

pMSCVneo-GFP-miR BHRF1-3

Absent Sites	0	AarI, AbsI, AjuI, AjuI', AlfI, AlfI', ApaI, AsiSI, BarI, BarI', BbsI, BclI, BpII, BpII', BsaBI, BsiWI, BstBI, BstXI, BstZ17I, CspCI, CspCI', DraIII, FseI, FspAI, MauBI, MluI, MreI, NruI, NsiI, PacI, PflMI, PmeI, PmlI, PshAI, PstI, PspOMI, PspXI, PstI, PstI', SanDI, SbfI, SfiI, SgrDI, SnaBI, SrfI, SvaI, XcmI, XhoI
AccI	1	3711
Arsl	1	1732
Arsl'	1	1700
AvrII	1	2187
BamHI	1	3704
BglII	1	1411
BplI	1	2658
BsmI	1	2816
BspEI	1	2804
BstEII	1	1089
Clal	1	3731
EcoRI	1	2365
HindIII	1	3724
HpaI	1	2349
MfeI	1	2176
NdeI	1	6864
NotI	1	2158
PciI	1	4800
RsrII	1	3551
SacII	1	2164
Sall	1	3710
Scal	1	6173
SexAI	1	1217
SgrAI	1	7236
StuI	1	2679

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5' TGAAAGACCCACCTGTAGGTTTGGCAAGCTAGCTTAAGTAACGCCATTTTGC AAGCATGGAAAATACATAACTGAGAATAGAGAAGTTCAGATCAAGG
 100
 3' ACTTCTGGGGTGGACATCCAAACCGTTCGATCGAATTCATTGCGGTA AACCGTTCCTGACCTTTTATGTATTGACTCTTATCTCTTCAAGTCTAGTTCC
 5' pCMV LTR

5' TTAGGAACAGAGAGACAGCAGAATATGGGCCAAACAGGATATCTGTGGTAAGCAGTTCCTGCCCCGGCTCAGGGCCAAGAACAGATGGTCCCCAGATGCG
 200
 3' AATCCTTGTCTCTCTGTGCTTATACCCGGTTTGTCTTATAGACACCATTTCGTCAAGGACGGGGCCGAGTCCCGGTTCTTGTCTACCAGGGGTCTACGC
 5' pCMV LTR

5' GTCCCGCCCTCAGCAGTTTCTAGAGAACCATCAGATGTTTCCAGGGTGCCCCAAGGACCTGAAATGACCCTGTGCCTTATTTGAACTAACCAATCAGTTC
 300
 3' CAGGGCGGGAGTCGTCAAAGATCTCTTGGTAGTCTACAAAGTCCACGGGGTTCCTGGACTTTACTGGGACACGGAATAAACTTGATTGGTTAGTCAAG
 5' pCMV LTR

5' GCTTCTCGTCTCTGTTCGCGCCTTCTGCTCCCCGAGCTCAATAAAAAGAGCCACAAACCCCTCACTCGGCGCGCAGTCTCCGATAGACTGCGTCCCC
 400
 3' CGAAGAGCGAAGACAAGCGCGGAAGACGAGGGGCTCGAGTTAATTTCTCGGGTGTGGGGAGTGAGCCGCGCGGTGAGGAGGCTATCTGACGCAGCGGG
 5' pCMV LTR

5' GGGTACCCGTATTCCCAATAAAGCCTCTTGCTGTTTGCATCCGAATCGTGGACTCGCTGATCCTTGGGAGGGTCTCCTCAGATTGATTGACTGCCACCT
 500
 3' CCCATGGGCATAAGGGTTAATTTGCGGAGAACGACAAACGTAGGCTTAGCACCTGAGCGACTAGGAACCCCTCCAGAGGAGTCTAACTAACTGACGGGTGGA
 5' pCMV LTR

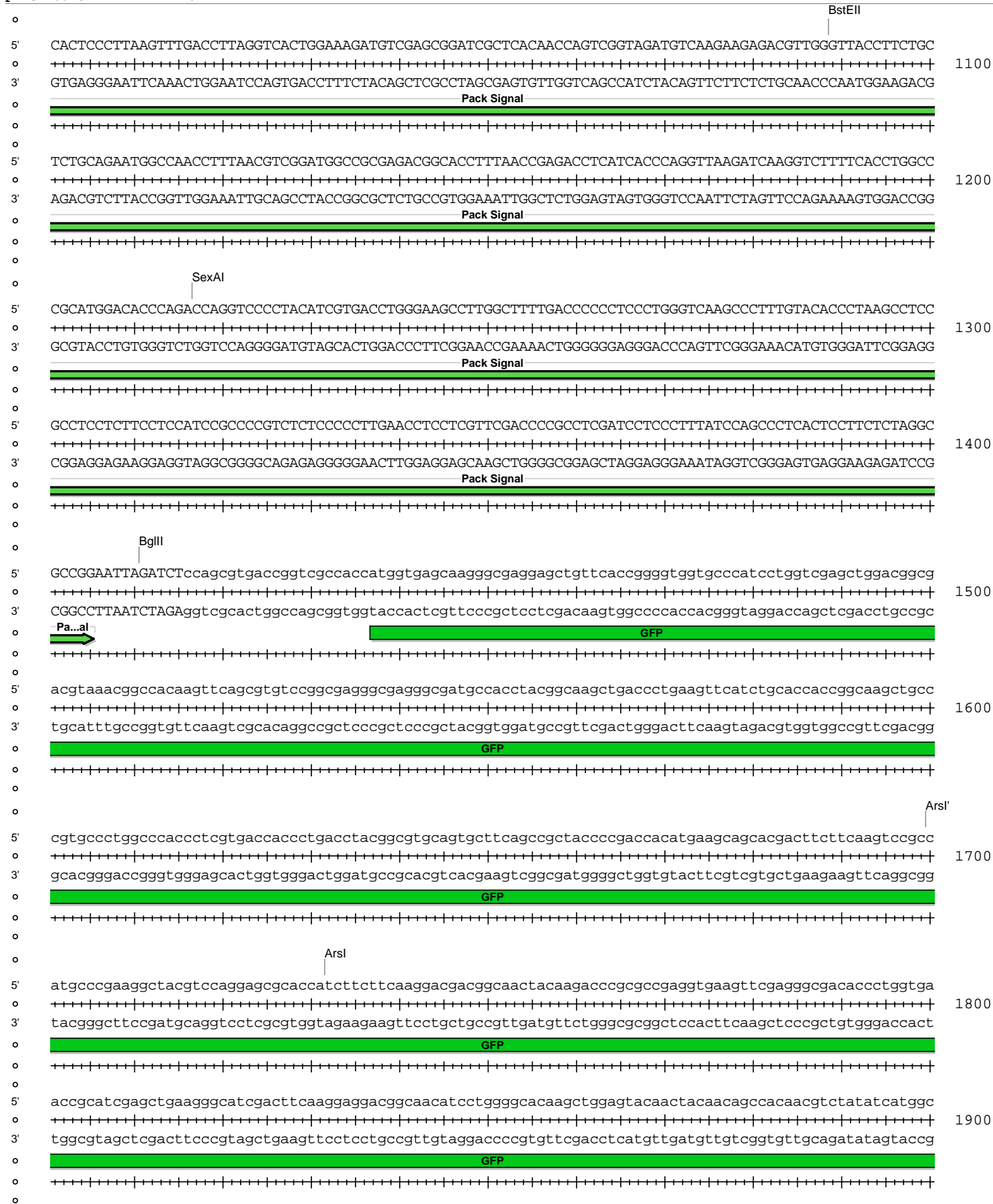
5' CGGGGTCTTTTCAATTTGGAGGTTCCACCGAGATTGGAGACCCCTGCCAGGGACCACCGACCCCCCGCGGGAGGTAAGCTGGCCAGCGGTCTGTTTCG
 600
 3' GCCCCAGAAAGTAAACCTCCAAGGTGGCTCTAAACCTCTGGGGACGGGTCCCTGGTGGCTGGGGGGCGGCCCTCCATTTCGACCGGTTCGCAGCAAAGC
 5' pCMV LTR Pack Signal

5' TGTCTGTCTCTGTCTTTGTGCGTGTGTGTGCCGCATCTAATGTTTGCGCCTGCGTCTGTACTAGTTAGCTAACTAGCTCTGTATCTGGCGGACCCGTGG
 700
 3' ACAGACAGAGACAGAAACACGCACAAACACGGCCGTAGATTACAAACCGGACGCAGACATGATCAATCGATTGATCGAGACATAGACCGCTGGGCACC
 Pack Signal

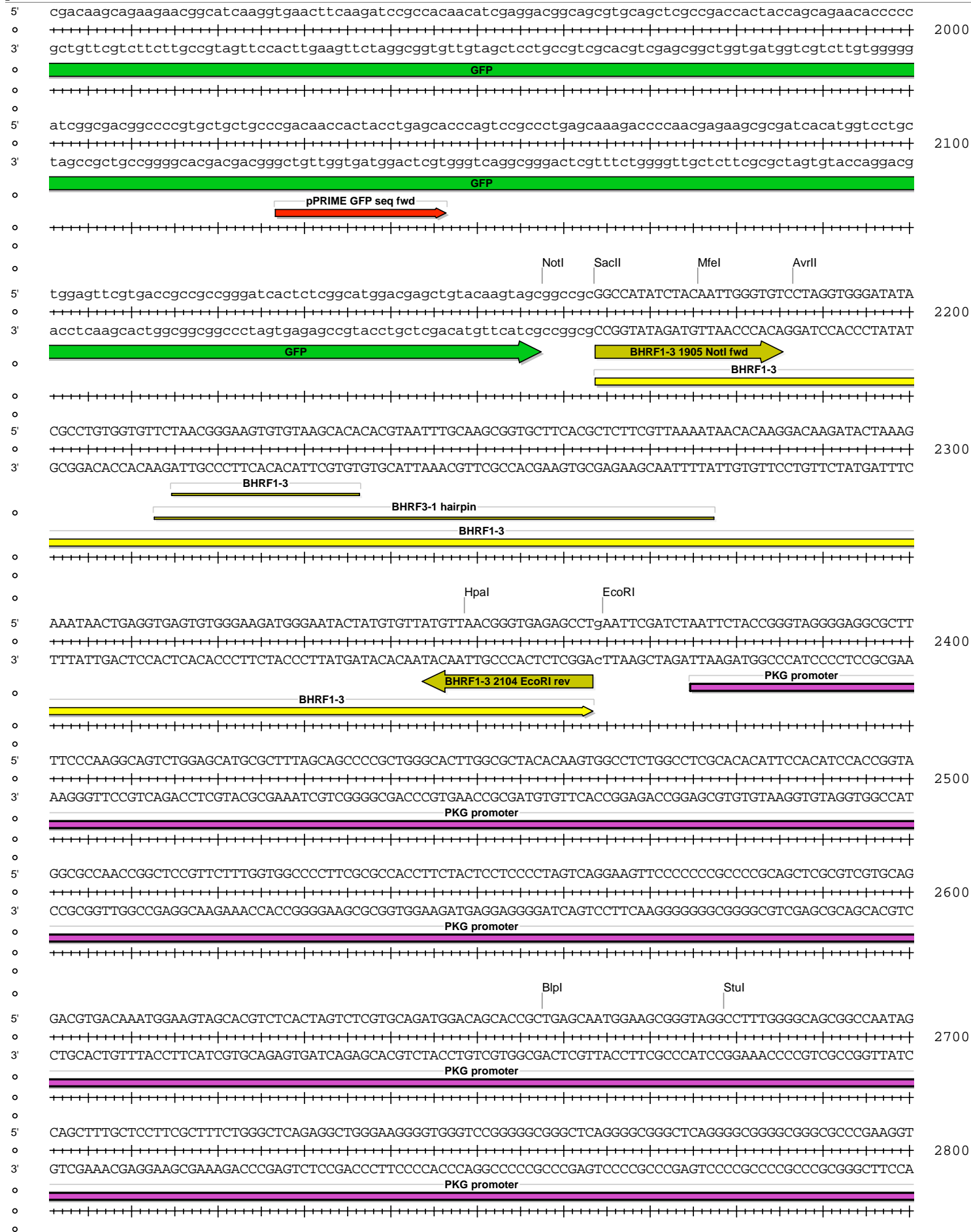
5' TGGAATGACGAGTTCGAACACCCGCGCAACCCCTGGGAGACGTCCCAGGGACTTTGGGGCCGTTTGTGGCCCGACCTGAGGAAGGGAGTCGATG
 800
 3' ACCTTGACTGCTCAAGACTTGTGGGCCGGCGTTGGGACCCTCTGCAGGGTCCCTGAAACCCCGGCAAAAACACCGGGCTGGACTCCTTCCTCAGCTAC
 Pack Signal

5' TGGAATCCGACCCCGTCAGGATATGTGGTCTGGTAGGAGACGAGAACC TAAAACAGTTCGCCCTCCGTCTGAATTTTGTCTTCGGTTTGAACCGAA
 900
 3' ACCTTAGGCTGGGGCAGTCTATACACCAAGACCATCCTCTGCTCTTGGATTTTGTCAAGGGCGGAGGCAGACTTAAAAACGAAAGCCAAACCTTGCTT
 Pack Signal

5' GCCGCGCTCTGTCTGCTGCAGCGCTGCAGCATCGTTCTGTGTTGTCTCTGTCTGACTGTGTTTCTGTATTTGTCTGAAAATTAGGGCCAGACTGTTAC
 1000
 3' CGGCGCGCAGAACAGACGACGTCGCGACGTCGTAGCAAGACACAACAGAGACAGACTGACACAAAGACATAAACAGACTTTTAATCCCGGTCTGACAATG
 Pack Signal



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5' CAAGCTAGCTTAAGTAACGCCATTTTGC AAGGCATGGAAAATACATAACTGAGAATAGAGAAGTTCAGATCAAGGTTAGGAACAGAGAGACAGCAGAATA
 3' GTTCGATCGAATTCATTGCGGTAAAACGTTCCGTACCTTTTATGTATTGACTCTTATCTCTTCAAGTCTAGTTC AATCCTTGTCTCTCTGTCGTCTTAT
 3' pCMV LTR

5' TGGGCCAAACAGGATACTGTGGTAAGCAGTTCCTGCCCGGCTCAGGGCCAAGAACAGATGGTCCCAGATGCGGTCCCGCCCTCAGCAGTTTCTAGAG
 3' ACCCGGTTTGTCTATAGACACCATTTCGTCAAGGACGGGGCCGAGTCCCGGTTCTTGTCTACCAGGGTCTACGCCAGGGCGGGAGTCGTC A AAGATCTC
 3' pCMV LTR

5' AACCATCAGATGTTTCCAGGGTGCCCAAGGACCTGAAATGACCCCTGTGCCTTATTGAACTAACAATCAGTTCGCTTCTCGCTTCTGTTTCGCGCGCTT
 3' TTGGTAGTCTACAAAGGTCCACGGGGTTCCTGGACTTTACTGGGACACGGAATAAACTTGATTGGTTAGTCAAGCGAAGAGCGAAGACAAGCGCGCAA
 3' pCMV LTR

5' CTGCTCCCCGAGCTCAATAAAAGAGCCACAACCCCTCACTCGGCGGCCAGTCTCCGATAGACTGCGTCGCCCGGGTACCCGTGTATCCAATAAACC
 3' GACGAGGGGCTCGAGTTATTTTCTCGGGTGTGGGGAGTGAGCCGCGCGGT CAGGAGGCTATCTGACGCAGCGGGCCCATGGGCACATAGGTTATTTGGG
 3' pCMV LTR

5' TCTTGCAGTTGCATCCGACTTGTGGTCTCGCTGTTCTTGGGAGGGTCTCCTCTGAGTGATTGACTACCCGT CAGCGGGGTCTTTCATGGGTAACAGTT
 3' AGAAGCTCAACGTAGGCTGAACACCAGAGCGACAAGGAACCCCTCCAGAGGAGACTCACTAACTGATGGGCAGTCGCCCCAGAAAGTACCCATTGTCAA
 3' pCMV LTR

5' TCTTGAAGTTGGAGAACAACATTCTGAGGGTAGGAGTCAATATTAAGTAATCCTGACTCAATTAGCCACTGTTTGAATCCACATACTCCAATACTCCT
 3' AGAACTTCAACCTCTTGTGTGTAAGACTCCCATCCTCAGCTTATAATTCAATTAGGACTGAGTTAATCGGTGACAAAACCTTAGGTGTATGAGGTTATGAGGA

5' GAAATAGTT CATTATGACAGCGCAGAAGAGCTGGGGAGAATTAATTCGTAATCATGGTCATAGCTGTTTCCCTGTGTGAAATTGTATCCGCTCACAATT
 3' CTTTATCAAGTAATACCTGTCGCGTCTTCTCGACCCCTCTTAATTAAGCATTAGTACCAGTATCGACAAAGGACACACTTAAACAATAGGCAGGTGTAA

5' CCACACAACATACGAGCCGGAAGCATAAAGTGTAAGCCCTGGGGTGCCATATGAGTGAGCTAACTCACATTAATTGCGTTGCGCTCACTGCCCGCTTTCC
 3' GGTGTGTTGTATGCTCGCCTTCGTATTTACATTTTCGACCCACCGAATTA CTCACTCGATTGAGTGTAAATTAACGCAACGCGAGTGACGGGCGAAAGG

5' AGTCGGGAAACCTGTCGTGCCAGCTGCATTAATGAATCGGCCAACGCGCGGGGAGAGGCGGTTTGC GTATTGGGCGCTCTTCCGCTTCCCTCGCTCACTGA
 3' TCAGCCCTTTGGACAGCACGGTCGACGTAATTA CTTAGCCGGTTGCGCGCCCTCTCCGCCAAACGCATAACCCGCGAGAAGGCGAAGGAGCGAGTGACT

5' CTCGCTGCGCTCGGTTCGGCTGCGGCGAGCGGTATCAGCTCACTCAAAGGCGGTAATACGGTTATCCACAGAATCAGGGGATAACGCAGGAAAGAAC
 3' GAGCGACGCGAGCCAGCAAGCCGACGCGCTCGCCATAGTCGAGTGAGTTTCCGCCATTATGCCAATAGGTGTCTTAGTCCCTTATGCGTCTTTCTTG
 PciI

5' ATGTGAGCAAAGGCCAGCAAAGGCCAGGAACCGTAAAAGGCCGCTTGTGCGCTTTTCCATAGGCTCCGCCCCCTGACGAGCATCACAAAATC
 3' TACACTCGTTTCCGGTTCGTTTCCGGTCTTGGCATTTTCCGGCGCAACGACCGCAAAAAGGTATCCGAGGCGGGGGACTGCTCGTAGTGTTTTAG

5' GACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTCCCTGGAAGCTCCCTCGTGCGCTCTCTGTTCCGACCCCTGCC
 3' CTGCGAGTT CAGTCTCCACCGCTTGGGCTGTCTGATATTTCTATGGTCCGCAAAGGGGACCTTCGAGGGAGCACGCGAGAGGACAAGGCTGGGACGG

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5' GCTTACCGGATACCTGTCCGCTTTCTCCCTTCGGGAAGCGTGGCGCTTTCTCATAGCTCAGCTGTAGGTATCTCAGTTCGGTGTAGGTCGTTCCGCTCC
 5100
 3' CGAATGGCCTATGGACAGGCGGAAAGAGGGAAGCCCTTCGCACCAGCGAAAGAGTATCGAGTGCACATCCATAGAGTCAAGCCACATCCAGCAAGCGAGG

5' AAGCTGGGCTGTGTGCACGAACCCCCGTTCCAGCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGGTAAGACACGACTTATCGC
 5200
 3' TTCGACCCGACACACGTGCTTGGGGGCAAGTGGGCTGGCGACGCGGAATAGGCCATTGATAGCAGAAGTCAAGTTCAGGTTGGGCCATTCTGTGCTGAATAGCG

5' CACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTCTTGAAGTGGTGGCCTAACTACGGCTACACTAGAAG
 5300
 3' GTGACCGTCTGCGGTGACCATGTCTTAATCGTCTCGCTCCATACATCCGCCACGATGTCTCAAGAAGTTCACCACCGGATTGATGCCGATGTGATCTTC

5' GACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCACCGCTGGTAGCGGTGGT
 5400
 3' CTGTCATAAACCATAGACGCGAGACGACTTCGGTCAATGGAAGCCTTTTTCTCAACCATCGAGAAGTACGGCCGTTTGTGGTGGCGACCATCGCCACCA

5' TTTTTTGTGTTGAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGGTCTGACGCTCAGTGGAAACGAAAAGT
 5500
 3' AAAAAACAAACGTTTCGTCGCTAATGCGCGTCTTTTTTCTAGAGTCTTCTAGGAAACTAGAAAAGATGCCCCAGACTGCGAGTCACTTTGCTTTTGA

5' CACGTTAAGGGATTTTGGTTCATGAGATATCAAAAAGGATCTTCCACTAGATCCTTTTAAATTAATAAATGAAGTTTAAATCAATCTAAAGTATATATGA
 5600
 3' GTGCAATTCCCTAAAACAGTACTCTAATAGTTTTTCTTAGAAGTGGATCTAGGAAAATTAATTTTACTTCAAATTTAGTTAGATTTTCATATATACT

5' GTAACTTGGTCTGACAGTTACCAATGCTTAATCAGTGAGGCACCTATCTCAGCGATCTGTCTATTTTCGTTTCATCCATAGTTGCCTGACTCCCCGTCGTG
 5700
 3' CATTTGAACCAGACTGTCAATGGTTACGAATTAGTCACTCCGTGGATAGAGTTCGCTAGACAGATAAAGCAAGTAGGTATCAACGGACTGAGGGGCAGCAC

Amp res

5' TAGATAACTACGATACGGGAGGGCTTACCATCTGGCCCCAGTGTGCAATGATACCGCGAGACCCACGCTCACCGGCTCCAGATTTATCAGCAATAAACCC
 5800
 3' ATCTATTGATGCTATGCCCTCCGAATGGTAGACCGGGTTCACGACGTTACTATGGCGCTCTGGGTGCGAGTGGCCGAGTCTAAATAGTCTGTTATTGG

Amp res

5' AGCCAGCCGGAAGGGCCGAGCGCAGAAGTGGTCTGCAACTTTATCCGCCTCCATCCAGTCTATTAATTGTTGCCGGAAGCTAGAGTAAGTAGTTCGCC
 5900
 3' TCGGTGCGCCTTCCCGCTCGCGTCTTACCAGGACGTTGAAATAGGCGGAGGTAGGTGAGATAAATTAACAACGGCCCTTCGATCTCATTCATCAAGCGG

Amp res

5' AGTTAATAGTTTGCACAACGTTGTTGCCATTGCTACAGGCATCGTGGTGTACGCTCGTTCGTTGGTATGGCTTCATTCAGCTCCGGTCCCAACGATCA
 6000
 3' TCAATTATCAAACGCGTTGCAACAACGTAACGATGTCCGTAGCACCCACAGTGCAGCAGCAAAACCATACCGAAGTAAGTTCGAGGCCAAGGGTTGCTAGT

Amp res

5' AGGCGAGTTACATGATCCCCATGTTGTGCAAAAAAGCGTTAGCTCCTTCGGTCCCTCCGATCGTTGTCAGAAGTAAGTTGGCCGAGTGTATCACTCA
 6100
 3' TCCGCTCAATGTAAGGGGTACAACAGTTTTTTTCGCAATCGAGGAAGCCAGGAGGCTAGCAACAGTCTTCATTCAACCGGCTCACAATAGTGAGT

Amp res

o
5' TGGTTATGGCAGCACTGCATAATTCTCTTACTGTCATGCCATCCGTAAGATGCTTTTCTGTGACTGGTGAGTACTCAACCAAGTCATTCTGAGAATAGTG 6200
o
3' ACCAATACCGTCGTGACGTATTAAGAGAATGACAGTACGGTAGGCATTCTACGAAAAGACTGACCACTCATGAGTTGGTTCAGTAAGACTCTTATCAC
o
Amp res
o
o
5' TATGCGGCGACCGAGTTGCTCTTGCCCGGCGTCAATACGGGATAATACCGCGCCACATAGCAGAACTTTAAAAGTGCTCATATTGGAAAACGTTCTTCG 6300
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3' ATACGCCGCTGGCTCAACGAGAACGGGCGCAGTTATGCCCTATTATGGCGCGGTGTATCGTCTTGAAATTTTACAGAGTAGTAACCTTTTGCAAGAAGC
o
Amp res
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o
5' GGGCGAAAACCTCTCAAGGATCTTACCGTGTGAGATCCAGTTCGATGTAACCCACTCGTGCACCCAACCTGATCTTCAGCATCTTTTACTTTCACCAGCG 6400
o
3' CCCGCTTTTGAGAGTTCCTAGAATGGCGACAACCTTAGGTCAAGTACATTGGGTGAGCACGTGGGTGACTAGAAAGTCGTAGAAAATGAAAGTGGTCCG
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Amp res
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o
5' TTTCTGGGTGAGCAAAAACAGGAAGGCAAAATGCCGCAAAAAGGAATAAGGGCGACACGGAAATGTTGAATACTCATACTCTTCTTTTCAATATTA 6500
o
3' AAAGACCCACTCGTTTTTGTCTTCCGTTTTACGGCGTTTTTCCCTTATTCCCGCTGTGCCTTTACAACCTATGAGTATGAGAAGGAAAAAGTTATAAT
o
Amp res
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5' TTGAAGCATTTATCAGGGTTATTGTCTCATGAGCGGATACATATTTGAATGTATTTAGAAAAATAAACAAATAGGGGTTCCGCGCACATTTCCCGAAAA 6600
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3' AACTTCGTAATAGTCCCAATAACAGAGTACTCGCCTATGTATAAACTTACATAAAATCTTTTATTGTTTATCCCAAGGCGCGTGTAAAGGGGCTTTT
o
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5' GTGCCACCTGACGTCTAAGAAACCATTATTATCATGACATTAACCTATAAAAATAGGCGTATCACGAGGCCCTTTCGTCTCGCGCTTTCGGTGATGACG 6700
o
3' CACGGTGGACTGCAGATTCTTTGGTAATAATAGTACTGTAATTGGATAATTTTATCCGCATAGTGCTCCGGGAAAGCAGAGCGCGCAAAGCCACTACTGC
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5' GTGAAAACCTCTGACACATGCAGCTCCCGGAGACGGTACAGCTTGTCTGTAAGCGGATGCCGGGAGCAGACAAGCCCGTCAGGGCGCGTCAGCGGGTGT 6800
o
3' CACTTTTGGAGACTGTGTACGTGAGGGCCTCTGCCAGTGTGAAACAGACATTGCGCTACGGCCCTCGTCTGTTCCGGCAGTCCCGCGAGTCGCCACA
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o
o
5' TGGCGGGTGTGCGGGCTGGCTTAACTATGCGGCATCAGAGCAGATTGACTGAGAGTGCACCATATGCGGTGTGAAATACCGCACAGATGCGTAAGGAGA 6900
o
3' ACCGCCACAGCCCCGACCGAATTGATACGCCGTAGTCTCGTCTAACATGACTCTCACGTGGTATACGCCACACTTTATGGCGTGTCTACGCATTCTCT
o
o
5' AAATACCGCATCAGGCGCCATTTCGCCATTTCAGGCTGCGCAACTGTTGGGAAGGGCGATCGGTGCGGGCTCTTTCGCTATTACGCCAGCTGGCGAAAGGGG 7000
o
3' TTTATGGCGTAGTCCGCGGTAAGCGGTAAGTCCGACGCGTTGACAACCTTCCCGCTAGCCACGCCCGGAGAAGCGATAATGCGGTGACCGCTTTCCCC
o
o
5' GATGTGCTGCAAGGCGATTAAGTTGGGTAAACGCCAGGGTTTTCCAGTCACGACGTTGTAAAACGACGGCGCAAGGAATGGTGCATGCAAGGAGATGGCG 7100
o
3' CTACACGACGTTCCGCTAATTCAACCCATTGCGGTCCCAAAAGGTCAGTGTGCAACATTTTGTCTCCGCGTTCCTTACCACGTACGTTCTCTACCCG
o
o
5' CCCAACAGTCCCCCGCCACGGGCTGCCACCATAACCCACGCCGAAACAAGCGCTCATGAGCCGAAGTGGCGAGCCCGATCTTCCCATCGGTGATGT 7200
o
3' GGGTTGTCAGGGGGCCGGTGCCTCCGACGGTGGTATGGGTGCGGCTTTGTTCCGAGTACTCGGGCTTACCCTCGGGCTAGAAGGGGTAGCCACTACA
o
o
o
Ndel

