

pMSCVneo-GFP-miR-27a

Absent Sites	0	AarI,AbstI,AjuI,AjuI',AlfI,AlfI',ApaI,AsiSI,AvrII,BarI,BarI',BbsI,BclI,BpI,BpI',BsaBI,BsiWI,BstBI,BstXI,BstZ17I,CspCI,CspCI',DraIII,FseI,FspAI,HpaI,MauBI,MfeI,MluI,MreI,NruI,NsiI,Pacl,PfiMI,PmeI,PmlI,PshAI,PsiI,PspOMI,PspXI,Psri,Psri',SacII,SanDI,SbfI,SfiI,SgrDI,SnaBI,SrfI,Swal,XcmI,XhoI
AccI	1	3727 (7429)
AflIII	1	4816 (7429)
Arsl	1	1737 (7429)
Arsl'	1	1705 (7429)
BamHI	1	3720 (7429)
BglIII	1	1411 (7429)
BsaAI	1	3355 (7429)
BsmI	1	2832 (7429)
BspEI	1	2820 (7429)
BstEII	1	1089 (7429)
Clal	1	3747 (7429)
EcoRI	1	2381 (7429)
HincII	1	3728 (7429)
HindIII	1	3740 (7429)
NdeI	1	6880 (7429)
NotI	1	2163 (7429)
PciI	1	4816 (7429)
Sall	1	3726 (7429)
Scal	1	6189 (7429)
SexAI	1	1217 (7429)
SgrAI	1	7252 (7429)
StuI	1	2695 (7429)

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5' TGAAAGACCCACCTGTAGGTTTGGCAAGCTAGCTTAAGTAACGCCATTTTGAAGGCATGGAAAATACATAACTGAGAATAGAGAAGTTCAGATCAAGG  
 100  
 3' ACTTCTGGGGTGGACATCCAAACCGTTCGATCGAATTCATTGCGGTAAACGTTCCGTACCTTTTATGTATTGACTCTTATCTCTTCAAGTCTAGTTCC  
 5' pCMV LTR

5' TTAGGAACAGAGACAGCAGAATATGGGCCAAACAGGATATCTGTGGTAAGCAGTTCCTGCCCCGGCTCAGGGCCAAGAACAGATGGTCCCCAGATGCG  
 200  
 3' AATCCTTGTCTCTCTGTCGCTTATACCCGGTTTGTCTTATAGACACCATTTCGTCAAGGACGGGGCCGAGTCCCGGTTCTTGTCTACCAGGGGTCTACGC  
 5' pCMV LTR

5' GTCCCGCCCTCAGCAGTTTCTAGAGAACCATCAGATGTTTCCAGGGTGCCCCAAGGACCTGAAATGACCCTGTGCCTTATTTGAACTAACCAATCAGTTC  
 300  
 3' CAGGGCCGGGAGTCGTCAAAGATCTCTTGGTAGTCTACAAAGTCCACGGGGTTCCTGGACTTTACTGGGACACGGAATAAACTTGATTGGTTAGTCAAG  
 5' pCMV LTR

5' GCTTCTCGTCTCTGTTCGCGCCTTCTGCTCCCCGAGCTCAATAAAAAGAGCCACAAACCCCTCACTCGGCGCGCAGTCTCCGATAGACTGCGTCGCCC  
 400  
 3' CGAAGAGCGAAGACAAGCGCGAAGACGAGGGGCTCGAGTTAATTTCTCGGGTGTGGGGAGTGAGCCGCGCGGTGAGGAGGCTATCTGACGCAGCGGG  
 5' pCMV LTR

5' GGGTACCCGTATCCCAATAAAGCCTCTTGCTGTTTGCATCCGAATCGTGGACTCGCTGATCCTTGGGAGGGTCTCCTCAGATTGATTGACTGCCACCT  
 500  
 3' CCCATGGGCATAAGGGTTAATTTGCGGAGAACGACAAACGTAGGCTTAGCACCTGAGCGACTAGGAACCCCTCCAGAGGAGTCTAACTAACTGACGGGTGGA  
 5' pCMV LTR

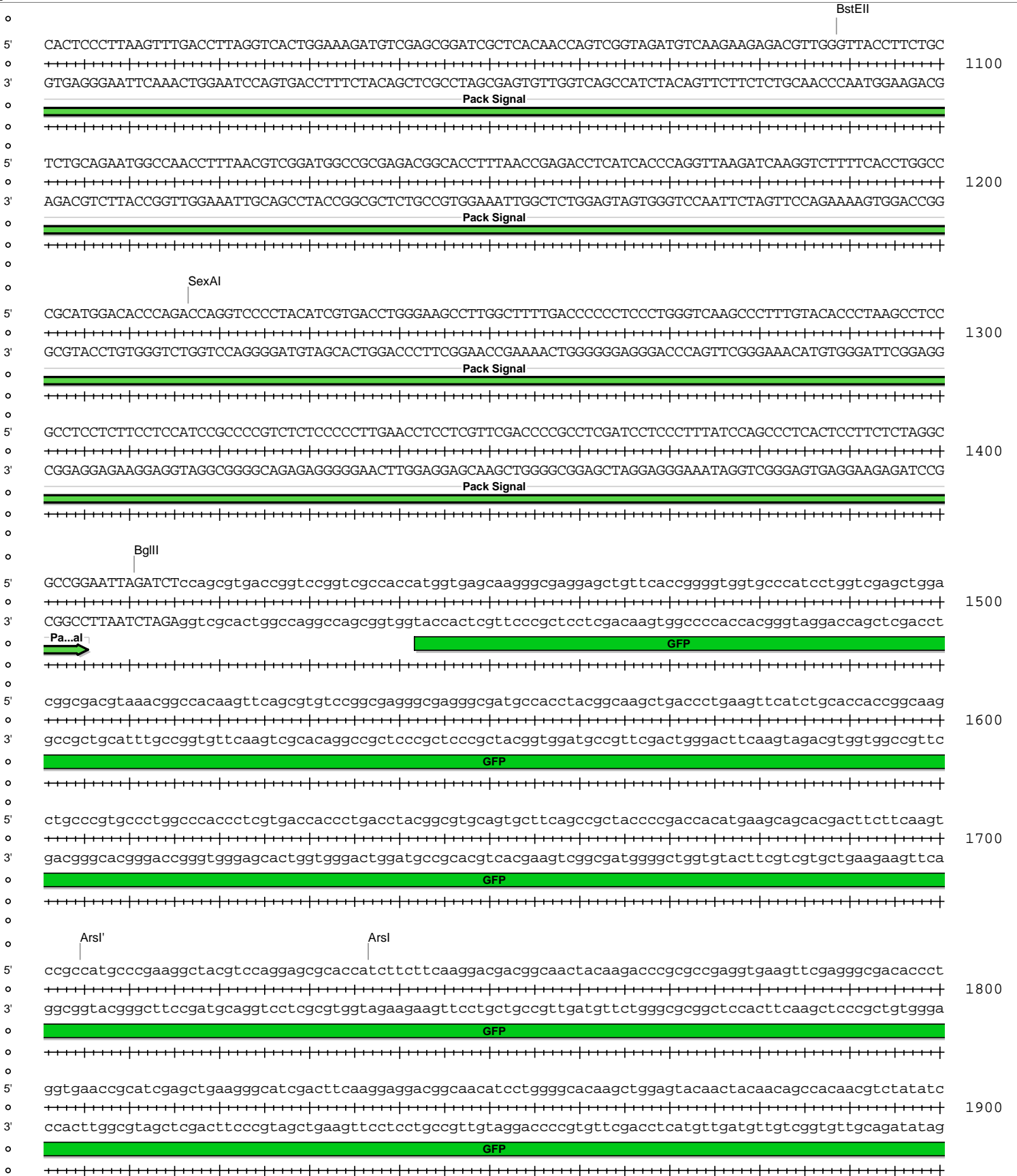
5' CGGGGTCTTTTCAATTTGGAGGTTCCACCGAGATTGGAGACCCCTGCCAGGGACCACCGACCCCCCGCGGGAGGTAAGCTGGCCAGCGGTCTGTTTCG  
 600  
 3' GCCCCAGAAAGTAAACCTCCAAGGTGGCTCTAAACCTCTGGGGACGGGTCCCTGGTGGCTGGGGGGCGGCCCTCCATTTCGACCGGTTCGCCAGCAAAGC  
 5' pCMV LTR Pack Signal

5' TGTCTGTCTCTGTCTTTGTGCGTGTTTGTGCCGCATCTAATGTTTGCCTGCGTCTGTACTAGTTAGCTAACTAGCTCTGTATCTGGCGGACCCGTGG  
 700  
 3' ACAGACAGAGACAGAAACACGCACAAACACGGCCGTAGATTACAAACCGGACGCAGACATGATCAATCGATTGATCGAGACATAGACCGCTGGGCACC  
 Pack Signal

5' TGGAATGACGAGTTCGAACACCCGCGCAACCCCTGGGAGACGTCCCAGGGACTTTGGGGCCGTTTGTGGCCCGACCTGAGGAAGGGAGTCGATG  
 800  
 3' ACCTTGACTGCTCAAGACTTGTGGGCCGGCGTTGGGACCCTCTGCAGGGTCCCTGAAACCCCGGCAAAAACACCGGGCTGGACTCCTTCCTCAGCTAC  
 Pack Signal

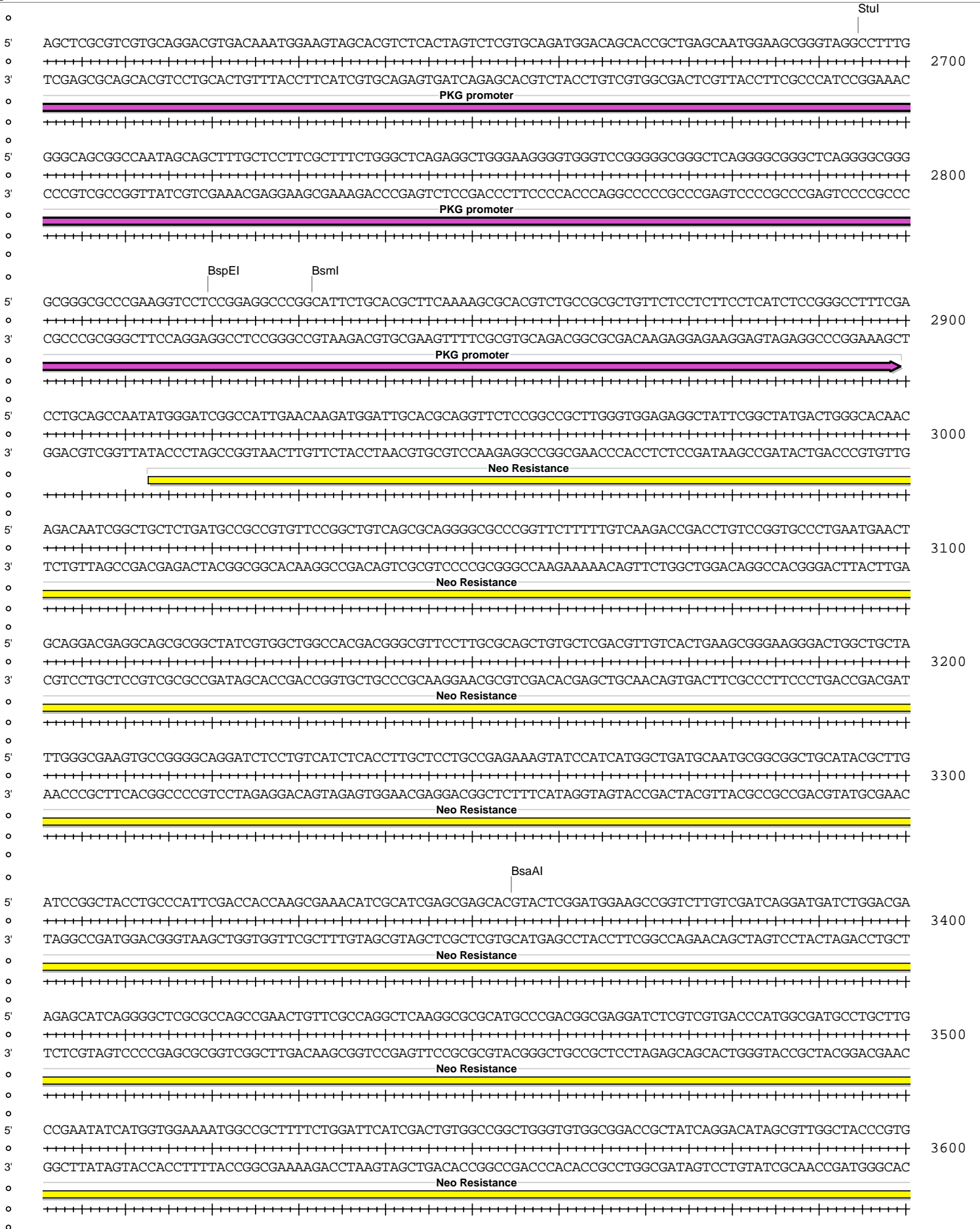
5' TGGAATCCGACCCCGTCAAGATATGTGGTCTGGTAGGAGACGAGAACCATAAACAGTTCGCCCTCCGTCTGAATTTTGTCTTTCGGTTTGAACCGAA  
 900  
 3' ACCTTAGGCTGGGGCAGTCTTATACACCAAGACCATCCTCTGCTCTTGGATTTTGTCAAGGGCGGAGGCAGACTTAAAAACGAAAGCCAAACCTTGGCTT  
 Pack Signal

5' GCCGCGCTCTGTCTGCTGCAGCGCTGCAGCATCGTTCGTGTTGTCTCTGTCTGACTGTGTTTCTGTATTTGTCTGAAAATTAGGGCCAGACTGTTAC  
 1000  
 3' CGGCGCGCAGAACAGACGACGTCGCGACGTCGTAGCAAGACACAACAGAGACAGACTGACACAAAGACATAAACAGACTTTTAATCCCGGTCTGACAATG  
 Pack Signal



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5' ATATTGCTGAAGAGCTTGGCGGCGAATGGGCTGACCGCTTCTCTGTGCTTTACGGTATCGCGCTCCCGATTTCGAGCGCATCGCCTTCTATCGCCTTCT  
 3' TATAACGACTTCTCGAACCGCCGCTTACCCGACTGGCGAAGGAGCACGAAATGCCATAGCGGCGAGGGCTAAGCGTTCGCGTAGCGGAAGATAGCGGAAGA  
 Neo Resistance

5' TGACGAGTTCTTCTGAGGGGATCCGTCGACCTGCAGCCAAGCTTATCGATAAAAATAAAAAGATTTTATTTAGTCTCCAGAAAAAGGGGGAATGAAAGACC  
 3' ACTGCTCAAGAAGACTCCCCTAGGCAGCTGGACGTCGGTTCGAATAGCTATTTTATTTTCTAAAATAAATCAGAGGTCTTTTCCCCCTTACTTTCTGG  
 Neo Resistance

5' CCACCTGTAGGTTTGGCAAGCTAGCTTAAGTAACGCCATTTTGAAGGCATGGAAAATACATAACTGAGAATAGAGAAGTTCAGATCAAGGTTAGGAACA  
 3' GGTGGACATCAAACCGTTTCGATCGAATTCATTGCGGTA AAAACGTTCCGTACCTTTTATGTATTGACTCTTATCTCTTCAAGTCTAGTTCCAATCCTTGT  
 3' pCMV LTR

5' GAGAGACAGCAGAATATGGGCCAAACAGGATATCTGTGGTAAGCAGTTCCTGCCCGGCTCAGGGCCAAGAACAGATGGTCCCCAGATGCGGTCCCGCCC  
 3' CTCTCTGTCTTTATACCCGTTTGTCTATAGACACCATTCGTC AAGGACGGGGCCGAGTCCCGGTTCTGTCTACCAGGGGTCTACGCCAGGGCGGG  
 3' pCMV LTR

5' TCAGCAGTTTCTAGAGAACCATCAGATGTTCCAGGGTGCCCCAAGGACCTGAAATGACCCTGTGCCTTATTTGAACTAACCAATCAGTTCGCTTCTCGC  
 3' AGTCGTCAAAGATCTCTGGTAGTCTACAAAGTCCCACGGGGTCTCGGACTTTACTGGGACACGGAATAAATCGATTGGTTAGTCAAGCGAAGAGCG  
 3' pCMV LTR

5' TTCTGTTCGCGCGCTTCTGCTCCCCGAGCTCAATAAAAGAGCCCACAACCCCTCACTCGGCGCGCCAGTCCCTCCGATAGACTGCGTCCCGGGTACCCG  
 3' AAGACAAGCGCGAAGACGAGGGGCTCGAGTTATTTCTCGGGTGTGGGGAGTGAGCCGCGCGGTGAGGAGGCTATCTGACGCGAGGGGCCATGGGC  
 3' pCMV LTR

5' TGTATCCAATAAACCTCTTGAGTTGCATCCGACTTGTGGTCTCGTGTTCCTTGGGAGGGTCTCCTCTGAGTGATTGACTACCCGTGAGCGGGGTCT  
 3' ACATAGGTTATTTGGGAGAACGTC AACCTAGGCTGAACACCAGAGCGACAAGGAACCTCCAGAGGAGACTCACTAATGATGGGCGAGTCCCGCCAG  
 3' pCMV LTR

5' TTCATGGGTAACAGTTTCTTGAAGTTGAGAGAACAACATTTCTGAGGGTAGGAGTCAATATTAAGTAATCCTGACTCAATTAGCCACTGTTTGAATCCAC  
 3' AAGTACCCATTGTCAAAGAACTTCAACCTCTTGTGTGAAGACTCCCATCTCAGCTTATAAATCATTAGGACTGAGTTAATCGGTGACAAAACCTTAGGTG  
 3'...R

5' ATACTCCAATACTCCTGAAATAGTTCATTATGGACAGCGCAGAAGAGCTGGGGAGAATTAATTCGTAATCATGGTCATAGCTGTTTCTGTGTGAAATTG  
 3' TATGAGGTTATGAGGACTTTATCAAGTAATACCTGTGCGTCTTCTCGACCCCTTAAATTAAGCATTAGTACCAGTATCGACAAGGACACACTTTAAC

5' TTATCCGCTCACAATCCACACAACATACGAGCCGGAAGCATAAAGTGTAAGCC TGGGGTGCCTAATGAGTGAGCTAACTCACATTAATTGCGTTGCGC  
 3' AATAGGCGAGTGTAAAGTGTGTGTATGCTCGGCCTTCGTATTTACATTTTCGACCCACGATTACTCACTCGATTGAGTGAATTAACGCAACGCG

5' TCACTGCCCGCTTTCAGTCGGGAAACCTGTCGTGCCAGCTGCATTAATGAATCGGCCAACGCGGGGAGAGGCGGTTGCGTATTGGGCGCTCTCCG  
 3' AGTGACGGGCGAAAGTTCAGCCCTTTGGACAGCACGGTCGACGTAATTAATAGCCGTTGCGCGCCCTCTCCGCCAAACGCATAACCCGCGAGAAGGC

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5' CTTCCTCGCTCACTGACTCGCTGCGCTCGGTCGTTTCGGCTGCGGGGAGCGGTATCAGCTCACTCAAAGCGGTAAACGTTATCCACAGAATCAGGGGA  
 4800  
 3' GAAGGAGCGAGTACTGAGCGACGCGAGCCAGCAAGCCGACGCCGCTCGCCATAGTCGAGTGTGTTTCCGCCATTATGCCAATAGGTGTCTTAGTCCCCT  
 Pcil  
 AfVIII  
 5' TAACGCAGGAAAGAACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAAGGCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCTGAC  
 4900  
 3' ATTGCGTCTTTCTTGACACTCGTTTTCCGGTCGTTTTCCGGTCCTTGGCATTMTTCCGGCGCAACGACCGCAAAAAGGTATCCGAGGCGGGGGACTG  
 5' GAGCATCACAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTCCCCCTGGAAGCTCCCTCGTGCCTCTC  
 5000  
 3' CTCGTAGTGTTTTAGCTGCGAGTTCAGTCTCCACCGCTTTGGGTGTCTGATATTTCTATGGTCCGCAAAGGGGACCTTCGAGGGAGCACGCGAGAG  
 5' CTGTTCCGACCTGCGCTTACCGGATACCTGTCCGCTTTCTCCCTTCGGGAAGCGTGGCGCTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGT  
 5100  
 3' GACAAGGCTGGGACGCGAATGGCTATGGACAGGCGGAAAGAGGAAGCCCTTCGCACCGGAAAGAGTATCGAGTGCACATCCATAGAGTCAAGCCA  
 5' GTAGTTCGTTTCGCTCCAAGCTGGGCTGTGTGCACGAACCCCGTTTCAGCCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGGTA  
 5200  
 3' CATCCAGCAAGCGAGGTTTCGACCCGACACAGTGTCTGGGGGCAAGTCGGGCTGGCGACGCGGAATAGGCCATTGATAGCAGAACTCAGGTTGGGCCAT  
 5' AGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTCTTGAAGTGGTGGCCTAAC  
 5300  
 3' TCTGTGCTGAATAGCGGTGACCGTGTGCGGTGACCATTGTCTTAATCGTCTCGCTCCATACATCCGCCACGATGTCTCAAGAACTTCACCACCGGATTGA  
 5' ACGGCTACACTAGAAGGACAGTATTGGTATCTGCGCTCTGTGTAAGCCAGTTACCTTCGGA AAAAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCAC  
 5400  
 3' TGCCGATGTGATCTTCTGTCTATAAACCATAGACGCGAGACGACTTCGGTCAATGGAAGCCTTTTTCTCAACCATCGAGAACTAGGCCGTTTGTGGTG  
 5' CGCTGGTAGCGGTGGTTTTTTTTGTTTGCAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGGTCTGACGCT  
 5500  
 3' GCGACCATCGCCACCAAAAAACAACGTTTCGTGCTAATGCGCGTCTTTTTTCTTAGAGTCTTCTAGGAAACTAGAAAAGATGCCCCAGACTGCCA  
 5' CAGTGAACGAAAACCTCACGTTAAGGGATTTTGGTTCATGAGATTATCAAAAAGGATCTTACCTAGATCCTTTTAAATTA AAAATGAAGTTTAAATCAA  
 5600  
 3' GTCACCTTGCTTTTGAGTGCAATTCCCTAAAACAGTACTCTAATAGTTTTTCTTAGAAGTGGATCTAGGAAAATTAATTTTTACTTCAAAAATTTAGTT  
 5' TCTAAAGTATATATGAGTAAACTTGGTCTGACAGTTACCAATGCTTAATCAGTGAGGCACCTATCTCAGCGATCTGTCTATTTCTGTTTCATCCATAGTTGC  
 5700  
 3' AGATTTTCATATATACTCATTTGAACCAGACTGTCAATGGTTACGAATTAGTCACTCCGTGGATAGAGTCGCTAGACAGATAAAGCAAGTAGGTATCAACG  
 Amp res  
 5' CTGACTCCCCGTCGTGTAGATAACTACGATACGGGAGGGCTTACCATCTGGCCCCAGTGCTGCAATGATACCGCGAGACCCACGCTCACCGGCTCCAGAT  
 5800  
 3' GACTGAGGGGCGACATCTATTGATGTATGCCCTCCGGAATGGTAGACCGGGTACGACGTTACTATGGCGCTCTGGGTGCGAGTGGCCGAGGTCTA  
 Amp res  
 5' TTATCAGCAATAAACCAGCCAGCCGGAAGGGCCGAGCGCAGAAGTGGTCTGCAACTTTATCCGCTCCATCCAGTCTATTAATTTGTTGCCGGGAAGCTA  
 5900  
 3' AATAGTCGTTATTTGGTTCGGTTCGGCTTCCCGGCTCGGCTCTTACCAGGACGTTGAAATAGGCGGAGGTAGGTGAGATAAATTAACAACGCCCTTCGAT  
 Amp res



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5' GAGTAAGTAGTTTCGCCAGTTAATAGTTTTCGCGCAACGTTGTTGCCATTGCTACAGGCATCGTGGTGTCCAGCTCGTCTGTTGGTATGGCTTCATTTCAGCTC  
 6000  
 3' CTCATTTCATCAAGCGGTCAATTATCAAACGCGTTGCAACAACGGTAAACGATGTCCGTAGCACCACAGTGCAGCAGCAAACCATAACCGAAGTAAGTCGAG  
 Amp res

5' CGGTTCCEAACGATCAAGGCGAGTTACATGATCCCCATGTTGTGCAAAAAGCGGTTAGCTCCTTCGGTCCCTCCGATCGTTGTCAGAAGTAAGTTGGCC  
 6100  
 3' GCCAAGGGTTGCTAGTTCCGCTCAATGTACTAGGGGTACAACACGTTTTTTTCGCCAATCGAGGAAGCCAGGAGGCTAGCAACAGTCTTCATTCAACCCG  
 Amp res

5' GCAGTGTATCACTCATGGTTATGGCAGCACTGCATAATTCTCTTACTGTATGCCATCCGTAAGATGCTTTTTCTGTGACTGGTGGTACTCAACCAAGT  
 6200  
 3' CGTCAATAAGTGTAGTACCAATACCGTCTGACGTATTAAGAGAATGACAGTACGGTAGGCATTTCTACGAAAAGACTGACCCTCATGAGTTGGTTCA  
 Amp res  
 Scal

5' CATTCTGAGAATAGTGTATGCGGCGACCGAGTTGCTCTTGCCCGCGTCAATACGGGATAATACCGCGCCACATAGCAGAACTTTAAAAGTGTCTCATCAT  
 6300  
 3' GTAAGACTCTTATCACATACGCCGCTGGCTCAACGAGAACGGGCGCAGTTATGCCCTATTATGGCGGGTGTATCGTCTTGAAATTTTCACGAGTAGTA  
 Amp res

5' TGGAAAACGTTCTTCGGGGCGAAAACCTCAAGGATCTTACCGCTGTTGAGATCCAGTTCGATGTAACCCACTCGTGCACCCAACTGATCTTCAGCATCT  
 6400  
 3' ACCTTTTGCAAGAAGCCCGCTTTTGAGAGTTCCTAGAAATGGCGCAAACTCTAGGTCAAGCTACATTGGGTGAGCACGTGGGTTGACTAGAAAGTCGTAGA  
 Amp res

5' TTTACTTTCACCAGCGTTTCTGGGTGAGCAAAAACAGGAAGGCAAAATGCCGCAAAAAGGGAATAAGGGCGACACGGAAATGTTGAATACTCATACTCT  
 6500  
 3' AAATGAAAGTGGTCGAAAGACCCACTCGTTTTTGTCTTCCGTTTTTACGGCGTTTTTCCCTTATTCCCGCTGTCCTTTACAACCTATGAGTATGAGA  
 Amp res

5' TCCTTTTTCAATATTATGAAGCATTTATCAGGGTTATTGTCTCATGAGCGGATACATATTTGAATGTATTTAGAAAAATAACAAATAGGGGTTCCGCG  
 6600  
 3' AGGAAAAAGTTATAATAACTTCGTAATAAGTCCCAATAACAGAGTACTCGCTATGTATAAACTTACATAAATCTTTTTATTTGTTTATCCCAAGGCGC  
 Amp res

5' CACATTTCCCGAAAAGTGCCACCTGACGTCTAAGAAACCATTATATCATGACATTAACCTATAAAAAATAGGCGTATCAGGAGCCCTTTCGTCTCGCG  
 6700  
 3' GTGTAAAGGGGCTTTTCACGGTGGACTGCAGATTCTTTGGTAATAATAGTACTGTAATTGGATATTTTATCCGCATAGTGCTCCGGGAAAGCAGAGCGC  
 Amp res

5' CGTTTCGGTGATGACGGTGAAAACCTCTGACACATGCAGCTCCCGGAGACGGTCACAGCTTGTCTGTAAGCGGATGCCGGGAGCAGACAAGCCCGTCAGG  
 6800  
 3' GCAAAGCCACTACTGCCACTTTTGAGACTGTGTACGTGAGGGCTCTGCCAGTGTGCAACAGACATTCGCCCTACGGCCCTCGTCTGTTTCGGGCAGTCC  
 Amp res

5' GCGCGTCAGCGGGTGTGGCGGGTGTGGGGCTGGCTTAACTATGCGGCATCAGAGCAGATTGTAAGTACTGAGAGTGCACCATATGCGGTGTGAAATACCGCA  
 6900  
 3' CGCGCAGTCGCCACAACCGCCACAGCCCGACCGAATTGATACCCGTAGTCTCGTCTAACATGACTCTCACGTGGTATACGCCACACTTTATGGCGT  
 Amp res

5' CAGATGCGTAAGGAGAAAATACCGCATCAGGCGCCATTCCGCCATTGAGGCTGCGCAACTGTTGGGAAGGGCGATCGGTGCGGGCTCTTCGCTATTACGC  
 7000  
 3' GTCTACGCATTCCTCTTTTATGGCGTAGTCCGCGGTAAGCGGTAAGTCCGACGCGTTGACAACCCTTCCCGCTAGCCACGCCCGGAGAAGCGATAATGCG  
 Amp res  
 Ndel

