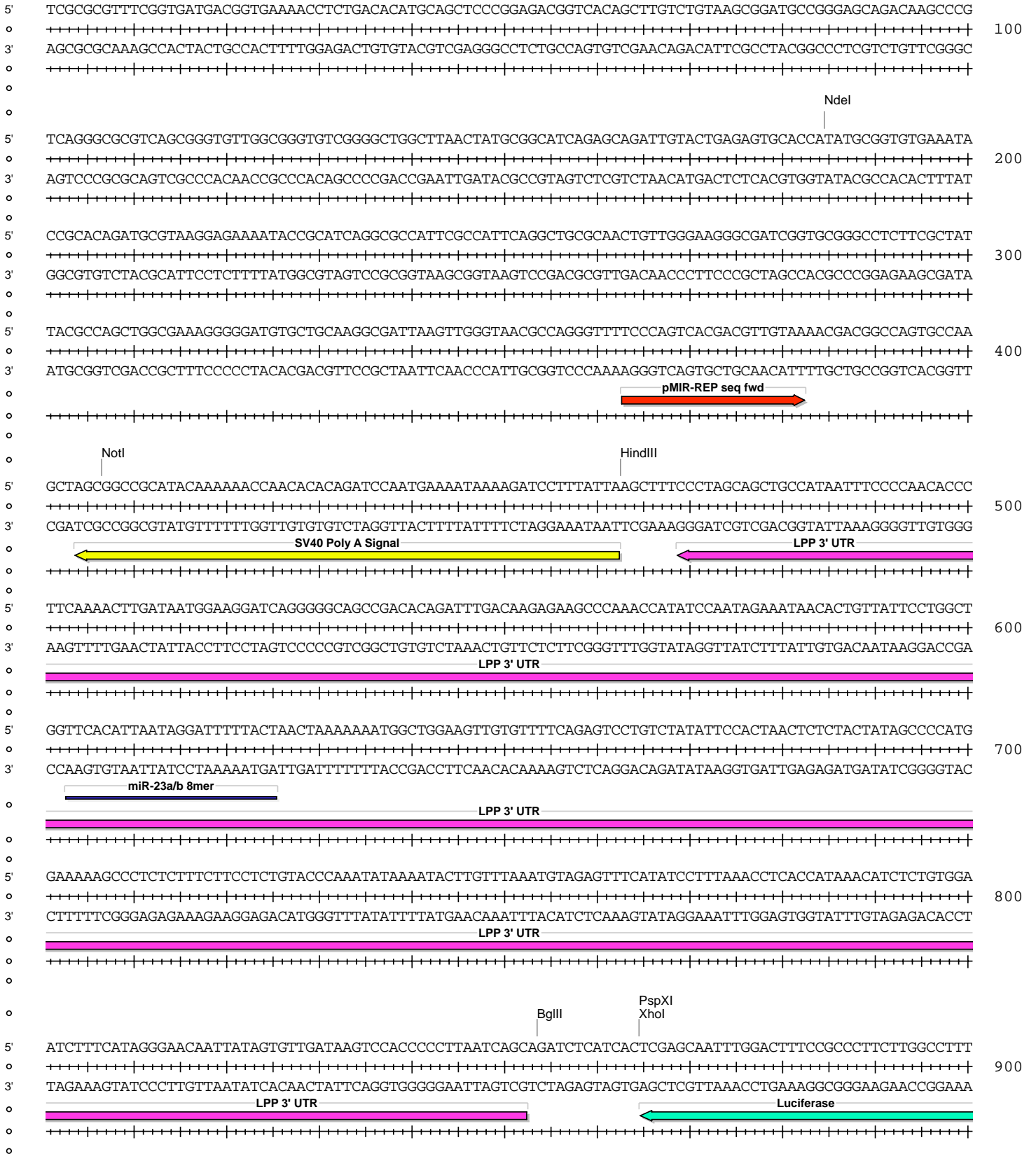


pMIR-REP-dCMV-LPP 3' UTR (3442-3826) wt

Absent Sites	0	AarI,AbstI,AfeI,AfII,AleI,Apal,AscI,AsiSI,BaeI,BaeI',BarI,BarI',BbvCI,BclI,BlpI,BmgBI,Bpu10I,BsgI,BstXI,BstZ17I,EcoICRI,Fall,Fall',FseI,FspAI,MauBI,MluI,MreI,NaeI,NgoMIV,NruI,PasI,PfIMI,PmeI,PmlI,PshAI,PspOMI,SacI,SanDI,SgrDI,SpeI,SrfI,Swal
Acc65I	1	2789 (6459)
AccI	1	5924 (6459)
AgeI	1	6092 (6459)
AhdI	1	4146 (6459)
AjuI	1	1635 (6459)
AjuI'	1	1667 (6459)
Alol	1	2548 (6459)
Alol'	1	2516 (6459)
AlwNI	1	3669 (6459)
Arsl	1	1336 (6459)
Arsl'	1	1368 (6459)
AvrII	1	6143 (6459)
BamHI	1	2524 (6459)
BglII	1	854 (6459)
BsaBI	1	5308 (6459)
BsmI	1	5221 (6459)
BsrGI	1	2025 (6459)
BssHII	1	5576 (6459)
Bsu36I	1	1903 (6459)
BtgZI	1	2774 (6459)
ClaI	1	1152 (6459)
CspCI	1	2738 (6459)
CspCI'	1	2703 (6459)
DraIII	1	5467 (6459)
EcoNI	1	901 (6459)
EcoO109I	1	1337 (6459)
EcoRV	1	1181 (6459)
HindIII	1	463 (6459)
HpaI	1	5207 (6459)
KpnI	1	2793 (6459)
MscI	1	5660 (6459)
NdeI	1	185 (6459)
NotI	1	407 (6459)
PacI	1	1197 (6459)
PciI	1	3253 (6459)
PpuMI	1	1337 (6459)
PspXI	1	865 (6459)
Psrl	1	2386 (6459)
Psrl'	1	2354 (6459)
PstI	1	6115 (6459)
RsrII	1	5916 (6459)
SacII	1	5823 (6459)
Sall	1	5923 (6459)
SbfI	1	6115 (6459)
Scal	1	4626 (6459)
SfiI	1	6197 (6459)
SgrAI	1	1087 (6459)
SnaBI	1	2772 (6459)
SspI	1	4950 (6459)
Tth111I	1	5992 (6459)
XcmI	1	1785 (6459)
XhoI	1	865 (6459)
XmnI	1	4745 (6459)

pMIR-REP-dCMV-LPP 3' UTR (3442-3826) wt







pMIR-REP-dCMV-LPP 3' UTR (3442-3826) wt

5' GGCGGAGTTGTTACGACATTTTGGAAAGTCCCGTTGATTTTGGTGCCAAAACAACTCCCATGACGTCAATGGGGTGGAGACTTGAAATCCCCGTGAG
 2700
 3' CCGCCTCAACAATGCTGTAAACCTTTCAGGGCAACTAAAACCACGGTTTGTGTTGAGGGTAACTGCAGTTACCCACCTCTGAACCTTTAGGGGCACTC
 CMV enhancer promoter

CspCl' CspCl SnaBI BtgZI Acc65I KpnI
 5' TCAAACCGCTATCCACGCCCATTTGATGTACTGCCAAAACCGCATCACCATGGTAATAGCGATGACTAATACgtaggttcactGATCTGGTACCTTGAATT
 2800
 3' AGTTTGGCGATAGGTGCGGGTAACTACATGACGGTTTTTGGCGTAGTGGTACCATTATCGCTACTGATATGcatccaagtgaCTAGACCATGGAACCTAA
 CMV enhancer promoter

5' CATGCTTCTCCTCCCTTTAGTGAGGGTAATTCTCTCTCTCCTATAGTGAGTCGTATTAATTCTTCTTCTATAGTGTACCTAAATCGTTGCAAT
 2900
 3' GTACGAAGAGGAGGGAAATCACTCCCATTAAGAGAGAGAGGGATATCACTCAGCATAATTAAGGAAGAGAAGATATCACAGTGGATTTAGCAACGTTA

5' TCGTAATCATGTGCATAGCTGTTTCCGTGTGAAATTGTTATCCGCTCACAATTCCACACAACATACGAGCCGGAAGCATAAAGTGTAAGCCTGGGGTGC
 3000
 3' AGCATTAGTACAGTATCGACAAAGGACACACTTTAACAATAGGCGAGTGTAAAGGTGTGTTGTATGCTCGGCCCTTCGTATTTACATTTCCGACCCACAG

5' CTAATGAGTGAGCTAACTCACATTAATTGCGTTGCGCTCACTGCCCGCTTTCAGTCGGGAAACCTGTCTGTGCCAGCTGCATTAATGAATCGGCCAACGC
 3100
 3' GATTACTCACTCGATTGAGTGTAAATTAACGCAACGCGAGTGACGGGCGAAAGGTGAGCCCTTTGGACAGCACGGTCGACGTAATTACTTAGCCGGTTGCG

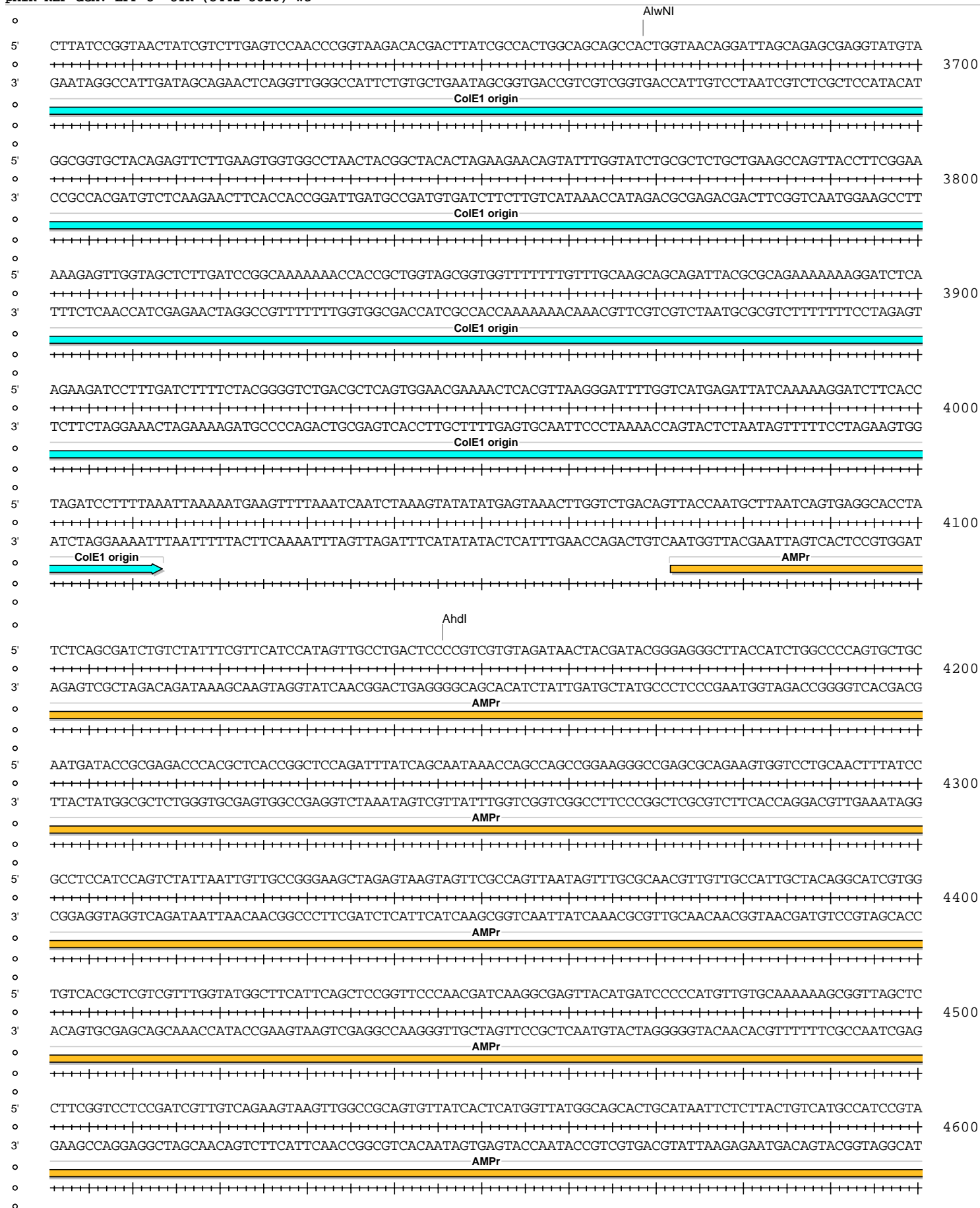
5' GCGGGGAGAGCGGTTTGCATATTGGGCGCTCTCCGCTTCTCGCTCACTGACTCGCTGCGCTCGGTCTGCTGCGGCGAGCGGTATCAGCTCACT
 3200
 3' CGCCCTCTCCGCCAAACGCATAACCCGCGAGAAGGCGAAGGAGCGAGTGACTGAGCGAGCGAGCCAGCAAGCCGACGCGCTCGCCATAGTCGAGTGA
 ColE1 origin

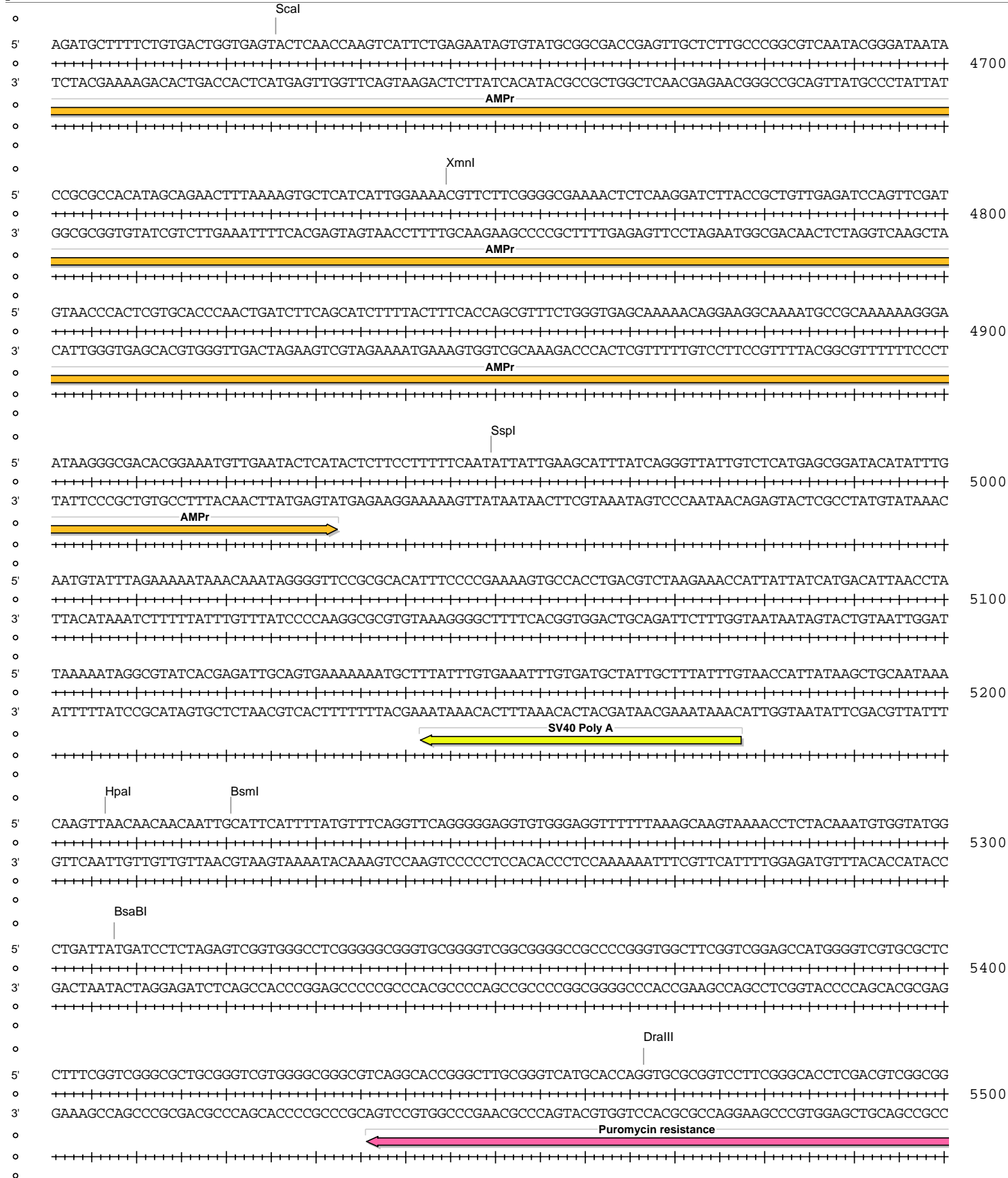
PciI
 5' CAAAGGCGGTAATACGTTATCCACAGAATCAGGGGATAACGCAGGAAAGAACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAAGGCCGC
 3300
 3' GTTTCGGCCATTATGCCAATAGGTGTCCTAGTCCCTATTGCGTCTTTCTTGTACTACTCGTTTTCCGGTCTGTTTTCCGGTCTTGGCATTTTTCCGGCG
 ColE1 origin

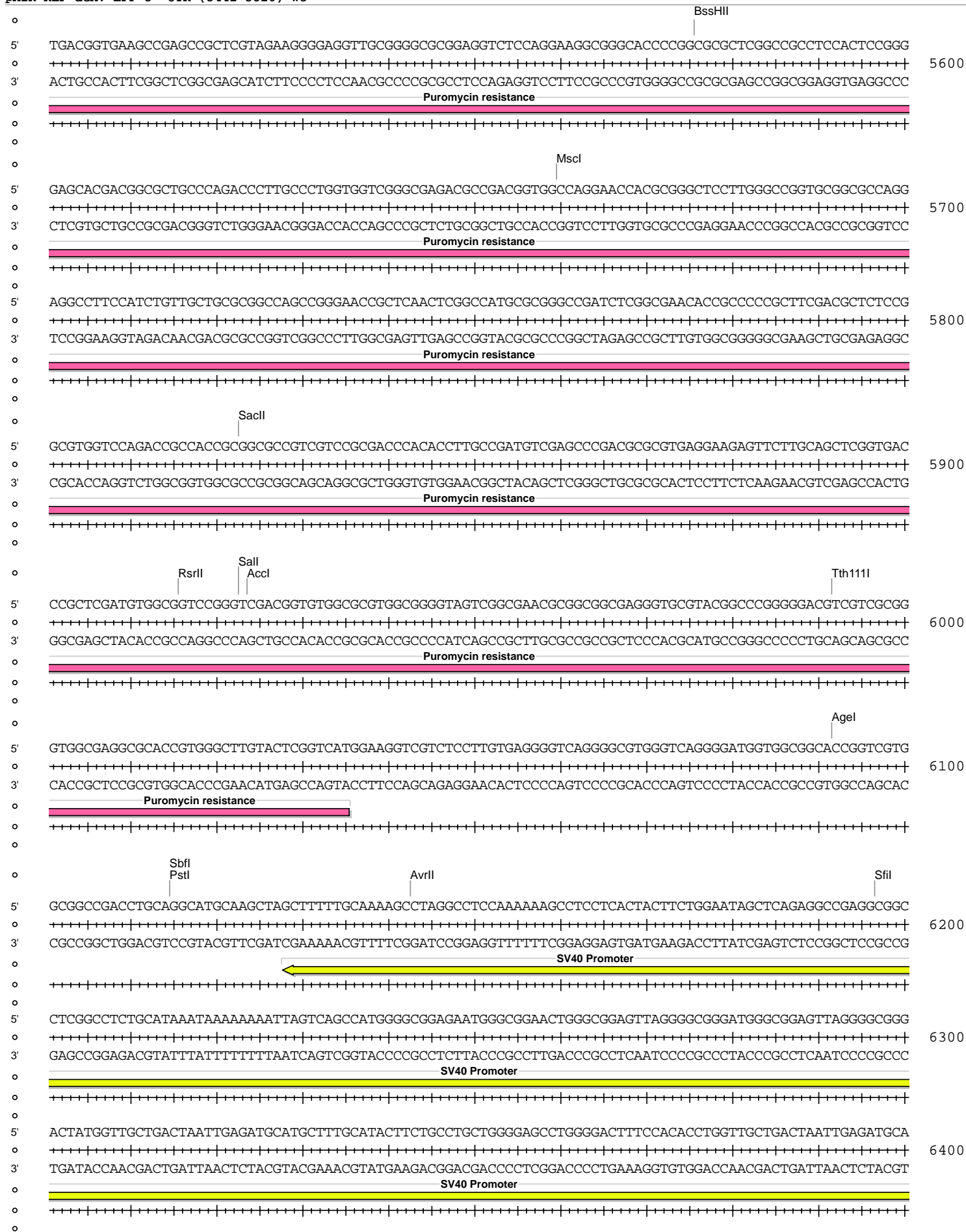
5' GTTGTGCGGTTTTTCCATAGGCTCCGCCCCCTGACGAGCATCACAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAGATAC
 3400
 3' CAACGACCGCAAAAAGGTATCCGAGGCGGGGGACTGCTCGTAGTGTTTTGTAGTGCAGTTTCAGTCTCCACCGCTTTGGGCTGTCTGATATTTCTATG
 ColE1 origin

5' CAGGCGTTTCCCCCTGGAAGCTCCCTCGTGCCTCTCCTGTTCCGACCTTCCGCTTACCGGATACCTGTCCGCTTTCTCCCTTCGGGAAGCGTGGCGC
 3500
 3' GTCCGCAAAAGGGGACCTTCGAGGGAGCACGCGAGAGGACAAGGTTGGGACGGCGAATGGCCTATGGACAGGCGGAAAGAGGGAAGCCCTTCGCACCGCG
 ColE1 origin

5' TTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTGCTTCGCTCCAAGCTGGGCTGTGTGCACGAACCCCCGTTTCAGCCGACCGCTGCGC
 3600
 3' AAAGAGTATCGAGTGCACATCCATAGAGTCAAGCCACATCCAGCAAGCGAGGTTTCGACCCGACACAGTGTCTGGGGGCAAGTCCGGCTGGCGACGCG
 ColE1 origin







pMIR-REP-dCMV-LPP 3' UTR (3442-3826) wt

5' TGCTTTGCATACTTCTGCCTGCTGGGGAGCCTGGGGACTTTCACACCAATCTTTCGTC
o ++++++
3' ACGAAACGTATGAAGACGGACGCCCTCGGACCCCTGAAAGGTGTGGTTAGAAAGCAG
o SV40 Promoter
o ++++++
o

6459