

Plasmid sequences

pDSAP-LRIM1-GFP

LOCUS pDSAPLrim1-GFP 7202 bp DNA circular 22-JUN-2016

FEATURES

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misc_feature	complement(5463..5481) /note="M13R"
misc_feature	3718..3767 /note="3xP3 element"
misc_feature	complement(337..459) /note="attr4"
misc_feature	271..286 /note="M13F"
misc_feature	3141..3367 /note="SV40 term"
misc_feature	3368..3644 /note="attB"
misc_feature	3860..4508 /note="OpIE2 promoter"
misc_feature	4509..5110 /note="pac puromycin resistance ORF"
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301 CCCTACAGGT CACTAATACC ATCTAAGTAG TTGATTCATA GTGACTGGAT ATGTTGTGTT
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pDSAT-APL1-GFP

LOCUS pDSAT 7006 bp DNA circular 22-JUN-2016

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pattB-RfB2 TEPI-GFP,3xP3-RFP (TEPI-GFP reporter)

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pattB-RfB2-Vg-TEP1r SV40YFP (line *Vg-TEP1r*)

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2521 tttGTACAAA AAAGCAGGCT GGTACCGGGC CCCCCGCTAG CGTCGAGTTC AACTCGACCA
2581 TAATAATTGA TCCGTCAATC CATATTGGTC CGCAATAATG AAAGTTGCAA GAGTACGACG
2641 GTATGAAAAG AGGTTCAGTA AGTTGTAAC TAATAGTTTC TTCCAACGT TCAAATGCTG
2701 GCAAATCTTT TCGCGGGCCG CACTTCGTCG ATCGCTAGTC TTAATGATAA TTTCTGAGAA
2761 AAAGTCTCTA CTGCATCTAC TATATTCTAC TGGATATAAA TGAATAACA ACGTGAAGCT
2821 CAACCTACAAC ATGTAATTTA TTGATGGTTT AGTTTAACCA ACCTATGAAA TAATTTGATA
2881 TAGAAATTTG TAGTCGTTTT TCTATGAAGT AAAATTCTAA AATCAAACAT TAAACTGTTT
2941 TGTAGTACCC GGACTCATGG TATGGCTTCT ATTAGCCGTA AACAAAGATT TACAATTGAC
3001 TAAGGTTAGG TCCGACACTG TAGGAGCCAG CGCGTCCTTT CAATACATCA ACGGACCATC
3061 TCGTGTGTGT AAATACTTAT TATTATTATG GTTTGCTAAT TGATATGTTT CAAGACCGAT
3121 TTGGATTTTC AAATAAGTAT TCTCTGATTC ATTTTGGGAG CCGGTCTCGT GATACAGTCG
3181 TCAGCCCGTA CGACTTAAC ACATTCTCGT CATGGGTTC AAGCCCCAGAT GGACCGTGCC
3241 GCCATACGTA GAGTCAGTCC TATCCTGTTA TGGGGGGTAA TACATAAGAC ACTGAAAGCC
3301 AACCCACAA GTGGTACAGA CAAGCCTTGa CCGACAATTG TTGTTGAGCC AAACAGAAGA
3361 AGAATCCATT TCGGGAAATG ATTTTATCAT TCAATCAAAC CAGTCAATCA TAAACATCAT
3421 AGTTTTAAAT ACTCAAACCT AGTTGAGATC TTTAAAACAC ATTATTTTATG TTTAATTA
3481 TGATCTGTTA GCTAGAAGGT AGATACGATA TTTTAGACAT TTCGTAATAG ATCGCAAATC
3541 TCTATTATGT TGGTAATTCA CTTCGTAATA CTCTTAGGCA AAACCTCTTAT TAGTAAACAA
3601 AATACTAATC AAACACTGAT AAACCTAACGC GATTTATACA TTGGACAAAG AAGAGGCTGA
3661 TTTTAAAAAT ACTCGCTTTA AAATTGCTT CATTCATCAA TGTATTGTAA AGCACATAAA
3721 GAACACAATC ATTGACTGAA AACAAATCCA CGTCTCAGCC AACTTCCAG ATCAATGAAA
3781 TAGCAAGTTC CAAGTCCAT TTCATTGATT ATGGTAACTA CTGATTATTT TCAATAACAA
3841 ATACTTCGAA GACTGCACAA TTCAAAAGTA TGCCAGAAAG AAAGGATTAC TATCAATTGT
3901 GGGTTAATCA AACTAAGACA GGTGGCAAAA ATGGAACCAT TGATTAAGGC AGCCACTGAC
3961 CGATTTCAAT TAAAAACAC ACTCTTGGAA GTTCCACAC AATCTCACCT TTTGCCAATT
4021 TTAGCAAAGA CGTTGTGCTG CACTGATAAG AATCGAACTG TAAACATGTG GGCAGTAAAA
4081 ATTATTTTAT CGTTCAACAC GGCGGTCATT ACACTATTCG AAGCAGCTGA AAAGATTTGA
4141 TGATAGCAGG ACCGTGAGAT CAGCAAATTT GAGGTATAAA AGATGATCCT GCGACCACCA
4201 GAAGGCACAT TCGAGCTTTG GAGTGCATTC AAAGCATCCG GGCAACTGCG AACAACCGAA
4261 CCatCGATCT CGAGCACCCA ACTTTTCTAT ACAAAGTTGG TACCGGGCCC CCCGCTAGCG
4321 TCGACGGTAT CGATAAGCTT GATATCGAAT TCCTGCAGCC CGGGGGATCC AATGTGGCAG
4381 TTCATAAGGT CACGAATATT AACGGTGATA ATCTTCATAG GTGCTGCTCA TGGGCTACTG
4441 GTTGTGGGTC CGAAATTTAT ACGGGCCAAC CAGGAATACA CTCTGGTGAT CAGCAACTTT
4501 AACTCACAGC TAAGCAAAGT GGACCTGCTG TTTAAACTGG AAGGCGAAAC TGATAATGGT

4561 TTAAGCGTTC TGAACGTTAC CAAGATGGTT GACGTGCGAC GTAATATGAA CCGAATGATC
4621 AACTTCAATA TGCCTGAGGA TCTGACGGCT GGAAACTACA AAATAACTAT CGATGGACAG
4681 CGTGGCTTCA GCTTTCACAA GGAGGCAGAG CTGGTGTATC TCAGCAAATC GATATCGGGG
4741 CTAATACAGG TCGATAAGCC CGTATTTAAA CCTGGGGATA CGGTGAAC TT CCGTGTGATC
4801 GTGCTGGACA CGGAGCTGAA ACCGCCGGCG AGGGTCAAGT CCGTTTATGT AACTATACGA
4861 GATCCTCAGC GCAATGTGAT TCGCAAATGG TCCACGGCAA AACTGTATGC CGGTGTGTTC
4921 GAGAGCGATC TACAGATAGC GCCTACTCCA ATGCTCGGGG TCTGGAATAT CTCGGTGGAG
4981 GTGGAAGGAG AAGAGCTTGT GTCAAAGACG TTTGAGGTGA AGGAGTACGT GTTGTCAACG
5041 TTCGACGTGC AGGTCATGCC ATCGGTGATT CCACTGGAAG AGCATCAAGC TGTGAATCTT
5101 ACAATCGAAG CGAACTATCA CTTTGGTAAG CCAGTGCAAG GAGTGGCCAA GTTGGAGCTG
5161 TACCTAGACG ACGATAAGCT AAAACTGAAA AAAGAGCTGA CTGTGTACGG AAAGGGCCAG
5221 GTAGAGTTGC GCTTTGACAA TTTTGCAATG GATGCGGATC AGCAGGATGT ACCAGTGAAG
5281 GTGTCGTTTCG TCGAGCAGTA CACAAATCGT ACGGTGGTCA AACAGTCACA AATCACGGTA
5341 TATAGGTATG CGTACCGAGT AGAGTTGATA AAAGAGAGTC CACAGTTTCG TCCGGGACTC
5401 CCGTTCAAAT GTGCGCTTCA GTTTACACAC CATGATGGAA CACCGGCTAA AGGCATTAGC
5461 GGTAAGGTAG AGGTATCCGA TGTACGATTC GAAACGACAA CAACGAGTGA TAACGATGGA
5521 TTGATTAAGC TCGAGCTGCA ACCAAGTGAG GGTACTGAAC AACTCAGTAT TCACTTCAAT
5581 GCTGTTGATG GATTCTTTTT TTATGAAGAT GTGAATAAGG TAGAAACGGT TACGGATGCG
5641 TATATTA AAC TGGAGCTGAA ATCACC CATC AAACGGAACA AATTGATGCG TTTTCATGGTG
5701 ACGTGCACGG AGCGCATGAC ATTCTTCGTG TACTATGTCA TGTCAAAGGG CAATATCATC
5761 GATGCAGGAT TCGTGCAGC CAACAAGCAA CCGAAGTACC TGTTCAGCT GAACGCAACA
5821 GAAAAGATGA TTCCGAGGGC GAAAATTCTC ATCGCTACCG TAGCGGGCCG CACGGTGGTG
5881 TACGACTTCG CAGACCTCGA TTTCCAAGAG CTTCGCAATA ATTTTGATTT AAGCATTGAC
5941 GAGCAAGAGA TCAAGCCGGG ACGACAAATC GAGCTGAGCA TGTCTGGACG CCCAGGAGCG
6001 TACGTTGGGC TGGCCGCGTA TGACAAAGCC TTGCTGCTTT TCAACAAGAA CCACGACCTG
6061 TTCTGGGAG ACATTGGGCA GGTGTTTGT GGGTTCATG CAATCAATGA GAACGAGTTT
6121 GACATATTC ACAGCTGGG TCTGTTCCGC AGGACATTTG ACGATATCTT GTTCGACAGT
6181 GCAAATGAAA AGACGGGGCG TAATGCATG CAGTCAGGCA AGCCGATCGG CAATGGTGTG
6241 TCGTATCGGA CGAACTTCCA GGAATCGTGG TTGTGGAAAA ATGTTTCCAT CGGACGATCG
6301 GGAAGTCGCA AGTTGATCGA GGTAGTACCG GACACGACCA CCTCCTGGTA TCTGACGGGC
6361 TTCTCGATCG ATCCCCTGTA CGGGTTGGGT ATCATCAAGA AGCCAATCCA GTTCACAACA
6421 GTCCAGCCGT TCTACATCGT AGAGAACTTA CCATATTC AA TCAAACGAGG CGAAGCGGTT
6481 GTGTTGCAGT TTACGCTGTT CAACAACCTT GGAGCGGAGT ATATAGCCGA TGTGACGCTG
6541 TACAATGTGG CCAACCAGAC CGAGTTCGTC GGACGTCCAA ATACGGATCT CAGCTACACC
6601 AAATCCGTGA GCGTTCCTCC AAAAGTTGGT GTGCCAATCT CGTTCCTCAT CAAGGCCCGC
6661 AAGCTCGGCG AGATGGCGGT TCGTGTA AAG GCTTCGATAA TGCTGGGACA CGAAACGGAC
6721 GCCCTG GAAA AGGTAATACG GGTGATGCCT GAAAGTTTGG TGCAGCCGAG AATGGATACA
6781 CGTTTTTCT GCTTCGACGA TCACAAAAAT CAAACGTTTC CGATCAACTT GGACATCAAC
6841 AAGAAGGCCG ACAGTGGATC GACAAAGATT GAGTTTCGAC TAAATCCCAA TTTGTTGACC
6901 ACGGTCATCA AGAACCTGGA CCATCTTCTC GGCGTTCCGA CGGGATGTGG TGAGCAGAAT
6961 ATGGTCAAAT TTGTTCCCAA CATTTTGGTA CTGGATTATT TGCATGCCAT CGGGTCGAAA
7021 GAACAGCATC TAATCGACAA AGCTACGAAT TTGTTGCGTC AAGGATATCA AAACCAGATG
7081 CGCTACCGTC AGACGGATGG TTCATTTGGT TTGTGGGAGA CTACTAATGG TAGCGTGT TT
7141 CTCACCGCGT TCGTTGGCAC ATCGATGCAA ACTGCAGTAA AATACATAAG CGATATTGAT
7201 GCAGCAATGG TGGAGAAGG ATTGGATTGG TTAGCCTCGA AGCAGCATT CTCTGGGACGG
7261 TTTGACAAGG CCGGTGCAGA GTATCACAAA GAAATGCAAG GAGGGTTGCG CAATGGTGTG
7321 GCCCTCACAT CATATGTGTT GATGGCATTTG CTGGAGAATG ACATTGCCAA AGCAAAGCAC
7381 GCAGAGGTGA TTCAAAAAGG AATGACCTAT CTGAGCAATC AGTTTGGATC CATCAACAAT
7441 GCATACGACC TATCGATAGC AACCTACGCG ATGATGTTGA ACGGACACAC CATGAAGGAG
7501 GAGGCACTCA ATAAGCTGAT TGATATGTCT TTCATTGATG CTGATAAAAA CGAACGGTTC
7561 TGGAACACAA CGAATCCAAT AGAAACCACC GCATATGCTC TGCTGTCGTT TGTGATGGCC
7621 GAGAAGTACA CAGACGGTAT ACCGGTCATG AATTGGTTGG TGAATCAACG TTACGTTACC
7681 GGTAGCTTTC CGAGCACGCA AGACACGTTT GTGGGGCTGA AAGCGCTGAC CAAAATGGCG
7741 GAAAAGATAT CTCCGTCCCG AAACGACTAC ACCGTTCAAC TGAAGTACAA GAAGAGTGCA
7801 AAATACTTCA AAATAAACTC GGAGCAAATT GATGTG GAAA ACTTCGTGGA TATACCGGAG
7861 GACACAAAAA AGCTCGAGAT CAATGTGGGG GGCATTGGAT TTGGGTTGTT AGAGGTGGTT
7921 TATCAATTTA ATTTGAATCT CGTCAACTTT GAGAATAGAT TCCAAC TAGA CCTGGAGAAA

7981 CAGAACACAG GCTCTGACTA CGAGCTGAGG CTGAAGGTCT GTGCCAGCTA CATACCCAG
8041 CTGACCGACA GACGATCGAA CATGGCACTG ATTGAGGTAA CCTTACCGAG CGGTTACGTG
8101 GTTGATCGCA ATCCGATCAG CGAGCAGACG AAGGTGAATC CGATTGAGAA AACTGAAATC
8161 CGTTACGGTG GCACTTCAGT CGTTTTATAC TACGACAATA TGGGCAGCGA GCGTAACTGT
8221 TTCACCCTGA CCGCGTACAG ACGCTTTAAG GTCGCATTGA AGCGTCCAGC GTATGTGGTT
8281 GTGTATGATT ATTATAATAC AAATCTGAAC GCCATCAAAG TGTACGAAGT GGACAAGCAG
8341 AATTTGTGCG AAATCTGTGA CGAAGAAGAC TGtcctGCAG AGTGCAAGAA ATAGTCctcG
8401 AGACAACATTT GTATAATAAA GTTGGTACCG GGCCCCCGC TAGCGTCGAC GGTATCGATA
8461 AGCTTGATAT CGAATTCTCT AGATCATAAT CAGCCATACC ACATTTGTAG AGGTTTACT
8521 TGCTTTAAAA AACCTCCAC ACCTCCCCCT GAACCTGAAA CATAAAATGA ATGCAATTGT
8581 TGTTGTTAAC TTGTTTATTG CAGCTTATAA TGGTTACAAA TAAAGCAATA GCATCACAAA
8641 TTTCACAAAT AAAGCATTTT TCTTACTGC ATTCTAGTTG TGGTTTGTCC AAACTCATCA
8701 ATGTATCAAG GGCGAATTCG GGGATCTAAT TCAATTAGAG ACTAATTCAA TTAGAGCTAA
8761 TTCAATTAGG ATCCAAGCTT ATCGATTTTCG AACCCCTCGAC CGCCGGAGTA TAAATAGAGG
8821 CGCTTCGTCT ACGGAGCGAC AATTCAATTC AAACAAGCAA AGTGAACACG TCGCTAAGCG
8881 AAAGCTAAGC AAATAAACAA GCGCAGCTGA ACAAGCTAAA CAATCGGGGT ACCGCTAGAG
8941 TCGACGGTAC CGCGGGCCCG GGATCCACCG GTCGCCACCA TGGTGAGCAA GGGCGAGGAG
9001 CTGTTACCCG GGGTGGTGCC CATCCTGGTC GAGCTGGACG GCGACGTAAA CGGCCACAAG
9061 TTCAGCGTGT CCGGCGAGGG CGAGGGCGAT GCCACCTACG GCAAGCTGAC CCTGAAGTTC
9121 ATCTGCACCA CCGGCAAGCT GCCCGTGCCC TGGCCCACCC TCGTGACCAC CTTCGGCTAC
9181 GGCCTGCAGT GCTTCGCCCC CTACCCCGAC CACATGAAGC AGCACGACTT CTTCAAGTCC
9241 GCCATGCCCG AAGGCTACGT CCAGGAGCGC ACCATCTTCT TCAAGGACGA CGGCAACTAC
9301 AAGACCCGCG CCGAGGTGAA GTTCGAGGGC GACACCCTGG TGAACCGCAT CGAGCTGAAG
9361 GGCATCGACT TCAAGGAGGA CGGCAACATC CTGGGGCACA AGCTGGAGTA CAACTACAAC
9421 AGCCACAACG TCTATATCAT GGCCGACAAG CAGAAGAACG GCATCAAGGT GAACTTCAAG
9481 ATCCGCCACA ACATCGAGGA CCGCAGCGTG CAGCTCGCCG ACCACTACCA GCAGAACACC
9541 CCCATCGCG ACGGCCCCGT GCTGCTGCC GACAACCCT ACCTGAGCTA CCAGTCCGCC
9601 CTGAGCAAAG ACCCCAACGA GAAGCGGAT CACATGGTCC TGCTGGAGTT CGTGACCGCC
9661 GCCGGGATCA CTCTCGGCAT GGACGAGCTG TACAAGTAAA GCGGCCCGCA CTCTAGATCA
9721 TAATCAGCCA TACCACATTT GTAGAGGTTT TACTTGCTTT AAAAAACCTC CCACACCTCC
9781 CCCTGAACCT GAAACATAAA ATGAATGCAA TTGTTGTTGT TAACTTGTTT ATTGCAGCTT
9841 ATAATGGTTA CAAATAAAGC AATAGCATCA CAAATTTAC AAATAAAGCA TTTTTTTCAC
9901 TGCATTCTAG TTGTGGTTTG TCCAAACTCA TCAATGTATC TTAAAGCTTA TCGATAcctc
9961 gagTACCCAG CTTTcttgta caaagtgggt gatCGGTACG TACCCAATTC GCCCTATAGT
10021 GAGTCGTATT ACAATTCCTT GGCCGTCGTT TTACAACGTC GTGACTGGGA AAACCCCTGGC
10081 GTTACCCAAC TTAATCGCCT TGCAGCACAT CCCCCTTTCG CCAGCTGGCG TAATAGCGAA
10141 GAGGCCCGCA CCGATCGCCC TTCCAACAG TTGCGCAGCC TGAATGGCGA ATGGAAATTG
10201 TAAGCGTTAA TATTTTGTTA AAATTCGCGT TAAATTTTTG TTAAATCAGC TCATTTTTTA
10261 ACCAATAGGC CGAAATCGGC AAAATCCCTT ATAAATCAAA AGAATAGACC GAGATAGGGT
10321 TGAGTGTGTT TCCAGTTTGG AACAAGAGTC CACTATTTAA GAACGTGGAC TCCAACGTCA
10381 AAGGGCGAAA AACCCTCTAT CAGGGCGATG GCCCACTACG TGAACCATCA CCCTAATCAA
10441 GTTTTTTGGG GTCGAGGTGC CGTAAAGCAC TAAATCGGAA CCCTAAAGGG AGCCCCCGAT
10501 TTAGAGCTTG ACGGGGAAAG CCGGCGAACG TGGCGAGAAA GGAAGGGAAG AAAGCGAAAG
10561 GAGCGGGCGC TAGGGCGCTG GCAAGTGTAG CGGTCACGCT GCGCGTAACC ACCACACCCG
10621 CCGCGCTTAA TGCGCCGCTA CAGGGCGCGT CAG

//

Promoter sequences:

Lp promoter

ATCCagcttgccgggaagacacattcgagatacctaagtgattgagcgattacgatctagcaaaacatacgttcagct
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ttcctgagtggtgaaagtgtggttagtgcgtgagagtgacggacacgac**TATG**

Vg promoter

ATCCcgctagcgtcgagttcaactcgaccataataattgatccgtcaatccatattggtccgcaataatgaaagttgcaag
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ggccgacttcgtcgatcgctagcttaatgataatttctgagaaaaaggtgctactgcatctactataattctactggatataat
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atgttagtcgtttctatgaagtaaaattctaaaatcaaacattaaactgtttgtagtaccggactcatggtatggcttctatta
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acatgtgggcagtaaaaattttcatcgttcaacacggcggtcattacactattcgaagcagctgaaaagatttgatgatg
caggaccgtgagatcagcaaaatttgaggtataaaagatgatcctgcgaccaccagaaggcacattcgagctttggagtg
attcaaagcatccgg

TEP1 minimal promoter

tccggatgtgcagtttgcaagcataaatactgttaacgcactgcaatattagccactggaatcggtatttctatacaaaccaa
ggggatttattcttctatcgcccggcgttcatgcaggtcgctatgtttacagtaacatctgagggcaggggaatccccataaaca
cagcacagcttaccgatagggatgcaaactgaccgtgattcagttcaatcgtagacggcatccgaagcagacgcgaaa
tcgacaacgtccaatccaacc

TALE sequences:

N terminal domain (start codon is in bold, *Bsal* overhangs are capitalized):

TATGccaagaagaagaggaaggtgcaggtggatctacgcacgctcggctacagccagcagcaacaggagaaga
tcaaaccgaaggttcggtcgacagtggcgcagcaccacgaggcactggtcggccatgggtttacacacgcgcacatcgtt
gcgctcagccaacacccggcagcgttagggaccgtcgtgtcaagtatcaggacatgatcgacgcttgcagaggcg
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gagttgagaggtccaccgttacagttggacacaggccaacttctcaagattgcaaagcgtggcggtgaccgcagtg
aggcagtgcatgcatggcgcaatgcaactgacgggtgccccct

C terminal domain (*Bsal* overhangs are capitalized):

AGCAAttgtgcccagttatctcgccctgatccggcggtggccgcttgaccaacgaccacctcgtcgccttggcctgcctcg
gcgacgtcctcgcgtggatgcagtgaaaaagggttgcgcacgcgcccgttgatcaaaagaaccaatcgccgtat
tccgaacgcacatcccatcgcgttgc

Repeat domain: (Capital letters correspond to *Bsal* overhangs, nnnnnn correspond to two codons encoding the repeat-variable diresidues (RVD) that determine specificity for DNA bases)

GAACccccggagcaggtggtggccatcgccagcnnnnnngcggttaagcaggcgctggagacggtgcagcggct
gttgcgggtgctgtgccaggccatggcctgacACCGgagcaggtggtggccatcgccagcnnnnnnggtggcaag
caggcgctggagacggtgcagcggctgttgcgggtgctgtgccaggccatggcctCACccggagcaggtggtggc
catcgccagcnnnnnngcggttaagcaggcgctggagacggtgcagcggctgttgcgggtgctgtgccaggccatgg
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caggcgctGGAGacggtgcagcggctgttgcgggtgctgtgccaggcgcatggcTTACccccggagcaggtggtg
gcatcgccagcnnnnnnggtggcaagcaggcgctggagacggtgcagcggctgttgcgggtgctgtgccaggccat
ggcCTGAccccggagcaggtggtggccatcgccagcnnnnnngcggttaagcaggcgctggagacggtgcagcg
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gtggccatgccagcnnnnnngcggtaagcaggcgctggagacgggtgcagcggctgtgccggtgctgtgccaggcc
catggcctgACTCcgagcaggtggtggccatgccagcnnnnnnggtggcaagcaggcgctggagacgggtgcag
cggctgtgccggtgctgtgccaggcCCATggcctgaccccggagcaggtggtggccatgccagcnnnnnnggtg
caagcaggcgc

Vp16 activation domain:

GGTGttcatctcgacgggtgaggacgtggctatggcacacgccgatgcgctggatgattttgacctggatatgctgggtgat
ggcgacagcccaggacccggttcacgccacacgactcggctccgtacggagcgtggacaccgctgacttcgagttc
agcagatgttcaccgacgccctgggaatcgacgaatacggtggt