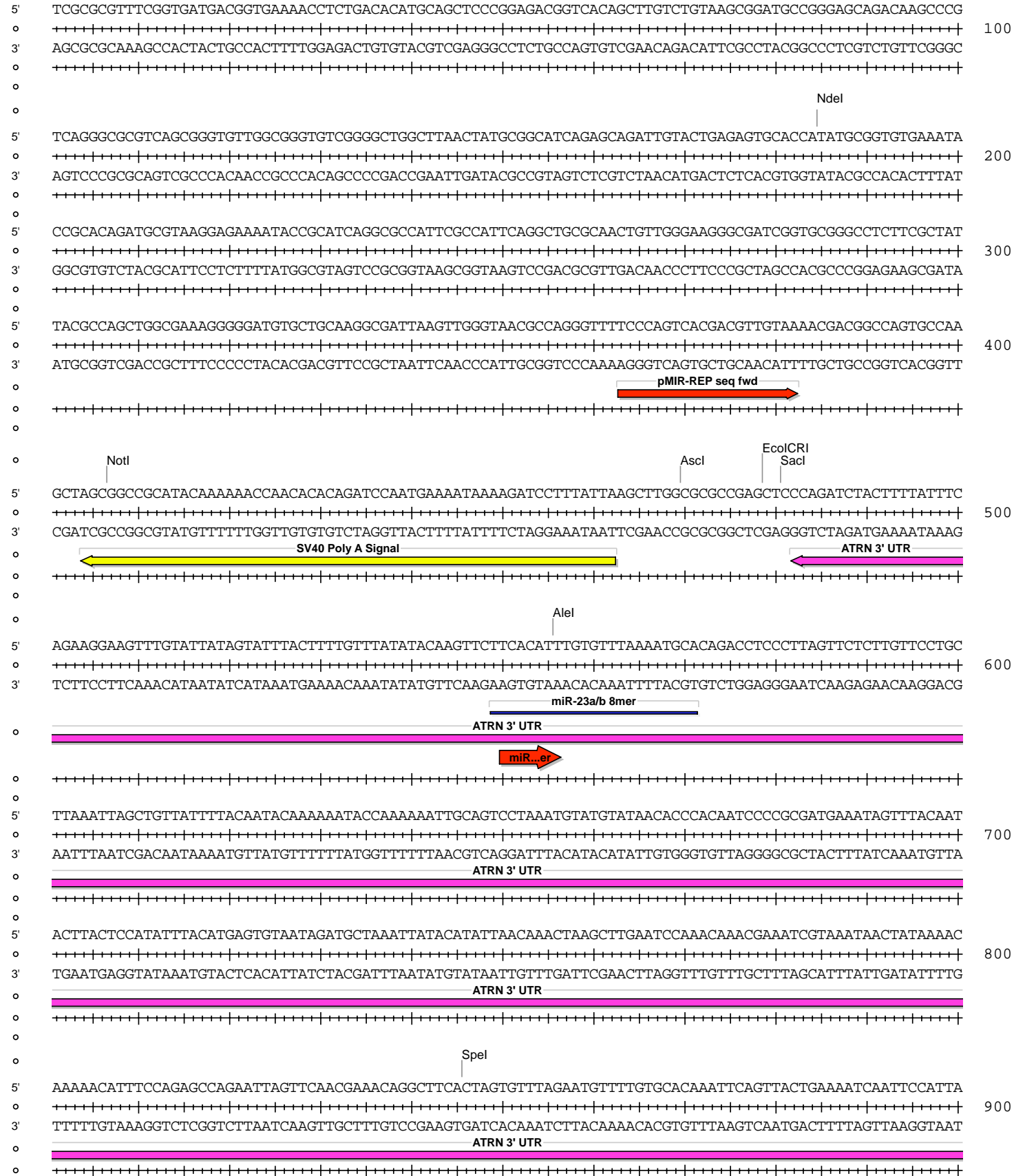


Absent Sites	0	Aarl,AbsI,Afel,Apal,AsiSI,Bael,Bael',BarI,Barl',BbvCI,BclI,BIpl,BmgBI,Bpu10I,BsgI,BstZ17I,FalI,Fall',FseI,FspAI, MauBI,MreI,NaeI,NgoMIV,NruI,PaSI,PfIMI,PmeI,PmII,PshAI,PspOMI,SanDI,SgrDI,SrfI,Swal
Acc65I	1	3439
AccI	1	6574
AfIII	1	1254
AgeI	1	6742
AhdI	1	4796
AjuI	1	2285
AjuI'	1	2317
AleI	1	556
Alol	1	3198
Alol'	1	3166
AscI	1	470
AvrII	1	6793
BamHI	1	3174
BsaBI	1	5958
BsmI	1	5871
BsrGI	1	2675
BstXI	1	1027
Clal	1	1802
CspCI	1	3388
CspCI'	1	3353
Drall	1	6117
EcoICRI	1	479
EcoNI	1	1551
EcoO109I	1	1987
EcoRV	1	1831
HpaI	1	5857
KpnI	1	3443
MluI	1	1498
NdeI	1	185
NotI	1	407
PacI	1	1847
PciI	1	3903
PpuMI	1	1987
PspXI	1	1515
PsrI	1	3036
PsrI'	1	3004
PstI	1	6765
RsrII	1	6566
SacI	1	481
SacII	1	6473
SalI	1	6573
SbfI	1	6765
Scal	1	5276
SfiI	1	6847
SgrAI	1	1737
SnaBI	1	3422
SpeI	1	846
SspI	1	5600
Tth111I	1	6642
XcmI	1	2435
XhoI	1	1515

pMIR-REP-dCMV-ATRN 3' UTR (3251-4265) wt



pMIR-REP-dCMV-ATRN 3' UTR (3251-4265) wt

5' CTGCCTTTAAAAGATGAGGTGCCAATTTTCCTCCTCCATTTCAAACATCTCCTTGTAGGCAGGGTGTGTTGACTCTCATCAAGGGCAATATCTCTTGGTG
 1000
 3' GACGGAAATTTTCTACTCCACGGTTAAAAGGAGAGGTTAAAGTTTGTAGAGGAACATCCGTCCCACAACTGAGAGTAGTTCCCCGTTATAGAGAACCAC
 ATRN 3' UTR

BstXI

5' GGCCTGGCTATCTAGAACCACCGCAATGGCTGGAGCCAAGTTTGGTCAATGGGGTAAACATTTGAGAAGGTAGGCAGGGCATGCCCTGAGGCCAGGAGG
 1100
 3' CCGGACCGATAGATCTTTGGTGGCGTTACCGACCTCGGTTCAAACAGTTACCCCATTTGTAAAGTCTTCCATCCGTCCCGTACGGGACTCCGGTCTCTC
 ATRN 3' UTR

5' CCTCTGCCGTCCTGGCTGTGTCTCAGGATGGCCAATTTCTCACAGAAACCACCACAAGGAAAGATCTCCTGGGATGACAGGGGTGTGAGGACTTGGATTT
 1200
 3' GGAGACGGCAGGACCGACACAGGAGTCTACCGGTTAAGAGTGTCTTTGGTGGTGTCTCTTTCTAGAGGACCTACTGTCCCACACTCTGAACCTAAA
 ATRN 3' UTR

AflIII

5' TGTTTTAATTTCTAAAATCTATTTTACATCTCAGTCACTACCCTAGCATTAGCTTAAAGTTAGTGTTTAGCAAATACTTGTGTAATGGATGGATGAATAAA
 1300
 3' ACAAAATTAAGATTTTAGATAAAAATGTAGAGTCAGTGATGGGATCGTAATCGAATTCGAATCACAATCGTTTTATGAACAACCTTACCTACCTACTTATTT
 miR-21 7mer-1A
 ATRN 3' UTR



5' TGAAATGGAAGGATCAAAGATGTTTCATGAAAACACCACCATCTCCAAGGAAGTGAATCAGCCCCTGGCCCCAGTACACCCATTAAATCAAAGGAGCAG
 1400
 3' ACTTTACCTTCCTAGTTTCTACAAGTACTTTTGTGGTGGTAGAGGGTTCCTTCACTTAGTCGGGGACCGGGTTCATGTGGGGTAATTTAGTTTCTCTCGTC
 ATRN 3' UTR

MluI

5' GATTTGCACTGGAAGGTAAAATGCCTCTTCCCACCAGCAGTGCCCTGCTCTTTTATTTCCCAGGTGTCTCCAGTCTTGAATGGCAGGACTTACCCACGC
 1500
 3' CTAACGTGACCTTCCATTTTACGGAGAAGGGTGGTTCGTACGGGACGAGAAAAATAAAGGGTCCACAGAGGTCAGAACTTACCGTCTGAATGGGTGCG
 ATRN 3' UTR

PspXI
XhoI

EcoNI

5' GTAGATCTCATCACTCGAGCAATTTGGACTTTCGCCCTTCTTGGCCTTTATGAGGATCTCTCTGATTTTCTTGCCTCGAGTTTCCGGTAAGACCTTT
 1600
 3' CATCTAGAGTAGTGAGCTCGTTAAACCTGAAAGCGGGGAAGAACCAGAAATACTCTAGAGAGACTAAAAGAAGCAGCTCAAAGGCCATTTCTGGAAA
 Luciferase

pMIR-REP seq rev

Luciferase

5' CCGTACTTCGTCCACAAACACAACCTCTCCGCGCAACTTTTTCGGGTGTGTTACTTGACTGGCGACGTAATCCACGATCTCTTTTCCGTCATCGTCTTT
 1700
 3' GCCATGAAGCAGGTGTTGTGTTGAGGAGGCGGTTGAAAAGCGCCAACAATGAACTGACCGCTGCATTAGGTGCTAGAGAAAAAGGCAGTAGCAGAAA
 Luciferase

SgrAI

5' CCGTGTCTCCAAAACAACAACGGCGGCGGGAAGTTACCCGGCGTCATCGTCGGAAGACTGCCACGCCCGCGTCGAAGATGTTGGGGTGTGTAAACAATA 1800
 ++++
 3' GGCACGAGGTTTTGTTGTTGCCGCCGCCCTTCAAGTGGCCGAGTAGCAGCCCTTCTGGACGGTGCGGGCGCAGCTTCTACAACCCCAACAATTGTTAT

Luciferase

Clal

EcoRV

Pacl

5' TCGATTCCAATTCAGCGGGGGCCACCTGATATCCTTGTATTTAATTAAGACTTCAAGCGGTCAACTATGAAGAAGTGTTCGCTTCGTCCAGTAAGC 1900
 ++++
 3' AGCTAAGGTTAAGTCGCCCGGTGACTATAGGAAACATAAATTAATTTCTGAAGTTCGCCAGTTGATACTTCTTACAAGCAGAAGCAGGGTTCATTCTG

Luciferase

EcoO109I
PpuMI

5' TATGTCTCCAGAATGTAGCCATCCATCCTTGTCATCAAGGCGTTGGTCGCTTCCGGATTGTTTACATAACCGGACATAATCATAGGTCCTCTGACACAT 2000
 ++++
 3' ATACAGAGGTCCTTACATCGGTAGGTAGGAACAGTTAGTTCGCAACCAGCGAAGGCCTAACAAATGTATTGGCTGTATTAGTATCCAGGAGACTGTGTA

Luciferase

5' AATTCGCTCTCTGATTAACGCCAGCGTTTCCCGGTATCCAGATCCACAACCTTCGCTTCAAAAAATGGAACAACCTTACCGACCGCGCCCGTTTAT 2100
 ++++
 3' TTAAGCGGAGAGACTAATTCGCGGTGCGCAAAGGGCCATAGGTCTAGGTGTTGGAAGCGAAGTTTTTTACCTTGTGAAATGGCTGGCGCGGGCCAAATA

Luciferase

5' CATCCCCCTCGGGTGAATCAGAATAGCTGATGTAGTCTCAGTGAGCCCATATCCTTGTCGATCCCTGGAAGATGGAAGCGTTTTGCAACCGCTTCCCC 2200
 ++++
 3' GTAGGGGAGCCCACATTAGTCTTATCGACTACATCAGAGTCACTCGGGTATAGGAACAGCATAGGGACCTTCTACCTTCGAAAACGTTGGCGAAGGGG

Luciferase

Ajul

5' GACTTCTTTCGAAAGAGGTGCGCCCCCAGAAGCAATTTCTGTAAATTAGATAAATCGTATTTGTCAATCAGAGTGCTTTTGGCGAAGAATGAAAATAGG 2300
 ++++
 3' CTGAAGAAAGCTTCTCCACGCGGGGTCTTCGTTAAAGCACATTTAATCTATTTAGCATAAACAGTTAGTCTACGAAAACCGCTTCTTACTTTTATCC

Luciferase

Ajul

5' GTTGGTACTAGCAACGCACCTTTGAATTTGTAATCCTGAAGGGATCGTAAAAACAGCTCTTCTTCAAATCTATACATTAAGACGACTCGAAATCCACATA 2400
 ++++
 3' CAACCATGATCGTTGCGTGAAACTTAAACATTAGGACTTCCCTAGCATTGTGTCGAGAAGAAGTTTAGATATGTAATTCGCTGAGCTTTAGGTGTAT

Luciferase

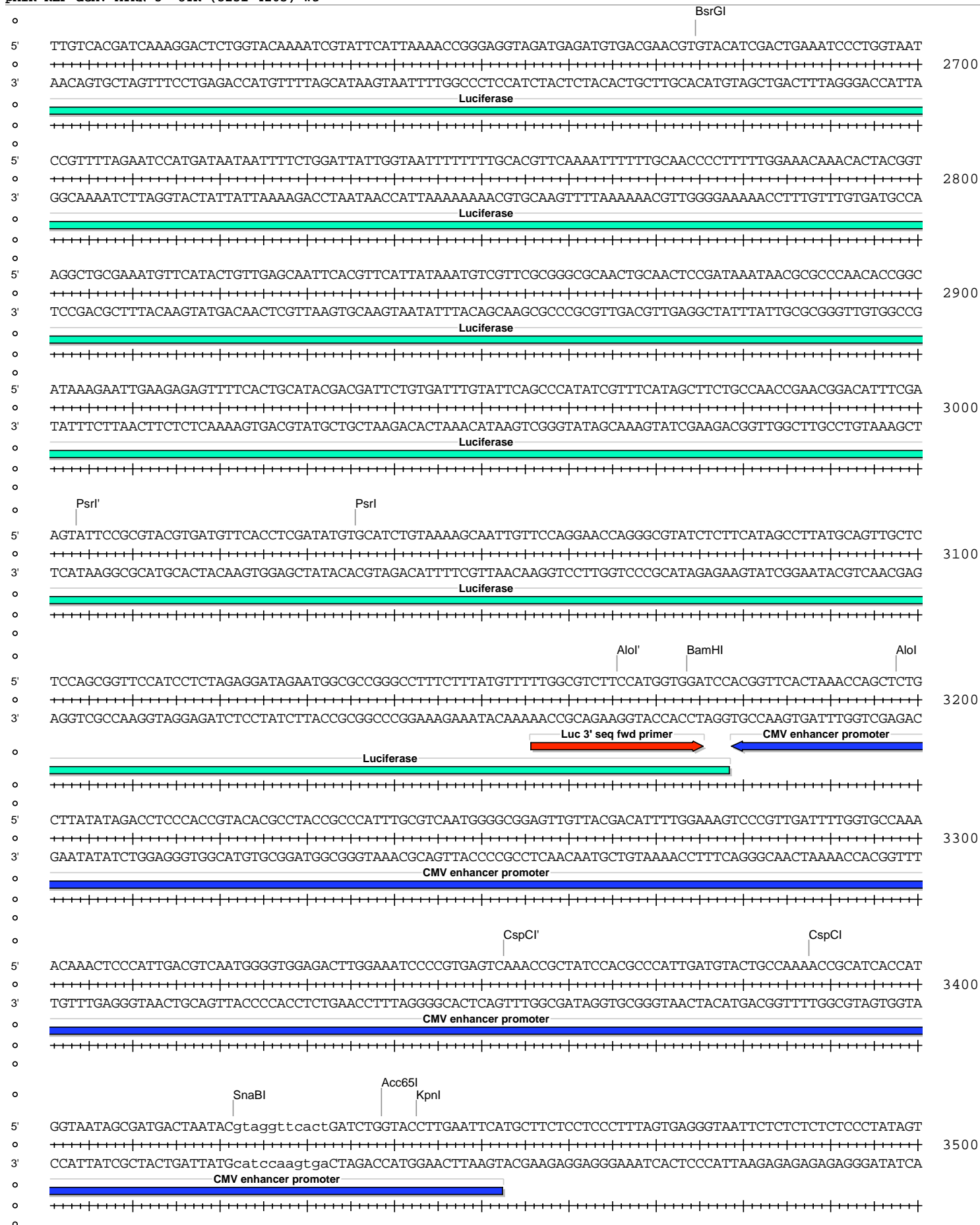
XcmI

5' TCAAATATCCGAGTGTAGTAACATTCCAAAACCGTGATGGAATGGGACAACACTTAAAATCGCAGTATCCGGAACGATTTGATTGCCAAAATAGGATC 2500
 ++++
 3' AGTTTTATAGGCTCACATCATTGTAAGGTTTTGGCACTACCTTACCCTGTTGTGAATTTAGCGTCATAGGCCTTGCTAAACTAACGGTTTTATCTCTAG

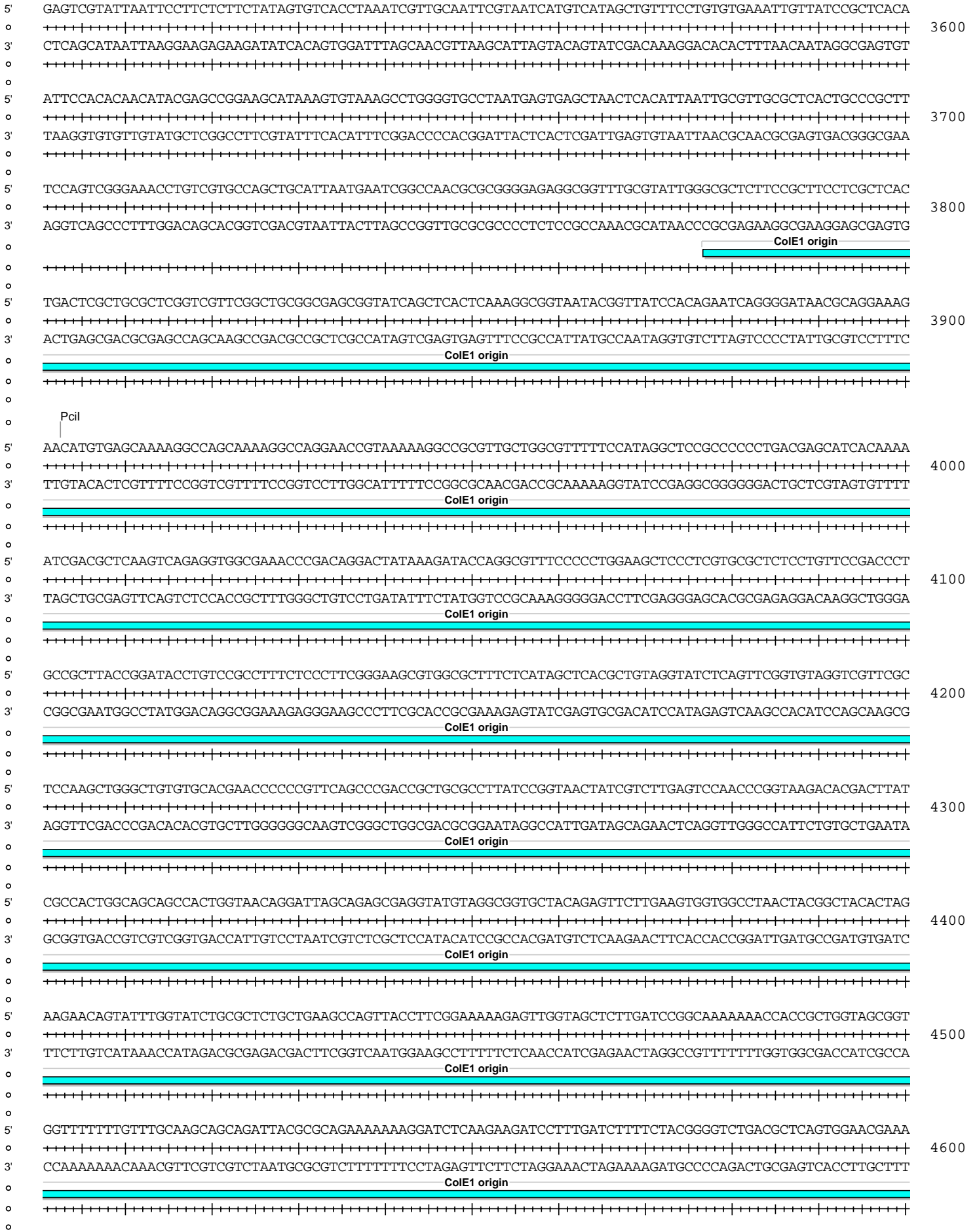
Luciferase

5' TCTGGCATGCGAGAATCTGACGAGGAGTTCTATGCGGAAGGGCCACACCTTAGGTAACCCAGTAGATCCAGAGGAATTCATTATCAGTGCAATTGTT 2600
 ++++
 3' AGACCGTACGCTTCTAGACTGCGTCCGTCAGATACGCCCTCCCGGTGTGGGAATCCATTGGGTCTATCTAGGTCCTTAAAGTAATAGTCACGTTAACAA

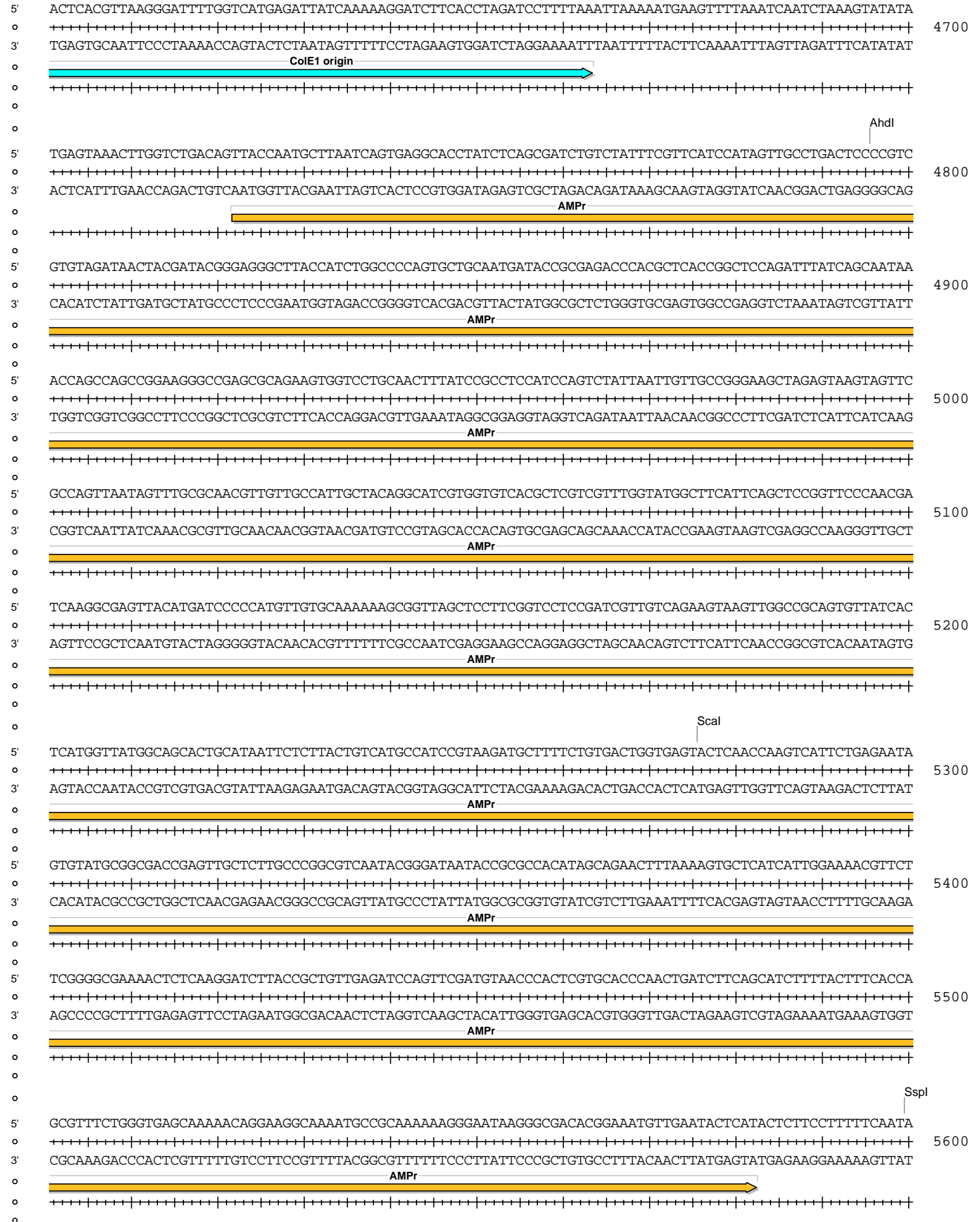
Luciferase



pMIR-REP-dCMV-ATRN 3' UTR (3251-4265) wt



pMIR-REP-dCMV-ATRn 3' UTR (3251-4265) wt



pMIR-REP-dCMV-ATRN 3' UTR (3251-4265) wt

