggctcc tttgcatgta acagacgacc taaacacttt gaccgtagca actggtccag 31920

gtgtgactat taataatact tccttgcaaa ctaaagttac tggagccttg ggttttgatt 31980

cacaaggcaa tatgcaactt aatgtagcag gaggactaag gattgattct caaaacagac 32040

gccttatact tgatgttagt tatccgtttg atgctcaaaa ccaactaaat ctaagactag 32100

gacagggccc tctttttata aactcagccc acaacttgga tattaactac aacaaaggcc 32160

tttacttgtt tacagcttca aacaattcca aaaagcttga ggttaaccta agcactgcca 32220

aggggttgat gtttgacgct acagccatag ccattaatgc aggagatggg cttgaatttg 32280

gttcacctaa tgcaccaaac acaaatcccc tcaaaacaaa aattggccat ggcctagaat 32340

ttgattcaaa caaggctatg gttcctaaac taggaactgg ccttagtttt gacagcacag 32400

gtgccattac agtaggaaac aaaaataatg ataagctaac tttgtggacc ggaataaacc 32460

ctccacctaa ctgtcaaatt gtggaaaaca ctaatacaaa tgatggcaaa cttactttag 32520

tattagtaaa aaatggaggg cttgttaatg gctacgtgtc tctagttggt gtatcagaca 32580

ctgtgaacca aatgttcaca caaaagacag caaacatcca attaagatta tattttgact 32640

cttctggaaa tctattaact gaggaatcag acttaaaaat tccacttaaa aataaatctt 32700

ctacagcgac cagtgaaact gtagccagca gcaaagcctt tatgccaagt actacagctt 32760

atcccttcaa caccactact agggatagtg aaaactacat tcatggaata tgttactaca 32820

tgactagtta tgatagaagt ctatttccct tgaacatttc tataatgcta aacagccgta 32880

tgatttcttc caatgttgcc tatgccatac aatttgaatg gaatctaaat gcaagtgaat 32940

ctccagaaag caacatagct acgctgacca catccccctt tttcttttct tacattacag 33000

aagacgacaa ctaaagaatc gtttgtgtta tgtttcaacg tgtttatttt tcaattgcag 33060

aaaatttcaa gtcatttttc attcagtagt atagccccac caccacatag cttatacaga 33120

tcaccgtacc ttaatcaaac tcacagaacc ctagtattca acctgccacc tccctcccaa 33180

cacacagagt acacagtcct ttctccccgg ctggccttaa aaagcatcat atcatgggta 33240

acagacatat tcttaggtgt tatattccac acggtttcct gtcgagccaa acgctcatca 33300

gtgatattaa taaactcccc gggcagctca cttaagttca tgtcgctgtc cagctgctga 33360

gccacaggct gctgtccaac ttgcggttgc ttaacgggcg gcgaaggaga agtccacgct 33420

cacaggatag ggcggtggtg ctgcagcagc gcgcgaataa actgctgccg ccgccgctcc 33480

gtcctgcagg aatacaacat ggcagtggtc tcctcagcga tgattcgcac cgcccgcagc 33540

ataaggcgcc ttgtcctccg ggcacagcag cgcaccctga tctcacttaa atcagcacag 33600

taactgcagc acagcaccac aatattgttc aaaatcccac agtgcaaggc gctgtatcca 33660

aagctcatgg cggggaccac agaacccacg tggccatcat accacaagcg caggtagatt 33720

aagtggcgac ccctcataaa cacgctggac ataaacatta cctcttttgg catgttgtaa 33780

ttcaccacct cccggtacca tataaacctc tgattaaaca tggcgccatc caccaccatc 33840

ctaaaccagc tggccaaaac ctgcccgccg gctatacact gcagggaacc gggactggaa 33900

caatgacagt ggagagccca ggactcgtaa ccatggatca tcatgctcgt catgatatca 33960

atgttggcac aacacaggca cacgtgcata cacttcctca ggattacaag ctcctcccgc 34020

gttagaacca tatcccaggg aacaacccat tcctgaatca gcgtaaatcc cacactgcag 34080

ggaagacctc gcacgtaact cacgttgtgc attgtcaaag tgttacattc gggcagcagc 34140

ggatgatcct ccagtatggt agcgcgggtt tctgtctcaa aaggaggtag acgatcccta 34200

ctgtacggag tgcgccgaga caaccgagat cgtgttggtc gtagtgtcat gccaaatgga 34260

acgccggacg tagtcatatt tcctgaagca aaaccaggtg cgggcgtgac aaacagatct 34320

gcgtctccgg tctcgccgct tagatcgctc tgtgtagtag ttgtagtata tccactctct 34380

caaagcatcc aggcgccccc tggcttcggg ttctatgtaa actccttcat gcgccgctgc 34440

cctgataaca tccaccaccg cagaataagc cacacccagc caacctacac attcgttctg 34500

cgagtcacac acgggaggag cgggaagagc tggaagaacc atgttttttt ttttattcca 34560

aaagattatc caaaacctca aaatgaagat ctattaagtg aacgcgctcc cctccggtgg 34620

cgtggtcaaa ctctacagcc aaagaacaga taatggcatt tgtaagatgt tgcacaatgg 34680

cttccaaaag gcaaacggcc ctcacgtcca agtggacgta aaggctaaac ccttcagggt 34740

gaatctcctc tataaacatt ccagcacctt caaccatgcc caaataattc tcatctcgcc 34800

accttctcaa tatatctcta agcaaatccc gaatattaag tccggccatt gtaaaaatct 34860

gctccagagc gccctccacc ttcagcctca agcagcgaat catgattgca aaaattcagg 34920

ttcctcacag acctgtataa gattcaaaag cggaacatta acaaaaatac cgcgatcccg 34980

taggtccctt cgcagggcca gctgaacata atcgtgcagg tctgcacgga ccagcgcggc 35040

cacttccccg ccaggaacca tgacaaaaga acccacactg attatgacac gcatactcgg 35100

agctatgcta accagcgtag ccccgatgta agcttgttgc atgggcggcg atataaaatg 35160

caaggtgctg ctcaaaaaat caggcaaagc ctcgcgcaaa aaagaaagca catcgtagtc 35220

atgctcatgc agataaaggc aggtaagctc cggaaccacc acagaaaaag acaccatttt 35280

tctctcaaac atgtctgcgg gtttctgcat aaacacaaaa taaaataaca aaaaaacatt 35340

taaacattag aagcctgtct tacaacagga aaaacaaccc ttataagcat aagacggact 35400

acggccatgc cggcgtgacc gtaaaaaaac tggtcaccgt gattaaaaag caccaccgac 35460

agctcctcgg tcatgtccgg agtcataatg taagactcgg taaacacatc aggttgattc 35520

acatcggtca gtgctaaaaa gcgaccgaaa tagcccgggg gaatacatac ccgcaggcgt 35580

agagacaaca ttacagcccc cataggaggt ataacaaaat taataggaga gaaaaacaca 35640

taaacacctg aaaaaccctc ctgcctaggc aaaatagcac cctcccgctc cagaacaaca 35700

tacagcgctt ccacagcggc agccataaca gtcagcctta ccagtaaaaa agaaaaccta 35760

ttaaaaaaac accactcgac acggcaccag ctcaatcagt cacagtgtaa aaaagggcca 35820

agtgcagagc gagtatatat aggactaaaa aatgacgtaa cggttaaagt ccacaaaaaa 35880

cacccagaaa accgcacgcg aacctacgcc cagaaacgaa agccaaaaaa cccacaactt 35940

cctcaaatcg tcacttccgt tttcccacgt tacgtcactt cccattttaa gaaaactaca 36000

attcccaaca catacaagtt actccgccct aaaacctacg tcacccgccc cgttcccacg 36060

ccccgcgcca cgtcacaaac tccacccccc cattatcata ttggcttcaa tccaaaataa 36120

ggtatattat tgatgatg 36138

<210> 43
<211> 36122
<212> DNA
<213> Artificial Sequence

<220>
<223> Adk35RF-Spike/E4orf6(RSV)-E4dl-42(E4re#41)

<400> 43
ttaattaaca tcatcaataa tataccttat tttggattga agccaatatg ataatgaggg 60

ggtggagttt gtgacgtggc gcggggcgtg ggaacggggc gggtgacgta gtagtgtggc 120

ggaagtgtga tgttgcaagt gtggcggaac acatgtaagc gacggatgtg gcaaaagtga 180

cgtttttggt gtgcgccggt gtacacagga agtgacaatt ttcgcgcggt ttaggcgga 240

tgttgtagta aatttgggcg taaccgagta agatttggcc attttcgcgg gaaaactgaa 300

taagaggaag tgaaatctga ataattttgt gttactcata gcgcgtaata atttgatccg 360

cgttaagata cattgatgag tttggacaaa ccacaactag aatgcagtga aaaaaatgct 420

ttatttgtga aatttgtgat gctattgctt tatttgtaac cattataagc tgcaataaac 480

aagttaacaa caacaattgc attcatttta tgtttcaggt tcaggggggag gtgtgggagg 540

ttttttaaag caagtaaaac ctctacaaat gtggtatggc tgattatgat caattttcat 600

ggccacttga tgtattgttc atatttgccc agttcttgga ggtcaatcag ggactcattc 660

aggttcttag ccacctcatt cagtctgtca atctccttct ggatgttcac cacagaggca 720

ttgatgccag agatgtctcc caggtccaca tcagggctgg tgtggttctt gaagtatttg 780

tccagttcct ccttgaagga gtccagttca ggttggagtg ggtcatagac tgtgttgttc 840

acaatgccaa tcaccacatc acagttgcca gacacaaagg tgttgtctgt ggtgataatc 900

tgtggttcat agaagttcct ctgggtcaca aaccagtggg tgccattgct cacaaacact 960

ccctcccttg gaaagtgagc cttgccatca tggcagatgg caggggctgt ggtgaagttc 1020

ttctcctggg caggcacata ggtcacatgc aggaacacca ctccatgagg ggcagactgt 1080

ggaaaactca tcaggtggta gcccttgcca cagaagtcca ccctcttgct ttgtcccagc 1140

acacactcac tcatcttggt ggcagccagg ttggcagatg ccctaatctc agcagccctg 1200

ataagttgtt gggtcacata ggtttggagg gattggagtc tgcctgtaat cagtctgtca 1260

atctggacct cagcctccac cttgtccagt ctgctcagga tgtcattcag cacagaggag 1320

atggctccaa agttgctgga aagttgcttc accagggtgt tcagagcctg ggcattctgg 1380

ttcaccacat cttggagttt gcccagggca gaggctgtgc tggacaggga gtcctgaatc 1440

ttgccaatgg cagagttgaa ctggttggca atcagtttct ggttctcata gagcacattc 1500

tgggtcactc caatgccatt gaacctgtaa gccatctgca tagcaaatgg gatttggagg 1560

gctgctcctg ctccaaaggt ccagccagag gtgatggtgc cagccagcag ggcagaggtg 1620

tattgggcaa tcatctcatc tgtcagcagt ggaggcagca ctgtcagtcc attgaacttc 1680

tgggcacaaa tcaggtccct ggcagcaatg tctcccagac agtctccata ttgcttgatg 1740

aagccagcat cagccagggt caccttgttg aacagcaggt cctcaatgaa ggacctcttg 1800

cttggcttgc ttgggtcagg cagaatctgg ctgaagttga agcctccaaa gtccttgatt 1860

ggaggtgtct tgtaaatctg cttcacctgg gcaaacacct cctgggtgtt cttgtcctgt 1920

tccacagcaa tgcctgtcag agccctgtta agttgggtac agaaggagcc atattggagc 1980

agcaggttgc tacactctgt gctgtctcca cagatataca ttgtacagtc cacagaggtc 2040

ttggtcatac tcacaggcag aatctctgtg gtcacagaga tggtgaagtt ggttgggatg 2100

gcaatgctgt tgttgctgta agccacagag ttctctgctc ccagactcat tgtgtaggca 2160

atgatgctct ggcttgccac agacctcgac ccaccgccac cggtctgggt ctggtaggag 2220

gcacagatgc ctgctccaat tgggatgtca cactcatagg agttgttcac atgctctgct 2280

ccaatcagac agccagccct ggtctggaac acattgctgc ctgtgctgta gaccctccag 2340

gttggtgtaa gttggtcagc atggatagcc acaggcacct cagtacagtt cacatcctgg 2400

tagagcacag ccacctggtt gctggtgttg gtgccaggtg taatcacaga cactcctcca 2460

aaggaacatg gtgtgatgtc cagaatctcc aaggtctgtg ggtccctcac agcatctgtg 2520

gtgtcagcaa tgtccctgcc aaactgttgg aatggcagga acttcttgtt gctctctgtc 2580

agcactcctg tgcctgtcag tccattgaag ttgaagttca cacacttgtt cttcaccagg 2640

ttggtgctct tctttggtcc acacactgtg gcaggggcat ggagcagttc aaaggacagc 2700

accaccaccc tgtatggttg gtagcccact ccattggttg gttggaagcc ataggattgg 2760

agtggaaagt aacagttgaa gccctccact ccattacatg gtgtgctgcc agcctggtaa 2820

atctctgtgc tgatgtccct ctcaaatggt ttcaggttgc tcttcctgaa cagtctgtag 2880

aggtagttgt agttgcctcc caccttgctg tccaggttgt tgctgttcca ggcaatcaca 2940

cagcctgtga agtcatcagg cagtttgtag ttgtagtcag caatcttgcc tgtttgtcca 3000

ggggcaatct gtctcacctc atctccccta atcacaaagg agtcagcata gacattggtg 3060

aaacacaggt cattcagttt ggttgggctc actccataac acttgaaggt gctgaaggag 3120

gcagagttgt agagcacaga gtagtcagcc acacagttgc taatcctctt cctgttccag 3180

gcatagacag aggcaaacct ggtggcattg aacacctctc caaatggaca caggttggtg 3240

atgtttggaa acctcacaat gctctctgtt ggttggaccc tgaagttgct ggtctggtag 3300

atgcccttct ccactgtgaa ggatttcagg gtacacttgg tctcagacag tgggtccagg 3360

gcacagtcca cagcatctgt gatggtgcca ttctcattgt atttcagcag gaaggtcctt 3420

ggttggaggt agcccacata gtaggctgct gctcctgctg tccagccaga ggaggagtct 3480

ccaggtgtca ggtaggacct gtgcagagcc agcagggtct ggaacctggt gatgttgatg 3540

ccaattggca ggtccaccag tggttccaag gcagagaagc cctgtggcag gtccctcacc 3600

aggttgattg gtgtgtgttt gctgtaaatc ttgaagtagc catcaatgtt cttgaacaca 3660

aactccctca ggttcttgaa gttgccctgc ttgccctcca agtccatcag gaatggttgg 3720

ctcacatatt caaaggtaca gttgttggca gaggagtaga ccctgaactc agactccatc 3780

caggacttgt tgttcttgtg gtagtagact cccaggaatg ggtcattaca gaactggaac 3840

tcacacacct taatcaccac attggtggca ttgttcacaa tcagcaggga ctgggtcttg 3900

ctgtccaggg tggtgccaaa aatccagccc ctgatgatgt tgctcttctc tgtgctggca 3960

aagtagactc catcattgaa tggcagcaca gggttgtcaa acctcttggt gccattggtg 4020

ccagacacat ggatggcatg gaaccaggtc acattgctga agaatggcag gaacaggtcc 4080

tgggtgctgt gcagcacaga ggacctgaac accttgtcag ggtagtagac tcccctggtg 4140

aaggagttgg tgtaggcagg aggaagttgg gtcctggtgg tcaggttcac acactggctg 4200

gacaccagtg gcagcagcac caggaacaca aacatggtgg caaatcggag gctggatcgg 4260

tcccggtgtc ttctatggag gtcaaaacag cgtggatggc gtctccaggc gatctgacgg 4320

ttcactaaac gagctcgtcg acgatctcta tcactgatag ggagatctct atcactgata 4380

gggagagctc tgcttatata gacctcccac cgtacacgcc taccgcccat ttgcgtcaat 4440

ggggcggagt tgttacgaca ttttggaaag tcccgttgat tttggtgcca aaacaaactc 4500

ccattgacgt caatggggtg gagacttgga aatccccgtg agtcaaaccg ctatccacgc 4560

ccattgatgt actgccaaaa ccgcatcacc atggtaatag cgatgactaa tacgtagatg 4620

tactgccaag taggaaagtc ccataaggtc atgtactggg cataatgcca ggcgggccat 4680

ttaccgtcat tgacgtcaat aggggggcgta cttggcatat gatacacttg atgtactgcc 4740

aagtgggcag tttaccgtaa atactccacc cattgacgtc aatggaaagt ccctattggc 4800

gttactatgg gaacatacgt cattattgac gtcaatgggc gggggtcgtt gggcggtcag 4860

ccaggcgggc catttaccgt aagttatgta acgcggaact ccatatatgg gctatgaact 4920

aatgaccccg taattgatta ctattacagt gtagtcttat gcaatactct tgtagtcttg 4980

caacatggta acgatgagtt agcaacatgc cttacaagga gagaaaaagc accgtgcatg 5040

ccgattggtg gaagtaaggt ggtacgatcg tgccttatta ggaaggcaac agacgggtct 5100

gacatggatt ggacgaacca ctgaattgcc gcattgcaga gatattgtat ttaagtgcct 5160

agctcgatac ataaacaaac taccccaagc tggccaccat gactacgtcc ggcgttccat 5220

ttggcatgac actacgacca acacgatctc ggttgtctcg gcgcactccg tacagtaggg 5280

atcgtctacc tccttttgag acagaaaccc gcgctaccat actggaggat catccgctgc 5340

tgcccgaatg taacactttg acaatgcaca acgtgagtta cgtgcgaggt cttccctgca 5400

gtgtgggatt tacgctgatt caggaatggg ttgttccctg ggatatggtt ctaacgcggg 5460

aggagcttgt aatcctgagg aagtgtatgc acgtgtgcct gtgttgtgcc aacattgata 5520

tcatgacgag catgatgatc catggttacg agtcctgggc tctccactgt cattgttcca 5580

gtcccggttc cctgcagtgt atagccggcg ggcaggtttt ggccagctgg tttaggatgg 5640

tggtggatgg cgccatgttt aatcagaggt ttatatggta ccggggaggtg gtgaattaca 5700

acatgccaaa agaggtaatg tttatgtcca gcgtgtttat gaggggtcgc cacttaatct 5760

acctgcgctt gtggtatgat ggccacgtgg gttctgtggt ccccgccatg agctttggat 5820

acagcgcctt gcactgtggg attttgaaca atattgtggt gctgtgctgc agttactgtg 5880

ctgatttaag tgagatcagg gtgcgctgct gtgcccggag gacaaggcgc cttatgctgc 5940

gggcggtgcg aatcatcgct gaggagacca ctgccatgtt gtattcctgc aggacggagc 6000

ggcggcggca gcagtttatt cgcgcgctgc tgcagcacca ccgccctatc ctgatgcacg 6060

attatgactc tacccccatg tagaagcttg gggatcaatt ctctagagct cgctgatcag 6120

cctcgactgt gccttctagt tgccagccat ctgttgtttg cccctccccc gtgccttcct 6180

tgaccctgga aggtgccact cccactgtcc tttcctaata aaatgaggaa attgcatcgc 6240

attgtctgag taggtgtcat tctattctgg ggggtggggt ggggcaggac agcaaggggg 6300

aggattggga agacaatagc aggcatgctg gggatgcggt gggctctatg gcttctgagg 6360

aaattgggcg tggcttaagg gtgggaaaga atatataagg tgggggtctt atgtagtttt 6420

gtatctgttt tgcagcagcc gccgccgcca tgagcaccaa ctcgtttgat ggaagcattg 6480

tgagctcata tttgacaacg cgcatgcccc catgggccgg ggtgcgtcag aatgtgatgg 6540

gctccagcat tgatggtcgc cccgtcctgc ccgcaaactc tactaccttg acctacgaga 6600

ccgtgtctgg aacgccgttg gagactgcag cctccgccgc cgcttcagcc gctgcagcca 6660

ccgcccgcgg gattgtgact gactttgctt tcctgagccc gcttgcaagc agtgcagctt 6720

cccgttcatc cgcccgcgat gacaagttga cggctctttt ggcacaattg gattctttga 6780

cccgggaact taatgtcgtt tctcagcagc tgttggatct gcgccagcag gtttctgccc 6840

tgaaggcttc ctcccctccc aatgcggttt aaaacataaa taaaaaacca gactctgttt 6900

ggatttggat caagcaagtg tcttgctgtc tttatttagg ggttttgcgc gcgcggtagg 6960

cccgggacca gcggtctcgg tcgttgaggg tcctgtgtat tttttccagg acgtggtaaa 7020

ggtgactctg gatgttcaga tacatgggca taagcccgtc tctggggtgg aggtagcacc 7080

actgcagagc ttcatgctgc ggggtggtgt tgtagatgat ccagtcgtag caggagcgct 7140

gggcgtggtg cctaaaaatg tctttcagta gcaagctgat tgccaggggc aggcccttgg 7200

tgtaagtgtt tacaaagcgg ttaagctggg atgggtgcat acgtggggat atgagatgca 7260

tcttggactg tatttttagg ttggctatgt tcccagccat atccctccgg ggattcatgt 7320

tgtgcagaac caccagcaca gtgtatccgg tgcacttggg aaatttgtca tgtagcttag 7380

aaggaaatgc gtggaagaac ttggagacgc ccttgtgacc tccaagattt tccatgcatt 7440

cgtccataat gatggcaatg ggcccacggg cggcggcctg ggcgaagata tttctgggat 7500

cactaacgtc atagttgtgt tccaggatga gatcgtcata ggccattttt acaaagcgcg 7560

ggcggagggt gccagactgc ggtataatgg ttccatccgg cccaggggcg tagttaccct 7620

cacagatttg catttcccac gctttgagtt cagatggggg gatcatgtct acctgcgggg 7680

cgatgaagaa aacggtttcc ggggtagggg agatcagctg ggaagaaagc aggttcctga 7740

gcagctgcga cttaccgcag ccggtgggcc cgtaaatcac acctattacc ggctgcaact 7800

ggtagttaag agagctgcag ctgccgtcat ccctgagcag gggggccact tcgttaagca 7860

tgtccctgac tcgcatgttt tccctgacca aatccgccag aaggcgctcg ccgcccagcg 7920

atagcagttc ttgcaaggaa gcaaagtttt tcaacggttt gagaccgtcc gccgtaggca 7980

tgcttttgag cgtttgacca agcagttcca ggcggtccca cagctcggtc acctgctcta 8040

cggcatctcg atccagcata tctcctcgtt tcgcgggttg gggcggcttt cgctgtacgg 8100

cagtagtcgg tgctcgtcca gacgggccag ggtcatgtct ttccacgggc gcagggtcct 8160

cgtcagcgta gtctgggtca cggtgaaggg gtgcgctccg ggctgcgcgc tggccagggt 8220

gcgcttgagg ctggtcctgc tggtgctgaa gcgctgccgg tcttcgccct gcgcgtcggc 8280

caggtagcat ttgaccatgg tgtcatagtc cagcccctcc gcggcgtggc ccttggcgcg 8340

cagcttgccc ttggaggagg cgccgcacga ggggcagtgc agacttttga gggcgtagag 8400

cttgggcgcg agaaataccg attccgggga gtaggcatcc gcgccgcagg ccccgcagac 8460

ggtctcgcat tccacgagcc aggtgagctc tggccgttcg gggtcaaaaa ccaggtttcc 8520

cccatgcttt ttgatgcgtt tcttacctct ggtttccatg agccggtgtc cacgctcggt 8580

gacgaaaagg ctgtccgtgt ccccgtatac agacttgaga ggcctgtcct cgagcggtgt 8640

tccgcggtcc tcctcgtata gaaactcgga ccactctgag acaaaggctc gcgtccaggc 8700

cagcacgaag gaggctaagt gggaggggta gcggtcgttg tccactaggg ggtccactcg 8760

ctccagggtg tgaagacaca tgtcgccctc ttcggcatca aggaaggtga ttggtttgta 8820

ggtgtaggcc acgtgaccgg gtgttcctga agggggggcta taaaaggggg tgggggcgcg 8880

ttcgtcctca ctctcttccg catcgctgtc tgcgagggcc agctgttggg gtgagtactc 8940

cctctgaaaa gcgggcatga cttctgcgct aagattgtca gtttccaaaa acgaggagga 9000

tttgatattc acctggcccg cggtgatgcc tttgagggtg gccgcatcca tctggtcaga 9060

aaagacaatc tttttgttgt caagcttggt ggcaaacgac ccgtagaggg cgttggacag 9120

caacttggcg atggagcgca gggtttggtt tttgtcgcga tcggcgcgct ccttggccgc 9180

gatgtttagc tgcacgtatt cgcgcgcaac gcaccgccat tcgggaaaga cggtggtgcg 9240

ctcgtcgggc accaggtgca cgcgccaacc gcggttgtgc agggtgacaa ggtcaacgct 9300

ggtggctacc tctccgcgta ggcgctcgtt ggtccagcag aggcggccgc ccttgcgcga 9360

gcagaatggc ggtagggggt ctagctgcgt ctcgtccggg gggtctgcgt ccacggtaaa 9420

gaccccgggc agcaggcgcg cgtcgaagta gtctatcttg catccttgca agtctagcgc 9480

ctgctgccat gcgcgggcgg caagcgcgcg ctcgtatggg ttgagtgggg gaccccatgg 9540

catggggtgg gtgagcgcgg aggcgtacat gccgcaaatg tcgtaaacgt agaggggctc 9600

tctgagtatt ccaagatatg tagggtagca tcttccaccg cggatgctgg cgcgcacgta 9660

atcgtatagt tcgtgcgagg gagcgaggag gtcgggaccg aggttgctac gggcgggctg 9720

ctctgctcgg aagactatct gcctgaagat ggcatgtgag ttggatgata tggttggacg 9780

ctggaagacg ttgaagctgg cgtctgtgag acctaccgcg tcacgcacga aggaggcgta 9840

ggagtcgcgc agcttgttga ccagctcggc ggtgacctgc acgtctaggg cgcagtagtc 9900

cagggtttcc ttgatgatgt catacttatc ctgtcccttt tttttccaca gctcgcggtt 9960

gaggacaaac tcttcgcggt ctttccagta ctcttggatc ggaaacccgt cggcctccga 10020

acggtaagag cctagcatgt agaactggtt gacggcctgg taggcgcagc atccctttc 10080

tacgggtagc gcgtatgcct gcgcggcctt ccggagcgag gtgtgggtga gcgcaaaggt 10140

gtccctgacc atgactttga ggtactggta tttgaagtca gtgtcgtcgc atccgccctg 10200

ctcccagagc aaaaagtccg tgcgcttttt ggaacgcgga tttggcaggg cgaaggtgac 10260

atcgttgaag agtatctttc ccgcgcgagg cataaagttg cgtgtgatgc ggaagggtcc 10320

cggcacctcg gaacggttgt taattacctg ggcggcgagc acgatctcgt caaagccgtt 10380

gatgttgtgg cccacaatgt aaagttccaa gaagcgcggg atgcccttga tggaaggcaa 10440

ttttttaagt tcctcgtagg tgagctcttc aggggagctg agcccgtgct ctgaaagggc 10500

ccagtctgca agatgagggt tggaagcgac gaatgagctc cacaggtcac gggccattag 10560

catttgcagg tggtcgcgaa aggtcctaaa ctggcgacct atggccattt tttctggggt 10620

gatgcagtag aaggtaagcg ggtcttgttc ccagcggtcc catccaaggt tcgcggctag 10680

gtctcgcgcg gcagtcacta gaggctcatc tccgccgaac ttcatgacca gcatgaaggg 10740

cacgagctgc ttcccaaagg cccccatcca agtataggtc tctacatcgt aggtgacaaa 10800

gagacgctcg gtgcgaggat gcgagccgat cgggaagaac tggatctccc gccaccaatt 10860

ggaggagtgg ctattgatgt ggtgaaagta gaagtccctg cgacgggccg aacactcgtg 10920

ctggcttttg taaaaacgtg cgcagtactg gcagcggtgc acgggctgta catcctgcac 10980

gaggttgacc tgacgaccgc gcacaaggaa gcagagtggg aatttgagcc cctcgcctgg 11040

cgggtttggc tggtggtctt ctacttcggc tgcttgtcct tgaccgtctg gctgctcgag 11100

gggagttacg gtggatcgga ccaccacgcc gcgcgagccc aaagtccaga tgtccgcgcg 11160

cggcggtcgg agcttgatga caacatcgcg cagatgggag ctgtccatgg tctggagctc 11220

ccgcggcgtc aggtcaggcg ggagctcctg caggtttacc tcgcatagac gggtcagggc 11280

gcgggctaga tccaggtgat acctaatttc caggggctgg ttggtggcgg cgtcgatggc 11340

ttgcaagagg ccgcatcccc gcggcgcgac tacggtaccg cgcggcgggc ggtgggccgc 11400

gggggtgtcc ttggatgatg catctaaaag cggtgacgcg ggcgagcccc cggaggtagg 11460

gggggctccg gacccgccgg gagaggggggc aggggcacgt cggcgccgcg cgcgggcagg 11520

agctggtgct gcgcgcgtag gttgctggcg aacgcgacga cgcggcggtt gatctcctga 11580

atctggcgcc tctgcgtgaa gacgacgggc ccggtgagct tgaacctgaa agagagttcg 11640

acagaatcaa tttcggtgtc gttgacggcg gcctggcgca aaatctcctg cacgtctcct 11700

gagttgtctt gataggcgat ctcggccatg aactgctcga tctcttcctc ctggagatct 11760

ccgcgtccgg ctcgctccac ggtggcggcg aggtcgttgg aaatgcgggc catgagctgc 11820

gagaaggcgt tgaggcctcc ctcgttccag acgcggctgt agaccacgcc cccttcggca 11880

tcgcgggcgc gcatgaccac ctgcgcgaga ttgagctcca cgtgccgggc gaagacggcg 11940

tagtttcgca ggcgctgaaa gaggtagttg agggtggtgg cggtgtgttc tgccacgaag 12000

aagtacataa cccagcgtcg caacgtggat tcgttgatat cccccaaggc ctcaaggcgc 12060

tccatggcct cgtagaagtc cacggcgaag ttgaaaaact gggagttgcg cgccgacacg 12120

gttaactcct cctccagaag acggatgagc tcggcgacag tgtcgcgcac ctcgcgctca 12180

aaggctacag gggcctcttc ttcttcttca atctcctctt ccataagggc ctccccttct 12240

tcttcttctg gcggcggtgg gggaggggggg acacggcggc gacgacggcg caccgggagg 12300

cggtcgacaa agcgctcgat catctccccg cggcgacggc gcatggtctc ggtgacggcg 12360

cggccgttct cgcgggggcg cagttggaag acgccgcccg tcatgtcccg gttatgggtt 12420

ggcgggggggc tgccatgcgg cagggatacg gcgctaacga tgcatctcaa caattgttgt 12480

gtaggtactc cgccgccgag ggacctgagc gagtccgcat cgaccggatc ggaaaacctc 12540

tcgagaaagg cgtctaacca gtcacagtcg caaggtaggc tgagcaccgt ggcgggcggc 12600

agcgggcggc ggtcggggtt gtttctggcg gaggtgctgc tgatgatgta attaaagtag 12660

gcggtcttga gacggcggat ggtcgacaga agcaccatgt ccttgggtcc ggcctgctga 12720

atgcgcaggc ggtcggccat gccccaggct tcgttttgac atcggcgcag gtctttgtag 12780

tagtcttgca tgagcctttc taccggcact tcttcttctc cttcctcttg tcctgcatct 12840

cttgcatcta tcgctgcggc ggcggcggag tttggccgta ggtggcgccc tcttcctccc 12900

atgcgtgtga ccccgaagcc cctcatcggc tgaagcaggg ctaggtcggc gacaacgcgc 12960

tcggctaata tggcctgctg cacctgcgtg agggtagact ggaagtcatc catgtccaca 13020

aagcggtggt atgcgcccgt gttgatggtg taagtgcagt tggccataac ggaccagtta 13080

acggtctggt gacccggctg cgagagctcg gtgtacctga gacgcgagta agccctcgag 13140

tcaaatacgt agtcgttgca agtccgcacc aggtactggt atcccaccaa aaagtgcggc 13200

ggcggctggc ggtagagggg ccagcgtagg gtggccgggg ctccgggggc gagatcttcc 13260

aacataaggc gatgatatcc gtagatgtac ctggacatcc aggtgatgcc ggcggcggtg 13320

gtggaggcgc gcggaaagtc gcggacgcgg ttccagatgt tgcgcagcgg caaaaagtgc 13380

tccatggtcg ggacgctctg gccggtcagg cgcgcgcaat cgttgacgct ctagcgtgca 13440

aaaggagagc ctgtaagcgg gcactcttcc gtggtctggt ggataaattc gcaagggtat 13500

catggcggac gaccggggtt cgagccccgt atccggccgt ccgccgtgat ccatgcggtt 13560

accgcccgcg tgtcgaaccc aggtgtgcga cgtcagacaa cgggggagtg ctccttttgg 13620

cttccttcca ggcgcggcgg ctgctgcgct agctttttg gccactggcc gcgcgcagcg 13680

taagcggtta ggctggaaag cgaaagcatt aagtggctcg ctccctgtag ccggagggtt 13740

attttccaag ggttgagtcg cgggaccccc ggttcgagtc tcggaccggc cggactgcgg 13800

cgaacggggg tttgcctccc cgtcatgcaa gaccccgctt gcaaattcct ccggaaacag 13860

ggacgagccc ctttttgct tttcccagat gcatccggtg ctgcggcaga tgcgcccccc 13920

tcctcagcag cggcaagagc aagagcagcg gcagacatgc agggcaccct cccctcctcc 13980

taccgcgtca ggaggggcga catccgcggt tgacgcggca gcagatggtg attacgaacc 14040

cccgcggcgc cgggcccggc actacctgga cttggaggag ggcgagggcc tggcgcggct 14100

aggagcgccc tctcctgagc ggcacccaag ggtgcagctg aagcgtgata cgcgtgaggc 14160

gtacgtgccg cggcagaacc tgtttcgcga ccgcgaggga gaggagcccg aggagatgcg 14220

ggatcgaaag ttccacgcag ggcgcgagct gcggcatggc ctgaatcgcg agcggttgct 14280

gcgcgaggag gactttgagc ccgacgcgcg aaccgggatt agtcccgcgc gcgcacacgt 14340

ggcggccgcc gacctggtaa ccgcatacga gcagacggtg aaccaggaga ttaactttca 14400

aaaaagcttt aacaaccacg tgcgtacgct tgtggcgcgc gaggaggtgg ctataggact 14460

gatgcatctg tgggactttg taagcgcgct ggagcaaaac ccaaatagca agccgctcat 14520

ggcgcagctg ttccttatag tgcagcacag cagggacaac gaggcattca gggatgcgct 14580

gctaaacata gtagagcccg agggccgctg gctgctcgat ttgataaaca tcctgcagag 14640

catagtggtg caggagcgca gcttgagcct ggctgacaag gtggccgcca tcaactattc 14700

catgcttagc ctgggcaagt tttacgcccg caagatatac catacccctt acgttcccat 14760

agacaaggag gtaaagatcg aggggttcta catgcgcatg gcgctgaagg tgcttacctt 14820

gagcgacgac ctgggcgttt atcgcaacga gcgcatccac aaggccgtga gcgtgagccg 14880

gcggcgcgag ctcagcgacc gcgagctgat gcacagcctg caaagggccc tggctggcac 14940

gggcagcggc gatagagagg ccgagtccta ctttgacgcg ggcgctgacc tgcgctgggc 15000

cccaagccga cgcgccctgg aggcagctgg ggccggacct gggctggcgg tggcacccgc 15060

gcgcgctggc aacgtcggcg gcgtggagga atatgacgag gacgatgagt acgagccaga 15120

ggacggcgag tactaagcgg tgatgtttct gatcagatga tgcaagacgc aacggacccg 15180

gcggtgcggg cggcgctgca gagccagccg tccggcctta actccacgga cgactggcgc 15240

caggtcatgg accgcatcat gtcgctgact gcgcgcaatc ctgacgcgtt ccggcagcag 15300

ccgcaggcca accggctctc cgcaattctg gaagcggtgg tcccggcgcg cgcaaacccc 15360

acgcacgaga aggtgctggc gatcgtaaac gcgctggccg aaaacagggc catccggccc 15420

gacgaggccg gcctggtcta cgacgcgctg cttcagcgcg tggctcgtta caacagcggc 15480

aacgtgcaga ccaacctgga ccggctggtg ggggatgtgc gcgaggccgt ggcgcagcgt 15540

gagcgcgcgc agcagcaggg caacctgggc tccatggttg cactaaacgc cttcctgagt 15600

acacagcccg ccaacgtgcc gcggggacag gaggactaca ccaactttgt gagcgcactg 15660

cggctaatgg tgactgagac accgcaaagt gaggtgtacc agtctgggcc agactatttt 15720

ttccagacca gtagacaagg cctgcagacc gtaaacctga gccaggcttt caaaaacttg 15780

caggggctgt ggggggtgcg ggctcccaca ggcgaccgcg cgaccgtgtc tagcttgctg 15840

acgcccaact cgcgcctgtt gctgctgcta atagcgccct tcacggacag tggcagcgtg 15900

tcccgggaca catacctagg tcacttgctg acactgtacc gcgaggccat aggtcaggcg 15960

catgtggacg agcatacttt ccaggagatt acaagtgtca gccgcgcgct ggggcaggag 16020

gacacgggca gcctggaggc aaccctaaac tacctgctga ccaaccggcg gcagaagatc 16080

ccctcgttgc acagtttaaa cagcgaggag gagcgcattt tgcgctacgt gcagcagagc 16140

gtgagcctta acctgatgcg cgacggggta acgcccagcg tggcgctgga catgaccgcg 16200

cgcaacatgg aaccgggcat gtatgcctca aaccggccgt ttatcaaccg cctaatggac 16260

tacttgcatc gcgcggccgc cgtgaacccc gagtatttca ccaatgccat cttgaacccg 16320

cactggctac cgccccctgg tttctacacc gggggattcg aggtgcccga gggtaacgat 16380

ggattcctct gggacgacat agacgacagc gtgttttccc cgcaaccgca gaccctgcta 16440

gagttgcaac agcgcgagca ggcagaggcg gcgctgcgaa aggaaagctt ccgcaggcca 16500

agcagcttgt ccgatctagg cgctgcggcc ccgcggtcag atgctagtag cccatttcca 16560

agcttgatag ggtctcttac cagcactcgc accacccgcc cgcgcctgct gggcgaggag 16620

gagtacctaa acaactcgct gctgcagccg cagcgcgaaa aaaacctgcc tccggcattt 16680

cccaacaacg ggatagagag cctagtggac aagatgagta gatggaagac gtacgcgcag 16740

gagcacaggg acgtgccagg cccgcgcccg cccacccgtc gtcaaaggca cgaccgtcag 16800

cggggtctgg tgtgggagga cgatgactcg gcagacgaca gcagcgtcct ggatttggga 16860

gggagtggca acccgtttgc gcaccttcgc cccaggctgg ggagaatgtt ttaaaaaaaa 16920

aaaagcatga tgcaaaataa aaaactcacc aaggccatgg caccgagcgt tggttttctt 16980

gtattcccct tagtatgcgg cgcgcggcga tgtatgagga aggtcctcct ccctcctacg 17040

agagtgtggt gagcgcggcg ccagtggcgg cggcgctggg ttctcccttc gatgctcccc 17100

tggacccgcc gtttgtgcct ccgcggtacc tgcggcctac cgggggggaga aacagcatcc 17160

gttactctga gttggcaccc ctattcgaca ccacccgtgt gtacctggtg gacaacaagt 17220

caacggatgt ggcatccctg aactaccaga acgaccacag caactttctg accacggtca 17280

ttcaaaacaa tgactacagc ccgggggagg caagcacaca gaccatcaat cttgacgacc 17340

ggtcgcactg gggcggcgac ctgaaaacca tcctgcatac caacatgcca aatgtgaacg 17400

agttcatgtt taccaataag tttaaggcgc gggtgatggt gtcgcgcttg cctactaagg 17460

acaatcaggt ggagctgaaa tacgagtggg tggagttcac gctgcccgag ggcaactact 17520

ccgagaccat gaccatagac cttatgaaca acgcgatcgt ggagcactac ttgaaagtgg 17580

gcagacagaa cggggttctg gaaagcgaca tcggggtaaa gtttgacacc cgcaacttca 17640

gactggggtt tgaccccgtc actggtcttg tcatgcctgg ggtatataca aacgaagcct 17700

tccatccaga catcattttg ctgccaggat gcggggtgga cttcacccac agccgcctga 17760

gcaacttgtt gggcatccgc aagcggcaac ccttccagga gggctttagg atcacctacg 17820

atgatctgga gggtggtaac attcccgcac tgttggatgt ggacgcctac caggcgagct 17880

tgaaagatga caccgaacag ggcgggggtg gcgcaggcgg cagcaacagc agtggcagcg 17940

gcgcggaaga gaactccaac gcggcagccg cggcaatgca gccggtggag gacatgaacg 18000

atcatgccat tcgcggcgac acctttgcca cacgggctga ggagaagcgc gctgaggccg 18060

aagcagcggc cgaagctgcc gcccccgctg cgcaacccga ggtcgagaag cctcagaaga 18120

aaccggtgat caaacccctg acagaggaca gcaagaaacg cagttacaac ctaataagca 18180

atgacagcac cttcacccag taccgcagct ggtaccttgc atacaactac ggcgaccctc 18240

agaccggaat ccgctcatgg accctgcttt gcactcctga cgtaacctgc ggctcggagc 18300

aggtctactg gtcgttgcca gacatgatgc aagaccccgt gaccttccgc tccacgcgcc 18360

agatcagcaa ctttccggtg gtgggcgccg agctgttgcc cgtgcactcc aagagcttct 18420

acaacgacca ggccgtctac tcccaactca tccgccagtt tacctctctg acccacgtgt 18480

tcaatcgctt tcccgagaac cagattttgg cgcgcccgcc agcccccacc atcaccaccg 18540

tcagtgaaaa cgttcctgct ctcacagatc acgggacgct accgctgcgc aacagcatcg 18600

gaggagtcca gcgagtgacc attactgacg ccagacgccg cacctgcccc tacgtttaca 18660

aggccctggg catagtctcg ccgcgcgtcc tatcgagccg cacttttga gcaagcatgt 18720

ccatccttat atcgcccagc aataacacag gctggggcct gcgcttccca agcaagatgt 18780

ttggcggggc caagaagcgc tccgaccaac acccagtgcg cgtgcgcggg cactaccgcg 18840

cgccctgggg cgcgcacaaa cgcggccgca ctgggcgcac caccgtcgat gacgccatcg 18900

acgcggtggt ggaggaggcg cgcaactaca cgcccacgcc gccaccagtg tccacagtgg 18960

acgcggccat tcagaccgtg gtgcgcggag cccggcgcta tgctaaaatg aagagacggc 19020

ggaggcgcgt agcacgtcgc caccgccgcc gacccggcac tgccgcccaa cgcgcggcgg 19080

cggccctgct taaccgcgca cgtcgcaccg gccgacgggc ggccatgcgg gccgctcgaa 19140

ggctggccgc gggtattgtc actgtgcccc ccaggtccag gcgacgagcg gccgccgcag 19200

cagccgcggc cattagtgct atgactcagg gtcgcagggg caacgtgtat tgggtgcgcg 19260

actcggttag cggcctgcgc gtgcccgtgc gcacccgccc cccgcgcaac tagattgcaa 19320

gaaaaaacta cttagactcg tactgttgta tgtatccagc ggcggcggcg cgcaacgaag 19380

ctatgtccaa gcgcaaaatc aaagaagaga tgctccaggt catcgcgccg gagatctatg 19440

gccccccgaa gaaggaagag caggattaca agccccgaaa gctaaagcgg gtcaaaaaga 19500

aaaagaaaga tgatgatgat gaacttgacg acgaggtgga actgctgcac gctaccgcgc 19560

ccaggcgacg ggtacagtgg aaaggtcgac gcgtaaaacg tgttttgcga cccggcacca 19620

ccgtagtctt tacgcccggt gagcgctcca cccgcaccta caagcgcgtg tatgatgagg 19680

tgtacggcga cgaggacctg cttgagcagg ccaacgagcg cctcggggag tttgcctacg 19740

gaaagcggca taaggacatg ctggcgttgc cgctggacga gggcaaccca acacctagcc 19800

taaagcccgt aacactgcag caggtgctgc ccgcgcttgc accgtccgaa gaaaagcgcg 19860

gcctaaagcg cgagtctggt gacttggcac ccaccgtgca gctgatggta cccaagcgcc 19920

agcgactgga agatgtcttg gaaaaaatga ccgtggaacc tgggctggag cccgaggtcc 19980

gcgtgcggcc aatcaagcag gtggcgccgg gactgggcgt gcagaccgtg gacgttcaga 20040

tacccactac cagtagcacc agtattgcca ccgccacaga gggcatggag acacaaacgt 20100

ccccggttgc ctcagcggtg gcggatgccg cggtgcaggc ggtcgctgcg gccgcgtcca 20160

agacctctac ggaggtgcaa acggacccgt ggatgtttcg cgtttcagcc ccccggcgcc 20220

cgcgccgttc gaggaagtac ggcgccgcca gcgcgctact gcccgaatat gccctacatc 20280

cttccattgc gcctaccccc ggctatcgtg gctacaccta ccgccccaga agacgagcaa 20340

ctacccgacg ccgaaccacc actggaaccc gccgccgccg tcgccgtcgc cagcccgtgc 20400

tggccccgat ttccgtgcgc agggtggctc gcgaaggagg caggaccctg gtgctgccaa 20460

cagcgcgcta ccaccccagc atcgtttaaa agccggtctt tgtggttctt gcagatatgg 20520

ccctcacctg ccgcctccgt ttcccggtgc cgggattccg aggaagaatg caccgtagga 20580

ggggcatggc cggccacggc ctgacgggcg gcatgcgtcg tgcgcaccac cggcggcggc 20640

gcgcgtcgca ccgtcgcatg cgcggcggta tcctgcccct ccttattcca ctgatcgccg 20700

cggcgattgg cgccgtgccc ggaattgcat ccgtggcctt gcaggcgcag agacactgat 20760

taaaaacaag ttgcatgtgg aaaaatcaaa ataaaaagtc tggactctca cgctcgcttg 20820

gtcctgtaac tattttgtag aatggaagac atcaactttg cgtctctggc cccgcgacac 20880

ggctcgcgcc cgttcatggg aaactggcaa gatatcggca ccagcaatat gagcggtggc 20940

gccttcagct ggggctcgct gtggagcggc attaaaaatt tcggttccac cgttaagaac 21000

tatggcagca aggcctggaa cagcagcaca ggccagatgc tgagggataa gttgaaagag 21060

caaaatttcc aacaaaaggt ggtagatggc ctggcctctg gcattagcgg ggtggtggac 21120

ctggccaacc aggcagtgca aaataagatt aacagtaagc ttgatccccg ccctcccgta 21180

gaggagcctc caccggccgt ggagacagtg tctccagagg ggcgtggcga aaagcgtccg 21240

cgccccgaca gggaagaaac tctggtgacg caaatagacg agcctccctc gtacgaggag 21300

gcactaaagc aaggcctgcc caccacccgt cccatcgcgc ccatggctac cggagtgctg 21360

ggccagcaca cacccgtaac gctggacctg cctccccccg ccgacaccca gcagaaacct 21420

gtgctgccag gcccgaccgc cgttgttgta acccgtccta gccgcgcgtc cctgcgccgc 21480

gccgccagcg gtccgcgatc gttgcggccc gtagccagtg gcaactggca aagcacactg 21540

aacagcatcg tgggtctggg ggtgcaatcc ctgaagcgcc gacgatgctt ctgatagcta 21600

acgtgtcgta tgtgtgtcat gtatgcgtcc atgtcgccgc cagaggagct gctgagccgc 21660

cgcgcgcccg ctttccaaga tggctacccc ttcgatgatg ccgcagtggt cttacatgca 21720

catctcgggc caggacgcct cggagtacct gagccccggg ctggtgcagt ttgcccgcgc 21780

caccgagacg tacttcagcc tgaataacaa gtttagaaac cccacggtgg cgcctacgca 21840

cgacgtgacc acagaccggt cccagcgttt gacgctgcgg ttcatccctg tggaccgtga 21900

ggatactgcg tactcgtaca aggcgcggtt caccctagct gtgggtgata accgtgtgct 21960

ggacatggct tccacgtact ttgacatccg cggcgtgctg gacaggggcc ctacttttaa 22020

gccctactct ggcactgcct acaacgccct ggctcccaag ggtgccccaa atccttgcga 22080

atgggatgaa gctgctactg ctcttgaaat aaacctagaa gaagaggacg atgacaacga 22140

agacgaagta gacgagcaag ctgagcagca aaaaactcac gtatttgggc aggcgcctta 22200

ttctggtata aatattacaa aggagggtat tcaaataggt gtcgaaggtc aaacacctaa 22260

atatgccgat aaaacatttc aacctgaacc tcaaatagga gaatctcagt ggtacgaaac 22320

agaaattaat catgcagctg ggagagtcct aaaaaagact accccaatga aaccatgtta 22380

cggttcatat gcaaaaccca caaatgaaaa tggagggcaa ggcattcttg taaagcaaca 22440

aaatggaaag ctagaaagtc aagtggaaat gcaatttttc tcaactactg aggcagccgc 22500

aggcaatggt gataacttga ctcctaaagt ggtattgtac agtgaagatg tagatataga 22560

aaccccagac actcatattt cttacatgcc cactattaag gaaggtaact cacgagaact 22620

aatgggccaa caatctatgc ccaacaggcc taattacatt gcttttaggg acaattttat 22680

tggtctaatg tattacaaca gcacgggtaa tatgggtgtt ctggcgggcc aagcatcgca 22740

gttgaatgct gttgtagatt tgcaagacag aaacacagag ctttcatacc agcttttgct 22800

tgattccatt ggtgatagaa ccaggtactt ttctatgtgg aatcaggctg ttgacagcta 22860

tgatccagat gttagaatta ttgaaaatca tggaactgaa gatgaacttc caaattactg 22920

ctttccactg ggaggtgtga ttaatacaga gactcttacc aaggtaaaac ctaaaacagg 22980

tcaggaaaat ggatgggaaa aagatgctac agaattttca gataaaaatg aaataagagt 23040

tggaaataat tttgccatgg aaatcaatct aaatgccaac ctgtggagaa atttcctgta 23100

ctccaacata gcgctgtatt tgcccgacaa gctaaagtac agtccttcca acgtaaaaat 23160

ttctgataac ccaaacacct acgactacat gaacaagcga gtggtggctc ccgggctagt 23220

ggactgctac attaaccttg gagcacgctg gtcccttgac tatatggaca acgtcaaccc 23280

atttaaccac caccgcaatg ctggcctgcg ctaccgctca atgttgctgg gcaatggtcg 23340

ctatgtgccc ttccacatcc aggtgcctca gaagttcttt gccattaaaa acctccttct 23400

cctgccgggc tcatacacct acgagtggaa cttcaggaag gatgttaaca tggttctgca 23460

gagctcccta ggaaatgacc taagggttga cggagccagc attaagtttg atagcatttg 23520

cctttacgcc accttcttcc ccatggccca caacaccgcc tccacgcttg aggccatgct 23580

tagaaacgac accaacgacc agtcctttaa cgactatctc tccgccgcca acatgctcta 23640

ccctataccc gccaacgcta ccaacgtgcc catatccatc ccctcccgca actgggcggc 23700

tttccgcggc tgggccttca cgcgccttaa gactaaggaa accccatcac tgggctcggg 23760

ctacgaccct tattacacct actctggctc tataccctac ctagatggaa ccttttacct 23820

caaccacacc tttaagaagg tggccattac ctttgactct tctgtcagct ggcctggcaa 23880

tgaccgcctg cttaccccca acgagtttga aattaagcgc tcagttgacg gggagggtta 23940

caacgttgcc cagtgtaaca tgaccaaaga ctggttcctg gtacaaatgc tagctaacta 24000

taacattggc taccagggct tctatatccc agagagctac aaggaccgca tgtactcctt 24060

ctttagaaac ttccagccca tgagccgtca ggtggtggat gatactaaat acaaggacta 24120

ccaacaggtg ggcatcctac accaacacaa caactctgga tttgttggct accttgcccc 24180

caccatgcgc gaaggacagg cctaccctgc taacttcccc tatccgctta taggcaagac 24240

cgcagttgac agcattaccc agaaaaagtt tctttgcgat cgcacccttt ggcgcatccc 24300

attctccagt aactttatgt ccatgggcgc actcacagac ctgggccaaa accttctcta 24360

cgccaactcc gcccacgcgc tagacatgac ttttgaggtg gatcccatgg acgagcccac 24420

ccttctttat gttttgtttg aagtctttga cgtggtccgt gtgcaccagc cgcaccgcgg 24480

cgtcatcgaa accgtgtacc tgcgcacgcc cttctcggcc ggcaacgcca caacataaag 24540

aagcaagcaa catcaacaac agctgccgcc atgggctcca gtgagcagga actgaaagcc 24600

attgtcaaag atcttggttg tgggccatat tttttgggca cctatgacaa gcgctttcca 24660

ggctttgttt ctccacacaa gctcgcctgc gccatagtca atacggccgg tcgcgagact 24720

gggggcgtac actggatggc ctttgcctgg aacccgcact caaaaacatg ctacctcttt 24780

gagccctttg gcttttctga ccagcgactc aagcaggttt accagtttga gtacgagtca 24840

ctcctgcgcc gtagcgccat tgcttcttcc cccgaccgct gtataacgct ggaaaagtcc 24900

acccaaagcg tacaggggcc caactcggcc gcctgtggac tattctgctg catgtttctc 24960

cacgcctttg ccaactggcc ccaaactccc atggatcaca accccaccat gaaccttatt 25020

accggggtac ccaactccat gctcaacagt ccccaggtac agcccaccct gcgtcgcaac 25080

caggaacagc tctacagctt cctggagcgc cactcgccct acttccgcag ccacagtgcg 25140

cagattagga gcgccacttc tttttgtcac ttgaaaaaca tgtaaaaata atgtactaga 25200

gacactttca ataaaggcaa atgcttttat ttgtacactc tcgggtgatt atttaccccc 25260

acccttgccg tctgcgccgt ttaaaaatca aaggggttct gccgcgcatc gctatgcgcc 25320

actggcaggg acacgttgcg atactggtgt ttagtgctcc acttaaactc aggcacaacc 25380

atccgcggca gctcggtgaa gttttcactc cacaggctgc gcaccatcac caacgcgttt 25440

agcaggtcgg gcgccgatat cttgaagtcg cagttggggc ctccgccctg cgcgcgcgag 25500

ttgcgataca cagggttgca gcactggaac actatcagcg ccgggtggtg cacgctggcc 25560

agcacgctct tgtcggagat cagatccgcg tccaggtcct ccgcgttgct cagggcgaac 25620

ggagtcaact ttggtagctg ccttcccaaa aagggcgcgt gcccaggctt tgagttgcac 25680

tcgcaccgta gtggcatcaa aaggtgaccg tgcccggtct gggcgttagg atacagcgcc 25740

tgcataaaag ccttgatctg cttaaaagcc acctgagcct ttgcgccttc agagaagaac 25800

atgccgcaag acttgccgga aaactgattg gccggacagg ccgcgtcgtg cacgcagcac 25860

cttgcgtcgg tgttggagat ctgcaccaca tttcggcccc accggttctt cacgatcttg 25920

gccttgctag actgctcctt cagcgcgcgc tgcccgtttt cgctcgtcac atccatttca 25980

atcacgtgct ccttatttat cataatgctt ccgtgtagac acttaagctc gccttcgatc 26040

tcagcgcagc ggtgcagcca caacgcgcag cccgtgggct cgtgatgctt gtaggtcacc 26100

tctgcaaacg actgcaggta cgcctgcagg aatcgcccca tcatcgtcac aaaggtcttg 26160

ttgctggtga aggtcagctg caacccgcgg tgctcctcgt tcagccaggt cttgcatacg 26220

gccgccagag cttccacttg gtcaggcagt agtttgaagt tcgcctttag atcgttatcc 26280

acgtggtact tgtccatcag cgcgcgcgca gcctccatgc ccttctccca cgcagacacg 26340

atcggcacac tcagcgggtt catcaccgta atttcacttt ccgcttcgct gggctcttcc 26400

tcttcctctt gcgtccgcat accacgcgcc actgggtcgt cttcattcag ccgccgcact 26460

gtgcgcttac ctcctttgcc atgcttgatt agcaccggtg ggttgctgaa acccaccatt 26520

tgtagcgcca catcttctct ttcttcctcg ctgtccacga ttacctctgg tgatggcggg 26580

cgctcgggct tgggagaagg gcgcttcttt ttcttcttgg gcgcaatggc caaatccgcc 26640

gccgaggtcg atggccgcgg gctgggtgtg cgcggcacca gcgcgtcttg tgatgagtct 26700

tcctcgtcct cggactcgat acgccgcctc atccgctttt ttgggggcgc ccggggaggc 26760

ggcggcgacg gggacgggga cgacacgtcc tccatggttg ggggacgtcg cgccgcaccg 26820

cgtccgcgct cgggggtggt ttcgcgctgc tcctcttccc gactggccat ttccttctcc 26880

tataggcaga aaaagatcat ggagtcagtc gagaagaagg acagcctaac cgccccctct 26940

gagttcgcca ccaccgcctc caccgatgcc gccaacgcgc ctaccacctt ccccgtcgag 27000

gcacccccgc ttgaggagga ggaagtgatt atcgagcagg acccaggttt tgtaagcgaa 27060

gacgacgagg accgctcagt accaacagag gataaaaagc aagaccagga caacgcagag 27120

gcaaacgagg aacaagtcgg gcgggggggac gaaaggcatg gcgactacct agatgtggga 27180

gacgacgtgc tgttgaagca tctgcagcgc cagtgcgcca ttatctgcga cgcgttgcaa 27240

gagcgcagcg atgtgcccct cgccatagcg gatgtcagcc ttgcctacga acgccaccta 27300

ttctcaccgc gcgtaccccc caaacgccaa gaaaacggca catgcgagcc caacccgcgc 27360

ctcaacttct accccgtatt tgccgtgcca gaggtgcttg ccacctatca catcttttc 27420

caaaactgca agataccccc atcctgccgt gccaaccgca gccgagcgga caagcagctg 27480

gccttgcggc agggcgctgt catacctgat atcgcctcgc tcaacgaagt gccaaaaatc 27540

tttgagggtc ttggacgcga cgagaagcgc gcggcaaacg ctctgcaaca ggaaaacagc 27600

gaaaatgaaa gtcactctgg agtgttggtg gaactcgagg gtgacaacgc gcgcctagcc 27660

gtactaaaac gcagcatcga ggtcacccac tttgcctacc cggcacttaa cctacccccc 27720

aaggtcatga gcacagtcat gagtgagctg atcgtgcgcc gtgcgcagcc cctggagagg 27780

gatgcaaatt tgcaagaaca aacagaggag ggcctacccg cagttggcga cgagcagcta 27840

gcgcgctggc ttcaaacgcg cgagcctgcc gacttggagg agcgacgcaa actaatgatg 27900

gccgcagtgc tcgttaccgt ggagcttgag tgcatgcagc ggttctttgc tgacccggag 27960

atgcagcgca agctagagga aacattgcac tacacctttc gacagggcta cgtacgccag 28020

gcctgcaaga tctccaacgt ggagctctgc aacctggtct cctaccttgg aattttgcac 28080

gaaaaccgcc ttgggcaaaa cgtgcttcat tccacgctca agggcgaggc gcgccgcgac 28140

tacgtccgcg actgcgttta cttatttcta tgctacacct ggcagacggc catgggcgtt 28200

tggcagcagt gcttggagga gtgcaacctc aaggagctgc agaaactgct aaagcaaaac 28260

ttgaaggacc tatggacggc cttcaacgag cgctccgtgg ccgcgcacct ggcggacatc 28320

attttccccg aacgcctgct taaaaccctg caacagggtc tgccagactt caccagtcaa 28380

agcatgttgc agaactttag gaactttatc ctagagcgct caggaatctt gcccgccacc 28440

tgctgtgcac ttcctagcga ctttgtgccc attaagtacc gcgaatgccc tccgccgctt 28500

tggggccact gctaccttct gcagctagcc aactaccttg cctaccactc tgacataatg 28560

gaagacgtga gcggtgacgg tctactggag tgtcactgtc gctgcaacct atgcaccccg 28620

caccgctccc tggtttgcaa ttcgcagctg cttaacgaaa gtcaaattat cggtaccttt 28680

gagctgcagg gtccctcgcc tgacgaaaag tccgcggctc cggggttgaa actcactccg 28740

gggctgtgga cgtcggctta ccttcgcaaa tttgtacctg aggactacca cgcccacgag 28800

attaggttct acgaagacca atcccgcccg cctaatgcgg agcttaccgc ctgcgtcatt 28860

acccagggcc acattcttgg ccaattgcaa gccatcaaca aagcccgcca agagtttctg 28920

ctacgaaagg gacgggggggt ttacttggac ccccagtccg gcgaggagct caacccaatc 28980

ccccgccgc cgcagcccta tcagcagcag ccgcgggccc ttgcttccca ggatggcacc 29040

caaaaagaag ctgcagctgc cgccgccacc cacggacgag gaggaatact gggacagtca 29100

ggcagaggag gttttggacg aggaggagga ggacatgatg gaagactggg agagcctaga 29160

cgaggaagct tccgaggtcg aagaggtgtc agacgaaaca ccgtcaccct cggtcgcatt 29220

cccctcgccg gcgccccaga aatcggcaac cggttccagc atggctacaa cctccgctcc 29280

tcaggcgccg ccggcactgc ccgttcgccg acccaaccgt agatgggaca ccactggaac 29340

cagggccggt aagtccaagc agccgccgcc gttagcccaa gagcaacaac agcgccaagg 29400

ctaccgctca tggcgcgggc acaagaacgc catagttgct tgcttgcaag actgtggggg 29460

caacatctcc ttcgcccgcc gctttcttct ctaccatcac ggcgtggcct tcccccgtaa 29520

catcctgcat tactaccgtc atctctacag cccatactgc accggcggca gcggcagcaa 29580

cagcagcggc cacacagaag caaaggcgac cggatagcaa gactctgaca aagcccaaga 29640

aatccacagc ggcggcagca gcaggaggag gagcgctgcg tctggcgccc aacgaacccg 29700

tatcgacccg cgagcttaga aacaggattt ttcccactct gtatgctata tttcaacaga 29760

gcaggggcca agaacaagag ctgaaaataa aaaacaggtc tctgcgatcc ctcacccgca 29820

gctgcctgta tcacaaaagc gaagatcagc ttcggcgcac gctggaagac gcggaggctc 29880

tcttcagtaa atactgcgcg ctgactctta aggactagtt tcgcgccctt tctcaaattt 29940

aagcgcgaaa actacgtcat ctccagcggc cacacccggc gccagcacct gttgtcagcg 30000

ccattatgag caaggaaatt cccacgccct acatgtggag ttaccagcca caaatgggac 30060

ttgcggctgg agctgcccaa gactactcaa cccgaataaa ctacatgagc gcgggacccc 30120

acatgatatc ccgggtcaac ggaatacgcg cccaccgaaa ccgaattctc ctggaacagg 30180

cggctattac caccacacct cgtaataacc ttaatccccg tagttggccc gctgccctgg 30240

tgtaccagga aagtcccgct cccaccactg tggtacttcc cagagacgcc caggccgaag 30300

ttcagatgac taactcaggg gcgcagcttg cgggcggctt tcgtcacagg gtgcggtcgc 30360

ccgggcaggg tataactcac ctgacaatca gagggcgagg tattcagctc aacgacgagt 30420

cggtgagctc ctcgcttggt ctccgtccgg acgggacatt tcagatcggc ggcgccggcc 30480

gctcttcatt cacgcctcgt caggcaatcc taactctgca gacctcgtcc tctgagccgc 30540

gctctggagg cattggaact ctgcaattta ttgaggagtt tgtgccatcg gtctacttta 30600

acccccttctc gggacctccc ggccactatc cggatcaatt tattcctaac tttgacgcgg 30660

taaaggactc ggcggacggc tacgactgaa tgttaagtgg agaggcagag caactgcgcc 30720

tgaaacacct ggtccactgt cgccgccaca agtgctttgc ccgcgactcc ggtgagtttt 30780

gctactttga attgcccgag gatcatatcg agggcccggc gcacggcgtc cggcttaccg 30840

cccagggaga gcttgcccgt agcctgattc gggagtttac ccagcgcccc ctgctagttg 30900

agcgggacag gggaccctgt gttctcactg tgatttgcaa ctgtcctaac cctggattac 30960

atcaagatcc tctagttaat gtcaggtcgc ctaagtcgat taactagagt acccggggat 31020

cttattccct ttaactaata aaaaaaaata ataaagcatc acttacttaa aatcagttag 31080

caaatttctg tccagtttat tcagcagcac ctccttgccc tcctcccagc tctggtattg 31140

cagcttcctc ctggctgcaa actttctcca caatctaaat ggaatgtcag tttcctcctg 31200

ttcctgtcca tccgcaccca ctatcttcat gttgttgcag atgaagcgcg caagaccgtc 31260

tgaagatacc ttcaaccccg tgtatccata tgacacggaa accggtcctc caactgtgcc 31320

ttttcttact cctccctttg tatcccccaa tgggtttcaa gagagtcccc ctggggtact 31380

ctctttgcgc ctatccgaac ctctagttac ctccaatggc atgcttgcgc tcaaaatggg 31440

caacggcctc tctctggacg aggccggcaa ccttacctcc caaaatgtaa ccactgtgag 31500

cccacctctc aaaaaaacca agtcaaacat aaacctggaa atatctgcac ccctcacagt 31560

tacctcagaa gccctaactg tggctgccgc cgcacctcta atggtcgcgg gcaacacact 31620

caccatgcaa tcacaggccc cgctaaccgt gcacgactcc aaacttagca ttgccaccca 31680

aggacccctc acagtgtcag aaggaaagct agccctgcaa acatcaggcc ccctcaccac 31740

caccgatagc agtaccctta ctatcactgc ctcacccccc ctaactactg ccactggtag 31800

cttgggcatt gacttgaaag agcccattta tacacaaaat ggaaaactag gactaaagta 31860

cggggctcct ttgcatgtaa cagacgacct aaacactttg accgtagcaa ctggtccagg 31920

tgtgactatt aataatactt ccttgcaaac taaagttact ggagccttgg gttttgattc 31980

acaaggcaat atgcaactta atgtagcagg aggactaagg attgattctc aaaacagacg 32040

ccttatactt gatgttagtt atccgtttga tgctcaaaac caactaaatc taagactagg 32100

acagggccct ctttttataa actcagccca caacttggat attaactaca acaaaggcct 32160

ttacttgttt acagcttcaa acaattccaa aaagcttgag gttaacctaa gcactgccaa 32220

ggggttgatg tttgacgcta cagccatagc cattaatgca ggagatgggc ttgaatttgg 32280

ttcacctaat gcaccaaaca caaatcccct caaaacaaaa attggccatg gcctagaatt 32340

tgattcaaac aaggctatgg ttcctaaact aggaactggc cttagttttg acagcacagg 32400

tgccattaca gtaggaaaca aaaataatga taagctaact ttgtggaccg gaataaaccc 32460

tccacctaac tgtcaaattg tggaaaacac taatacaaat gatggcaaac ttactttagt 32520

attagtaaaa aatggagggc ttgttaatgg ctacgtgtct ctagttggtg tatcagacac 32580

tgtgaaccaa atgttcacac aaaagacagc aaacatccaa ttaagattat attttgactc 32640

ttctggaaat ctattaactg aggaatcaga cttaaaaatt ccacttaaaa ataaatcttc 32700

tacagcgacc agtgaaactg tagccagcag caaagccttt atgccaagta ctacagctta 32760

tcccttcaac accactacta gggatagtga aaactacatt catggaatat gttactacat 32820

gactagttat gatagaagtc tatttccctt gaacatttct ataatgctaa acagccgtat 32880

gatttcttcc aatgttgcct atgccataca atttgaatgg aatctaaatg caagtgaatc 32940

tccagaaagc aacatagcta cgctgaccac atcccccttt ttcttttctt acattacaga 33000

agacgacaac taaagaatcg tttgtgttat gtttcaacgt gtttattttt caattgcaga 33060

aaatttcaag tcatttttca ttcagtagta tagccccacc accacatagc ttatacagat 33120

caccgtacct taatcaaact cacagaaccc tagtattcaa cctgccacct ccctcccaac 33180

acacagagta cacagtcctt tctccccggc tggccttaaa aagcatcata tcatgggtaa 33240

cagacatatt cttaggtgtt atattccaca cggtttcctg tcgagccaaa cgctcatcag 33300

tgatattaat aaactccccg ggcagctcac ttaagttcat gtcgctgtcc agctgctgag 33360

ccacaggctg ctgtccaact tgcggttgct taacgggcgg cgaaggagaa gtccacgctc 33420

agtgctgcag cagcgcgcga ataaactgct gccgccgccg ctccgtcctg caggaataca 33480

acatggcagt ggtctcctca gcgatgattc gcaccgcccg cagcataagg cgccttgtcc 33540

tccgggcaca gcagcgcacc ctgatctcac ttaaatcagc acagtaactg cagcacagca 33600

ccacaatatt gttcaaaatc ccacagtgca aggcgctgta tccaaagctc atggcgggga 33660

ccacagaacc cacgtggcca tcataccaca agcgcaggta gattaagtgg cgacccctca 33720

taaacacgct ggacataaac attacctctt ttggcatgtt gtaattcacc acctcccggt 33780

accatataaa cctctgatta aacatggcgc catccaccac catcctaaac cagctggcca 33840

aaacctgccc gccggctata cactgcaggg aaccgggact ggaacaatga cagtggagag 33900

cccaggactc gtaaccatgg atcatcatgc tcgtcatgat atcaatgttg gcacaacaca 33960

ggcacacgtg catacacttc ctcaggatta caagctcctc ccgcgttaga accatatccc 34020

agggaacaac ccattcctga atcagcgtaa atcccacact gcagggaaga cctcgcacgt 34080

aactcacgtt gtgcattgtc aaagtgttac attcgggcag cagcggatga tcctccagta 34140

tggtagcgcg ggtttctgtc tcaaaaggag gtagacgatc cctactgtac ggagtgcgcc 34200

gagacaaccg agatcgtgtt ggtcgtagtg tcatgccaaa tggaacgccg gacgtagtca 34260

tatttcctga agcaaaacca ggtgcgggcg tgacaaacag atctgcgtct ccggtctcgc 34320

cgcttagatc gctctgtgta gtagttgtag tatatccact ctctcaaagc atccaggcgc 34380

cccctggctt cgggttctat gtaaactcct tcatgcgccg ctgccctgat aacatccacc 34440

accgcagaat aagccacacc cagccaacct acacattcgt tctgcgagtc acacacggga 34500

ggagcgggaa gagctggaag aaccatgttt ttttttttat tccaaaagat tatccaaaac 34560

ctcaaaatga agatctatta agtgaacgcg ctcccctccg gtggcgtggt caaactctac 34620

agccaaagaa cagataatgg catttgtaag atgttgcaca atggcttcca aaaggcaaac 34680

ggccctcacg tccaagtgga cgtaaaggct aaacccttca gggtgaatct cctctataaa 34740

cattccagca ccttcaacca tgcccaaata attctcatct cgccaccttc tcaatatatc 34800

tctaagcaaa tcccgaatat taagtccggc cattgtaaaa atctgctcca gagcgccctc 34860

caccttcagc ctcaagcagc gaatcatgat tgcaaaaatt caggttcctc acagacctgt 34920

ataagattca aaagcggaac attaacaaaa ataccgcgat cccgtaggtc ccttcgcagg 34980

gccagctgaa cataatcgtg caggtctgca cggaccagcg cggccacttc cccgccagga 35040

accatgacaa aagaacccac actgattatg acacgcatac tcggagctat gctaaccagc 35100

gtagccccga tgtaagcttg ttgcatgggc ggcgatataa aatgcaaggt gctgctcaaa 35160

aaatcaggca aagcctcgcg caaaaaagaa agcacatcgt agtcatgctc atgcagataa 35220

aggcaggtaa gctccggaac caccacagaa aaagacacca tttttctctc aaacatgtct 35280

gcgggtttct gcataaacac aaaataaaat aacaaaaaaa catttaaaca ttagaagcct 35340

gtcttacaac aggaaaaaca acccttataa gcataagacg gactacggcc atgccggcgt 35400

gaccgtaaaa aaactggtca ccgtgattaa aaagcaccac cgacagctcc tcggtcatgt 35460

ccggagtcat aatgtaagac tcggtaaaca catcaggttg attcacatcg gtcagtgcta 35520

aaaagcgacc gaaatagccc gggggaatac atacccgcag gcgtagagac aacattacag 35580

cccccatagg aggtataaca aaattaatag gagagaaaaa cacataaaca cctgaaaaac 35640

cctcctgcct aggcaaaata gcaccctccc gctccagaac aacatacagc gcttccacag 35700

cggcagccat aacagtcagc cttaccagta aaaaagaaaa cctattaaaa aaacaccact 35760

cgacacggca ccagctcaat cagtcacagt gtaaaaaagg gccaagtgca gagcgagtat 35820

atataggact aaaaaatgac gtaacggtta aagtccacaa aaaacaccca gaaaaccgca 35880

cgcgaaccta cgcccagaaa cgaaagccaa aaaacccaca acttcctcaa atcgtcactt 35940

ccgttttccc acgttacgtc acttcccatt ttaagaaaac tacaattccc aacacataca 36000

agttactccg ccctaaaacc tacgtcaccc gccccgttcc cacgccccgc gccacgtcac 36060

aaactccacc ccctcattat catattggct tcaatccaaa ataaggtata ttattgatga 36120

tg 36122

<210> 44
<211> 36107
<212> DNA
<213> Artificial Sequence

<220>
<223> Adk35RF-Spike/E4orf6(RSV)-E4dl-57(E4re#42)

<400> 44
ttaattaaca tcatcaataa tataccttat tttggattga agccaatatg ataatgaggg 60

ggtggagttt gtgacgtggc gcggggcgtg ggaacggggc gggtgacgta gtagtgtggc 120

ggaagtgtga tgttgcaagt gtggcggaac acatgtaagc gacggatgtg gcaaaagtga 180

cgtttttggt gtgcgccggt gtacacagga agtgacaatt ttcgcgcggt tttaggcgga 240

tgttgtagta aatttgggcg taaccgagta agatttggcc attttcgcgg gaaaactgaa 300

taagaggaag tgaaatctga ataattttgt gttactcata gcgcgtaata atttgatccg 360

cgttaagata cattgatgag tttggacaaa ccacaactag aatgcagtga aaaaaatgct 420

ttatttgtga aatttgtgat gctattgctt tatttgtaac cattataagc tgcaataaac 480

aagttaacaa caacaattgc attcatttta tgtttcaggt tcaggggggag gtgtgggagg 540

ttttttaaag caagtaaaac ctctacaaat gtggtatggc tgattatgat caattttcat 600

ggccacttga tgtattgttc atatttgccc agttcttgga ggtcaatcag ggactcattc 660

aggttcttag ccacctcatt cagtctgtca atctccttct ggatgttcac cacagaggca 720

ttgatgccag agatgtctcc caggtccaca tcagggctgg tgtggttctt gaagtatttg 780

tccagttcct ccttgaagga gtccagttca ggttggagtg ggtcatagac tgtgttgttc 840

acaatgccaa tcaccacatc acagttgcca gacacaaagg tgttgtctgt ggtgataatc 900

tgtggttcat agaagttcct ctgggtcaca aaccagtggg tgccattgct cacaaacact 960

ccctcccttg gaaagtgagc cttgccatca tggcagatgg caggggctgt ggtgaagttc 1020

ttctcctggg caggcacata ggtcacatgc aggaacacca ctccatgagg ggcagactgt 1080

ggaaaactca tcaggtggta gcccttgcca cagaagtcca ccctcttgct ttgtcccagc 1140

acacactcac tcatcttggt ggcagccagg ttggcagatg ccctaatctc agcagccctg 1200

ataagttgtt gggtcacata ggtttggagg gattggagtc tgcctgtaat cagtctgtca 1260

atctggacct cagcctccac cttgtccagt ctgctcagga tgtcattcag cacagaggag 1320

atggctccaa agttgctgga aagttgcttc accagggtgt tcagagcctg ggcattctgg 1380

ttcaccacat cttggagttt gcccagggca gaggctgtgc tggacaggga gtcctgaatc 1440

ttgccaatgg cagagttgaa ctggttggca atcagtttct ggttctcata gagcacattc 1500

tgggtcactc caatgccatt gaacctgtaa gccatctgca tagcaaatgg gatttggagg 1560

gctgctcctg ctccaaaggt ccagccagag gtgatggtgc cagccagcag ggcagaggtg 1620

tattgggcaa tcatctcatc tgtcagcagt ggaggcagca ctgtcagtcc attgaacttc 1680

tgggcacaaa tcaggtccct ggcagcaatg tctcccagac agtctccata ttgcttgatg 1740

aagccagcat cagccagggt caccttgttg aacagcaggt cctcaatgaa ggacctcttg 1800

cttggcttgc ttgggtcagg cagaatctgg ctgaagttga agcctccaaa gtccttgatt 1860

ggaggtgtct tgtaaatctg cttcacctgg gcaaacacct cctgggtgtt cttgtcctgt 1920

tccacagcaa tgcctgtcag agccctgtta agttgggtac agaaggagcc atattggagc 1980

agcaggttgc tacactctgt gctgtctcca cagatataca ttgtacagtc cacagaggtc 2040

ttggtcatac tcacaggcag aatctctgtg gtcacagaga tggtgaagtt ggttgggatg 2100

gcaatgctgt tgttgctgta agccacagag ttctctgctc ccagactcat tgtgtaggca 2160

atgatgctct ggcttgccac agacctcgac ccaccgccac cggtctgggt ctggtaggag 2220

gcacagatgc ctgctccaat tgggatgtca cactcatagg agttgttcac atgctctgct 2280

ccaatcagac agccagccct ggtctggaac acattgctgc ctgtgctgta gaccctccag 2340

gttggtgtaa gttggtcagc atggatagcc acaggcacct cagtacagtt cacatcctgg 2400

tagagcacag ccacctggtt gctggtgttg gtgccaggtg taatcacaga cactcctcca 2460

aaggaacatg gtgtgatgtc cagaatctcc aaggtctgtg ggtccctcac agcatctgtg 2520

gtgtcagcaa tgtccctgcc aaactgttgg aatggcagga acttcttgtt gctctctgtc 2580

agcactcctg tgcctgtcag tccattgaag ttgaagttca cacacttgtt cttcaccagg 2640

ttggtgctct tctttggtcc acacactgtg gcaggggcat ggagcagttc aaaggacagc 2700

accaccaccc tgtatggttg gtagcccact ccattggttg gttggaagcc ataggattgg 2760

agtggaaagt aacagttgaa gccctccact ccattacatg gtgtgctgcc agcctggtaa 2820

atctctgtgc tgatgtccct ctcaaatggt ttcaggttgc tcttcctgaa cagtctgtag 2880

aggtagttgt agttgcctcc caccttgctg tccaggttgt tgctgttcca ggcaatcaca 2940

cagcctgtga agtcatcagg cagtttgtag ttgtagtcag caatcttgcc tgtttgtcca 3000

ggggcaatct gtctcacctc atctccccta atcacaaagg agtcagcata gacattggtg 3060

aaacacaggt cattcagttt ggttgggctc actccataac acttgaaggt gctgaaggag 3120

gcagagttgt agagcacaga gtagtcagcc acacagttgc taatcctctt cctgttccag 3180

gcatagacag aggcaaacct ggtggcattg aacacctctc caaatggaca caggttggtg 3240

atgtttggaa acctcacaat gctctctgtt ggttggaccc tgaagttgct ggtctggtag 3300

atgcccttct ccactgtgaa ggatttcagg gtacacttgg tctcagacag tgggtccagg 3360

gcacagtcca cagcatctgt gatggtgcca ttctcattgt atttcagcag gaaggtcctt 3420

ggttggaggt agcccacata gtaggctgct gctcctgctg tccagccaga ggaggagtct 3480

ccaggtgtca ggtaggacct gtgcagagcc agcagggtct ggaacctggt gatgttgatg 3540

ccaattggca ggtccaccag tggttccaag gcagagaagc cctgtggcag gtccctcacc 3600

aggttgattg gtgtgtgttt gctgtaaatc ttgaagtagc catcaatgtt cttgaacaca 3660

aactccctca ggttcttgaa gttgccctgc ttgccctcca agtccatcag gaatggttgg 3720

ctcacatatt caaaggtaca gttgttggca gaggagtaga ccctgaactc agactccatc 3780

caggacttgt tgttcttgtg gtagtagact cccaggaatg ggtcattaca gaactggaac 3840

tcacacacct taatcaccac attggtggca ttgttcacaa tcagcaggga ctgggtcttg 3900

ctgtccaggg tggtgccaaa aatccagccc ctgatgatgt tgctcttctc tgtgctggca 3960

aagtagactc catcattgaa tggcagcaca gggttgtcaa acctcttggt gccattggtg 4020

ccagacacat ggatggcatg gaaccaggtc acattgctga agaatggcag gaacaggtcc 4080

tgggtgctgt gcagcacaga ggacctgaac accttgtcag ggtagtagac tcccctggtg 4140

aaggagttgg tgtaggcagg aggaagttgg gtcctggtgg tcaggttcac acactggctg 4200

gacaccagtg gcagcagcac caggaacaca aacatggtgg caaatcggag gctggatcgg 4260

tcccggtgtc ttctatggag gtcaaaacag cgtggatggc gtctccaggc gatctgacgg 4320

ttcactaaac gagctcgtcg acgatctcta tcactgatag ggagatctct atcactgata 4380

gggagagctc tgcttatata gacctcccac cgtacacgcc taccgcccat ttgcgtcaat 4440

ggggcggagt tgttacgaca ttttggaaag tcccgttgat tttggtgcca aaacaaactc 4500

ccattgacgt caatggggtg gagacttgga aatccccgtg agtcaaaccg ctatccacgc 4560

ccattgatgt actgccaaaa ccgcatcacc atggtaatag cgatgactaa tacgtagatg 4620

tactgccaag taggaaagtc ccataaggtc atgtactggg cataatgcca ggcgggccat 4680

ttaccgtcat tgacgtcaat agggggcgta cttggcatat gatacacttg atgtactgcc 4740

aagtgggcag tttaccgtaa atactccacc cattgacgtc aatggaaagt ccctattggc 4800

gttactatgg gaacatacgt cattattgac gtcaatgggc gggggtcgtt gggcggtcag 4860

ccaggcgggc catttaccgt aagttatgta acgcggaact ccatatatgg gctatgaact 4920

aatgaccccg taattgatta ctattacagt gtagtcttat gcaatactct tgtagtcttg 4980

caacatggta acgatgagtt agcaacatgc cttacaagga gagaaaaagc accgtgcatg 5040

ccgattggtg gaagtaaggt ggtacgatcg tgccttatta ggaaggcaac agacgggtct 5100

gacatggatt ggacgaacca ctgaattgcc gcattgcaga gatattgtat ttaagtgcct 5160

agctcgatac ataaacaaac taccccaagc tggccaccat gactacgtcc ggcgttccat 5220

ttggcatgac actacgacca acacgatctc ggttgtctcg gcgcactccg tacagtaggg 5280

atcgtctacc tccttttgag acagaaaccc gcgctaccat actggaggat catccgctgc 5340

tgcccgaatg taacactttg acaatgcaca acgtgagtta cgtgcgaggt cttccctgca 5400

gtgtgggatt tacgctgatt caggaatggg ttgttccctg ggatatggtt ctaacgcggg 5460

aggagcttgt aatcctgagg aagtgtatgc acgtgtgcct gtgttgtgcc aacattgata 5520

tcatgacgag catgatgatc catggttacg agtcctgggc tctccactgt cattgttcca 5580

gtcccggttc cctgcagtgt atagccggcg ggcaggtttt ggccagctgg tttaggatgg 5640

tggtggatgg cgccatgttt aatcagaggt ttatatggta ccgggaggtg gtgaattaca 5700

acatgccaaa agaggtaatg tttatgtcca gcgtgtttat gaggggtcgc cacttaatct 5760

acctgcgctt gtggtatgat ggccacgtgg gttctgtggt ccccgccatg agctttggat 5820

acagcgcctt gcactgtggg attttgaaca atattgtggt gctgtgctgc agttactgtg 5880

ctgatttaag tgagatcagg gtgcgctgct gtgcccggag gacaaggcgc cttatgctgc 5940

gggcggtgcg aatcatcgct gaggagacca ctgccatgtt gtattcctgc aggacggagc 6000

ggcggcggca gcagtttatt cgcgcgctgc tgcagcacca ccgccctatc ctgatgcacg 6060

attatgactc tacccccatg tagaagcttg gggatcaatt ctctagagct cgctgatcag 6120

cctcgactgt gccttctagt tgccagccat ctgttgtttg cccctccccc gtgccttcct 6180

tgaccctgga aggtgccact cccactgtcc tttcctaata aaatgaggaa attgcatcgc 6240

attgtctgag taggtgtcat tctattctgg ggggtggggt ggggcaggac agcaaggggg 6300

aggattggga agacaatagc aggcatgctg gggatgcggt gggctctatg gcttctgagg 6360

aaattgggcg tggcttaagg gtgggaaaga atatataagg tgggggtctt atgtagtttt 6420

gtatctgttt tgcagcagcc gccgccgcca tgagcaccaa ctcgtttgat ggaagcattg 6480

tgagctcata tttgacaacg cgcatgcccc catgggccgg ggtgcgtcag aatgtgatgg 6540

gctccagcat tgatggtcgc cccgtcctgc ccgcaaactc tactaccttg acctacgaga 6600

ccgtgtctgg aacgccgttg gagactgcag cctccgccgc cgcttcagcc gctgcagcca 6660

ccgcccgcgg gattgtgact gactttgctt tcctgagccc gcttgcaagc agtgcagctt 6720

cccgttcatc cgcccgcgat gacaagttga cggctctttt ggcacaattg gattctttga 6780

cccgggaact taatgtcgtt tctcagcagc tgttggatct gcgccagcag gtttctgccc 6840

tgaaggcttc ctcccctccc aatgcggttt aaaacataaa taaaaaacca gactctgttt 6900

ggatttggat caagcaagtg tcttgctgtc tttatttagg ggttttgcgc gcgcggtagg 6960

cccgggacca gcggtctcgg tcgttgaggg tcctgtgtat tttttccagg acgtggtaaa 7020

ggtgactctg gatgttcaga tacatgggca taagcccgtc tctggggtgg aggtagcacc 7080

actgcagagc ttcatgctgc ggggtggtgt tgtagatgat ccagtcgtag caggagcgct 7140

gggcgtggtg cctaaaaatg tctttcagta gcaagctgat tgccaggggc aggcccttgg 7200

tgtaagtgtt tacaaagcgg ttaagctggg atgggtgcat acgtggggat atgagatgca 7260

tcttggactg tatttttagg ttggctatgt tcccagccat atccctccgg ggattcatgt 7320

tgtgcagaac caccagcaca gtgtatccgg tgcacttggg aaatttgtca tgtagcttag 7380

aaggaaatgc gtggaagaac ttggagacgc ccttgtgacc tccaagattt tccatgcatt 7440

cgtccataat gatggcaatg ggcccacggg cggcggcctg ggcgaagata tttctgggat 7500

cactaacgtc atagttgtgt tccaggatga gatcgtcata ggccattttt acaaagcgcg 7560

ggcggagggt gccagactgc ggtataatgg ttccatccgg cccaggggcg tagttaccct 7620

cacagatttg catttcccac gctttgagtt cagatggggg gatcatgtct acctgcgggg 7680

cgatgaagaa aacggtttcc ggggtagggg agatcagctg ggaagaaagc aggttcctga 7740

gcagctgcga cttaccgcag ccggtgggcc cgtaaatcac acctattacc ggctgcaact 7800

ggtagttaag agagctgcag ctgccgtcat ccctgagcag gggggccact tcgttaagca 7860

tgtccctgac tcgcatgttt tccctgacca aatccgccag aaggcgctcg ccgcccagcg 7920

atagcagttc ttgcaaggaa gcaaagtttt tcaacggttt gagaccgtcc gccgtaggca 7980

tgcttttgag cgtttgacca agcagttcca ggcggtccca cagctcggtc acctgctcta 8040

cggcatctcg atccagcata tctcctcgtt tcgcgggttg gggcggcttt cgctgtacgg 8100

cagtagtcgg tgctcgtcca gacgggccag ggtcatgtct ttccacgggc gcagggtcct 8160

cgtcagcgta gtctgggtca cggtgaaggg gtgcgctccg ggctgcgcgc tggccagggt 8220

gcgcttgagg ctggtcctgc tggtgctgaa gcgctgccgg tcttcgccct gcgcgtcggc 8280

caggtagcat ttgaccatgg tgtcatagtc cagcccctcc gcggcgtggc ccttggcgcg 8340

cagcttgccc ttggaggagg cgccgcacga ggggcagtgc agacttttga gggcgtagag 8400

cttgggcgcg agaaataccg attccgggga gtaggcatcc gcgccgcagg ccccgcagac 8460

ggtctcgcat tccacgagcc aggtgagctc tggccgttcg gggtcaaaaa ccaggtttcc 8520

cccatgcttt ttgatgcgtt tcttacctct ggtttccatg agccggtgtc cacgctcggt 8580

gacgaaaagg ctgtccgtgt ccccgtatac agacttgaga ggcctgtcct cgagcggtgt 8640

tccgcggtcc tcctcgtata gaaactcgga ccactctgag acaaaggctc gcgtccaggc 8700

cagcacgaag gaggctaagt gggaggggta gcggtcgttg tccactaggg ggtccactcg 8760

ctccagggtg tgaagacaca tgtcgccctc ttcggcatca aggaaggtga ttggtttgta 8820

ggtgtaggcc acgtgaccgg gtgttcctga agggggggcta taaaaggggg tgggggcgcg 8880

ttcgtcctca ctctcttccg catcgctgtc tgcgagggcc agctgttggg gtgagtactc 8940

cctctgaaaa gcgggcatga cttctgcgct aagattgtca gtttccaaaa acgaggagga 9000

tttgatattc acctggcccg cggtgatgcc tttgagggtg gccgcatcca tctggtcaga 9060

aaagacaatc tttttgttgt caagcttggt ggcaaacgac ccgtagaggg cgttggacag 9120

caacttggcg atggagcgca gggtttggtt tttgtcgcga tcggcgcgct ccttggccgc 9180

gatgtttagc tgcacgtatt cgcgcgcaac gcaccgccat tcgggaaaga cggtggtgcg 9240

ctcgtcgggc accaggtgca cgcgccaacc gcggttgtgc agggtgacaa ggtcaacgct 9300

ggtggctacc tctccgcgta ggcgctcgtt ggtccagcag aggcggccgc ccttgcgcga 9360

gcagaatggc ggtagggggt ctagctgcgt ctcgtccggg gggtctgcgt ccacggtaaa 9420

gaccccgggc agcaggcgcg cgtcgaagta gtctatcttg catccttgca agtctagcgc 9480

ctgctgccat gcgcgggcgg caagcgcgcg ctcgtatggg ttgagtgggg gaccccatgg 9540

catggggtgg gtgagcgcgg aggcgtacat gccgcaaatg tcgtaaacgt agaggggctc 9600

tctgagtatt ccaagatatg tagggtagca tcttccaccg cggatgctgg cgcgcacgta 9660

atcgtatagt tcgtgcgagg gagcgaggag gtcgggaccg aggttgctac gggcgggctg 9720

ctctgctcgg aagactatct gcctgaagat ggcatgtgag ttggatgata tggttggacg 9780

ctggaagacg ttgaagctgg cgtctgtgag acctaccgcg tcacgcacga aggaggcgta 9840

ggagtcgcgc agcttgttga ccagctcggc ggtgacctgc acgtctaggg cgcagtagtc 9900

cagggtttcc ttgatgatgt catacttatc ctgtcccttt tttttccaca gctcgcggtt 9960

gaggacaaac tcttcgcggt ctttccagta ctcttggatc ggaaacccgt cggcctccga 10020

acggtaagag cctagcatgt agaactggtt gacggcctgg taggcgcagc atccctttc 10080

tacgggtagc gcgtatgcct gcgcggcctt ccggagcgag gtgtgggtga gcgcaaaggt 10140

gtccctgacc atgactttga ggtactggta tttgaagtca gtgtcgtcgc atccgccctg 10200

ctcccagagc aaaaagtccg tgcgcttttt ggaacgcgga tttggcaggg cgaaggtgac 10260

atcgttgaag agtatctttc ccgcgcgagg cataaagttg cgtgtgatgc ggaagggtcc 10320

cggcacctcg gaacggttgt taattacctg ggcggcgagc acgatctcgt caaagccgtt 10380

gatgttgtgg cccacaatgt aaagttccaa gaagcgcggg atgcccttga tggaaggcaa 10440

ttttttaagt tcctcgtagg tgagctcttc aggggagctg agcccgtgct ctgaaagggc 10500

ccagtctgca agatgagggt tggaagcgac gaatgagctc cacaggtcac gggccattag 10560

catttgcagg tggtcgcgaa aggtcctaaa ctggcgacct atggccattt tttctggggt 10620

gatgcagtag aaggtaagcg ggtcttgttc ccagcggtcc catccaaggt tcgcggctag 10680

gtctcgcgcg gcagtcacta gaggctcatc tccgccgaac ttcatgacca gcatgaaggg 10740

cacgagctgc ttcccaaagg cccccatcca agtataggtc tctacatcgt aggtgacaaa 10800

gagacgctcg gtgcgaggat gcgagccgat cgggaagaac tggatctccc gccaccaatt 10860

ggaggagtgg ctattgatgt ggtgaaagta gaagtccctg cgacgggccg aacactcgtg 10920

ctggcttttg taaaaacgtg cgcagtactg gcagcggtgc acgggctgta catcctgcac 10980

gaggttgacc tgacgaccgc gcacaaggaa gcagagtggg aatttgagcc cctcgcctgg 11040

cgggtttggc tggtggtctt ctacttcggc tgcttgtcct tgaccgtctg gctgctcgag 11100

gggagttacg gtggatcgga ccaccacgcc gcgcgagccc aaagtccaga tgtccgcgcg 11160

cggcggtcgg agcttgatga caacatcgcg cagatgggag ctgtccatgg tctggagctc 11220

ccgcggcgtc aggtcaggcg ggagctcctg caggtttacc tcgcatagac gggtcagggc 11280

gcgggctaga tccaggtgat acctaatttc caggggctgg ttggtggcgg cgtcgatggc 11340

ttgcaagagg ccgcatcccc gcggcgcgac tacggtaccg cgcggcgggc ggtgggccgc 11400

gggggtgtcc ttggatgatg catctaaaag cggtgacgcg ggcgagcccc cggaggtagg 11460

gggggctccg gacccgccgg gagaggggggc aggggcacgt cggcgccgcg cgcgggcagg 11520

agctggtgct gcgcgcgtag gttgctggcg aacgcgacga cgcggcggtt gatctcctga 11580

atctggcgcc tctgcgtgaa gacgacgggc ccggtgagct tgaacctgaa agagagttcg 11640

acagaatcaa tttcggtgtc gttgacggcg gcctggcgca aaatctcctg cacgtctcct 11700

gagttgtctt gataggcgat ctcggccatg aactgctcga tctcttcctc ctggagatct 11760

ccgcgtccgg ctcgctccac ggtggcggcg aggtcgttgg aaatgcgggc catgagctgc 11820

gagaaggcgt tgaggcctcc ctcgttccag acgcggctgt agaccacgcc cccttcggca 11880

tcgcgggcgc gcatgaccac ctgcgcgaga ttgagctcca cgtgccgggc gaagacggcg 11940

tagtttcgca ggcgctgaaa gaggtagttg agggtggtgg cggtgtgttc tgccacgaag 12000

aagtacataa cccagcgtcg caacgtggat tcgttgatat cccccaaggc ctcaaggcgc 12060

tccatggcct cgtagaagtc cacggcgaag ttgaaaaact gggagttgcg cgccgacacg 12120

gttaactcct cctccagaag acggatgagc tcggcgacag tgtcgcgcac ctcgcgctca 12180

aaggctacag gggcctcttc ttcttcttca atctcctctt ccataagggc ctccccttct 12240

tcttcttctg gcggcggtgg gggaggggggg acacggcggc gacgacggcg caccgggagg 12300

cggtcgacaa agcgctcgat catctccccg cggcgacggc gcatggtctc ggtgacggcg 12360

cggccgttct cgcgggggcg cagttggaag acgccgcccg tcatgtcccg gttatgggtt 12420

ggcgggggggc tgccatgcgg cagggatacg gcgctaacga tgcatctcaa caattgttgt 12480

gtaggtactc cgccgccgag ggacctgagc gagtccgcat cgaccggatc ggaaaacctc 12540

tcgagaaagg cgtctaacca gtcacagtcg caaggtaggc tgagcaccgt ggcgggcggc 12600

agcgggcggc ggtcggggtt gtttctggcg gaggtgctgc tgatgatgta attaaagtag 12660

gcggtcttga gacggcggat ggtcgacaga agcaccatgt ccttgggtcc ggcctgctga 12720

atgcgcaggc ggtcggccat gccccaggct tcgttttgac atcggcgcag gtctttgtag 12780

tagtcttgca tgagcctttc taccggcact tcttcttctc cttcctcttg tcctgcatct 12840

cttgcatcta tcgctgcggc ggcggcggag tttggccgta ggtggcgccc tcttcctccc 12900

atgcgtgtga ccccgaagcc cctcatcggc tgaagcaggg ctaggtcggc gacaacgcgc 12960

tcggctaata tggcctgctg cacctgcgtg agggtagact ggaagtcatc catgtccaca 13020

aagcggtggt atgcgcccgt gttgatggtg taagtgcagt tggccataac ggaccagtta 13080

acggtctggt gacccggctg cgagagctcg gtgtacctga gacgcgagta agccctcgag 13140

tcaaatacgt agtcgttgca agtccgcacc aggtactggt atcccaccaa aaagtgcggc 13200

ggcggctggc ggtagagggg ccagcgtagg gtggccgggg ctccgggggc gagatcttcc 13260

aacataaggc gatgatatcc gtagatgtac ctggacatcc aggtgatgcc ggcggcggtg 13320

gtggaggcgc gcggaaagtc gcggacgcgg ttccagatgt tgcgcagcgg caaaaagtgc 13380

tccatggtcg ggacgctctg gccggtcagg cgcgcgcaat cgttgacgct ctagcgtgca 13440

aaaggagagc ctgtaagcgg gcactcttcc gtggtctggt ggataaattc gcaagggtat 13500

catggcggac gaccggggtt cgagccccgt atccggccgt ccgccgtgat ccatgcggtt 13560

accgcccgcg tgtcgaaccc aggtgtgcga cgtcagacaa cgggggagtg ctccttttgg 13620

cttccttcca ggcgcggcgg ctgctgcgct agctttttg gccactggcc gcgcgcagcg 13680

taagcggtta ggctggaaag cgaaagcatt aagtggctcg ctccctgtag ccggagggtt 13740

attttccaag ggttgagtcg cgggaccccc ggttcgagtc tcggaccggc cggactgcgg 13800

cgaacggggg tttgcctccc cgtcatgcaa gaccccgctt gcaaattcct ccggaaacag 13860

ggacgagccc ctttttgct tttcccagat gcatccggtg ctgcggcaga tgcgcccccc 13920

tcctcagcag cggcaagagc aagagcagcg gcagacatgc agggcaccct cccctcctcc 13980

taccgcgtca ggaggggcga catccgcggt tgacgcggca gcagatggtg attacgaacc 14040

cccgcggcgc cgggcccggc actacctgga cttggaggag ggcgagggcc tggcgcggct 14100

aggagcgccc tctcctgagc ggcacccaag ggtgcagctg aagcgtgata cgcgtgaggc 14160

gtacgtgccg cggcagaacc tgtttcgcga ccgcgaggga gaggagcccg aggagatgcg 14220

ggatcgaaag ttccacgcag ggcgcgagct gcggcatggc ctgaatcgcg agcggttgct 14280

gcgcgaggag gactttgagc ccgacgcgcg aaccgggatt agtcccgcgc gcgcacacgt 14340

ggcggccgcc gacctggtaa ccgcatacga gcagacggtg aaccaggaga ttaactttca 14400

aaaaagcttt aacaaccacg tgcgtacgct tgtggcgcgc gaggaggtgg ctataggact 14460

gatgcatctg tgggactttg taagcgcgct ggagcaaaac ccaaatagca agccgctcat 14520

ggcgcagctg ttccttatag tgcagcacag cagggacaac gaggcattca gggatgcgct 14580

gctaaacata gtagagcccg agggccgctg gctgctcgat ttgataaaca tcctgcagag 14640

catagtggtg caggagcgca gcttgagcct ggctgacaag gtggccgcca tcaactattc 14700

catgcttagc ctgggcaagt tttacgcccg caagatatac catacccctt acgttcccat 14760

agacaaggag gtaaagatcg aggggttcta catgcgcatg gcgctgaagg tgcttacctt 14820

gagcgacgac ctgggcgttt atcgcaacga gcgcatccac aaggccgtga gcgtgagccg 14880

gcggcgcgag ctcagcgacc gcgagctgat gcacagcctg caaagggccc tggctggcac 14940

gggcagcggc gatagagagg ccgagtccta ctttgacgcg ggcgctgacc tgcgctgggc 15000

cccaagccga cgcgccctgg aggcagctgg ggccggacct gggctggcgg tggcacccgc 15060

gcgcgctggc aacgtcggcg gcgtggagga atatgacgag gacgatgagt acgagccaga 15120

ggacggcgag tactaagcgg tgatgtttct gatcagatga tgcaagacgc aacggacccg 15180

gcggtgcggg cggcgctgca gagccagccg tccggcctta actccacgga cgactggcgc 15240

caggtcatgg accgcatcat gtcgctgact gcgcgcaatc ctgacgcgtt ccggcagcag 15300

ccgcaggcca accggctctc cgcaattctg gaagcggtgg tcccggcgcg cgcaaacccc 15360

acgcacgaga aggtgctggc gatcgtaaac gcgctggccg aaaacagggc catccggccc 15420

gacgaggccg gcctggtcta cgacgcgctg cttcagcgcg tggctcgtta caacagcggc 15480

aacgtgcaga ccaacctgga ccggctggtg ggggatgtgc gcgaggccgt ggcgcagcgt 15540

gagcgcgcgc agcagcaggg caacctgggc tccatggttg cactaaacgc cttcctgagt 15600

acacagcccg ccaacgtgcc gcggggacag gaggactaca ccaactttgt gagcgcactg 15660

cggctaatgg tgactgagac accgcaaagt gaggtgtacc agtctgggcc agactatttt 15720

ttccagacca gtagacaagg cctgcagacc gtaaacctga gccaggcttt caaaaacttg 15780

caggggctgt ggggggtgcg ggctcccaca ggcgaccgcg cgaccgtgtc tagcttgctg 15840

acgcccaact cgcgcctgtt gctgctgcta atagcgccct tcacggacag tggcagcgtg 15900

tcccgggaca catacctagg tcacttgctg acactgtacc gcgaggccat aggtcaggcg 15960

catgtggacg agcatacttt ccaggagatt acaagtgtca gccgcgcgct ggggcaggag 16020

gacacgggca gcctggaggc aaccctaaac tacctgctga ccaaccggcg gcagaagatc 16080

ccctcgttgc acagtttaaa cagcgaggag gagcgcattt tgcgctacgt gcagcagagc 16140

gtgagcctta acctgatgcg cgacggggta acgcccagcg tggcgctgga catgaccgcg 16200

cgcaacatgg aaccgggcat gtatgcctca aaccggccgt ttatcaaccg cctaatggac 16260

tacttgcatc gcgcggccgc cgtgaacccc gagtatttca ccaatgccat cttgaacccg 16320

cactggctac cgccccctgg tttctacacc gggggattcg aggtgcccga gggtaacgat 16380

ggattcctct gggacgacat agacgacagc gtgttttccc cgcaaccgca gaccctgcta 16440

gagttgcaac agcgcgagca ggcagaggcg gcgctgcgaa aggaaagctt ccgcaggcca 16500

agcagcttgt ccgatctagg cgctgcggcc ccgcggtcag atgctagtag cccatttcca 16560

agcttgatag ggtctcttac cagcactcgc accacccgcc cgcgcctgct gggcgaggag 16620

gagtacctaa acaactcgct gctgcagccg cagcgcgaaa aaaacctgcc tccggcattt 16680

cccaacaacg ggatagagag cctagtggac aagatgagta gatggaagac gtacgcgcag 16740

gagcacaggg acgtgccagg cccgcgcccg cccacccgtc gtcaaaggca cgaccgtcag 16800

cggggtctgg tgtgggagga cgatgactcg gcagacgaca gcagcgtcct ggatttggga 16860

gggagtggca acccgtttgc gcaccttcgc cccaggctgg ggagaatgtt ttaaaaaaaa 16920

aaaagcatga tgcaaaataa aaaactcacc aaggccatgg caccgagcgt tggttttctt 16980

gtattcccct tagtatgcgg cgcgcggcga tgtatgagga aggtcctcct ccctcctacg 17040

agagtgtggt gagcgcggcg ccagtggcgg cggcgctggg ttctcccttc gatgctcccc 17100

tggacccgcc gtttgtgcct ccgcggtacc tgcggcctac cgggggggaga aacagcatcc 17160

gttactctga gttggcaccc ctattcgaca ccacccgtgt gtacctggtg gacaacaagt 17220

caacggatgt ggcatccctg aactaccaga acgaccacag caactttctg accacggtca 17280

ttcaaaacaa tgactacagc ccgggggagg caagcacaca gaccatcaat cttgacgacc 17340

ggtcgcactg gggcggcgac ctgaaaacca tcctgcatac caacatgcca aatgtgaacg 17400

agttcatgtt taccaataag tttaaggcgc gggtgatggt gtcgcgcttg cctactaagg 17460

acaatcaggt ggagctgaaa tacgagtggg tggagttcac gctgcccgag ggcaactact 17520

ccgagaccat gaccatagac cttatgaaca acgcgatcgt ggagcactac ttgaaagtgg 17580

gcagacagaa cggggttctg gaaagcgaca tcggggtaaa gtttgacacc cgcaacttca 17640

gactggggtt tgaccccgtc actggtcttg tcatgcctgg ggtatataca aacgaagcct 17700

tccatccaga catcattttg ctgccaggat gcggggtgga cttcacccac agccgcctga 17760

gcaacttgtt gggcatccgc aagcggcaac ccttccagga gggctttagg atcacctacg 17820

atgatctgga gggtggtaac attcccgcac tgttggatgt ggacgcctac caggcgagct 17880

tgaaagatga caccgaacag ggcgggggtg gcgcaggcgg cagcaacagc agtggcagcg 17940

gcgcggaaga gaactccaac gcggcagccg cggcaatgca gccggtggag gacatgaacg 18000

atcatgccat tcgcggcgac acctttgcca cacgggctga ggagaagcgc gctgaggccg 18060

aagcagcggc cgaagctgcc gcccccgctg cgcaacccga ggtcgagaag cctcagaaga 18120

aaccggtgat caaacccctg acagaggaca gcaagaaacg cagttacaac ctaataagca 18180

atgacagcac cttcacccag taccgcagct ggtaccttgc atacaactac ggcgaccctc 18240

agaccggaat ccgctcatgg accctgcttt gcactcctga cgtaacctgc ggctcggagc 18300

aggtctactg gtcgttgcca gacatgatgc aagaccccgt gaccttccgc tccacgcgcc 18360

agatcagcaa ctttccggtg gtgggcgccg agctgttgcc cgtgcactcc aagagcttct 18420

acaacgacca ggccgtctac tcccaactca tccgccagtt tacctctctg acccacgtgt 18480

tcaatcgctt tcccgagaac cagattttgg cgcgcccgcc agcccccacc atcaccaccg 18540

tcagtgaaaa cgttcctgct ctcacagatc acgggacgct accgctgcgc aacagcatcg 18600

gaggagtcca gcgagtgacc attactgacg ccagacgccg cacctgcccc tacgtttaca 18660

aggccctggg catagtctcg ccgcgcgtcc tatcgagccg cacttttga gcaagcatgt 18720

ccatccttat atcgcccagc aataacacag gctggggcct gcgcttccca agcaagatgt 18780

ttggcggggc caagaagcgc tccgaccaac acccagtgcg cgtgcgcggg cactaccgcg 18840

cgccctgggg cgcgcacaaa cgcggccgca ctgggcgcac caccgtcgat gacgccatcg 18900

acgcggtggt ggaggaggcg cgcaactaca cgcccacgcc gccaccagtg tccacagtgg 18960

acgcggccat tcagaccgtg gtgcgcggag cccggcgcta tgctaaaatg aagagacggc 19020

ggaggcgcgt agcacgtcgc caccgccgcc gacccggcac tgccgcccaa cgcgcggcgg 19080

cggccctgct taaccgcgca cgtcgcaccg gccgacgggc ggccatgcgg gccgctcgaa 19140

ggctggccgc gggtattgtc actgtgcccc ccaggtccag gcgacgagcg gccgccgcag 19200

cagccgcggc cattagtgct atgactcagg gtcgcagggg caacgtgtat tgggtgcgcg 19260

actcggttag cggcctgcgc gtgcccgtgc gcacccgccc cccgcgcaac tagattgcaa 19320

gaaaaaacta cttagactcg tactgttgta tgtatccagc ggcggcggcg cgcaacgaag 19380

ctatgtccaa gcgcaaaatc aaagaagaga tgctccaggt catcgcgccg gagatctatg 19440

gccccccgaa gaaggaagag caggattaca agccccgaaa gctaaagcgg gtcaaaaaga 19500

aaaagaaaga tgatgatgat gaacttgacg acgaggtgga actgctgcac gctaccgcgc 19560

ccaggcgacg ggtacagtgg aaaggtcgac gcgtaaaacg tgttttgcga cccggcacca 19620

ccgtagtctt tacgcccggt gagcgctcca cccgcaccta caagcgcgtg tatgatgagg 19680

tgtacggcga cgaggacctg cttgagcagg ccaacgagcg cctcggggag tttgcctacg 19740

gaaagcggca taaggacatg ctggcgttgc cgctggacga gggcaaccca acacctagcc 19800

taaagcccgt aacactgcag caggtgctgc ccgcgcttgc accgtccgaa gaaaagcgcg 19860

gcctaaagcg cgagtctggt gacttggcac ccaccgtgca gctgatggta cccaagcgcc 19920

agcgactgga agatgtcttg gaaaaaatga ccgtggaacc tgggctggag cccgaggtcc 19980

gcgtgcggcc aatcaagcag gtggcgccgg gactgggcgt gcagaccgtg gacgttcaga 20040

tacccactac cagtagcacc agtattgcca ccgccacaga gggcatggag acacaaacgt 20100

ccccggttgc ctcagcggtg gcggatgccg cggtgcaggc ggtcgctgcg gccgcgtcca 20160

agacctctac ggaggtgcaa acggacccgt ggatgtttcg cgtttcagcc ccccggcgcc 20220

cgcgccgttc gaggaagtac ggcgccgcca gcgcgctact gcccgaatat gccctacatc 20280

cttccattgc gcctaccccc ggctatcgtg gctacaccta ccgccccaga agacgagcaa 20340

ctacccgacg ccgaaccacc actggaaccc gccgccgccg tcgccgtcgc cagcccgtgc 20400

tggccccgat ttccgtgcgc agggtggctc gcgaaggagg caggaccctg gtgctgccaa 20460

cagcgcgcta ccaccccagc atcgtttaaa agccggtctt tgtggttctt gcagatatgg 20520

ccctcacctg ccgcctccgt ttcccggtgc cgggattccg aggaagaatg caccgtagga 20580

ggggcatggc cggccacggc ctgacgggcg gcatgcgtcg tgcgcaccac cggcggcggc 20640

gcgcgtcgca ccgtcgcatg cgcggcggta tcctgcccct ccttattcca ctgatcgccg 20700

cggcgattgg cgccgtgccc ggaattgcat ccgtggcctt gcaggcgcag agacactgat 20760

taaaaacaag ttgcatgtgg aaaaatcaaa ataaaaagtc tggactctca cgctcgcttg 20820

gtcctgtaac tattttgtag aatggaagac atcaactttg cgtctctggc cccgcgacac 20880

ggctcgcgcc cgttcatggg aaactggcaa gatatcggca ccagcaatat gagcggtggc 20940

gccttcagct ggggctcgct gtggagcggc attaaaaatt tcggttccac cgttaagaac 21000

tatggcagca aggcctggaa cagcagcaca ggccagatgc tgagggataa gttgaaagag 21060

caaaatttcc aacaaaaggt ggtagatggc ctggcctctg gcattagcgg ggtggtggac 21120

ctggccaacc aggcagtgca aaataagatt aacagtaagc ttgatccccg ccctcccgta 21180

gaggagcctc caccggccgt ggagacagtg tctccagagg ggcgtggcga aaagcgtccg 21240

cgccccgaca gggaagaaac tctggtgacg caaatagacg agcctccctc gtacgaggag 21300

gcactaaagc aaggcctgcc caccacccgt cccatcgcgc ccatggctac cggagtgctg 21360

ggccagcaca cacccgtaac gctggacctg cctccccccg ccgacaccca gcagaaacct 21420

gtgctgccag gcccgaccgc cgttgttgta acccgtccta gccgcgcgtc cctgcgccgc 21480

gccgccagcg gtccgcgatc gttgcggccc gtagccagtg gcaactggca aagcacactg 21540

aacagcatcg tgggtctggg ggtgcaatcc ctgaagcgcc gacgatgctt ctgatagcta 21600

acgtgtcgta tgtgtgtcat gtatgcgtcc atgtcgccgc cagaggagct gctgagccgc 21660

cgcgcgcccg ctttccaaga tggctacccc ttcgatgatg ccgcagtggt cttacatgca 21720

catctcgggc caggacgcct cggagtacct gagccccggg ctggtgcagt ttgcccgcgc 21780

caccgagacg tacttcagcc tgaataacaa gtttagaaac cccacggtgg cgcctacgca 21840

cgacgtgacc acagaccggt cccagcgttt gacgctgcgg ttcatccctg tggaccgtga 21900

ggatactgcg tactcgtaca aggcgcggtt caccctagct gtgggtgata accgtgtgct 21960

ggacatggct tccacgtact ttgacatccg cggcgtgctg gacaggggcc ctacttttaa 22020

gccctactct ggcactgcct acaacgccct ggctcccaag ggtgccccaa atccttgcga 22080

atgggatgaa gctgctactg ctcttgaaat aaacctagaa gaagaggacg atgacaacga 22140

agacgaagta gacgagcaag ctgagcagca aaaaactcac gtatttgggc aggcgcctta 22200

ttctggtata aatattacaa aggagggtat tcaaataggt gtcgaaggtc aaacacctaa 22260

atatgccgat aaaacatttc aacctgaacc tcaaatagga gaatctcagt ggtacgaaac 22320

agaaattaat catgcagctg ggagagtcct aaaaaagact accccaatga aaccatgtta 22380

cggttcatat gcaaaaccca caaatgaaaa tggagggcaa ggcattcttg taaagcaaca 22440

aaatggaaag ctagaaagtc aagtggaaat gcaatttttc tcaactactg aggcagccgc 22500

aggcaatggt gataacttga ctcctaaagt ggtattgtac agtgaagatg tagatataga 22560

aaccccagac actcatattt cttacatgcc cactattaag gaaggtaact cacgagaact 22620

aatgggccaa caatctatgc ccaacaggcc taattacatt gcttttaggg acaattttat 22680

tggtctaatg tattacaaca gcacgggtaa tatgggtgtt ctggcgggcc aagcatcgca 22740

gttgaatgct gttgtagatt tgcaagacag aaacacagag ctttcatacc agcttttgct 22800

tgattccatt ggtgatagaa ccaggtactt ttctatgtgg aatcaggctg ttgacagcta 22860

tgatccagat gttagaatta ttgaaaatca tggaactgaa gatgaacttc caaattactg 22920

ctttccactg ggaggtgtga ttaatacaga gactcttacc aaggtaaaac ctaaaacagg 22980

tcaggaaaat ggatgggaaa aagatgctac agaattttca gataaaaatg aaataagagt 23040

tggaaataat tttgccatgg aaatcaatct aaatgccaac ctgtggagaa atttcctgta 23100

ctccaacata gcgctgtatt tgcccgacaa gctaaagtac agtccttcca acgtaaaaat 23160

ttctgataac ccaaacacct acgactacat gaacaagcga gtggtggctc ccgggctagt 23220

ggactgctac attaaccttg gagcacgctg gtcccttgac tatatggaca acgtcaaccc 23280

atttaaccac caccgcaatg ctggcctgcg ctaccgctca atgttgctgg gcaatggtcg 23340

ctatgtgccc ttccacatcc aggtgcctca gaagttcttt gccattaaaa acctccttct 23400

cctgccgggc tcatacacct acgagtggaa cttcaggaag gatgttaaca tggttctgca 23460

gagctcccta ggaaatgacc taagggttga cggagccagc attaagtttg atagcatttg 23520

cctttacgcc accttcttcc ccatggccca caacaccgcc tccacgcttg aggccatgct 23580

tagaaacgac accaacgacc agtcctttaa cgactatctc tccgccgcca acatgctcta 23640

ccctataccc gccaacgcta ccaacgtgcc catatccatc ccctcccgca actgggcggc 23700

tttccgcggc tgggccttca cgcgccttaa gactaaggaa accccatcac tgggctcggg 23760

ctacgaccct tattacacct actctggctc tataccctac ctagatggaa ccttttacct 23820

caaccacacc tttaagaagg tggccattac ctttgactct tctgtcagct ggcctggcaa 23880

tgaccgcctg cttaccccca acgagtttga aattaagcgc tcagttgacg gggagggtta 23940

caacgttgcc cagtgtaaca tgaccaaaga ctggttcctg gtacaaatgc tagctaacta 24000

taacattggc taccagggct tctatatccc agagagctac aaggaccgca tgtactcctt 24060

ctttagaaac ttccagccca tgagccgtca ggtggtggat gatactaaat acaaggacta 24120

ccaacaggtg ggcatcctac accaacacaa caactctgga tttgttggct accttgcccc 24180

caccatgcgc gaaggacagg cctaccctgc taacttcccc tatccgctta taggcaagac 24240

cgcagttgac agcattaccc agaaaaagtt tctttgcgat cgcacccttt ggcgcatccc 24300

attctccagt aactttatgt ccatgggcgc actcacagac ctgggccaaa accttctcta 24360

cgccaactcc gcccacgcgc tagacatgac ttttgaggtg gatcccatgg acgagcccac 24420

ccttctttat gttttgtttg aagtctttga cgtggtccgt gtgcaccagc cgcaccgcgg 24480

cgtcatcgaa accgtgtacc tgcgcacgcc cttctcggcc ggcaacgcca caacataaag 24540

aagcaagcaa catcaacaac agctgccgcc atgggctcca gtgagcagga actgaaagcc 24600

attgtcaaag atcttggttg tgggccatat tttttgggca cctatgacaa gcgctttcca 24660

ggctttgttt ctccacacaa gctcgcctgc gccatagtca atacggccgg tcgcgagact 24720

gggggcgtac actggatggc ctttgcctgg aacccgcact caaaaacatg ctacctcttt 24780

gagccctttg gcttttctga ccagcgactc aagcaggttt accagtttga gtacgagtca 24840

ctcctgcgcc gtagcgccat tgcttcttcc cccgaccgct gtataacgct ggaaaagtcc 24900

acccaaagcg tacaggggcc caactcggcc gcctgtggac tattctgctg catgtttctc 24960

cacgcctttg ccaactggcc ccaaactccc atggatcaca accccaccat gaaccttatt 25020

accggggtac ccaactccat gctcaacagt ccccaggtac agcccaccct gcgtcgcaac 25080

caggaacagc tctacagctt cctggagcgc cactcgccct acttccgcag ccacagtgcg 25140

cagattagga gcgccacttc tttttgtcac ttgaaaaaca tgtaaaaata atgtactaga 25200

gacactttca ataaaggcaa atgcttttat ttgtacactc tcgggtgatt atttaccccc 25260

acccttgccg tctgcgccgt ttaaaaatca aaggggttct gccgcgcatc gctatgcgcc 25320

actggcaggg acacgttgcg atactggtgt ttagtgctcc acttaaactc aggcacaacc 25380

atccgcggca gctcggtgaa gttttcactc cacaggctgc gcaccatcac caacgcgttt 25440

agcaggtcgg gcgccgatat cttgaagtcg cagttggggc ctccgccctg cgcgcgcgag 25500

ttgcgataca cagggttgca gcactggaac actatcagcg ccgggtggtg cacgctggcc 25560

agcacgctct tgtcggagat cagatccgcg tccaggtcct ccgcgttgct cagggcgaac 25620

ggagtcaact ttggtagctg ccttcccaaa aagggcgcgt gcccaggctt tgagttgcac 25680

tcgcaccgta gtggcatcaa aaggtgaccg tgcccggtct gggcgttagg atacagcgcc 25740

tgcataaaag ccttgatctg cttaaaagcc acctgagcct ttgcgccttc agagaagaac 25800

atgccgcaag acttgccgga aaactgattg gccggacagg ccgcgtcgtg cacgcagcac 25860

cttgcgtcgg tgttggagat ctgcaccaca tttcggcccc accggttctt cacgatcttg 25920

gccttgctag actgctcctt cagcgcgcgc tgcccgtttt cgctcgtcac atccatttca 25980

atcacgtgct ccttatttat cataatgctt ccgtgtagac acttaagctc gccttcgatc 26040

tcagcgcagc ggtgcagcca caacgcgcag cccgtgggct cgtgatgctt gtaggtcacc 26100

tctgcaaacg actgcaggta cgcctgcagg aatcgcccca tcatcgtcac aaaggtcttg 26160

ttgctggtga aggtcagctg caacccgcgg tgctcctcgt tcagccaggt cttgcatacg 26220

gccgccagag cttccacttg gtcaggcagt agtttgaagt tcgcctttag atcgttatcc 26280

acgtggtact tgtccatcag cgcgcgcgca gcctccatgc ccttctccca cgcagacacg 26340

atcggcacac tcagcgggtt catcaccgta atttcacttt ccgcttcgct gggctcttcc 26400

tcttcctctt gcgtccgcat accacgcgcc actgggtcgt cttcattcag ccgccgcact 26460

gtgcgcttac ctcctttgcc atgcttgatt agcaccggtg ggttgctgaa acccaccatt 26520

tgtagcgcca catcttctct ttcttcctcg ctgtccacga ttacctctgg tgatggcggg 26580

cgctcgggct tgggagaagg gcgcttcttt ttcttcttgg gcgcaatggc caaatccgcc 26640

gccgaggtcg atggccgcgg gctgggtgtg cgcggcacca gcgcgtcttg tgatgagtct 26700

tcctcgtcct cggactcgat acgccgcctc atccgctttt ttgggggcgc ccggggaggc 26760

ggcggcgacg gggacgggga cgacacgtcc tccatggttg ggggacgtcg cgccgcaccg 26820

cgtccgcgct cgggggtggt ttcgcgctgc tcctcttccc gactggccat ttccttctcc 26880

tataggcaga aaaagatcat ggagtcagtc gagaagaagg acagcctaac cgccccctct 26940

gagttcgcca ccaccgcctc caccgatgcc gccaacgcgc ctaccacctt ccccgtcgag 27000

gcacccccgc ttgaggagga ggaagtgatt atcgagcagg acccaggttt tgtaagcgaa 27060

gacgacgagg accgctcagt accaacagag gataaaaagc aagaccagga caacgcagag 27120

gcaaacgagg aacaagtcgg gcgggggggac gaaaggcatg gcgactacct agatgtggga 27180

gacgacgtgc tgttgaagca tctgcagcgc cagtgcgcca ttatctgcga cgcgttgcaa 27240

gagcgcagcg atgtgcccct cgccatagcg gatgtcagcc ttgcctacga acgccaccta 27300

ttctcaccgc gcgtaccccc caaacgccaa gaaaacggca catgcgagcc caacccgcgc 27360

ctcaacttct accccgtatt tgccgtgcca gaggtgcttg ccacctatca catcttttc 27420

caaaactgca agataccct atcctgccgt gccaaccgca gccgagcgga caagcagctg 27480

gccttgcggc agggcgctgt catacctgat atcgcctcgc tcaacgaagt gccaaaaatc 27540

tttgagggtc ttggacgcga cgagaagcgc gcggcaaacg ctctgcaaca ggaaaacagc 27600

gaaaatgaaa gtcactctgg agtgttggtg gaactcgagg gtgacaacgc gcgcctagcc 27660

gtactaaaac gcagcatcga ggtcacccac tttgcctacc cggcacttaa cctacccccc 27720

aaggtcatga gcacagtcat gagtgagctg atcgtgcgcc gtgcgcagcc cctggagagg 27780

gatgcaaatt tgcaagaaca aacagaggag ggcctacccg cagttggcga cgagcagcta 27840

gcgcgctggc ttcaaacgcg cgagcctgcc gacttggagg agcgacgcaa actaatgatg 27900

gccgcagtgc tcgttaccgt ggagcttgag tgcatgcagc ggttctttgc tgacccggag 27960

atgcagcgca agctagagga aacattgcac tacacctttc gacagggcta cgtacgccag 28020

gcctgcaaga tctccaacgt ggagctctgc aacctggtct cctaccttgg aattttgcac 28080

gaaaaccgcc ttgggcaaaa cgtgcttcat tccacgctca agggcgaggc gcgccgcgac 28140

tacgtccgcg actgcgttta cttatttcta tgctacacct ggcagacggc catgggcgtt 28200

tggcagcagt gcttggagga gtgcaacctc aaggagctgc agaaactgct aaagcaaaac 28260

ttgaaggacc tatggacggc cttcaacgag cgctccgtgg ccgcgcacct ggcggacatc 28320

attttccccg aacgcctgct taaaaccctg caacagggtc tgccagactt caccagtcaa 28380

agcatgttgc agaactttag gaactttatc ctagagcgct caggaatctt gcccgccacc 28440

tgctgtgcac ttcctagcga ctttgtgccc attaagtacc gcgaatgccc tccgccgctt 28500

tggggccact gctaccttct gcagctagcc aactaccttg cctaccactc tgacataatg 28560

gaagacgtga gcggtgacgg tctactggag tgtcactgtc gctgcaacct atgcaccccg 28620

caccgctccc tggtttgcaa ttcgcagctg cttaacgaaa gtcaaattat cggtaccttt 28680

gagctgcagg gtccctcgcc tgacgaaaag tccgcggctc cggggttgaa actcactccg 28740

gggctgtgga cgtcggctta ccttcgcaaa tttgtacctg aggactacca cgcccacgag 28800

attaggttct acgaagacca atcccgcccg cctaatgcgg agcttaccgc ctgcgtcatt 28860

acccagggcc acattcttgg ccaattgcaa gccatcaaca aagcccgcca agagtttctg 28920

ctacgaaagg gacgggggggt ttacttggac ccccagtccg gcgaggagct caacccaatc 28980

cccccgccgc cgcagcccta tcagcagcag ccgcgggccc ttgcttccca ggatggcacc 29040

caaaaagaag ctgcagctgc cgccgccacc cacggacgag gaggaatact gggacagtca 29100

ggcagaggag gttttggacg aggaggagga ggacatgatg gaagactggg agagcctaga 29160

cgaggaagct tccgaggtcg aagaggtgtc agacgaaaca ccgtcaccct cggtcgcatt 29220

cccctcgccg gcgccccaga aatcggcaac cggttccagc atggctacaa cctccgctcc 29280

tcaggcgccg ccggcactgc ccgttcgccg acccaaccgt agatgggaca ccactggaac 29340

cagggccggt aagtccaagc agccgccgcc gttagcccaa gagcaacaac agcgccaagg 29400

ctaccgctca tggcgcgggc acaagaacgc catagttgct tgcttgcaag actgtggggg 29460

caacatctcc ttcgcccgcc gctttcttct ctaccatcac ggcgtggcct tcccccgtaa 29520

catcctgcat tactaccgtc atctctacag cccatactgc accggcggca gcggcagcaa 29580

cagcagcggc cacacagaag caaaggcgac cggatagcaa gactctgaca aagcccaaga 29640

aatccacagc ggcggcagca gcaggaggag gagcgctgcg tctggcgccc aacgaacccg 29700

tatcgacccg cgagcttaga aacaggattt ttcccactct gtatgctata tttcaacaga 29760

gcaggggcca agaacaagag ctgaaaataa aaaacaggtc tctgcgatcc ctcacccgca 29820

gctgcctgta tcacaaaagc gaagatcagc ttcggcgcac gctggaagac gcggaggctc 29880

tcttcagtaa atactgcgcg ctgactctta aggactagtt tcgcgccctt tctcaaattt 29940

aagcgcgaaa actacgtcat ctccagcggc cacacccggc gccagcacct gttgtcagcg 30000

ccattatgag caaggaaatt cccacgccct acatgtggag ttaccagcca caaatgggac 30060

ttgcggctgg agctgcccaa gactactcaa cccgaataaa ctacatgagc gcgggacccc 30120

acatgatatc ccgggtcaac ggaatacgcg cccaccgaaa ccgaattctc ctggaacagg 30180

cggctattac caccacacct cgtaataacc ttaatccccg tagttggccc gctgccctgg 30240

tgtaccagga aagtcccgct cccaccactg tggtacttcc cagagacgcc caggccgaag 30300

ttcagatgac taactcaggg gcgcagcttg cgggcggctt tcgtcacagg gtgcggtcgc 30360

ccgggcaggg tataactcac ctgacaatca gagggcgagg tattcagctc aacgacgagt 30420

cggtgagctc ctcgcttggt ctccgtccgg acgggacatt tcagatcggc ggcgccggcc 30480

gctcttcatt cacgcctcgt caggcaatcc taactctgca gacctcgtcc tctgagccgc 30540

gctctggagg cattggaact ctgcaattta ttgaggagtt tgtgccatcg gtctacttta 30600

acccctttctc gggacctccc ggccactatc cggatcaatt tattcctaac tttgacgcgg 30660

taaaggactc ggcggacggc tacgactgaa tgttaagtgg agaggcagag caactgcgcc 30720

tgaaacacct ggtccactgt cgccgccaca agtgctttgc ccgcgactcc ggtgagtttt 30780

gctactttga attgcccgag gatcatatcg agggcccggc gcacggcgtc cggcttaccg 30840

cccagggaga gcttgcccgt agcctgattc gggagtttac ccagcgcccc ctgctagttg 30900

agcgggacag gggaccctgt gttctcactg tgatttgcaa ctgtcctaac cctggattac 30960

atcaagatcc tctagttaat gtcaggtcgc ctaagtcgat taactagagt acccggggat 31020

cttattccct ttaactaata aaaaaaaata ataaagcatc acttacttaa aatcagttag 31080

caaatttctg tccagtttat tcagcagcac ctccttgccc tcctcccagc tctggtattg 31140

cagcttcctc ctggctgcaa actttctcca caatctaaat ggaatgtcag tttcctcctg 31200

ttcctgtcca tccgcaccca ctatcttcat gttgttgcag atgaagcgcg caagaccgtc 31260

tgaagatacc ttcaaccccg tgtatccata tgacacggaa accggtcctc caactgtgcc 31320

ttttcttact cctccctttg tatcccccaa tgggtttcaa gagagtcccc ctggggtact 31380

ctctttgcgc ctatccgaac ctctagttac ctccaatggc atgcttgcgc tcaaaatggg 31440

caacggcctc tctctggacg aggccggcaa ccttacctcc caaaatgtaa ccactgtgag 31500

cccacctctc aaaaaaacca agtcaaacat aaacctggaa atatctgcac ccctcacagt 31560

tacctcagaa gccctaactg tggctgccgc cgcacctcta atggtcgcgg gcaacacact 31620

caccatgcaa tcacaggccc cgctaaccgt gcacgactcc aaacttagca ttgccaccca 31680

aggacccctc acagtgtcag aaggaaagct agccctgcaa acatcaggcc ccctcaccac 31740

caccgatagc agtaccctta ctatcactgc ctcaccccct ctaactactg ccactggtag 31800

cttgggcatt gacttgaaag agcccattta tacacaaaat ggaaaactag gactaaagta 31860

cggggctcct ttgcatgtaa cagacgacct aaacactttg accgtagcaa ctggtccagg 31920

tgtgactatt aataatactt ccttgcaaac taaagttact ggagccttgg gttttgattc 31980

acaaggcaat atgcaactta atgtagcagg aggactaagg attgattctc aaaacagacg 32040

ccttatactt gatgttagtt atccgtttga tgctcaaaac caactaaatc taagactagg 32100

acagggccct ctttttataa actcagccca caacttggat attaactaca acaaaggcct 32160

ttacttgttt acagcttcaa acaattccaa aaagcttgag gttaacctaa gcactgccaa 32220

ggggttgatg tttgacgcta cagccatagc cattaatgca ggagatgggc ttgaatttgg 32280

ttcacctaat gcaccaaaca caaatcccct caaaacaaaa attggccatg gcctagaatt 32340

tgattcaaac aaggctatgg ttcctaaact aggaactggc cttagttttg acagcacagg 32400

tgccattaca gtaggaaaca aaaataatga taagctaact ttgtggaccg gaataaaccc 32460

tccacctaac tgtcaaattg tggaaaacac taatacaaat gatggcaaac ttactttagt 32520

attagtaaaa aatggagggc ttgttaatgg ctacgtgtct ctagttggtg tatcagacac 32580

tgtgaaccaa atgttcacac aaaagacagc aaacatccaa ttaagattat attttgactc 32640

ttctggaaat ctattaactg aggaatcaga cttaaaaatt ccacttaaaa ataaatcttc 32700

tacagcgacc agtgaaactg tagccagcag caaagccttt atgccaagta ctacagctta 32760

tcccttcaac accactacta gggatagtga aaactacatt catggaatat gttactacat 32820

gactagttat gatagaagtc tatttccctt gaacatttct ataatgctaa acagccgtat 32880

gatttcttcc aatgttgcct atgccataca atttgaatgg aatctaaatg caagtgaatc 32940

tccagaaagc aacatagcta cgctgaccac atcccccttt ttcttttctt acattacaga 33000

agacgacaac taaagaatcg tttgtgttat gtttcaacgt gtttatttttt caattgcaga 33060

aaatttcaag tcatttttca ttcagtagta tagccccacc accacatagc ttatacagat 33120

caccgtacct taatcaaact cacagaaccc tagtattcaa cctgccacct ccctcccaac 33180

acacagagta cacagtcctt tctccccggc tggccttaaa aagcatcata tcatgggtaa 33240

cagacatatt cttaggtgtt atattccaca cggtttcctg tcgagccaaa cgctcatcag 33300

tgatattaat aaactccccg ggcagctcac ttaagttcat gtcgctgtcc agctgctgag 33360

ccacaggctg ctgtccaact tgcggttgct taacgggcgg cgaaggagaa gtccacgctc 33420

agcgaataaa ctgctgccgc cgccgctccg tcctgcagga atacaacatg gcagtggtct 33480

cctcagcgat gattcgcacc gcccgcagca taaggcgcct tgtcctccgg gcacagcagc 33540

gcaccctgat ctcacttaaa tcagcacagt aactgcagca cagcaccaca atattgttca 33600

aaatcccaca gtgcaaggcg ctgtatccaa agctcatggc ggggaccaca gaacccacgt 33660

ggccatcata ccacaagcgc aggtagatta agtggcgacc cctcataaac acgctggaca 33720

taaacattac ctcttttggc atgttgtaat tcaccacctc ccggtaccat ataaacctct 33780

gattaaacat ggcgccatcc accaccatcc taaaccagct ggccaaaacc tgcccgccgg 33840

ctatacactg cagggaaccg ggactggaac aatgacagtg gagagcccag gactcgtaac 33900

catggatcat catgctcgtc atgatatcaa tgttggcaca acacaggcac acgtgcatac 33960

acttcctcag gattacaagc tcctcccgcg ttagaaccat atcccaggga acaacccatt 34020

cctgaatcag cgtaaatccc acactgcagg gaagacctcg cacgtaactc acgttgtgca 34080

ttgtcaaagt gttacattcg ggcagcagcg gatgatcctc cagtatggta gcgcgggttt 34140

ctgtctcaaa aggaggtaga cgatccctac tgtacggagt gcgccgagac aaccgagatc 34200

gtgttggtcg tagtgtcatg ccaaatggaa cgccggacgt agtcatattt cctgaagcaa 34260

aaccaggtgc gggcgtgaca aacagatctg cgtctccggt ctcgccgctt agatcgctct 34320

gtgtagtagt tgtagtatat ccactctctc aaagcatcca ggcgcccccc ggcttcgggt 34380

tctatgtaaa ctccttcatg cgccgctgcc ctgataacat ccaccaccgc agaataagcc 34440

acacccagcc aacctacaca ttcgttctgc gagtcacaca cgggaggagc gggaagagct 34500

ggaagaacca tgtttttttt tttattccaa aagattatcc aaaacctcaa aatgaagatc 34560

tattaagtga acgcgctccc ctccggtggc gtggtcaaac tctacagcca aagaacagat 34620

aatggcattt gtaagatgtt gcacaatggc ttccaaaagg caaacggccc tcacgtccaa 34680

gtggacgtaa aggctaaacc cttcagggtg aatctcctct ataaacattc cagcaccttc 34740

aaccatgccc aaataattct catctcgcca ccttctcaat atatctctaa gcaaatcccg 34800

aatattaagt ccggccattg taaaaatctg ctccagagcg ccctccacct tcagcctcaa 34860

gcagcgaatc atgattgcaa aaattcaggt tcctcacaga cctgtataag attcaaaagc 34920

ggaacattaa caaaaatacc gcgatcccgt aggtcccttc gcagggccag ctgaacataa 34980

tcgtgcaggt ctgcacggac cagcgcggcc acttccccgc caggaaccat gacaaaagaa 35040

cccacactga ttatgacacg catactcgga gctatgctaa ccagcgtagc cccgatgtaa 35100

gcttgttgca tgggcggcga tataaaatgc aaggtgctgc tcaaaaaatc aggcaaagcc 35160

tcgcgcaaaa aagaaagcac atcgtagtca tgctcatgca gataaaggca ggtaagctcc 35220

ggaaccacca cagaaaaaga caccattttt ctctcaaaca tgtctgcggg tttctgcata 35280

aacacaaaat aaaataacaa aaaaacattt aaacattaga agcctgtctt acaacaggaa 35340

aaacaaccct tataagcata agacggacta cggccatgcc ggcgtgaccg taaaaaaact 35400

ggtcaccgtg attaaaaagc accaccgaca gctcctcggt catgtccgga gtcataatgt 35460

aagactcggt aaacacatca ggttgattca catcggtcag tgctaaaaag cgaccgaaat 35520

agcccggggg aatacatacc cgcaggcgta gagacaacat tacagccccc ataggaggta 35580

taacaaaatt aataggagag aaaaacacat aaacacctga aaaaccctcc tgcctaggca 35640

aaatagcacc ctcccgctcc agaacaacat acagcgcttc cacagcggca gccataacag 35700

tcagccttac cagtaaaaaa gaaaacctat taaaaaaaca ccactcgaca cggcaccagc 35760

tcaatcagtc acagtgtaaa aaagggccaa gtgcagagcg agtatatata ggactaaaaa 35820

atgacgtaac ggttaaagtc cacaaaaaac acccagaaaa ccgcacgcga acctacgccc 35880

agaaacgaaa gccaaaaaac ccacaacttc ctcaaatcgt cacttccgtt ttcccacgtt 35940

acgtcacttc ccattttaag aaaactacaa ttcccaacac atacaagtta ctccgcccta 36000

aaacctacgt cacccgcccc gttcccacgc cccgcgccac gtcacaaact ccacccccctc 36060

attatcatat tggcttcaat ccaaaataag gtatattatt gatgatg 36107

<210> 45
<211> 35846
<212> DNA
<213> Artificial Sequence

<220>
<223> Adk35RF-Spike/E4orf6(RSV)-E4dl-318(E4re#43)

<400> 45
ttaattaaca tcatcaataa taccttat tttggattga agccaatatg ataatgaggg 60

ggtggagttt gtgacgtggc gcggggcgtg ggaacggggc gggtgacgta gtagtgtggc 120

ggaagtgtga tgttgcaagt gtggcggaac acatgtaagc gacggatgtg gcaaaagtga 180

cgtttttggt gtgcgccggt gtacacagga agtgacaatt ttcgcgcggt tttaggcgga 240

tgttgtagta aatttgggcg taaccgagta agatttggcc attttcgcgg gaaaactgaa 300

taagaggaag tgaaatctga ataattttgt gttactcata gcgcgtaata atttgatccg 360

cgttaagata cattgatgag tttggacaaa ccacaactag aatgcagtga aaaaaatgct 420

ttatttgtga aatttgtgat gctattgctt tatttgtaac cattataagc tgcaataaac 480

aagttaacaa caacaattgc attcatttta tgtttcaggt tcaggggggag gtgtgggagg 540

ttttttaaag caagtaaaac ctctacaaat gtggtatggc tgattatgat caattttcat 600

ggccacttga tgtattgttc atatttgccc agttcttgga ggtcaatcag ggactcattc 660

aggttcttag ccacctcatt cagtctgtca atctccttct ggatgttcac cacagaggca 720

ttgatgccag agatgtctcc caggtccaca tcagggctgg tgtggttctt gaagtatttg 780

tccagttcct ccttgaagga gtccagttca ggttggagtg ggtcatagac tgtgttgttc 840

acaatgccaa tcaccacatc acagttgcca gacacaaagg tgttgtctgt ggtgataatc 900

tgtggttcat agaagttcct ctgggtcaca aaccagtggg tgccattgct cacaaacact 960

ccctcccttg gaaagtgagc cttgccatca tggcagatgg caggggctgt ggtgaagttc 1020

ttctcctggg caggcacata ggtcacatgc aggaacacca ctccatgagg ggcagactgt 1080

ggaaaactca tcaggtggta gcccttgcca cagaagtcca ccctcttgct ttgtcccagc 1140

acacactcac tcatcttggt ggcagccagg ttggcagatg ccctaatctc agcagccctg 1200

ataagttgtt gggtcacata ggtttggagg gattggagtc tgcctgtaat cagtctgtca 1260

atctggacct cagcctccac cttgtccagt ctgctcagga tgtcattcag cacagaggag 1320

atggctccaa agttgctgga aagttgcttc accagggtgt tcagagcctg ggcattctgg 1380

ttcaccacat cttggagttt gcccagggca gaggctgtgc tggacaggga gtcctgaatc 1440

ttgccaatgg cagagttgaa ctggttggca atcagtttct ggttctcata gagcacattc 1500

tgggtcactc caatgccatt gaacctgtaa gccatctgca tagcaaatgg gatttggagg 1560

gctgctcctg ctccaaaggt ccagccagag gtgatggtgc cagccagcag ggcagaggtg 1620

tattgggcaa tcatctcatc tgtcagcagt ggaggcagca ctgtcagtcc attgaacttc 1680

tgggcacaaa tcaggtccct ggcagcaatg tctcccagac agtctccata ttgcttgatg 1740

aagccagcat cagccagggt caccttgttg aacagcaggt cctcaatgaa ggacctcttg 1800

cttggcttgc ttgggtcagg cagaatctgg ctgaagttga agcctccaaa gtccttgatt 1860

ggaggtgtct tgtaaatctg cttcacctgg gcaaacacct cctgggtgtt cttgtcctgt 1920

tccacagcaa tgcctgtcag agccctgtta agttgggtac agaaggagcc atattggagc 1980

agcaggttgc tacactctgt gctgtctcca cagatataca ttgtacagtc cacagaggtc 2040

ttggtcatac tcacaggcag aatctctgtg gtcacagaga tggtgaagtt ggttgggatg 2100

gcaatgctgt tgttgctgta agccacagag ttctctgctc ccagactcat tgtgtaggca 2160

atgatgctct ggcttgccac agacctcgac ccaccgccac cggtctgggt ctggtaggag 2220

gcacagatgc ctgctccaat tgggatgtca cactcatagg agttgttcac atgctctgct 2280

ccaatcagac agccagccct ggtctggaac acattgctgc ctgtgctgta gaccctccag 2340

gttggtgtaa gttggtcagc atggatagcc acaggcacct cagtacagtt cacatcctgg 2400

tagagcacag ccacctggtt gctggtgttg gtgccaggtg taatcacaga cactcctcca 2460

aaggaacatg gtgtgatgtc cagaatctcc aaggtctgtg ggtccctcac agcatctgtg 2520

gtgtcagcaa tgtccctgcc aaactgttgg aatggcagga acttcttgtt gctctctgtc 2580

agcactcctg tgcctgtcag tccattgaag ttgaagttca cacacttgtt cttcaccagg 2640

ttggtgctct tctttggtcc acacactgtg gcaggggcat ggagcagttc aaaggacagc 2700

accaccaccc tgtatggttg gtagcccact ccattggttg gttggaagcc ataggattgg 2760

agtggaaagt aacagttgaa gccctccact ccattacatg gtgtgctgcc agcctggtaa 2820

atctctgtgc tgatgtccct ctcaaatggt ttcaggttgc tcttcctgaa cagtctgtag 2880

aggtagttgt agttgcctcc caccttgctg tccaggttgt tgctgttcca ggcaatcaca 2940

cagcctgtga agtcatcagg cagtttgtag ttgtagtcag caatcttgcc tgtttgtcca 3000

ggggcaatct gtctcacctc atctccccta atcacaaagg agtcagcata gacattggtg 3060

aaacacaggt cattcagttt ggttgggctc actccataac acttgaaggt gctgaaggag 3120

gcagagttgt agagcacaga gtagtcagcc acacagttgc taatcctctt cctgttccag 3180

gcatagacag aggcaaacct ggtggcattg aacacctctc caaatggaca caggttggtg 3240

atgtttggaa acctcacaat gctctctgtt ggttggaccc tgaagttgct ggtctggtag 3300

atgcccttct ccactgtgaa ggatttcagg gtacacttgg tctcagacag tgggtccagg 3360

gcacagtcca cagcatctgt gatggtgcca ttctcattgt atttcagcag gaaggtcctt 3420

ggttggaggt agcccacata gtaggctgct gctcctgctg tccagccaga ggaggagtct 3480

ccaggtgtca ggtaggacct gtgcagagcc agcagggtct ggaacctggt gatgttgatg 3540

ccaattggca ggtccaccag tggttccaag gcagagaagc cctgtggcag gtccctcacc 3600

aggttgattg gtgtgtgttt gctgtaaatc ttgaagtagc catcaatgtt cttgaacaca 3660

aactccctca ggttcttgaa gttgccctgc ttgccctcca agtccatcag gaatggttgg 3720

ctcacatatt caaaggtaca gttgttggca gaggagtaga ccctgaactc agactccatc 3780

caggacttgt tgttcttgtg gtagtagact cccaggaatg ggtcattaca gaactggaac 3840

tcacacacct taatcaccac attggtggca ttgttcacaa tcagcaggga ctgggtcttg 3900

ctgtccaggg tggtgccaaa aatccagccc ctgatgatgt tgctcttctc tgtgctggca 3960

aagtagactc catcattgaa tggcagcaca gggttgtcaa acctcttggt gccattggtg 4020

ccagacacat ggatggcatg gaaccaggtc acattgctga agaatggcag gaacaggtcc 4080

tgggtgctgt gcagcacaga ggacctgaac accttgtcag ggtagtagac tcccctggtg 4140

aaggagttgg tgtaggcagg aggaagttgg gtcctggtgg tcaggttcac acactggctg 4200

gacaccagtg gcagcagcac caggaacaca aacatggtgg caaatcggag gctggatcgg 4260

tcccggtgtc ttctatggag gtcaaaacag cgtggatggc gtctccaggc gatctgacgg 4320

ttcactaaac gagctcgtcg acgatctcta tcactgatag ggagatctct atcactgata 4380

gggagagctc tgcttatata gacctcccac cgtacacgcc taccgcccat ttgcgtcaat 4440

ggggcggagt tgttacgaca ttttggaaag tcccgttgat tttggtgcca aaacaaactc 4500

ccattgacgt caatggggtg gagacttgga aatccccgtg agtcaaaccg ctatccacgc 4560

ccattgatgt actgccaaaa ccgcatcacc atggtaatag cgatgactaa tacgtagatg 4620

tactgccaag taggaaagtc ccataaggtc atgtactggg cataatgcca ggcgggccat 4680

ttaccgtcat tgacgtcaat agggggcgta cttggcatat gatacacttg atgtactgcc 4740

aagtgggcag tttaccgtaa atactccacc cattgacgtc aatggaaagt ccctattggc 4800

gttactatgg gaacatacgt cattattgac gtcaatgggc gggggtcgtt gggcggtcag 4860

ccaggcgggc catttaccgt aagttatgta acgcggaact ccatatatgg gctatgaact 4920

aatgaccccg taattgatta ctattacagt gtagtcttat gcaatactct tgtagtcttg 4980

caacatggta acgatgagtt agcaacatgc cttacaagga gagaaaaagc accgtgcatg 5040

ccgattggtg gaagtaaggt ggtacgatcg tgccttatta ggaaggcaac agacgggtct 5100

gacatggatt ggacgaacca ctgaattgcc gcattgcaga gatattgtat ttaagtgcct 5160

agctcgatac ataaacaaac taccccaagc tggccaccat gactacgtcc ggcgttccat 5220

ttggcatgac actacgacca acacgatctc ggttgtctcg gcgcactccg tacagtaggg 5280

atcgtctacc tccttttgag acagaaaccc gcgctaccat actggaggat catccgctgc 5340

tgcccgaatg taacactttg acaatgcaca acgtgagtta cgtgcgaggt cttccctgca 5400

gtgtgggatt tacgctgatt caggaatggg ttgttccctg ggatatggtt ctaacgcggg 5460

aggagcttgt aatcctgagg aagtgtatgc acgtgtgcct gtgttgtgcc aacattgata 5520

tcatgacgag catgatgatc catggttacg agtcctgggc tctccactgt cattgttcca 5580

gtcccggttc cctgcagtgt atagccggcg ggcaggtttt ggccagctgg tttaggatgg 5640

tggtggatgg cgccatgttt aatcagaggt ttatatggta ccgggaggtg gtgaattaca 5700

acatgccaaa agaggtaatg tttatgtcca gcgtgtttat gaggggtcgc cacttaatct 5760

acctgcgctt gtggtatgat ggccacgtgg gttctgtggt ccccgccatg agctttggat 5820

acagcgcctt gcactgtggg attttgaaca atattgtggt gctgtgctgc agttactgtg 5880

ctgatttaag tgagatcagg gtgcgctgct gtgcccggag gacaaggcgc cttatgctgc 5940

gggcggtgcg aatcatcgct gaggagacca ctgccatgtt gtattcctgc aggacggagc 6000

ggcggcggca gcagtttatt cgcgcgctgc tgcagcacca ccgccctatc ctgatgcacg 6060

attatgactc tacccccatg tagaagcttg gggatcaatt ctctagagct cgctgatcag 6120

cctcgactgt gccttctagt tgccagccat ctgttgtttg cccctccccc gtgccttcct 6180

tgaccctgga aggtgccact cccactgtcc tttcctaata aaatgaggaa attgcatcgc 6240

attgtctgag taggtgtcat tctattctgg ggggtggggt ggggcaggac agcaaggggg 6300

aggattggga agacaatagc aggcatgctg gggatgcggt gggctctatg gcttctgagg 6360

aaattgggcg tggcttaagg gtgggaaaga atatataagg tgggggtctt atgtagtttt 6420

gtatctgttt tgcagcagcc gccgccgcca tgagcaccaa ctcgtttgat ggaagcattg 6480

tgagctcata tttgacaacg cgcatgcccc catgggccgg ggtgcgtcag aatgtgatgg 6540

gctccagcat tgatggtcgc cccgtcctgc ccgcaaactc tactaccttg acctacgaga 6600

ccgtgtctgg aacgccgttg gagactgcag cctccgccgc cgcttcagcc gctgcagcca 6660

ccgcccgcgg gattgtgact gactttgctt tcctgagccc gcttgcaagc agtgcagctt 6720

cccgttcatc cgcccgcgat gacaagttga cggctctttt ggcacaattg gattctttga 6780

cccgggaact taatgtcgtt tctcagcagc tgttggatct gcgccagcag gtttctgccc 6840

tgaaggcttc ctcccctccc aatgcggttt aaaacataaa taaaaaacca gactctgttt 6900

ggatttggat caagcaagtg tcttgctgtc tttatttagg ggttttgcgc gcgcggtagg 6960

cccgggacca gcggtctcgg tcgttgaggg tcctgtgtat tttttccagg acgtggtaaa 7020

ggtgactctg gatgttcaga tacatgggca taagcccgtc tctggggtgg aggtagcacc 7080

actgcagagc ttcatgctgc ggggtggtgt tgtagatgat ccagtcgtag caggagcgct 7140

gggcgtggtg cctaaaaatg tctttcagta gcaagctgat tgccaggggc aggcccttgg 7200

tgtaagtgtt tacaaagcgg ttaagctggg atgggtgcat acgtggggat atgagatgca 7260

tcttggactg tatttttagg ttggctatgt tcccagccat atccctccgg ggattcatgt 7320

tgtgcagaac caccagcaca gtgtatccgg tgcacttggg aaatttgtca tgtagcttag 7380

aaggaaatgc gtggaagaac ttggagacgc ccttgtgacc tccaagattt tccatgcatt 7440

cgtccataat gatggcaatg ggcccacggg cggcggcctg ggcgaagata tttctgggat 7500

cactaacgtc atagttgtgt tccaggatga gatcgtcata ggccattttt acaaagcgcg 7560

ggcggagggt gccagactgc ggtataatgg ttccatccgg cccaggggcg tagttaccct 7620

cacagatttg catttcccac gctttgagtt cagatggggg gatcatgtct acctgcgggg 7680

cgatgaagaa aacggtttcc ggggtagggg agatcagctg ggaagaaagc aggttcctga 7740

gcagctgcga cttaccgcag ccggtgggcc cgtaaatcac acctattacc ggctgcaact 7800

ggtagttaag agagctgcag ctgccgtcat ccctgagcag gggggccact tcgttaagca 7860

tgtccctgac tcgcatgttt tccctgacca aatccgccag aaggcgctcg ccgcccagcg 7920

atagcagttc ttgcaaggaa gcaaagtttt tcaacggttt gagaccgtcc gccgtaggca 7980

tgcttttgag cgtttgacca agcagttcca ggcggtccca cagctcggtc acctgctcta 8040

cggcatctcg atccagcata tctcctcgtt tcgcgggttg gggcggcttt cgctgtacgg 8100

cagtagtcgg tgctcgtcca gacgggccag ggtcatgtct ttccacgggc gcagggtcct 8160

cgtcagcgta gtctgggtca cggtgaaggg gtgcgctccg ggctgcgcgc tggccagggt 8220

gcgcttgagg ctggtcctgc tggtgctgaa gcgctgccgg tcttcgccct gcgcgtcggc 8280

caggtagcat ttgaccatgg tgtcatagtc cagcccctcc gcggcgtggc ccttggcgcg 8340

cagcttgccc ttggaggagg cgccgcacga ggggcagtgc agacttttga gggcgtagag 8400

cttgggcgcg agaaataccg attccgggga gtaggcatcc gcgccgcagg ccccgcagac 8460

ggtctcgcat tccacgagcc aggtgagctc tggccgttcg gggtcaaaaa ccaggtttcc 8520

cccatgcttt ttgatgcgtt tcttacctct ggtttccatg agccggtgtc cacgctcggt 8580

gacgaaaagg ctgtccgtgt ccccgtatac agacttgaga ggcctgtcct cgagcggtgt 8640

tccgcggtcc tcctcgtata gaaactcgga ccactctgag acaaaggctc gcgtccaggc 8700

cagcacgaag gaggctaagt gggaggggta gcggtcgttg tccactaggg ggtccactcg 8760

ctccagggtg tgaagacaca tgtcgccctc ttcggcatca aggaaggtga ttggtttgta 8820

ggtgtaggcc acgtgaccgg gtgttcctga ggggggggcta taaaaggggg tgggggcgcg 8880

ttcgtcctca ctctcttccg catcgctgtc tgcgagggcc agctgttggg gtgagtactc 8940

cctctgaaaa gcgggcatga cttctgcgct aagattgtca gtttccaaaa acgaggagga 9000

tttgatattc acctggcccg cggtgatgcc tttgagggtg gccgcatcca tctggtcaga 9060

aaagacaatc tttttgttgt caagcttggt ggcaaacgac ccgtagaggg cgttggacag 9120

caacttggcg atggagcgca gggtttggtt tttgtcgcga tcggcgcgct ccttggccgc 9180

gatgtttagc tgcacgtatt cgcgcgcaac gcaccgccat tcgggaaaga cggtggtgcg 9240

ctcgtcgggc accaggtgca cgcgccaacc gcggttgtgc agggtgacaa ggtcaacgct 9300

ggtggctacc tctccgcgta ggcgctcgtt ggtccagcag aggcggccgc ccttgcgcga 9360

gcagaatggc ggtagggggt ctagctgcgt ctcgtccggg gggtctgcgt ccacggtaaa 9420

gaccccgggc agcaggcgcg cgtcgaagta gtctatcttg catccttgca agtctagcgc 9480

ctgctgccat gcgcgggcgg caagcgcgcg ctcgtatggg ttgagtgggg gaccccatgg 9540

catggggtgg gtgagcgcgg aggcgtacat gccgcaaatg tcgtaaacgt agaggggctc 9600

tctgagtatt ccaagatatg tagggtagca tcttccaccg cggatgctgg cgcgcacgta 9660

atcgtatagt tcgtgcgagg gagcgaggag gtcgggaccg aggttgctac gggcgggctg 9720

ctctgctcgg aagactatct gcctgaagat ggcatgtgag ttggatgata tggttggacg 9780

ctggaagacg ttgaagctgg cgtctgtgag acctaccgcg tcacgcacga aggaggcgta 9840

ggagtcgcgc agcttgttga ccagctcggc ggtgacctgc acgtctaggg cgcagtagtc 9900

cagggtttcc ttgatgatgt catacttatc ctgtcccttt tttttccaca gctcgcggtt 9960

gaggacaaac tcttcgcggt ctttccagta ctcttggatc ggaaacccgt cggcctccga 10020

acggtaagag cctagcatgt agaactggtt gacggcctgg taggcgcagc atccctttc 10080

tacgggtagc gcgtatgcct gcgcggcctt ccggagcgag gtgtgggtga gcgcaaaggt 10140

gtccctgacc atgactttga ggtactggta tttgaagtca gtgtcgtcgc atccgccctg 10200

ctcccagagc aaaaagtccg tgcgcttttt ggaacgcgga tttggcaggg cgaaggtgac 10260

atcgttgaag agtatctttc ccgcgcgagg cataaagttg cgtgtgatgc ggaagggtcc 10320

cggcacctcg gaacggttgt taattacctg ggcggcgagc acgatctcgt caaagccgtt 10380

gatgttgtgg cccacaatgt aaagttccaa gaagcgcggg atgcccttga tggaaggcaa 10440

tttttaagt tcctcgtagg tgagctcttc aggggagctg agcccgtgct ctgaaagggc 10500

ccagtctgca agatgagggt tggaagcgac gaatgagctc cacaggtcac gggccattag 10560

catttgcagg tggtcgcgaa aggtcctaaa ctggcgacct atggccattt tttctggggt 10620

gatgcagtag aaggtaagcg ggtcttgttc ccagcggtcc catccaaggt tcgcggctag 10680

gtctcgcgcg gcagtcacta gaggctcatc tccgccgaac ttcatgacca gcatgaaggg 10740

cacgagctgc ttcccaaagg cccccatcca agtataggtc tctacatcgt aggtgacaaa 10800

gagacgctcg gtgcgaggat gcgagccgat cgggaagaac tggatctccc gccaccaatt 10860

ggaggagtgg ctattgatgt ggtgaaagta gaagtccctg cgacgggccg aacactcgtg 10920

ctggcttttg taaaaacgtg cgcagtactg gcagcggtgc acgggctgta catcctgcac 10980

gaggttgacc tgacgaccgc gcacaaggaa gcagagtggg aatttgagcc cctcgcctgg 11040

cgggtttggc tggtggtctt ctacttcggc tgcttgtcct tgaccgtctg gctgctcgag 11100

gggagttacg gtggatcgga ccaccacgcc gcgcgagccc aaagtccaga tgtccgcgcg 11160

cggcggtcgg agcttgatga caacatcgcg cagatgggag ctgtccatgg tctggagctc 11220

ccgcggcgtc aggtcaggcg ggagctcctg caggtttacc tcgcatagac gggtcagggc 11280

gcgggctaga tccaggtgat acctaatttc caggggctgg ttggtggcgg cgtcgatggc 11340

ttgcaagagg ccgcatcccc gcggcgcgac tacggtaccg cgcggcgggc ggtgggccgc 11400

gggggtgtcc ttggatgatg catctaaaag cggtgacgcg ggcgagcccc cggaggtagg 11460

gggggctccg gacccgccgg gagagggggc aggggcacgt cggcgccgcg cgcgggcagg 11520

agctggtgct gcgcgcgtag gttgctggcg aacgcgacga cgcggcggtt gatctcctga 11580

atctggcgcc tctgcgtgaa gacgacgggc ccggtgagct tgaacctgaa agagagttcg 11640

acagaatcaa tttcggtgtc gttgacggcg gcctggcgca aaatctcctg cacgtctcct 11700

gagttgtctt gataggcgat ctcggccatg aactgctcga tctcttcctc ctggagatct 11760

ccgcgtccgg ctcgctccac ggtggcggcg aggtcgttgg aaatgcgggc catgagctgc 11820

gagaaggcgt tgaggcctcc ctcgttccag acgcggctgt agaccacgcc cccttcggca 11880

tcgcgggcgc gcatgaccac ctgcgcgaga ttgagctcca cgtgccgggc gaagacggcg 11940

tagtttcgca ggcgctgaaa gaggtagttg agggtggtgg cggtgtgttc tgccacgaag 12000

aagtacataa cccagcgtcg caacgtggat tcgttgatat cccccaaggc ctcaaggcgc 12060

tccatggcct cgtagaagtc cacggcgaag ttgaaaaact gggagttgcg cgccgacacg 12120

gttaactcct cctccagaag acggatgagc tcggcgacag tgtcgcgcac ctcgcgctca 12180

aaggctacag gggcctcttc ttcttcttca atctcctctt ccataagggc ctccccttct 12240

tcttcttctg gcggcggtgg gggaggggcg acacggcggc gacgacggcg caccgggagg 12300

cggtcgacaa agcgctcgat catctccccg cggcgacggc gcatggtctc ggtgacggcg 12360

cggccgttct cgcgggggcg cagttggaag acgccgcccg tcatgtcccg gttatgggtt 12420

ggcgggggcg tgccatgcgg cagggatacg gcgctaacga tgcatctcaa caattgttgt 12480

gtaggtactc cgccgccgag ggacctgagc gagtccgcat cgaccggatc ggaaaacctc 12540

tcgagaaagg cgtctaacca gtcacagtcg caaggtaggc tgagcaccgt ggcgggcggc 12600

agcgggcggc ggtcggggtt gtttctggcg gaggtgctgc tgatgatgta attaaagtag 12660

gcggtcttga gacggcggat ggtcgacaga agcaccatgt ccttgggtcc ggcctgctga 12720

atgcgcaggc ggtcggccat gccccaggct tcgttttgac atcggcgcag gtctttgtag 12780

tagtcttgca tgagcctttc taccggcact tcttcttctc cttcctcttg tcctgcatct 12840

cttgcatcta tcgctgcggc ggcggcggag tttggccgta ggtggcgccc tcttcctccc 12900

atgcgtgtga ccccgaagcc cctcatcggc tgaagcaggg ctaggtcggc gacaacgcgc 12960

tcggctaata tggcctgctg cacctgcgtg agggtagact ggaagtcatc catgtccaca 13020

aagcggtggt atgcgcccgt gttgatggtg taagtgcagt tggccataac ggaccagtta 13080

acggtctggt gacccggctg cgagagctcg gtgtacctga gacgcgagta agccctcgag 13140

tcaaatacgt agtcgttgca agtccgcacc aggtactggt atcccaccaa aaagtgcggc 13200

ggcggctggc ggtagagggg ccagcgtagg gtggccgggg ctccgggggc gagatcttcc 13260

aacataaggc gatgatatcc gtagatgtac ctggacatcc aggtgatgcc ggcggcggtg 13320

gtggaggcgc gcggaaagtc gcggacgcgg ttccagatgt tgcgcagcgg caaaaagtgc 13380

tccatggtcg ggacgctctg gccggtcagg cgcgcgcaat cgttgacgct ctagcgtgca 13440

aaaggagagc ctgtaagcgg gcactcttcc gtggtctggt ggataaattc gcaagggtat 13500

catggcggac gaccggggtt cgagccccgt atccggccgt ccgccgtgat ccatgcggtt 13560

accgcccgcg tgtcgaaccc aggtgtgcga cgtcagacaa cgggggagtg ctccttttgg 13620

cttccttcca ggcgcggcgg ctgctgcgct agctttttg gccactggcc gcgcgcagcg 13680

taagcggtta ggctggaaag cgaaagcatt aagtggctcg ctccctgtag ccggagggtt 13740

attttccaag ggttgagtcg cgggaccccc ggttcgagtc tcggaccggc cggactgcgg 13800

cgaacggggg tttgcctccc cgtcatgcaa gaccccgctt gcaaattcct ccggaaacag 13860

ggacgagccc ctttttgct tttcccagat gcatccggtg ctgcggcaga tgcgcccccc 13920

tcctcagcag cggcaagagc aagagcagcg gcagacatgc agggcaccct cccctcctcc 13980

taccgcgtca ggaggggcga catccgcggt tgacgcggca gcagatggtg attacgaacc 14040

cccgcggcgc cgggcccggc actacctgga cttggaggag ggcgagggcc tggcgcggct 14100

aggagcgccc tctcctgagc ggcacccaag ggtgcagctg aagcgtgata cgcgtgaggc 14160

gtacgtgccg cggcagaacc tgtttcgcga ccgcgaggga gaggagcccg aggagatgcg 14220

ggatcgaaag ttccacgcag ggcgcgagct gcggcatggc ctgaatcgcg agcggttgct 14280

gcgcgaggag gactttgagc ccgacgcgcg aaccgggatt agtcccgcgc gcgcacacgt 14340

ggcggccgcc gacctggtaa ccgcatacga gcagacggtg aaccaggaga ttaactttca 14400

aaaaagcttt aacaaccacg tgcgtacgct tgtggcgcgc gaggaggtgg ctataggact 14460

gatgcatctg tgggactttg taagcgcgct ggagcaaaac ccaaatagca agccgctcat 14520

ggcgcagctg ttccttatag tgcagcacag cagggacaac gaggcattca gggatgcgct 14580

gctaaacata gtagagcccg agggccgctg gctgctcgat ttgataaaca tcctgcagag 14640

catagtggtg caggagcgca gcttgagcct ggctgacaag gtggccgcca tcaactattc 14700

catgcttagc ctgggcaagt tttacgcccg caagatatac catacccctt acgttcccat 14760

agacaaggag gtaaagatcg aggggttcta catgcgcatg gcgctgaagg tgcttacctt 14820

gagcgacgac ctgggcgttt atcgcaacga gcgcatccac aaggccgtga gcgtgagccg 14880

gcggcgcgag ctcagcgacc gcgagctgat gcacagcctg caaagggccc tggctggcac 14940

gggcagcggc gatagagagg ccgagtccta ctttgacgcg ggcgctgacc tgcgctgggc 15000

cccaagccga cgcgccctgg aggcagctgg ggccggacct gggctggcgg tggcacccgc 15060

gcgcgctggc aacgtcggcg gcgtggagga atatgacgag gacgatgagt acgagccaga 15120

ggacggcgag tactaagcgg tgatgtttct gatcagatga tgcaagacgc aacggacccg 15180

gcggtgcggg cggcgctgca gagccagccg tccggcctta actccacgga cgactggcgc 15240

caggtcatgg accgcatcat gtcgctgact gcgcgcaatc ctgacgcgtt ccggcagcag 15300

ccgcaggcca accggctctc cgcaattctg gaagcggtgg tcccggcgcg cgcaaacccc 15360

acgcacgaga aggtgctggc gatcgtaaac gcgctggccg aaaacagggc catccggccc 15420

gacgaggccg gcctggtcta cgacgcgctg cttcagcgcg tggctcgtta caacagcggc 15480

aacgtgcaga ccaacctgga ccggctggtg ggggatgtgc gcgaggccgt ggcgcagcgt 15540

gagcgcgcgc agcagcaggg caacctgggc tccatggttg cactaaacgc cttcctgagt 15600

acacagcccg ccaacgtgcc gcggggacag gaggactaca ccaactttgt gagcgcactg 15660

cggctaatgg tgactgagac accgcaaagt gaggtgtacc agtctgggcc agactatttt 15720

ttccagacca gtagacaagg cctgcagacc gtaaacctga gccaggcttt caaaaacttg 15780

caggggctgt ggggggtgcg ggctcccaca ggcgaccgcg cgaccgtgtc tagcttgctg 15840

acgcccaact cgcgcctgtt gctgctgcta atagcgccct tcacggacag tggcagcgtg 15900

tcccgggaca catacctagg tcacttgctg acactgtacc gcgaggccat aggtcaggcg 15960

catgtggacg agcatacttt ccaggagatt acaagtgtca gccgcgcgct ggggcaggag 16020

gacacgggca gcctggaggc aaccctaaac tacctgctga ccaaccggcg gcagaagatc 16080

ccctcgttgc acagtttaaa cagcgaggag gagcgcattt tgcgctacgt gcagcagagc 16140

gtgagcctta acctgatgcg cgacggggta acgcccagcg tggcgctgga catgaccgcg 16200

cgcaacatgg aaccgggcat gtatgcctca aaccggccgt ttatcaaccg cctaatggac 16260

tacttgcatc gcgcggccgc cgtgaacccc gagtatttca ccaatgccat cttgaacccg 16320

cactggctac cgccccctgg tttctacacc gggggattcg aggtgcccga gggtaacgat 16380

ggattcctct gggacgacat agacgacagc gtgttttccc cgcaaccgca gaccctgcta 16440

gagttgcaac agcgcgagca ggcagaggcg gcgctgcgaa aggaaagctt ccgcaggcca 16500

agcagcttgt ccgatctagg cgctgcggcc ccgcggtcag atgctagtag cccatttcca 16560

agcttgatag ggtctcttac cagcactcgc accacccgcc cgcgcctgct gggcgaggag 16620

gagtacctaa acaactcgct gctgcagccg cagcgcgaaa aaaacctgcc tccggcattt 16680

cccaacaacg ggatagagag cctagtggac aagatgagta gatggaagac gtacgcgcag 16740

gagcacaggg acgtgccagg cccgcgcccg cccacccgtc gtcaaaggca cgaccgtcag 16800

cggggtctgg tgtgggagga cgatgactcg gcagacgaca gcagcgtcct ggatttggga 16860

gggagtggca acccgtttgc gcaccttcgc cccaggctgg ggagaatgtt ttaaaaaaaa 16920

aaaagcatga tgcaaaataa aaaactcacc aaggccatgg caccgagcgt tggttttctt 16980

gtattcccct tagtatgcgg cgcgcggcga tgtatgagga aggtcctcct ccctcctacg 17040

agagtgtggt gagcgcggcg ccagtggcgg cggcgctggg ttctcccttc gatgctcccc 17100

tggacccgcc gtttgtgcct ccgcggtacc tgcggcctac cgggggggaga aacagcatcc 17160

gttactctga gttggcaccc ctattcgaca ccacccgtgt gtacctggtg gacaacaagt 17220

caacggatgt ggcatccctg aactaccaga acgaccacag caactttctg accacggtca 17280

ttcaaaacaa tgactacagc ccgggggagg caagcacaca gaccatcaat cttgacgacc 17340

ggtcgcactg gggcggcgac ctgaaaacca tcctgcatac caacatgcca aatgtgaacg 17400

agttcatgtt taccaataag tttaaggcgc gggtgatggt gtcgcgcttg cctactaagg 17460

acaatcaggt ggagctgaaa tacgagtggg tggagttcac gctgcccgag ggcaactact 17520

ccgagaccat gaccatagac cttatgaaca acgcgatcgt ggagcactac ttgaaagtgg 17580

gcagacagaa cggggttctg gaaagcgaca tcggggtaaa gtttgacacc cgcaacttca 17640

gactggggtt tgaccccgtc actggtcttg tcatgcctgg ggtatataca aacgaagcct 17700

tccatccaga catcattttg ctgccaggat gcggggtgga cttcacccac agccgcctga 17760

gcaacttgtt gggcatccgc aagcggcaac ccttccagga gggctttagg atcacctacg 17820

atgatctgga gggtggtaac attcccgcac tgttggatgt ggacgcctac caggcgagct 17880

tgaaagatga caccgaacag ggcgggggtg gcgcaggcgg cagcaacagc agtggcagcg 17940

gcgcggaaga gaactccaac gcggcagccg cggcaatgca gccggtggag gacatgaacg 18000

atcatgccat tcgcggcgac acctttgcca cacgggctga ggagaagcgc gctgaggccg 18060

aagcagcggc cgaagctgcc gcccccgctg cgcaacccga ggtcgagaag cctcagaaga 18120

aaccggtgat caaacccctg acagaggaca gcaagaaacg cagttacaac ctaataagca 18180

atgacagcac cttcacccag taccgcagct ggtaccttgc atacaactac ggcgaccctc 18240

agaccggaat ccgctcatgg accctgcttt gcactcctga cgtaacctgc ggctcggagc 18300

aggtctactg gtcgttgcca gacatgatgc aagaccccgt gaccttccgc tccacgcgcc 18360

agatcagcaa ctttccggtg gtgggcgccg agctgttgcc cgtgcactcc aagagcttct 18420

acaacgacca ggccgtctac tcccaactca tccgccagtt tacctctctg acccacgtgt 18480

tcaatcgctt tcccgagaac cagattttgg cgcgcccgcc agcccccacc atcaccaccg 18540

tcagtgaaaa cgttcctgct ctcacagatc acgggacgct accgctgcgc aacagcatcg 18600

gaggagtcca gcgagtgacc attactgacg ccagacgccg cacctgcccc tacgtttaca 18660

aggccctggg catagtctcg ccgcgcgtcc tatcgagccg cacttttga gcaagcatgt 18720

ccatccttat atcgcccagc aataacacag gctggggcct gcgcttccca agcaagatgt 18780

ttggcggggc caagaagcgc tccgaccaac acccagtgcg cgtgcgcggg cactaccgcg 18840

cgccctgggg cgcgcacaaa cgcggccgca ctgggcgcac caccgtcgat gacgccatcg 18900

acgcggtggt ggaggaggcg cgcaactaca cgcccacgcc gccaccagtg tccacagtgg 18960

acgcggccat tcagaccgtg gtgcgcggag cccggcgcta tgctaaaatg aagagacggc 19020

ggaggcgcgt agcacgtcgc caccgccgcc gacccggcac tgccgcccaa cgcgcggcgg 19080

cggccctgct taaccgcgca cgtcgcaccg gccgacgggc ggccatgcgg gccgctcgaa 19140

ggctggccgc gggtattgtc actgtgcccc ccaggtccag gcgacgagcg gccgccgcag 19200

cagccgcggc cattagtgct atgactcagg gtcgcagggg caacgtgtat tgggtgcgcg 19260

actcggttag cggcctgcgc gtgcccgtgc gcacccgccc cccgcgcaac tagattgcaa 19320

gaaaaaacta cttagactcg tactgttgta tgtatccagc ggcggcggcg cgcaacgaag 19380

ctatgtccaa gcgcaaaatc aaagaagaga tgctccaggt catcgcgccg gagatctatg 19440

gccccccgaa gaaggaagag caggattaca agccccgaaa gctaaagcgg gtcaaaaaga 19500

aaaagaaaga tgatgatgat gaacttgacg acgaggtgga actgctgcac gctaccgcgc 19560

ccaggcgacg ggtacagtgg aaaggtcgac gcgtaaaacg tgttttgcga cccggcacca 19620

ccgtagtctt tacgcccggt gagcgctcca cccgcaccta caagcgcgtg tatgatgagg 19680

tgtacggcga cgaggacctg cttgagcagg ccaacgagcg cctcggggag tttgcctacg 19740

gaaagcggca taaggacatg ctggcgttgc cgctggacga gggcaaccca acacctagcc 19800

taaagcccgt aacactgcag caggtgctgc ccgcgcttgc accgtccgaa gaaaagcgcg 19860

gcctaaagcg cgagtctggt gacttggcac ccaccgtgca gctgatggta cccaagcgcc 19920

agcgactgga agatgtcttg gaaaaaatga ccgtggaacc tgggctggag cccgaggtcc 19980

gcgtgcggcc aatcaagcag gtggcgccgg gactgggcgt gcagaccgtg gacgttcaga 20040

tacccactac cagtagcacc agtattgcca ccgccacaga gggcatggag acacaaacgt 20100

ccccggttgc ctcagcggtg gcggatgccg cggtgcaggc ggtcgctgcg gccgcgtcca 20160

agacctctac ggaggtgcaa acggacccgt ggatgtttcg cgtttcagcc ccccggcgcc 20220

cgcgccgttc gaggaagtac ggcgccgcca gcgcgctact gcccgaatat gccctacatc 20280

cttccattgc gcctaccccc ggctatcgtg gctacaccta ccgccccaga agacgagcaa 20340

ctacccgacg ccgaaccacc actggaaccc gccgccgccg tcgccgtcgc cagcccgtgc 20400

tggccccgat ttccgtgcgc agggtggctc gcgaaggagg caggaccctg gtgctgccaa 20460

cagcgcgcta ccaccccagc atcgtttaaa agccggtctt tgtggttctt gcagatatgg 20520

ccctcacctg ccgcctccgt ttcccggtgc cgggattccg aggaagaatg caccgtagga 20580

ggggcatggc cggccacggc ctgacgggcg gcatgcgtcg tgcgcaccac cggcggcggc 20640

gcgcgtcgca ccgtcgcatg cgcggcggta tcctgcccct ccttattcca ctgatcgccg 20700

cggcgattgg cgccgtgccc ggaattgcat ccgtggcctt gcaggcgcag agacactgat 20760

taaaaacaag ttgcatgtgg aaaaatcaaa ataaaaagtc tggactctca cgctcgcttg 20820

gtcctgtaac tattttgtag aatggaagac atcaactttg cgtctctggc cccgcgacac 20880

ggctcgcgcc cgttcatggg aaactggcaa gatatcggca ccagcaatat gagcggtggc 20940

gccttcagct ggggctcgct gtggagcggc attaaaaatt tcggttccac cgttaagaac 21000

tatggcagca aggcctggaa cagcagcaca ggccagatgc tgagggataa gttgaaagag 21060

caaaatttcc aacaaaaggt ggtagatggc ctggcctctg gcattagcgg ggtggtggac 21120

ctggccaacc aggcagtgca aaataagatt aacagtaagc ttgatccccg ccctcccgta 21180

gaggagcctc caccggccgt ggagacagtg tctccagagg ggcgtggcga aaagcgtccg 21240

cgccccgaca gggaagaaac tctggtgacg caaatagacg agcctccctc gtacgaggag 21300

gcactaaagc aaggcctgcc caccacccgt cccatcgcgc ccatggctac cggagtgctg 21360

ggccagcaca cacccgtaac gctggacctg cctccccccg ccgacaccca gcagaaacct 21420

gtgctgccag gcccgaccgc cgttgttgta acccgtccta gccgcgcgtc cctgcgccgc 21480

gccgccagcg gtccgcgatc gttgcggccc gtagccagtg gcaactggca aagcacactg 21540

aacagcatcg tgggtctggg ggtgcaatcc ctgaagcgcc gacgatgctt ctgatagcta 21600

acgtgtcgta tgtgtgtcat gtatgcgtcc atgtcgccgc cagaggagct gctgagccgc 21660

cgcgcgcccg ctttccaaga tggctacccc ttcgatgatg ccgcagtggt cttacatgca 21720

catctcgggc caggacgcct cggagtacct gagccccggg ctggtgcagt ttgcccgcgc 21780

caccgagacg tacttcagcc tgaataacaa gtttagaaac cccacggtgg cgcctacgca 21840

cgacgtgacc acagaccggt cccagcgttt gacgctgcgg ttcatccctg tggaccgtga 21900

ggatactgcg tactcgtaca aggcgcggtt caccctagct gtgggtgata accgtgtgct 21960

ggacatggct tccacgtact ttgacatccg cggcgtgctg gacaggggcc ctacttttaa 22020

gccctactct ggcactgcct acaacgccct ggctcccaag ggtgccccaa atccttgcga 22080

atgggatgaa gctgctactg ctcttgaaat aaacctagaa gaagaggacg atgacaacga 22140

agacgaagta gacgagcaag ctgagcagca aaaaactcac gtatttgggc aggcgcctta 22200

ttctggtata aatattacaa aggagggtat tcaaataggt gtcgaaggtc aaacacctaa 22260

atatgccgat aaaacatttc aacctgaacc tcaaatagga gaatctcagt ggtacgaaac 22320

agaaattaat catgcagctg ggagagtcct aaaaaagact accccaatga aaccatgtta 22380

cggttcatat gcaaaaccca caaatgaaaa tggagggcaa ggcattcttg taaagcaaca 22440

aaatggaaag ctagaaagtc aagtggaaat gcaatttttc tcaactactg aggcagccgc 22500

aggcaatggt gataacttga ctcctaaagt ggtattgtac agtgaagatg tagatataga 22560

aaccccagac actcatattt cttacatgcc cactattaag gaaggtaact cacgagaact 22620

aatgggccaa caatctatgc ccaacaggcc taattacatt gcttttaggg acaattttat 22680

tggtctaatg tattacaaca gcacgggtaa tatgggtgtt ctggcgggcc aagcatcgca 22740

gttgaatgct gttgtagatt tgcaagacag aaacacagag ctttcatacc agcttttgct 22800

tgattccatt ggtgatagaa ccaggtactt ttctatgtgg aatcaggctg ttgacagcta 22860

tgatccagat gttagaatta ttgaaaatca tggaactgaa gatgaacttc caaattactg 22920

ctttccactg ggaggtgtga ttaatacaga gactcttacc aaggtaaaac ctaaaacagg 22980

tcaggaaaat ggatgggaaa aagatgctac agaattttca gataaaaatg aaataagagt 23040

tggaaataat tttgccatgg aaatcaatct aaatgccaac ctgtggagaa atttcctgta 23100

ctccaacata gcgctgtatt tgcccgacaa gctaaagtac agtccttcca acgtaaaaat 23160

ttctgataac ccaaacacct acgactacat gaacaagcga gtggtggctc ccgggctagt 23220

ggactgctac attaaccttg gagcacgctg gtcccttgac tatatggaca acgtcaaccc 23280

atttaaccac caccgcaatg ctggcctgcg ctaccgctca atgttgctgg gcaatggtcg 23340

ctatgtgccc ttccacatcc aggtgcctca gaagttcttt gccattaaaa acctccttct 23400

cctgccgggc tcatacacct acgagtggaa cttcaggaag gatgttaaca tggttctgca 23460

gagctcccta ggaaatgacc taagggttga cggagccagc attaagtttg atagcatttg 23520

cctttacgcc accttcttcc ccatggccca caacaccgcc tccacgcttg aggccatgct 23580

tagaaacgac accaacgacc agtcctttaa cgactatctc tccgccgcca acatgctcta 23640

ccctataccc gccaacgcta ccaacgtgcc catatccatc ccctcccgca actgggcggc 23700

tttccgcggc tgggccttca cgcgccttaa gactaaggaa accccatcac tgggctcggg 23760

ctacgaccct tattacacct actctggctc tataccctac ctagatggaa ccttttacct 23820

caaccacacc tttaagaagg tggccattac ctttgactct tctgtcagct ggcctggcaa 23880

tgaccgcctg cttaccccca acgagtttga aattaagcgc tcagttgacg gggagggtta 23940

caacgttgcc cagtgtaaca tgaccaaaga ctggttcctg gtacaaatgc tagctaacta 24000

taacattggc taccagggct tctatatccc agagagctac aaggaccgca tgtactcctt 24060

ctttagaaac ttccagccca tgagccgtca ggtggtggat gatactaaat acaaggacta 24120

ccaacaggtg ggcatcctac accaacacaa caactctgga tttgttggct accttgcccc 24180

caccatgcgc gaaggacagg cctaccctgc taacttcccc tatccgctta taggcaagac 24240

cgcagttgac agcattaccc agaaaaagtt tctttgcgat cgcacccttt ggcgcatccc 24300

attctccagt aactttatgt ccatgggcgc actcacagac ctgggccaaa accttctcta 24360

cgccaactcc gcccacgcgc tagacatgac ttttgaggtg gatcccatgg acgagcccac 24420

ccttctttat gttttgtttg aagtctttga cgtggtccgt gtgcaccagc cgcaccgcgg 24480

cgtcatcgaa accgtgtacc tgcgcacgcc cttctcggcc ggcaacgcca caacataaag 24540

aagcaagcaa catcaacaac agctgccgcc atgggctcca gtgagcagga actgaaagcc 24600

attgtcaaag atcttggttg tgggccatat tttttgggca cctatgacaa gcgctttcca 24660

ggctttgttt ctccacacaa gctcgcctgc gccatagtca atacggccgg tcgcgagact 24720

gggggcgtac actggatggc ctttgcctgg aacccgcact caaaaacatg ctacctcttt 24780

gagccctttg gcttttctga ccagcgactc aagcaggttt accagtttga gtacgagtca 24840

ctcctgcgcc gtagcgccat tgcttcttcc cccgaccgct gtataacgct ggaaaagtcc 24900

acccaaagcg tacaggggcc caactcggcc gcctgtggac tattctgctg catgtttctc 24960

cacgcctttg ccaactggcc ccaaactccc atggatcaca accccaccat gaaccttatt 25020

accggggtac ccaactccat gctcaacagt ccccaggtac agcccaccct gcgtcgcaac 25080

caggaacagc tctacagctt cctggagcgc cactcgccct acttccgcag ccacagtgcg 25140

cagattagga gcgccacttc tttttgtcac ttgaaaaaca tgtaaaaata atgtactaga 25200

gacactttca ataaaggcaa atgcttttat ttgtacactc tcgggtgatt atttaccccc 25260

acccttgccg tctgcgccgt ttaaaaatca aaggggttct gccgcgcatc gctatgcgcc 25320

actggcaggg acacgttgcg atactggtgt ttagtgctcc acttaaactc aggcacaacc 25380

atccgcggca gctcggtgaa gttttcactc cacaggctgc gcaccatcac caacgcgttt 25440

agcaggtcgg gcgccgatat cttgaagtcg cagttggggc ctccgccctg cgcgcgcgag 25500

ttgcgataca cagggttgca gcactggaac actatcagcg ccgggtggtg cacgctggcc 25560

agcacgctct tgtcggagat cagatccgcg tccaggtcct ccgcgttgct cagggcgaac 25620

ggagtcaact ttggtagctg ccttcccaaa aagggcgcgt gcccaggctt tgagttgcac 25680

tcgcaccgta gtggcatcaa aaggtgaccg tgcccggtct gggcgttagg atacagcgcc 25740

tgcataaaag ccttgatctg cttaaaagcc acctgagcct ttgcgccttc agagaagaac 25800

atgccgcaag acttgccgga aaactgattg gccggacagg ccgcgtcgtg cacgcagcac 25860

cttgcgtcgg tgttggagat ctgcaccaca tttcggcccc accggttctt cacgatcttg 25920

gccttgctag actgctcctt cagcgcgcgc tgcccgtttt cgctcgtcac atccatttca 25980

atcacgtgct ccttatttat cataatgctt ccgtgtagac acttaagctc gccttcgatc 26040

tcagcgcagc ggtgcagcca caacgcgcag cccgtgggct cgtgatgctt gtaggtcacc 26100

tctgcaaacg actgcaggta cgcctgcagg aatcgcccca tcatcgtcac aaaggtcttg 26160

ttgctggtga aggtcagctg caacccgcgg tgctcctcgt tcagccaggt cttgcatacg 26220

gccgccagag cttccacttg gtcaggcagt agtttgaagt tcgcctttag atcgttatcc 26280

acgtggtact tgtccatcag cgcgcgcgca gcctccatgc ccttctccca cgcagacacg 26340

atcggcacac tcagcgggtt catcaccgta atttcacttt ccgcttcgct gggctcttcc 26400

tcttcctctt gcgtccgcat accacgcgcc actgggtcgt cttcattcag ccgccgcact 26460

gtgcgcttac ctcctttgcc atgcttgatt agcaccggtg ggttgctgaa acccaccatt 26520

tgtagcgcca catcttctct ttcttcctcg ctgtccacga ttacctctgg tgatggcggg 26580

cgctcgggct tgggagaagg gcgcttcttt ttcttcttgg gcgcaatggc caaatccgcc 26640

gccgaggtcg atggccgcgg gctgggtgtg cgcggcacca gcgcgtcttg tgatgagtct 26700

tcctcgtcct cggactcgat acgccgcctc atccgctttt ttgggggcgc ccggggaggc 26760

ggcggcgacg gggacgggga cgacacgtcc tccatggttg ggggacgtcg cgccgcaccg 26820

cgtccgcgct cgggggtggt ttcgcgctgc tcctcttccc gactggccat ttccttctcc 26880

tataggcaga aaaagatcat ggagtcagtc gagaagaagg acagcctaac cgccccctct 26940

gagttcgcca ccaccgcctc caccgatgcc gccaacgcgc ctaccacctt ccccgtcgag 27000

gcacccccgc ttgaggagga ggaagtgatt atcgagcagg acccaggttt tgtaagcgaa 27060

gacgacgagg accgctcagt accaacagag gataaaaagc aagaccagga caacgcagag 27120

gcaaacgagg aacaagtcgg gcgggggggac gaaaggcatg gcgactacct agatgtggga 27180

gacgacgtgc tgttgaagca tctgcagcgc cagtgcgcca ttatctgcga cgcgttgcaa 27240

gagcgcagcg atgtgcccct cgccatagcg gatgtcagcc ttgcctacga acgccaccta 27300

ttctcaccgc gcgtaccccc caaacgccaa gaaaacggca catgcgagcc caacccgcgc 27360

ctcaacttct accccgtatt tgccgtgcca gaggtgcttg ccacctatca catcttttc 27420

caaaactgca agataccccct atcctgccgt gccaaccgca gccgagcgga caagcagctg 27480

gccttgcggc agggcgctgt catacctgat atcgcctcgc tcaacgaagt gccaaaaatc 27540

tttgagggtc ttggacgcga cgagaagcgc gcggcaaacg ctctgcaaca ggaaaacagc 27600

gaaaatgaaa gtcactctgg agtgttggtg gaactcgagg gtgacaacgc gcgcctagcc 27660

gtactaaaac gcagcatcga ggtcacccac tttgcctacc cggcacttaa cctacccccc 27720

aaggtcatga gcacagtcat gagtgagctg atcgtgcgcc gtgcgcagcc cctggagagg 27780

gatgcaaatt tgcaagaaca aacagaggag ggcctacccg cagttggcga cgagcagcta 27840

gcgcgctggc ttcaaacgcg cgagcctgcc gacttggagg agcgacgcaa actaatgatg 27900

gccgcagtgc tcgttaccgt ggagcttgag tgcatgcagc ggttctttgc tgacccggag 27960

atgcagcgca agctagagga aacattgcac tacacctttc gacagggcta cgtacgccag 28020

gcctgcaaga tctccaacgt ggagctctgc aacctggtct cctaccttgg aattttgcac 28080

gaaaaccgcc ttgggcaaaa cgtgcttcat tccacgctca agggcgaggc gcgccgcgac 28140

tacgtccgcg actgcgttta cttatttcta tgctacacct ggcagacggc catgggcgtt 28200

tggcagcagt gcttggagga gtgcaacctc aaggagctgc agaaactgct aaagcaaaac 28260

ttgaaggacc tatggacggc cttcaacgag cgctccgtgg ccgcgcacct ggcggacatc 28320

attttccccg aacgcctgct taaaaccctg caacagggtc tgccagactt caccagtcaa 28380

agcatgttgc agaactttag gaactttatc ctagagcgct caggaatctt gcccgccacc 28440

tgctgtgcac ttcctagcga ctttgtgccc attaagtacc gcgaatgccc tccgccgctt 28500

tggggccact gctaccttct gcagctagcc aactaccttg cctaccactc tgacataatg 28560

gaagacgtga gcggtgacgg tctactggag tgtcactgtc gctgcaacct atgcaccccg 28620

caccgctccc tggtttgcaa ttcgcagctg cttaacgaaa gtcaaattat cggtaccttt 28680

gagctgcagg gtccctcgcc tgacgaaaag tccgcggctc cggggttgaa actcactccg 28740

gggctgtgga cgtcggctta ccttcgcaaa tttgtacctg aggactacca cgcccacgag 28800

attaggttct acgaagacca atcccgcccg cctaatgcgg agcttaccgc ctgcgtcatt 28860

acccagggcc acattcttgg ccaattgcaa gccatcaaca aagcccgcca agagtttctg 28920

ctacgaaagg gacgggggggt ttacttggac ccccagtccg gcgaggagct caacccaatc 28980

cccccgccgc cgcagcccta tcagcagcag ccgcgggccc ttgcttccca ggatggcacc 29040

caaaaagaag ctgcagctgc cgccgccacc cacggacgag gaggaatact gggacagtca 29100

ggcagaggag gttttggacg aggaggagga ggacatgatg gaagactggg agagcctaga 29160

cgaggaagct tccgaggtcg aagaggtgtc agacgaaaca ccgtcaccct cggtcgcatt 29220

cccctcgccg gcgccccaga aatcggcaac cggttccagc atggctacaa cctccgctcc 29280

tcaggcgccg ccggcactgc ccgttcgccg acccaaccgt agatgggaca ccactggaac 29340

cagggccggt aagtccaagc agccgccgcc gttagcccaa gagcaacaac agcgccaagg 29400

ctaccgctca tggcgcgggc acaagaacgc catagttgct tgcttgcaag actgtggggg 29460

caacatctcc ttcgcccgcc gctttcttct ctaccatcac ggcgtggcct tcccccgtaa 29520

catcctgcat tactaccgtc atctctacag cccatactgc accggcggca gcggcagcaa 29580

cagcagcggc cacacagaag caaaggcgac cggatagcaa gactctgaca aagcccaaga 29640

aatccacagc ggcggcagca gcaggaggag gagcgctgcg tctggcgccc aacgaacccg 29700

tatcgacccg cgagcttaga aacaggattt ttcccactct gtatgctata tttcaacaga 29760

gcaggggcca agaacaagag ctgaaaataa aaaacaggtc tctgcgatcc ctcacccgca 29820

gctgcctgta tcacaaaagc gaagatcagc ttcggcgcac gctggaagac gcggaggctc 29880

tcttcagtaa atactgcgcg ctgactctta aggactagtt tcgcgccctt tctcaaattt 29940

aagcgcgaaa actacgtcat ctccagcggc cacacccggc gccagcacct gttgtcagcg 30000

ccattatgag caaggaaatt cccacgccct acatgtggag ttaccagcca caaatgggac 30060

ttgcggctgg agctgcccaa gactactcaa cccgaataaa ctacatgagc gcgggacccc 30120

acatgatatc ccgggtcaac ggaatacgcg cccaccgaaa ccgaattctc ctggaacagg 30180

cggctattac caccacacct cgtaataacc ttaatccccg tagttggccc gctgccctgg 30240

tgtaccagga aagtcccgct cccaccactg tggtacttcc cagagacgcc caggccgaag 30300

ttcagatgac taactcaggg gcgcagcttg cgggcggctt tcgtcacagg gtgcggtcgc 30360

ccgggcaggg tataactcac ctgacaatca gagggcgagg tattcagctc aacgacgagt 30420

cggtgagctc ctcgcttggt ctccgtccgg acgggacatt tcagatcggc ggcgccggcc 30480

gctcttcatt cacgcctcgt caggcaatcc taactctgca gacctcgtcc tctgagccgc 30540

gctctggagg cattggaact ctgcaattta ttgaggagtt tgtgccatcg gtctacttta 30600

accccttctc gggacctccc ggccactatc cggatcaatt tattcctaac tttgacgcgg 30660

taaaggactc ggcggacggc tacgactgaa tgttaagtgg agaggcagag caactgcgcc 30720

tgaaacacct ggtccactgt cgccgccaca agtgctttgc ccgcgactcc ggtgagtttt 30780

gctactttga attgcccgag gatcatatcg agggcccggc gcacggcgtc cggcttaccg 30840

cccagggaga gcttgcccgt agcctgattc gggagtttac ccagcgcccc ctgctagttg 30900

agcgggacag gggaccctgt gttctcactg tgatttgcaa ctgtcctaac cctggattac 30960

atcaagatcc tctagttaat gtcaggtcgc ctaagtcgat taactagagt acccggggat 31020

cttattccct ttaactaata aaaaaaaata ataaagcatc acttacttaa aatcagttag 31080

caaatttctg tccagtttat tcagcagcac ctccttgccc tcctcccagc tctggtattg 31140

cagcttcctc ctggctgcaa actttctcca caatctaaat ggaatgtcag tttcctcctg 31200

ttcctgtcca tccgcaccca ctatcttcat gttgttgcag atgaagcgcg caagaccgtc 31260

tgaagatacc ttcaaccccg tgtatccata tgacacggaa accggtcctc caactgtgcc 31320

ttttcttact cctccctttg tatcccccaa tgggtttcaa gagagtcccc ctggggtact 31380

ctctttgcgc ctatccgaac ctctagttac ctccaatggc atgcttgcgc tcaaaatggg 31440

caacggcctc tctctggacg aggccggcaa ccttacctcc caaaatgtaa ccactgtgag 31500

cccacctctc aaaaaaacca agtcaaacat aaacctggaa atatctgcac ccctcacagt 31560

tacctcagaa gccctaactg tggctgccgc cgcacctcta atggtcgcgg gcaacacact 31620

caccatgcaa tcacaggccc cgctaaccgt gcacgactcc aaacttagca ttgccaccca 31680

aggacccctc acagtgtcag aaggaaagct agccctgcaa acatcaggcc ccctcaccac 31740

caccgatagc agtaccctta ctatcactgc ctcacccccc ctaactactg ccactggtag 31800

cttgggcatt gacttgaaag agcccattta tacacaaaat ggaaaactag gactaaagta 31860

cggggctcct ttgcatgtaa cagacgacct aaacactttg accgtagcaa ctggtccagg 31920

tgtgactatt aataatactt ccttgcaaac taaagttact ggagccttgg gttttgattc 31980

acaaggcaat atgcaactta atgtagcagg aggactaagg attgattctc aaaacagacg 32040

ccttatactt gatgttagtt atccgtttga tgctcaaaac caactaaatc taagactagg 32100

acagggccct ctttttataa actcagccca caacttggat attaactaca acaaaggcct 32160

ttacttgttt acagcttcaa acaattccaa aaagcttgag gttaacctaa gcactgccaa 32220

ggggttgatg tttgacgcta cagccatagc cattaatgca ggagatgggc ttgaatttgg 32280

ttcacctaat gcaccaaaca caaatcccct caaaacaaaa attggccatg gcctagaatt 32340

tgattcaaac aaggctatgg ttcctaaact aggaactggc cttagttttg acagcacagg 32400

tgccattaca gtaggaaaca aaaataatga taagctaact ttgtggaccg gaataaaccc 32460

tccacctaac tgtcaaattg tggaaaacac taatacaaat gatggcaaac ttactttagt 32520

attagtaaaa aatggagggc ttgttaatgg ctacgtgtct ctagttggtg tatcagacac 32580

tgtgaaccaa atgttcacac aaaagacagc aaacatccaa ttaagattat attttgactc 32640

ttctggaaat ctattaactg aggaatcaga cttaaaaatt ccacttaaaa ataaatcttc 32700

tacagcgacc agtgaaactg tagccagcag caaagccttt atgccaagta ctacagctta 32760

tcccttcaac accactacta gggatagtga aaactacatt catggaatat gttactacat 32820

gactagttat gatagaagtc tatttccctt gaacatttct ataatgctaa acagccgtat 32880

gatttcttcc aatgttgcct atgccataca atttgaatgg aatctaaatg caagtgaatc 32940

tccagaaagc aacatagcta cgctgaccac atcccccttt ttcttttctt acattacaga 33000

agacgacaac taaagaatcg tttgtgttat gtttcaacgt gtttattttt caattgcaga 33060

aaatttcaag tcatttttca ttcagtagta tagccccacc accacatagc ttatacagat 33120

caccgtacct taatcaaact cacagaaccc tagtattcaa cctgccacct ccctcccaac 33180

acacagagta cacagtcctt tctccccggc tggccttaaa aagcatcata tcatgggtaa 33240

cagacatatt cttaggtgtt atattccaca cggtttcctg tcgagccaaa cgctcatcag 33300

tgatattaat aaactccccg ggcagctcac ttaagttcat gtcgctgtcc agctgctgag 33360

ccacaggctg ctgtccaact tgcggttgct taacgggcgg cgaaggagaa gtccacgctc 33420

agtagattaa gtggcgaccc ctcataaaca cgctggacat aaacattacc tcttttggca 33480

tgttgtaatt caccacctcc cggtaccata taaacctctg attaaacatg gcgccatcca 33540

ccaccatcct aaaccagctg gccaaaacct gcccgccggc tatacactgc agggaaccgg 33600

gactggaaca atgacagtgg agagcccagg actcgtaacc atggatcatc atgctcgtca 33660

tgatatcaat gttggcacaa cacaggcaca cgtgcataca cttcctcagg attacaagct 33720

cctcccgcgt tagaaccata tcccagggaa caacccattc ctgaatcagc gtaaatccca 33780

cactgcaggg aagacctcgc acgtaactca cgttgtgcat tgtcaaagtg ttacattcgg 33840

gcagcagcgg atgatcctcc agtatggtag cgcgggtttc tgtctcaaaa ggaggtagac 33900

gatccctact gtacggagtg cgccgagaca accgagatcg tgttggtcgt agtgtcatgc 33960

caaatggaac gccggacgta gtcatatttc ctgaagcaaa accaggtgcg ggcgtgacaa 34020

acagatctgc gtctccggtc tcgccgctta gatcgctctg tgtagtagtt gtagtatatc 34080

cactctctca aagcatccag gcgccccctg gcttcgggtt ctatgtaaac tccttcatgc 34140

gccgctgccc tgataacatc caccaccgca gaataagcca cacccagcca acctacacat 34200

tcgttctgcg agtcacacac gggaggagcg ggaagagctg gaagaaccat gttttttttt 34260

ttattccaaa agattatcca aaacctcaaa atgaagatct attaagtgaa cgcgctcccc 34320

tccggtggcg tggtcaaact ctacagccaa agaacagata atggcatttg taagatgttg 34380

cacaatggct tccaaaaggc aaacggccct cacgtccaag tggacgtaaa ggctaaaccc 34440

ttcagggtga atctcctcta taaacattcc agcaccttca accatgccca aataattctc 34500

atctcgccac cttctcaata tatctctaag caaatcccga atattaagtc cggccattgt 34560

aaaaatctgc tccagagcgc cctccacctt cagcctcaag cagcgaatca tgattgcaaa 34620

aattcaggtt cctcacagac ctgtataaga ttcaaaagcg gaacattaac aaaaataccg 34680

cgatcccgta ggtcccttcg cagggccagc tgaacataat cgtgcaggtc tgcacggacc 34740

agcgcggcca cttccccgcc aggaaccatg acaaaagaac ccacactgat tatgacacgc 34800

atactcggag ctatgctaac cagcgtagcc ccgatgtaag cttgttgcat gggcggcgat 34860

ataaaatgca aggtgctgct caaaaaatca ggcaaagcct cgcgcaaaaa agaaagcaca 34920

tcgtagtcat gctcatgcag ataaaggcag gtaagctccg gaaccaccac agaaaaagac 34980

accatttttc tctcaaacat gtctgcgggt ttctgcataa acacaaaata aaataacaaa 35040

aaaacattta aacattagaa gcctgtctta caacaggaaa aacaaccctt ataagcataa 35100

gacggactac ggccatgccg gcgtgaccgt aaaaaaactg gtcaccgtga ttaaaaagca 35160

ccaccgacag ctcctcggtc atgtccggag tcataatgta agactcggta aacacatcag 35220

gttgattcac atcggtcagt gctaaaaagc gaccgaaata gcccgggggа atacataccc 35280

gcaggcgtag agacaacatt acagccccca taggaggtat aacaaaatta ataggagaga 35340

aaaacacata aacacctgaa aaaccctcct gcctaggcaa aatagcaccc tcccgctcca 35400

gaacaacata cagcgcttcc acagcggcag ccataacagt cagccttacc agtaaaaaag 35460

aaaacctatt aaaaaaacac cactcgacac ggcaccagct caatcagtca cagtgtaaaa 35520

aagggccaag tgcagagcga gtatatatag gactaaaaaa tgacgtaacg gttaaagtcc 35580

acaaaaaaca cccagaaaac cgcacgcgaa cctacgccca gaaacgaaag ccaaaaaacc 35640

cacaacttcc tcaaatcgtc acttccgttt tcccacgtta cgtcacttcc cattttaaga 35700

aaactacaat tcccaacaca tacaagttac tccgccctaa aacctacgtc acccgccccg 35760

ttcccacgcc ccgcgccacg tcacaaactc cacccccctca ttatcatatt ggcttcaatc 35820

caaaataagg tatattattg atgatg 35846

<210> 46
<211> 35750
<212> DNA
<213> Artificial Sequence

<220>
<223> Adk35RF-Spike/E4orf6(RSV)-E4dl-421(E4re#44)

<400> 46
ttaattaaca tcatcaataa tataccttat tttggattga agccaatatg ataatgaggg 60

ggtggagttt gtgacgtggc gcggggcgtg ggaacggggc gggtgacgta gtagtgtggc 120

ggaagtgtga tgttgcaagt gtggcggaac acatgtaagc gacggatgtg gcaaaagtga 180

cgtttttggt gtgcgccggt gtacacagga agtgacaatt ttcgcgcggt ttaggcgga 240

tgttgtagta aatttgggcg taaccgagta agatttggcc attttcgcgg gaaaactgaa 300

taagaggaag tgaaatctga ataattttgt gttactcata gcgcgtaata atttgatccg 360

cgttaagata cattgatgag tttggacaaa ccacaactag aatgcagtga aaaaaatgct 420

ttatttgtga aatttgtgat gctattgctt tatttgtaac cattataagc tgcaataaac 480

aagttaacaa caacaattgc attcatttta tgtttcaggt tcaggggggag gtgtgggagg 540

ttttttaaag caagtaaaac ctctacaaat gtggtatggc tgattatgat caattttcat 600

ggccacttga tgtattgttc atatttgccc agttcttgga ggtcaatcag ggactcattc 660

aggttcttag ccacctcatt cagtctgtca atctccttct ggatgttcac cacagaggca 720

ttgatgccag agatgtctcc caggtccaca tcagggctgg tgtggttctt gaagtatttg 780

tccagttcct ccttgaagga gtccagttca ggttggagtg ggtcatagac tgtgttgttc 840

acaatgccaa tcaccacatc acagttgcca gacacaaagg tgttgtctgt ggtgataatc 900

tgtggttcat agaagttcct ctgggtcaca aaccagtggg tgccattgct cacaaacact 960

ccctcccttg gaaagtgagc cttgccatca tggcagatgg caggggctgt ggtgaagttc 1020

ttctcctggg caggcacata ggtcacatgc aggaacacca ctccatgagg ggcagactgt 1080

ggaaaactca tcaggtggta gcccttgcca cagaagtcca ccctcttgct ttgtcccagc 1140

acacactcac tcatcttggt ggcagccagg ttggcagatg ccctaatctc agcagccctg 1200

ataagttgtt gggtcacata ggtttggagg gattggagtc tgcctgtaat cagtctgtca 1260

atctggacct cagcctccac cttgtccagt ctgctcagga tgtcattcag cacagaggag 1320

atggctccaa agttgctgga aagttgcttc accagggtgt tcagagcctg ggcattctgg 1380

ttcaccacat cttggagttt gcccagggca gaggctgtgc tggacaggga gtcctgaatc 1440

ttgccaatgg cagagttgaa ctggttggca atcagtttct ggttctcata gagcacattc 1500

tgggtcactc caatgccatt gaacctgtaa gccatctgca tagcaaatgg gatttggagg 1560

gctgctcctg ctccaaaggt ccagccagag gtgatggtgc cagccagcag ggcagaggtg 1620

tattgggcaa tcatctcatc tgtcagcagt ggaggcagca ctgtcagtcc attgaacttc 1680

tgggcacaaa tcaggtccct ggcagcaatg tctcccagac agtctccata ttgcttgatg 1740

aagccagcat cagccagggt caccttgttg aacagcaggt cctcaatgaa ggacctcttg 1800

cttggcttgc ttgggtcagg cagaatctgg ctgaagttga agcctccaaa gtccttgatt 1860

ggaggtgtct tgtaaatctg cttcacctgg gcaaacacct cctgggtgtt cttgtcctgt 1920

tccacagcaa tgcctgtcag agccctgtta agttgggtac agaaggagcc atattggagc 1980

agcaggttgc tacactctgt gctgtctcca cagatataca ttgtacagtc cacagaggtc 2040

ttggtcatac tcacaggcag aatctctgtg gtcacagaga tggtgaagtt ggttgggatg 2100

gcaatgctgt tgttgctgta agccacagag ttctctgctc ccagactcat tgtgtaggca 2160

atgatgctct ggcttgccac agacctcgac ccaccgccac cggtctgggt ctggtaggag 2220

gcacagatgc ctgctccaat tgggatgtca cactcatagg agttgttcac atgctctgct 2280

ccaatcagac agccagccct ggtctggaac acattgctgc ctgtgctgta gaccctccag 2340

gttggtgtaa gttggtcagc atggatagcc acaggcacct cagtacagtt cacatcctgg 2400

tagagcacag ccacctggtt gctggtgttg gtgccaggtg taatcacaga cactcctcca 2460

aaggaacatg gtgtgatgtc cagaatctcc aaggtctgtg ggtccctcac agcatctgtg 2520

gtgtcagcaa tgtccctgcc aaactgttgg aatggcagga acttcttgtt gctctctgtc 2580

agcactcctg tgcctgtcag tccattgaag ttgaagttca cacacttgtt cttcaccagg 2640

ttggtgctct tctttggtcc acacactgtg gcaggggcat ggagcagttc aaaggacagc 2700

accaccaccc tgtatggttg gtagcccact ccattggttg gttggaagcc ataggattgg 2760

agtggaaagt aacagttgaa gccctccact ccattacatg gtgtgctgcc agcctggtaa 2820

atctctgtgc tgatgtccct ctcaaatggt ttcaggttgc tcttcctgaa cagtctgtag 2880

aggtagttgt agttgcctcc caccttgctg tccaggttgt tgctgttcca ggcaatcaca 2940

cagcctgtga agtcatcagg cagtttgtag ttgtagtcag caatcttgcc tgtttgtcca 3000

ggggcaatct gtctcacctc atctccccta atcacaaagg agtcagcata gacattggtg 3060

aaacacaggt cattcagttt ggttgggctc actccataac acttgaaggt gctgaaggag 3120

gcagagttgt agagcacaga gtagtcagcc acacagttgc taatcctctt cctgttccag 3180

gcatagacag aggcaaacct ggtggcattg aacacctctc caaatggaca caggttggtg 3240

atgtttggaa acctcacaat gctctctgtt ggttggaccc tgaagttgct ggtctggtag 3300

atgcccttct ccactgtgaa ggatttcagg gtacacttgg tctcagacag tgggtccagg 3360

gcacagtcca cagcatctgt gatggtgcca ttctcattgt atttcagcag gaaggtcctt 3420

ggttggaggt agcccacata gtaggctgct gctcctgctg tccagccaga ggaggagtct 3480

ccaggtgtca ggtaggacct gtgcagagcc agcagggtct ggaacctggt gatgttgatg 3540

ccaattggca ggtccaccag tggttccaag gcagagaagc cctgtggcag gtccctcacc 3600

aggttgattg gtgtgtgttt gctgtaaatc ttgaagtagc catcaatgtt cttgaacaca 3660

aactccctca ggttcttgaa gttgccctgc ttgccctcca agtccatcag gaatggttgg 3720

ctcacatatt caaaggtaca gttgttggca gaggagtaga ccctgaactc agactccatc 3780

caggacttgt tgttcttgtg gtagtagact cccaggaatg ggtcattaca gaactggaac 3840

tcacacacct taatcaccac attggtggca ttgttcacaa tcagcaggga ctgggtcttg 3900

ctgtccaggg tggtgccaaa aatccagccc ctgatgatgt tgctcttctc tgtgctggca 3960

aagtagactc catcattgaa tggcagcaca gggttgtcaa acctcttggt gccattggtg 4020

ccagacacat ggatggcatg gaaccaggtc acattgctga agaatggcag gaacaggtcc 4080

tgggtgctgt gcagcacaga ggacctgaac accttgtcag ggtagtagac tcccctggtg 4140

aaggagttgg tgtaggcagg aggaagttgg gtcctggtgg tcaggttcac acactggctg 4200

gacaccagtg gcagcagcac caggaacaca aacatggtgg caaatcggag gctggatcgg 4260

tcccggtgtc ttctatggag gtcaaaacag cgtggatggc gtctccaggc gatctgacgg 4320

ttcactaaac gagctcgtcg acgatctcta tcactgatag ggagatctct atcactgata 4380

gggagagctc tgcttatata gacctcccac cgtacacgcc taccgcccat ttgcgtcaat 4440

ggggcggagt tgttacgaca ttttggaaag tcccgttgat tttggtgcca aaacaaactc 4500

ccattgacgt caatggggtg gagacttgga aatccccgtg agtcaaaccg ctatccacgc 4560

ccattgatgt actgccaaaa ccgcatcacc atggtaatag cgatgactaa tacgtagatg 4620

tactgccaag taggaaagtc ccataaggtc atgtactggg cataatgcca ggcgggccat 4680

ttaccgtcat tgacgtcaat agggggcgta cttggcatat gatacacttg atgtactgcc 4740

aagtgggcag tttaccgtaa atactccacc cattgacgtc aatggaaagt ccctattggc 4800

gttactatgg gaacatacgt cattattgac gtcaatgggc gggggtcgtt gggcggtcag 4860

ccaggcgggc catttaccgt aagttatgta acgcggaact ccatatatgg gctatgaact 4920

aatgaccccg taattgatta ctattacagt gtagtcttat gcaatactct tgtagtcttg 4980

caacatggta acgatgagtt agcaacatgc cttacaagga gagaaaaagc accgtgcatg 5040

ccgattggtg gaagtaaggt ggtacgatcg tgccttatta ggaaggcaac agacgggtct 5100

gacatggatt ggacgaacca ctgaattgcc gcattgcaga gatattgtat ttaagtgcct 5160

agctcgatac ataaacaaac taccccaagc tggccaccat gactacgtcc ggcgttccat 5220

ttggcatgac actacgacca acacgatctc ggttgtctcg gcgcactccg tacagtaggg 5280

atcgtctacc tccttttgag acagaaaccc gcgctaccat actggaggat catccgctgc 5340

tgcccgaatg taacactttg acaatgcaca acgtgagtta cgtgcgaggt cttccctgca 5400

gtgtgggatt tacgctgatt caggaatggg ttgttccctg ggatatggtt ctaacgcggg 5460

aggagcttgt aatcctgagg aagtgtatgc acgtgtgcct gtgttgtgcc aacattgata 5520

tcatgacgag catgatgatc catggttacg agtcctgggc tctccactgt cattgttcca 5580

gtcccggttc cctgcagtgt atagccggcg ggcaggtttt ggccagctgg tttaggatgg 5640

tggtggatgg cgccatgttt aatcagaggt ttatatggta ccgggaggtg gtgaattaca 5700

acatgccaaa agaggtaatg tttatgtcca gcgtgtttat gaggggtcgc cacttaatct 5760

acctgcgctt gtggtatgat ggccacgtgg gttctgtggt ccccgccatg agctttggat 5820

acagcgcctt gcactgtggg attttgaaca atattgtggt gctgtgctgc agttactgtg 5880

ctgatttaag tgagatcagg gtgcgctgct gtgcccggag gacaaggcgc cttatgctgc 5940

gggcggtgcg aatcatcgct gaggagacca ctgccatgtt gtattcctgc aggacggagc 6000

ggcggcggca gcagtttatt cgcgcgctgc tgcagcacca ccgccctatc ctgatgcacg 6060

attatgactc tacccccatg tagaagcttg gggatcaatt ctctagagct cgctgatcag 6120

cctcgactgt gccttctagt tgccagccat ctgttgtttg cccctccccc gtgccttcct 6180

tgaccctgga aggtgccact cccactgtcc tttcctaata aaatgaggaa attgcatcgc 6240

attgtctgag taggtgtcat tctattctgg ggggtggggt ggggcaggac agcaaggggg 6300

aggattggga agacaatagc aggcatgctg gggatgcggt gggctctatg gcttctgagg 6360

aaattgggcg tggcttaagg gtgggaaaga atatataagg tgggggtctt atgtagtttt 6420

gtatctgttt tgcagcagcc gccgccgcca tgagcaccaa ctcgtttgat ggaagcattg 6480

tgagctcata tttgacaacg cgcatgcccc catgggccgg ggtgcgtcag aatgtgatgg 6540

gctccagcat tgatggtcgc cccgtcctgc ccgcaaactc tactaccttg acctacgaga 6600

ccgtgtctgg aacgccgttg gagactgcag cctccgccgc cgcttcagcc gctgcagcca 6660

ccgcccgcgg gattgtgact gactttgctt tcctgagccc gcttgcaagc agtgcagctt 6720

cccgttcatc cgcccgcgat gacaagttga cggctctttt ggcacaattg gattctttga 6780

cccgggaact taatgtcgtt tctcagcagc tgttggatct gcgccagcag gtttctgccc 6840

tgaaggcttc ctcccctccc aatgcggttt aaaacataaa taaaaaacca gactctgttt 6900

ggatttggat caagcaagtg tcttgctgtc tttatttagg ggttttgcgc gcgcggtagg 6960

cccgggacca gcggtctcgg tcgttgaggg tcctgtgtat tttttccagg acgtggtaaa 7020

ggtgactctg gatgttcaga tacatgggca taagcccgtc tctggggtgg aggtagcacc 7080

actgcagagc ttcatgctgc ggggtggtgt tgtagatgat ccagtcgtag caggagcgct 7140

gggcgtggtg cctaaaaatg tctttcagta gcaagctgat tgccaggggc aggcccttgg 7200

tgtaagtgtt tacaaagcgg ttaagctggg atgggtgcat acgtggggat atgagatgca 7260

tcttggactg tatttttagg ttggctatgt tcccagccat atccctccgg ggattcatgt 7320

tgtgcagaac caccagcaca gtgtatccgg tgcacttggg aaatttgtca tgtagcttag 7380

aaggaaatgc gtggaagaac ttggagacgc ccttgtgacc tccaagattt tccatgcatt 7440

cgtccataat gatggcaatg ggcccacggg cggcggcctg ggcgaagata tttctgggat 7500

cactaacgtc atagttgtgt tccaggatga gatcgtcata ggccattttt acaaagcgcg 7560

ggcggagggt gccagactgc ggtataatgg ttccatccgg cccaggggcg tagttaccct 7620

cacagatttg catttcccac gctttgagtt cagatggggg gatcatgtct acctgcgggg 7680

cgatgaagaa aacggtttcc ggggtagggg agatcagctg ggaagaaagc aggttcctga 7740

gcagctgcga cttaccgcag ccggtgggcc cgtaaatcac acctattacc ggctgcaact 7800

ggtagttaag agagctgcag ctgccgtcat ccctgagcag gggggccact tcgttaagca 7860

tgtccctgac tcgcatgttt tccctgacca aatccgccag aaggcgctcg ccgcccagcg 7920

atagcagttc ttgcaaggaa gcaaagtttt tcaacggttt gagaccgtcc gccgtaggca 7980

tgcttttgag cgtttgacca agcagttcca ggcggtccca cagctcggtc acctgctcta 8040

cggcatctcg atccagcata tctcctcgtt tcgcgggttg gggcggcttt cgctgtacgg 8100

cagtagtcgg tgctcgtcca gacgggccag ggtcatgtct ttccacgggc gcagggtcct 8160

cgtcagcgta gtctgggtca cggtgaaggg gtgcgctccg ggctgcgcgc tggccagggt 8220

gcgcttgagg ctggtcctgc tggtgctgaa gcgctgccgg tcttcgccct gcgcgtcggc 8280

caggtagcat ttgaccatgg tgtcatagtc cagcccctcc gcggcgtggc ccttggcgcg 8340

cagcttgccc ttggaggagg cgccgcacga ggggcagtgc agacttttga gggcgtagag 8400

cttgggcgcg agaaataccg attccgggga gtaggcatcc gcgccgcagg ccccgcagac 8460

ggtctcgcat tccacgagcc aggtgagctc tggccgttcg gggtcaaaaa ccaggtttcc 8520

cccatgcttt ttgatgcgtt tcttacctct ggtttccatg agccggtgtc cacgctcggt 8580

gacgaaaagg ctgtccgtgt ccccgtatac agacttgaga ggcctgtcct cgagcggtgt 8640

tccgcggtcc tcctcgtata gaaactcgga ccactctgag acaaaggctc gcgtccaggc 8700

cagcacgaag gaggctaagt gggaggggta gcggtcgttg tccactaggg ggtccactcg 8760

ctccagggtg tgaagacaca tgtcgccctc ttcggcatca aggaaggtga ttggtttgta 8820

ggtgtaggcc acgtgaccgg gtgttcctga agggggggcta taaaaggggg tgggggcgcg 8880

ttcgtcctca ctctcttccg catcgctgtc tgcgagggcc agctgttggg gtgagtactc 8940

cctctgaaaa gcgggcatga cttctgcgct aagattgtca gtttccaaaa acgaggagga 9000

tttgatattc acctggcccg cggtgatgcc tttgagggtg gccgcatcca tctggtcaga 9060

aaagacaatc tttttgttgt caagcttggt ggcaaacgac ccgtagaggg cgttggacag 9120

caacttggcg atggagcgca gggtttggtt tttgtcgcga tcggcgcgct ccttggccgc 9180

gatgtttagc tgcacgtatt cgcgcgcaac gcaccgccat tcgggaaaga cggtggtgcg 9240

ctcgtcgggc accaggtgca cgcgccaacc gcggttgtgc agggtgacaa ggtcaacgct 9300

ggtggctacc tctccgcgta ggcgctcgtt ggtccagcag aggcggccgc ccttgcgcga 9360

gcagaatggc ggtagggggt ctagctgcgt ctcgtccggg gggtctgcgt ccacggtaaa 9420

gaccccgggc agcaggcgcg cgtcgaagta gtctatcttg catccttgca agtctagcgc 9480

ctgctgccat gcgcgggcgg caagcgcgcg ctcgtatggg ttgagtgggg gaccccatgg 9540

catggggtgg gtgagcgcgg aggcgtacat gccgcaaatg tcgtaaacgt agaggggctc 9600

tctgagtatt ccaagatatg tagggtagca tcttccaccg cggatgctgg cgcgcacgta 9660

atcgtatagt tcgtgcgagg gagcgaggag gtcgggaccg aggttgctac gggcgggctg 9720

ctctgctcgg aagactatct gcctgaagat ggcatgtgag ttggatgata tggttggacg 9780

ctggaagacg ttgaagctgg cgtctgtgag acctaccgcg tcacgcacga aggaggcgta 9840

ggagtcgcgc agcttgttga ccagctcggc ggtgacctgc acgtctaggg cgcagtagtc 9900

cagggtttcc ttgatgatgt catacttatc ctgtcccttt tttttccaca gctcgcggtt 9960

gaggacaaac tcttcgcggt ctttccagta ctcttggatc ggaaacccgt cggcctccga 10020

acggtaagag cctagcatgt agaactggtt gacggcctgg taggcgcagc atccctttc 10080

tacgggtagc gcgtatgcct gcgcggcctt ccggagcgag gtgtgggtga gcgcaaaggt 10140

gtccctgacc atgactttga ggtactggta tttgaagtca gtgtcgtcgc atccgccctg 10200

ctcccagagc aaaaagtccg tgcgcttttt ggaacgcgga tttggcaggg cgaaggtgac 10260

atcgttgaag agtatctttc ccgcgcgagg cataaagttg cgtgtgatgc ggaagggtcc 10320

cggcacctcg gaacggttgt taattacctg ggcggcgagc acgatctcgt caaagccgtt 10380

gatgttgtgg cccacaatgt aaagttccaa gaagcgcggg atgcccttga tggaaggcaa 10440

ttttttaagt tcctcgtagg tgagctcttc aggggagctg agcccgtgct ctgaaagggc 10500

ccagtctgca agatgagggt tggaagcgac gaatgagctc cacaggtcac gggccattag 10560

catttgcagg tggtcgcgaa aggtcctaaa ctggcgacct atggccattt tttctggggt 10620

gatgcagtag aaggtaagcg ggtcttgttc ccagcggtcc catccaaggt tcgcggctag 10680

gtctcgcgcg gcagtcacta gaggctcatc tccgccgaac ttcatgacca gcatgaaggg 10740

cacgagctgc ttcccaaagg cccccatcca agtataggtc tctacatcgt aggtgacaaa 10800

gagacgctcg gtgcgaggat gcgagccgat cgggaagaac tggatctccc gccaccaatt 10860

ggaggagtgg ctattgatgt ggtgaaagta gaagtccctg cgacgggccg aacactcgtg 10920

ctggcttttg taaaaacgtg cgcagtactg gcagcggtgc acgggctgta catcctgcac 10980

gaggttgacc tgacgaccgc gcacaaggaa gcagagtggg aatttgagcc cctcgcctgg 11040

cgggtttggc tggtggtctt ctacttcggc tgcttgtcct tgaccgtctg gctgctcgag 11100

gggagttacg gtggatcgga ccaccacgcc gcgcgagccc aaagtccaga tgtccgcgcg 11160

cggcggtcgg agcttgatga caacatcgcg cagatgggag ctgtccatgg tctggagctc 11220

ccgcggcgtc aggtcaggcg ggagctcctg caggtttacc tcgcatagac gggtcagggc 11280

gcgggctaga tccaggtgat acctaatttc caggggctgg ttggtggcgg cgtcgatggc 11340

ttgcaagagg ccgcatcccc gcggcgcgac tacggtaccg cgcggcgggc ggtgggccgc 11400

gggggtgtcc ttggatgatg catctaaaag cggtgacgcg ggcgagcccc cggaggtagg 11460

gggggctccg gacccgccgg gagagggggc aggggcacgt cggcgccgcg cgcgggcagg 11520

agctggtgct gcgcgcgtag gttgctggcg aacgcgacga cgcggcggtt gatctcctga 11580

atctggcgcc tctgcgtgaa gacgacgggc ccggtgagct tgaacctgaa agagagttcg 11640

acagaatcaa tttcggtgtc gttgacggcg gcctggcgca aaatctcctg cacgtctcct 11700

gagttgtctt gataggcgat ctcggccatg aactgctcga tctcttcctc ctggagatct 11760

ccgcgtccgg ctcgctccac ggtggcggcg aggtcgttgg aaatgcgggc catgagctgc 11820

gagaaggcgt tgaggcctcc ctcgttccag acgcggctgt agaccacgcc cccttcggca 11880

tcgcgggcgc gcatgaccac ctgcgcgaga ttgagctcca cgtgccgggc gaagacggcg 11940

tagtttcgca ggcgctgaaa gaggtagttg agggtggtgg cggtgtgttc tgccacgaag 12000

aagtacataa cccagcgtcg caacgtggat tcgttgatat cccccaaggc ctcaaggcgc 12060

tccatggcct cgtagaagtc cacggcgaag ttgaaaaact gggagttgcg cgccgacacg 12120

gttaactcct cctccagaag acggatgagc tcggcgacag tgtcgcgcac ctcgcgctca 12180

aaggctacag gggcctcttc ttcttcttca atctcctctt ccataagggc ctccccttct 12240

tcttcttctg gcggcggtgg gggaggggggg acacggcggc gacgacggcg caccgggagg 12300

cggtcgacaa agcgctcgat catctccccg cggcgacggc gcatggtctc ggtgacggcg 12360

cggccgttct cgcgggggcg cagttggaag acgccgcccg tcatgtcccg gttatgggtt 12420

ggcgggggggc tgccatgcgg cagggatacg gcgctaacga tgcatctcaa caattgttgt 12480

gtaggtactc cgccgccgag ggacctgagc gagtccgcat cgaccggatc ggaaaacctc 12540

tcgagaaagg cgtctaacca gtcacagtcg caaggtaggc tgagcaccgt ggcgggcggc 12600

agcgggcggc ggtcggggtt gtttctggcg gaggtgctgc tgatgatgta attaaagtag 12660

gcggtcttga gacggcggat ggtcgacaga agcaccatgt ccttgggtcc ggcctgctga 12720

atgcgcaggc ggtcggccat gccccaggct tcgttttgac atcggcgcag gtctttgtag 12780

tagtcttgca tgagcctttc taccggcact tcttcttctc cttcctcttg tcctgcatct 12840

cttgcatcta tcgctgcggc ggcggcggag tttggccgta ggtggcgccc tcttcctccc 12900

atgcgtgtga ccccgaagcc cctcatcggc tgaagcaggg ctaggtcggc gacaacgcgc 12960

tcggctaata tggcctgctg cacctgcgtg agggtagact ggaagtcatc catgtccaca 13020

aagcggtggt atgcgcccgt gttgatggtg taagtgcagt tggccataac ggaccagtta 13080

acggtctggt gacccggctg cgagagctcg gtgtacctga gacgcgagta agccctcgag 13140

tcaaatacgt agtcgttgca agtccgcacc aggtactggt atcccaccaa aaagtgcggc 13200

ggcggctggc ggtagagggg ccagcgtagg gtggccgggg ctccgggggc gagatcttcc 13260

aacataaggc gatgatatcc gtagatgtac ctggacatcc aggtgatgcc ggcggcggtg 13320

gtggaggcgc gcggaaagtc gcggacgcgg ttccagatgt tgcgcagcgg caaaaagtgc 13380

tccatggtcg ggacgctctg gccggtcagg cgcgcgcaat cgttgacgct ctagcgtgca 13440

aaaggagagc ctgtaagcgg gcactcttcc gtggtctggt ggataaattc gcaagggtat 13500

catggcggac gaccggggtt cgagccccgt atccggccgt ccgccgtgat ccatgcggtt 13560

accgcccgcg tgtcgaaccc aggtgtgcga cgtcagacaa cgggggagtg ctccttttgg 13620

cttccttcca ggcgcggcgg ctgctgcgct agctttttg gccactggcc gcgcgcagcg 13680

taagcggtta ggctggaaag cgaaagcatt aagtggctcg ctccctgtag ccggagggtt 13740

attttccaag ggttgagtcg cgggaccccc ggttcgagtc tcggaccggc cggactgcgg 13800

cgaacggggg tttgcctccc cgtcatgcaa gaccccgctt gcaaattcct ccggaaacag 13860

ggacgagccc ctttttgct tttcccagat gcatccggtg ctgcggcaga tgcgcccccc 13920

tcctcagcag cggcaagagc aagagcagcg gcagacatgc agggcaccct cccctcctcc 13980

taccgcgtca ggaggggcga catccgcggt tgacgcggca gcagatggtg attacgaacc 14040

cccgcggcgc cgggcccggc actacctgga cttggaggag ggcgagggcc tggcgcggct 14100

aggagcgccc tctcctgagc ggcacccaag ggtgcagctg aagcgtgata cgcgtgaggc 14160

gtacgtgccg cggcagaacc tgtttcgcga ccgcgaggga gaggagcccg aggagatgcg 14220

ggatcgaaag ttccacgcag ggcgcgagct gcggcatggc ctgaatcgcg agcggttgct 14280

gcgcgaggag gactttgagc ccgacgcgcg aaccgggatt agtcccgcgc gcgcacacgt 14340

ggcggccgcc gacctggtaa ccgcatacga gcagacggtg aaccaggaga ttaactttca 14400

aaaaagcttt aacaaccacg tgcgtacgct tgtggcgcgc gaggaggtgg ctataggact 14460

gatgcatctg tgggactttg taagcgcgct ggagcaaaac ccaaatagca agccgctcat 14520

ggcgcagctg ttccttatag tgcagcacag cagggacaac gaggcattca gggatgcgct 14580

gctaaacata gtagagcccg agggccgctg gctgctcgat ttgataaaca tcctgcagag 14640

catagtggtg caggagcgca gcttgagcct ggctgacaag gtggccgcca tcaactattc 14700

catgcttagc ctgggcaagt tttacgcccg caagatatac catacccctt acgttcccat 14760

agacaaggag gtaaagatcg aggggttcta catgcgcatg gcgctgaagg tgcttacctt 14820

gagcgacgac ctgggcgttt atcgcaacga gcgcatccac aaggccgtga gcgtgagccg 14880

gcggcgcgag ctcagcgacc gcgagctgat gcacagcctg caaagggccc tggctggcac 14940

gggcagcggc gatagagagg ccgagtccta ctttgacgcg ggcgctgacc tgcgctgggc 15000

cccaagccga cgcgccctgg aggcagctgg ggccggacct gggctggcgg tggcacccgc 15060

gcgcgctggc aacgtcggcg gcgtggagga atatgacgag gacgatgagt acgagccaga 15120

ggacggcgag tactaagcgg tgatgtttct gatcagatga tgcaagacgc aacggacccg 15180

gcggtgcggg cggcgctgca gagccagccg tccggcctta actccacgga cgactggcgc 15240

caggtcatgg accgcatcat gtcgctgact gcgcgcaatc ctgacgcgtt ccggcagcag 15300

ccgcaggcca accggctctc cgcaattctg gaagcggtgg tcccggcgcg cgcaaacccc 15360

acgcacgaga aggtgctggc gatcgtaaac gcgctggccg aaaacagggc catccggccc 15420

gacgaggccg gcctggtcta cgacgcgctg cttcagcgcg tggctcgtta caacagcggc 15480

aacgtgcaga ccaacctgga ccggctggtg ggggatgtgc gcgaggccgt ggcgcagcgt 15540

gagcgcgcgc agcagcaggg caacctgggc tccatggttg cactaaacgc cttcctgagt 15600

acacagcccg ccaacgtgcc gcggggacag gaggactaca ccaactttgt gagcgcactg 15660

cggctaatgg tgactgagac accgcaaagt gaggtgtacc agtctgggcc agactatttt 15720

ttccagacca gtagacaagg cctgcagacc gtaaacctga gccaggcttt caaaaacttg 15780

caggggctgt ggggggtgcg ggctcccaca ggcgaccgcg cgaccgtgtc tagcttgctg 15840

acgcccaact cgcgcctgtt gctgctgcta atagcgccct tcacggacag tggcagcgtg 15900

tcccgggaca catacctagg tcacttgctg acactgtacc gcgaggccat aggtcaggcg 15960

catgtggacg agcatacttt ccaggagatt acaagtgtca gccgcgcgct ggggcaggag 16020

gacacgggca gcctggaggc aaccctaaac tacctgctga ccaaccggcg gcagaagatc 16080

ccctcgttgc acagtttaaa cagcgaggag gagcgcattt tgcgctacgt gcagcagagc 16140

gtgagcctta acctgatgcg cgacggggta acgcccagcg tggcgctgga catgaccgcg 16200

cgcaacatgg aaccgggcat gtatgcctca aaccggccgt ttatcaaccg cctaatggac 16260

tacttgcatc gcgcggccgc cgtgaacccc gagtatttca ccaatgccat cttgaacccg 16320

cactggctac cgccccctgg tttctacacc gggggattcg aggtgcccga gggtaacgat 16380

ggattcctct gggacgacat agacgacagc gtgttttccc cgcaaccgca gaccctgcta 16440

gagttgcaac agcgcgagca ggcagaggcg gcgctgcgaa aggaaagctt ccgcaggcca 16500

agcagcttgt ccgatctagg cgctgcggcc ccgcggtcag atgctagtag cccatttcca 16560

agcttgatag ggtctcttac cagcactcgc accacccgcc cgcgcctgct gggcgaggag 16620

gagtacctaa acaactcgct gctgcagccg cagcgcgaaa aaaacctgcc tccggcattt 16680

cccaacaacg ggatagagag cctagtggac aagatgagta gatggaagac gtacgcgcag 16740

gagcacaggg acgtgccagg cccgcgcccg cccacccgtc gtcaaaggca cgaccgtcag 16800

cggggtctgg tgtgggagga cgatgactcg gcagacgaca gcagcgtcct ggatttggga 16860

gggagtggca acccgtttgc gcaccttcgc cccaggctgg ggagaatgtt ttaaaaaaaa 16920

aaaagcatga tgcaaaataa aaaactcacc aaggccatgg caccgagcgt tggttttctt 16980

gtattcccct tagtatgcgg cgcgcggcga tgtatgagga aggtcctcct ccctcctacg 17040

agagtgtggt gagcgcggcg ccagtggcgg cggcgctggg ttctcccttc gatgctcccc 17100

tggacccgcc gtttgtgcct ccgcggtacc tgcggcctac cgggggggaga aacagcatcc 17160

gttactctga gttggcaccc ctattcgaca ccacccgtgt gtacctggtg gacaacaagt 17220

caacggatgt ggcatccctg aactaccaga acgaccacag caactttctg accacggtca 17280

ttcaaaacaa tgactacagc ccgggggagg caagcacaca gaccatcaat cttgacgacc 17340

ggtcgcactg gggcggcgac ctgaaaacca tcctgcatac caacatgcca aatgtgaacg 17400

agttcatgtt taccaataag tttaaggcgc gggtgatggt gtcgcgcttg cctactaagg 17460

acaatcaggt ggagctgaaa tacgagtggg tggagttcac gctgcccgag ggcaactact 17520

ccgagaccat gaccatagac cttatgaaca acgcgatcgt ggagcactac ttgaaagtgg 17580

gcagacagaa cggggttctg gaaagcgaca tcggggtaaa gtttgacacc cgcaacttca 17640

gactggggtt tgaccccgtc actggtcttg tcatgcctgg ggtatataca aacgaagcct 17700

tccatccaga catcattttg ctgccaggat gcggggtgga cttcacccac agccgcctga 17760

gcaacttgtt gggcatccgc aagcggcaac ccttccagga gggctttagg atcacctacg 17820

atgatctgga gggtggtaac attcccgcac tgttggatgt ggacgcctac caggcgagct 17880

tgaaagatga caccgaacag ggcgggggtg gcgcaggcgg cagcaacagc agtggcagcg 17940

gcgcggaaga gaactccaac gcggcagccg cggcaatgca gccggtggag gacatgaacg 18000

atcatgccat tcgcggcgac acctttgcca cacgggctga ggagaagcgc gctgaggccg 18060

aagcagcggc cgaagctgcc gcccccgctg cgcaacccga ggtcgagaag cctcagaaga 18120

aaccggtgat caaacccctg acagaggaca gcaagaaacg cagttacaac ctaataagca 18180

atgacagcac cttcacccag taccgcagct ggtaccttgc atacaactac ggcgaccctc 18240

agaccggaat ccgctcatgg accctgcttt gcactcctga cgtaacctgc ggctcggagc 18300

aggtctactg gtcgttgcca gacatgatgc aagaccccgt gaccttccgc tccacgcgcc 18360

agatcagcaa ctttccggtg gtgggcgccg agctgttgcc cgtgcactcc aagagcttct 18420

acaacgacca ggccgtctac tcccaactca tccgccagtt tacctctctg acccacgtgt 18480

tcaatcgctt tcccgagaac cagattttgg cgcgcccgcc agcccccacc atcaccaccg 18540

tcagtgaaaa cgttcctgct ctcacagatc acgggacgct accgctgcgc aacagcatcg 18600

gaggagtcca gcgagtgacc attactgacg ccagacgccg cacctgcccc tacgtttaca 18660

aggccctggg catagtctcg ccgcgcgtcc tatcgagccg cacttttga gcaagcatgt 18720

ccatccttat atcgcccagc aataacacag gctggggcct gcgcttccca agcaagatgt 18780

ttggcggggc caagaagcgc tccgaccaac acccagtgcg cgtgcgcggg cactaccgcg 18840

cgccctgggg cgcgcacaaa cgcggccgca ctgggcgcac caccgtcgat gacgccatcg 18900

acgcggtggt ggaggaggcg cgcaactaca cgcccacgcc gccaccagtg tccacagtgg 18960

acgcggccat tcagaccgtg gtgcgcggag cccggcgcta tgctaaaatg aagagacggc 19020

ggaggcgcgt agcacgtcgc caccgccgcc gacccggcac tgccgcccaa cgcgcggcgg 19080

cggccctgct taaccgcgca cgtcgcaccg gccgacgggc ggccatgcgg gccgctcgaa 19140

ggctggccgc gggtattgtc actgtgcccc ccaggtccag gcgacgagcg gccgccgcag 19200

cagccgcggc cattagtgct atgactcagg gtcgcagggg caacgtgtat tgggtgcgcg 19260

actcggttag cggcctgcgc gtgcccgtgc gcacccgccc cccgcgcaac tagattgcaa 19320

gaaaaaacta cttagactcg tactgttgta tgtatccagc ggcggcggcg cgcaacgaag 19380

ctatgtccaa gcgcaaaatc aaagaagaga tgctccaggt catcgcgccg gagatctatg 19440

gccccccgaa gaaggaagag caggattaca agccccgaaa gctaaagcgg gtcaaaaaga 19500

aaaagaaaga tgatgatgat gaacttgacg acgaggtgga actgctgcac gctaccgcgc 19560

ccaggcgacg ggtacagtgg aaaggtcgac gcgtaaaacg tgttttgcga cccggcacca 19620

ccgtagtctt tacgcccggt gagcgctcca cccgcaccta caagcgcgtg tatgatgagg 19680

tgtacggcga cgaggacctg cttgagcagg ccaacgagcg cctcggggag tttgcctacg 19740

gaaagcggca taaggacatg ctggcgttgc cgctggacga gggcaaccca acacctagcc 19800

taaagcccgt aacactgcag caggtgctgc ccgcgcttgc accgtccgaa gaaaagcgcg 19860

gcctaaagcg cgagtctggt gacttggcac ccaccgtgca gctgatggta cccaagcgcc 19920

agcgactgga agatgtcttg gaaaaaatga ccgtggaacc tgggctggag cccgaggtcc 19980

gcgtgcggcc aatcaagcag gtggcgccgg gactgggcgt gcagaccgtg gacgttcaga 20040

tacccactac cagtagcacc agtattgcca ccgccacaga gggcatggag acacaaacgt 20100

ccccggttgc ctcagcggtg gcggatgccg cggtgcaggc ggtcgctgcg gccgcgtcca 20160

agacctctac ggaggtgcaa acggacccgt ggatgtttcg cgtttcagcc ccccggcgcc 20220

cgcgccgttc gaggaagtac ggcgccgcca gcgcgctact gcccgaatat gccctacatc 20280

cttccattgc gcctaccccc ggctatcgtg gctacaccta ccgccccaga agacgagcaa 20340

ctacccgacg ccgaaccacc actggaaccc gccgccgccg tcgccgtcgc cagcccgtgc 20400

tggccccgat ttccgtgcgc agggtggctc gcgaaggagg caggaccctg gtgctgccaa 20460

cagcgcgcta ccaccccagc atcgtttaaa agccggtctt tgtggttctt gcagatatgg 20520

ccctcacctg ccgcctccgt ttcccggtgc cgggattccg aggaagaatg caccgtagga 20580

ggggcatggc cggccacggc ctgacgggcg gcatgcgtcg tgcgcaccac cggcggcggc 20640

gcgcgtcgca ccgtcgcatg cgcggcggta tcctgcccct ccttattcca ctgatcgccg 20700

cggcgattgg cgccgtgccc ggaattgcat ccgtggcctt gcaggcgcag agacactgat 20760

taaaaacaag ttgcatgtgg aaaaatcaaa ataaaaagtc tggactctca cgctcgcttg 20820

gtcctgtaac tattttgtag aatggaagac atcaactttg cgtctctggc cccgcgacac 20880

ggctcgcgcc cgttcatggg aaactggcaa gatatcggca ccagcaatat gagcggtggc 20940

gccttcagct ggggctcgct gtggagcggc attaaaaatt tcggttccac cgttaagaac 21000

tatggcagca aggcctggaa cagcagcaca ggccagatgc tgagggataa gttgaaagag 21060

caaaatttcc aacaaaaggt ggtagatggc ctggcctctg gcattagcgg ggtggtggac 21120

ctggccaacc aggcagtgca aaataagatt aacagtaagc ttgatccccg ccctcccgta 21180

gaggagcctc caccggccgt ggagacagtg tctccagagg ggcgtggcga aaagcgtccg 21240

cgccccgaca gggaagaaac tctggtgacg caaatagacg agcctccctc gtacgaggag 21300

gcactaaagc aaggcctgcc caccacccgt cccatcgcgc ccatggctac cggagtgctg 21360

ggccagcaca cacccgtaac gctggacctg cctccccccg ccgacaccca gcagaaacct 21420

gtgctgccag gcccgaccgc cgttgttgta acccgtccta gccgcgcgtc cctgcgccgc 21480

gccgccagcg gtccgcgatc gttgcggccc gtagccagtg gcaactggca aagcacactg 21540

aacagcatcg tgggtctggg ggtgcaatcc ctgaagcgcc gacgatgctt ctgatagcta 21600

acgtgtcgta tgtgtgtcat gtatgcgtcc atgtcgccgc cagaggagct gctgagccgc 21660

cgcgcgcccg ctttccaaga tggctacccc ttcgatgatg ccgcagtggt cttacatgca 21720

catctcgggc caggacgcct cggagtacct gagccccggg ctggtgcagt ttgcccgcgc 21780

caccgagacg tacttcagcc tgaataacaa gtttagaaac cccacggtgg cgcctacgca 21840

cgacgtgacc acagaccggt cccagcgttt gacgctgcgg ttcatccctg tggaccgtga 21900

ggatactgcg tactcgtaca aggcgcggtt caccctagct gtgggtgata accgtgtgct 21960

ggacatggct tccacgtact ttgacatccg cggcgtgctg gacaggggcc ctacttttaa 22020

gccctactct ggcactgcct acaacgccct ggctcccaag ggtgccccaa atccttgcga 22080

atgggatgaa gctgctactg ctcttgaaat aaacctagaa gaagaggacg atgacaacga 22140

agacgaagta gacgagcaag ctgagcagca aaaaactcac gtatttgggc aggcgcctta 22200

ttctggtata aatattacaa aggagggtat tcaaataggt gtcgaaggtc aaacacctaa 22260

atatgccgat aaaacatttc aacctgaacc tcaaatagga gaatctcagt ggtacgaaac 22320

agaaattaat catgcagctg ggagagtcct aaaaaagact accccaatga aaccatgtta 22380

cggttcatat gcaaaaccca caaatgaaaa tggagggcaa ggcattcttg taaagcaaca 22440

aaatggaaag ctagaaagtc aagtggaaat gcaatttttc tcaactactg aggcagccgc 22500

aggcaatggt gataacttga ctcctaaagt ggtattgtac agtgaagatg tagatataga 22560

aaccccagac actcatattt cttacatgcc cactattaag gaaggtaact cacgagaact 22620

aatgggccaa caatctatgc ccaacaggcc taattacatt gcttttaggg acaattttat 22680

tggtctaatg tattacaaca gcacgggtaa tatgggtgtt ctggcgggcc aagcatcgca 22740

gttgaatgct gttgtagatt tgcaagacag aaacacagag ctttcatacc agcttttgct 22800

tgattccatt ggtgatagaa ccaggtactt ttctatgtgg aatcaggctg ttgacagcta 22860

tgatccagat gttagaatta ttgaaaatca tggaactgaa gatgaacttc caaattactg 22920

ctttccactg ggaggtgtga ttaatacaga gactcttacc aaggtaaaac ctaaaacagg 22980

tcaggaaaat ggatgggaaa aagatgctac agaattttca gataaaaatg aaataagagt 23040

tggaaataat tttgccatgg aaatcaatct aaatgccaac ctgtggagaa atttcctgta 23100

ctccaacata gcgctgtatt tgcccgacaa gctaaagtac agtccttcca acgtaaaaat 23160

ttctgataac ccaaacacct acgactacat gaacaagcga gtggtggctc ccgggctagt 23220

ggactgctac attaaccttg gagcacgctg gtcccttgac tatatggaca acgtcaaccc 23280

atttaaccac caccgcaatg ctggcctgcg ctaccgctca atgttgctgg gcaatggtcg 23340

ctatgtgccc ttccacatcc aggtgcctca gaagttcttt gccattaaaa acctccttct 23400

cctgccgggc tcatacacct acgagtggaa cttcaggaag gatgttaaca tggttctgca 23460

gagctcccta ggaaatgacc taagggttga cggagccagc attaagtttg atagcatttg 23520

cctttacgcc accttcttcc ccatggccca caacaccgcc tccacgcttg aggccatgct 23580

tagaaacgac accaacgacc agtcctttaa cgactatctc tccgccgcca acatgctcta 23640

ccctataccc gccaacgcta ccaacgtgcc catatccatc ccctcccgca actgggcggc 23700

tttccgcggc tgggccttca cgcgccttaa gactaaggaa accccatcac tgggctcggg 23760

ctacgaccct tattacacct actctggctc tataccctac ctagatggaa ccttttacct 23820

caaccacacc tttaagaagg tggccattac ctttgactct tctgtcagct ggcctggcaa 23880

tgaccgcctg cttaccccca acgagtttga aattaagcgc tcagttgacg gggagggtta 23940

caacgttgcc cagtgtaaca tgaccaaaga ctggttcctg gtacaaatgc tagctaacta 24000

taacattggc taccagggct tctatatccc agagagctac aaggaccgca tgtactcctt 24060

ctttagaaac ttccagccca tgagccgtca ggtggtggat gatactaaat acaaggacta 24120

ccaacaggtg ggcatcctac accaacacaa caactctgga tttgttggct accttgcccc 24180

caccatgcgc gaaggacagg cctaccctgc taacttcccc tatccgctta taggcaagac 24240

cgcagttgac agcattaccc agaaaaagtt tctttgcgat cgcacccttt ggcgcatccc 24300

attctccagt aactttatgt ccatgggcgc actcacagac ctgggccaaa accttctcta 24360

cgccaactcc gcccacgcgc tagacatgac ttttgaggtg gatcccatgg acgagcccac 24420

ccttctttat gttttgtttg aagtctttga cgtggtccgt gtgcaccagc cgcaccgcgg 24480

cgtcatcgaa accgtgtacc tgcgcacgcc cttctcggcc ggcaacgcca caacataaag 24540

aagcaagcaa catcaacaac agctgccgcc atgggctcca gtgagcagga actgaaagcc 24600

attgtcaaag atcttggttg tgggccatat tttttgggca cctatgacaa gcgctttcca 24660

ggctttgttt ctccacacaa gctcgcctgc gccatagtca atacggccgg tcgcgagact 24720

gggggcgtac actggatggc ctttgcctgg aacccgcact caaaaacatg ctacctcttt 24780

gagccctttg gcttttctga ccagcgactc aagcaggttt accagtttga gtacgagtca 24840

ctcctgcgcc gtagcgccat tgcttcttcc cccgaccgct gtataacgct ggaaaagtcc 24900

acccaaagcg tacaggggcc caactcggcc gcctgtggac tattctgctg catgtttctc 24960

cacgcctttg ccaactggcc ccaaactccc atggatcaca accccaccat gaaccttatt 25020

accggggtac ccaactccat gctcaacagt ccccaggtac agcccaccct gcgtcgcaac 25080

caggaacagc tctacagctt cctggagcgc cactcgccct acttccgcag ccacagtgcg 25140

cagattagga gcgccacttc tttttgtcac ttgaaaaaca tgtaaaaata atgtactaga 25200

gacactttca ataaaggcaa atgcttttat ttgtacactc tcgggtgatt atttaccccc 25260

acccttgccg tctgcgccgt ttaaaaatca aaggggttct gccgcgcatc gctatgcgcc 25320

actggcaggg acacgttgcg atactggtgt ttagtgctcc acttaaactc aggcacaacc 25380

atccgcggca gctcggtgaa gttttcactc cacaggctgc gcaccatcac caacgcgttt 25440

agcaggtcgg gcgccgatat cttgaagtcg cagttggggc ctccgccctg cgcgcgcgag 25500

ttgcgataca cagggttgca gcactggaac actatcagcg ccgggtggtg cacgctggcc 25560

agcacgctct tgtcggagat cagatccgcg tccaggtcct ccgcgttgct cagggcgaac 25620

ggagtcaact ttggtagctg ccttcccaaa aagggcgcgt gcccaggctt tgagttgcac 25680

tcgcaccgta gtggcatcaa aaggtgaccg tgcccggtct gggcgttagg atacagcgcc 25740

tgcataaaag ccttgatctg cttaaaagcc acctgagcct ttgcgccttc agagaagaac 25800

atgccgcaag acttgccgga aaactgattg gccggacagg ccgcgtcgtg cacgcagcac 25860

cttgcgtcgg tgttggagat ctgcaccaca tttcggcccc accggttctt cacgatcttg 25920

gccttgctag actgctcctt cagcgcgcgc tgcccgtttt cgctcgtcac atccatttca 25980

atcacgtgct ccttatttat cataatgctt ccgtgtagac acttaagctc gccttcgatc 26040

tcagcgcagc ggtgcagcca caacgcgcag cccgtgggct cgtgatgctt gtaggtcacc 26100

tctgcaaacg actgcaggta cgcctgcagg aatcgcccca tcatcgtcac aaaggtcttg 26160

ttgctggtga aggtcagctg caacccgcgg tgctcctcgt tcagccaggt cttgcatacg 26220

gccgccagag cttccacttg gtcaggcagt agtttgaagt tcgcctttag atcgttatcc 26280

acgtggtact tgtccatcag cgcgcgcgca gcctccatgc ccttctccca cgcagacacg 26340

atcggcacac tcagcgggtt catcaccgta atttcacttt ccgcttcgct gggctcttcc 26400

tcttcctctt gcgtccgcat accacgcgcc actgggtcgt cttcattcag ccgccgcact 26460

gtgcgcttac ctcctttgcc atgcttgatt agcaccggtg ggttgctgaa acccaccatt 26520

tgtagcgcca catcttctct ttcttcctcg ctgtccacga ttacctctgg tgatggcggg 26580

cgctcgggct tgggagaagg gcgcttcttt ttcttcttgg gcgcaatggc caaatccgcc 26640

gccgaggtcg atggccgcgg gctgggtgtg cgcggcacca gcgcgtcttg tgatgagtct 26700

tcctcgtcct cggactcgat acgccgcctc atccgctttt ttgggggcgc ccggggaggc 26760

ggcggcgacg gggacgggga cgacacgtcc tccatggttg ggggacgtcg cgccgcaccg 26820

cgtccgcgct cgggggtggt ttcgcgctgc tcctcttccc gactggccat ttccttctcc 26880

tataggcaga aaaagatcat ggagtcagtc gagaagaagg acagcctaac cgccccctct 26940

gagttcgcca ccaccgcctc caccgatgcc gccaacgcgc ctaccacctt ccccgtcgag 27000

gcacccccgc ttgaggagga ggaagtgatt atcgagcagg acccaggttt tgtaagcgaa 27060

gacgacgagg accgctcagt accaacagag gataaaaagc aagaccagga caacgcagag 27120

gcaaacgagg aacaagtcgg gcggggggac gaaaggcatg gcgactacct agatgtggga 27180

gacgacgtgc tgttgaagca tctgcagcgc cagtgcgcca ttatctgcga cgcgttgcaa 27240

gagcgcagcg atgtgcccct cgccatagcg gatgtcagcc ttgcctacga acgccaccta 27300

ttctcaccgc gcgtaccccc caaacgccaa gaaaacggca catgcgagcc caacccgcgc 27360

ctcaacttct accccgtatt tgccgtgcca gaggtgcttg ccacctatca catcttttc 27420

caaaactgca agataccct atcctgccgt gccaaccgca gccgagcgga caagcagctg 27480

gccttgcggc agggcgctgt catacctgat atcgcctcgc tcaacgaagt gccaaaaatc 27540

tttgagggtc ttggacgcga cgagaagcgc gcggcaaacg ctctgcaaca ggaaaacagc 27600

gaaaatgaaa gtcactctgg agtgttggtg gaactcgagg gtgacaacgc gcgcctagcc 27660

gtactaaaac gcagcatcga ggtcacccac tttgcctacc cggcacttaa cctacccccc 27720

aaggtcatga gcacagtcat gagtgagctg atcgtgcgcc gtgcgcagcc cctggagagg 27780

gatgcaaatt tgcaagaaca aacagaggag ggcctacccg cagttggcga cgagcagcta 27840

gcgcgctggc ttcaaacgcg cgagcctgcc gacttggagg agcgacgcaa actaatgatg 27900

gccgcagtgc tcgttaccgt ggagcttgag tgcatgcagc ggttctttgc tgacccggag 27960

atgcagcgca agctagagga aacattgcac tacacctttc gacagggcta cgtacgccag 28020

gcctgcaaga tctccaacgt ggagctctgc aacctggtct cctaccttgg aattttgcac 28080

gaaaaccgcc ttgggcaaaa cgtgcttcat tccacgctca agggcgaggc gcgccgcgac 28140

tacgtccgcg actgcgttta cttatttcta tgctacacct ggcagacggc catgggcgtt 28200

tggcagcagt gcttggagga gtgcaacctc aaggagctgc agaaactgct aaagcaaaac 28260

ttgaaggacc tatggacggc cttcaacgag cgctccgtgg ccgcgcacct ggcggacatc 28320

attttccccg aacgcctgct taaaaccctg caacagggtc tgccagactt caccagtcaa 28380

agcatgttgc agaactttag gaactttatc ctagagcgct caggaatctt gcccgccacc 28440

tgctgtgcac ttcctagcga ctttgtgccc attaagtacc gcgaatgccc tccgccgctt 28500

tggggccact gctaccttct gcagctagcc aactaccttg cctaccactc tgacataatg 28560

gaagacgtga gcggtgacgg tctactggag tgtcactgtc gctgcaacct atgcaccccg 28620

caccgctccc tggtttgcaa ttcgcagctg cttaacgaaa gtcaaattat cggtaccttt 28680

gagctgcagg gtccctcgcc tgacgaaaag tccgcggctc cggggttgaa actcactccg 28740

gggctgtgga cgtcggctta ccttcgcaaa tttgtacctg aggactacca cgcccacgag 28800

attaggttct acgaagacca atcccgcccg cctaatgcgg agcttaccgc ctgcgtcatt 28860

acccagggcc acattcttgg ccaattgcaa gccatcaaca aagcccgcca agagtttctg 28920

ctacgaaagg gacgggggggt ttacttggac ccccagtccg gcgaggagct caacccaatc 28980

cccccgccgc cgcagcccta tcagcagcag ccgcgggccc ttgcttccca ggatggcacc 29040

caaaaagaag ctgcagctgc cgccgccacc cacggacgag gaggaatact gggacagtca 29100

ggcagaggag gttttggacg aggaggagga ggacatgatg gaagactggg agagcctaga 29160

cgaggaagct tccgaggtcg aagaggtgtc agacgaaaca ccgtcaccct cggtcgcatt 29220

cccctcgccg gcgccccaga aatcggcaac cggttccagc atggctacaa cctccgctcc 29280

tcaggcgccg ccggcactgc ccgttcgccg acccaaccgt agatgggaca ccactggaac 29340

cagggccggt aagtccaagc agccgccgcc gttagcccaa gagcaacaac agcgccaagg 29400

ctaccgctca tggcgcgggc acaagaacgc catagttgct tgcttgcaag actgtggggg 29460

caacatctcc ttcgcccgcc gctttcttct ctaccatcac ggcgtggcct tcccccgtaa 29520

catcctgcat tactaccgtc atctctacag cccatactgc accggcggca gcggcagcaa 29580

cagcagcggc cacacagaag caaaggcgac cggatagcaa gactctgaca aagcccaaga 29640

aatccacagc ggcggcagca gcaggaggag gagcgctgcg tctggcgccc aacgaacccg 29700

tatcgacccg cgagcttaga aacaggattt ttcccactct gtatgctata tttcaacaga 29760

gcaggggcca agaacaagag ctgaaaataa aaaacaggtc tctgcgatcc ctcacccgca 29820

gctgcctgta tcacaaaagc gaagatcagc ttcggcgcac gctggaagac gcggaggctc 29880

tcttcagtaa atactgcgcg ctgactctta aggactagtt tcgcgccctt tctcaaattt 29940

aagcgcgaaa actacgtcat ctccagcggc cacacccggc gccagcacct gttgtcagcg 30000

ccattatgag caaggaaatt cccacgccct acatgtggag ttaccagcca caaatgggac 30060

ttgcggctgg agctgcccaa gactactcaa cccgaataaa ctacatgagc gcgggacccc 30120

acatgatatc ccgggtcaac ggaatacgcg cccaccgaaa ccgaattctc ctggaacagg 30180

cggctattac caccacacct cgtaataacc ttaatccccg tagttggccc gctgccctgg 30240

tgtaccagga aagtcccgct cccaccactg tggtacttcc cagagacgcc caggccgaag 30300

ttcagatgac taactcaggg gcgcagcttg cgggcggctt tcgtcacagg gtgcggtcgc 30360

ccgggcaggg tataactcac ctgacaatca gagggcgagg tattcagctc aacgacgagt 30420

cggtgagctc ctcgcttggt ctccgtccgg acgggacatt tcagatcggc ggcgccggcc 30480

gctcttcatt cacgcctcgt caggcaatcc taactctgca gacctcgtcc tctgagccgc 30540

gctctggagg cattggaact ctgcaattta ttgaggagtt tgtgccatcg gtctacttta 30600

accccttctc gggacctccc ggccactatc cggatcaatt tattcctaac tttgacgcgg 30660

taaaggactc ggcggacggc tacgactgaa tgttaagtgg agaggcagag caactgcgcc 30720

tgaaacacct ggtccactgt cgccgccaca agtgctttgc ccgcgactcc ggtgagtttt 30780

gctactttga attgcccgag gatcatatcg agggcccggc gcacggcgtc cggcttaccg 30840

cccagggaga gcttgcccgt agcctgattc gggagtttac ccagcgcccc ctgctagttg 30900

agcgggacag gggaccctgt gttctcactg tgatttgcaa ctgtcctaac cctggattac 30960

atcaagatcc tctagttaat gtcaggtcgc ctaagtcgat taactagagt acccggggat 31020

cttattccct ttaactaata aaaaaaaata ataaagcatc acttacttaa aatcagttag 31080

caaatttctg tccagtttat tcagcagcac ctccttgccc tcctcccagc tctggtattg 31140

cagcttcctc ctggctgcaa actttctcca caatctaaat ggaatgtcag tttcctcctg 31200

ttcctgtcca tccgcaccca ctatcttcat gttgttgcag atgaagcgcg caagaccgtc 31260

tgaagatacc ttcaaccccg tgtatccata tgacacggaa accggtcctc caactgtgcc 31320

ttttcttact cctccctttg tatcccccaa tgggtttcaa gagagtcccc ctggggtact 31380

ctctttgcgc ctatccgaac ctctagttac ctccaatggc atgcttgcgc tcaaaatggg 31440

caacggcctc tctctggacg aggccggcaa ccttacctcc caaaatgtaa ccactgtgag 31500

cccacctctc aaaaaaacca agtcaaacat aaacctggaa atatctgcac ccctcacagt 31560

tacctcagaa gccctaactg tggctgccgc cgcacctcta atggtcgcgg gcaacacact 31620

caccatgcaa tcacaggccc cgctaaccgt gcacgactcc aaacttagca ttgccaccca 31680

aggacccctc acagtgtcag aaggaaagct agccctgcaa acatcaggcc ccctcaccac 31740

caccgatagc agtaccctta ctatcactgc ctcaccccct ctaactactg ccactggtag 31800

cttgggcatt gacttgaaag agcccattta tacacaaaat ggaaaactag gactaaagta 31860

cggggctcct ttgcatgtaa cagacgacct aaacactttg accgtagcaa ctggtccagg 31920

tgtgactatt aataatactt ccttgcaaac taaagttact ggagccttgg gttttgattc 31980

acaaggcaat atgcaactta atgtagcagg aggactaagg attgattctc aaaacagacg 32040

ccttatactt gatgttagtt atccgtttga tgctcaaaac caactaaatc taagactagg 32100

acagggccct ctttttataa actcagccca caacttggat attaactaca acaaaggcct 32160

ttacttgttt acagcttcaa acaattccaa aaagcttgag gttaacctaa gcactgccaa 32220

ggggttgatg tttgacgcta cagccatagc cattaatgca ggagatgggc ttgaatttgg 32280

ttcacctaat gcaccaaaca caaatcccct caaaacaaaa attggccatg gcctagaatt 32340

tgattcaaac aaggctatgg ttcctaaact aggaactggc cttagttttg acagcacagg 32400

tgccattaca gtaggaaaca aaaataatga taagctaact ttgtggaccg gaataaaccc 32460

tccacctaac tgtcaaattg tggaaaacac taatacaaat gatggcaaac ttactttagt 32520

attagtaaaa aatggagggc ttgttaatgg ctacgtgtct ctagttggtg tatcagacac 32580

tgtgaaccaa atgttcacac aaaagacagc aaacatccaa ttaagattat attttgactc 32640

ttctggaaat ctattaactg aggaatcaga cttaaaaatt ccacttaaaa ataaatcttc 32700

tacagcgacc agtgaaactg tagccagcag caaagccttt atgccaagta ctacagctta 32760

tcccttcaac accactacta gggatagtga aaactacatt catggaatat gttactacat 32820

gactagttat gatagaagtc tatttccctt gaacatttct ataatgctaa acagccgtat 32880

gatttcttcc aatgttgcct atgccataca atttgaatgg aatctaaatg caagtgaatc 32940

tccagaaagc aacatagcta cgctgaccac atcccccttt ttcttttctt acattacaga 33000

agacgacaac taaagaatcg tttgtgttat gtttcaacgt gtttattttt caattgcaga 33060

aaatttcaag tcatttttca ttcagtagta tagccccacc accacatagc ttatacagat 33120

caccgtacct taatcaaact cacagaaccc tagtattcaa cctgccacct ccctcccaac 33180

acacagagta cacagtcctt tctccccggc tggccttaaa aagcatcata tcatgggtaa 33240

cagacatatt cttaggtgtt atattccaca cggtttcctg tcgagccaaa cgctcatcag 33300

tgatattaat aaactccccg ggcagctcac ttaagttcat gtcgctgtcc agctgctgag 33360

ccacaggctg ctgtccaact tgcggttgct taacgggcgg cgaaggagaa gtccacgctc 33420

actgattaaa catggcgcca tccaccacca tcctaaacca gctggccaaa acctgcccgc 33480

cggctataca ctgcagggaa ccgggactgg aacaatgaca gtggagagcc caggactcgt 33540

aaccatggat catcatgctc gtcatgatat caatgttggc acaacacagg cacacgtgca 33600

tacacttcct caggattaca agctcctccc gcgttagaac catatcccag ggaacaaccc 33660

attcctgaat cagcgtaaat cccacactgc agggaagacc tcgcacgtaa ctcacgttgt 33720

gcattgtcaa agtgttacat tcgggcagca gcggatgatc ctccagtatg gtagcgcggg 33780

tttctgtctc aaaaggaggt agacgatccc tactgtacgg agtgcgccga gacaaccgag 33840

atcgtgttgg tcgtagtgtc atgccaaatg gaacgccgga cgtagtcata tttcctgaag 33900

caaaaccagg tgcgggcgtg acaaacagat ctgcgtctcc ggtctcgccg cttagatcgc 33960

tctgtgtagt agttgtagta tatccactct ctcaaagcat ccaggcgccc cctggcttcg 34020

ggttctatgt aaactccttc atgcgccgct gccctgataa catccaccac cgcagaataa 34080

gccacaccca gccaacctac acattcgttc tgcgagtcac acacgggagg agcgggaaga 34140

gctggaagaa ccatgttttt ttttttattc caaaagatta tccaaaacct caaaatgaag 34200

atctattaag tgaacgcgct cccctccggt ggcgtggtca aactctacag ccaaagaaca 34260

gataatggca tttgtaagat gttgcacaat ggcttccaaa aggcaaacgg ccctcacgtc 34320

caagtggacg taaaggctaa acccttcagg gtgaatctcc tctataaaca ttccagcacc 34380

ttcaaccatg cccaaataat tctcatctcg ccaccttctc aatatatctc taagcaaatc 34440

ccgaatatta agtccggcca ttgtaaaaat ctgctccaga gcgccctcca ccttcagcct 34500

caagcagcga atcatgattg caaaaattca ggttcctcac agacctgtat aagattcaaa 34560

agcggaacat taacaaaaat accgcgatcc cgtaggtccc ttcgcagggc cagctgaaca 34620

taatcgtgca ggtctgcacg gaccagcgcg gccacttccc cgccaggaac catgacaaaa 34680

gaacccacac tgattatgac acgcatactc ggagctatgc taaccagcgt agccccgatg 34740

taagcttgtt gcatgggcgg cgatataaaa tgcaaggtgc tgctcaaaaa atcaggcaaa 34800

gcctcgcgca aaaaagaaag cacatcgtag tcatgctcat gcagataaag gcaggtaagc 34860

tccggaacca ccacagaaaa agacaccatt tttctctcaa acatgtctgc gggtttctgc 34920

ataaacacaa aataaaataa caaaaaaaca tttaaacatt agaagcctgt cttacaacag 34980

gaaaaacaac ccttataagc ataagacgga ctacggccat gccggcgtga ccgtaaaaaa 35040

actggtcacc gtgattaaaa agcaccaccg acagctcctc ggtcatgtcc ggagtcataa 35100

tgtaagactc ggtaaacaca tcaggttgat tcacatcggt cagtgctaaa aagcgaccga 35160

aatagcccgg gggaatacat acccgcaggc gtagagacaa cattacagcc cccataggag 35220

gtataacaaa attaatagga gagaaaaaca cataaacacc tgaaaaaccc tcctgcctag 35280

gcaaaatagc accctcccgc tccagaacaa catacagcgc ttccacagcg gcagccataa 35340

cagtcagcct taccagtaaa aaagaaaacc tattaaaaaa acaccactcg acacggcacc 35400

agctcaatca gtcacagtgt aaaaaagggc caagtgcaga gcgagtatat ataggactaa 35460

aaaatgacgt aacggttaaa gtccacaaaa aacacccaga aaaccgcacg cgaacctacg 35520

cccagaaacg aaagccaaaa aacccacaac ttcctcaaat cgtcacttcc gttttcccac 35580

gttacgtcac ttcccatttt aagaaaacta caattcccaa cacatacaag ttactccgcc 35640

ctaaaaccta cgtcacccgc cccgttccca cgccccgcgc cacgtcacaa actccacccc 35700

ctcattatca tattggcttc aatccaaaat aaggtatatt attgatgatg 35750