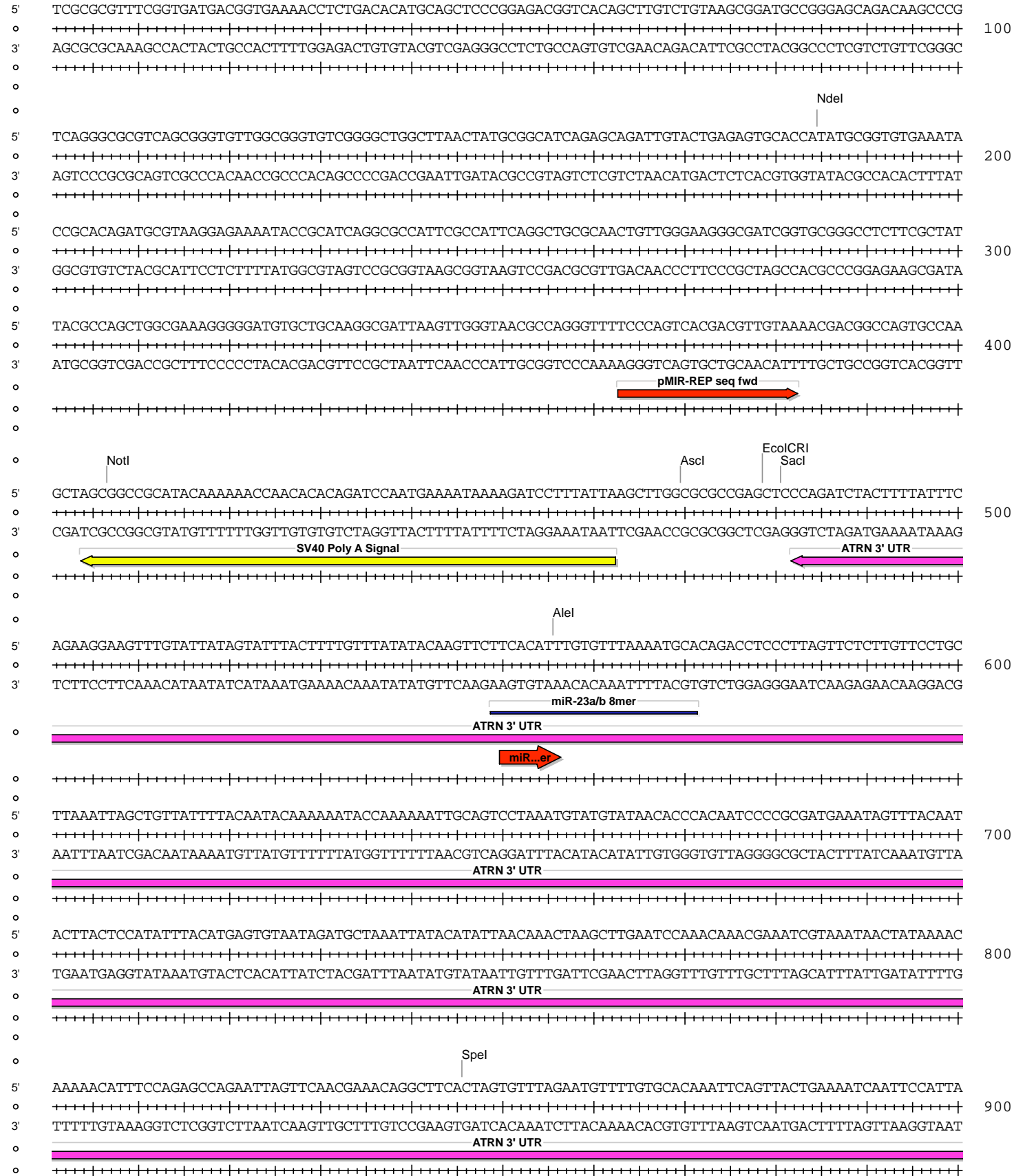


Absent Sites	0	Aarl,AbsI,Afel,Apal,AsiSI,Bael,Bael',BarI,Barl',BbvCI,BclI,BIpl,BmgBI,Bpu10I,BsgI,BstZ17I,Fall,Fall',FseI,FspAI, MauBI,Mrel,Nael,NgoMIV,NruI,PaSI,PfIMI,PmeI,PmII,PshAI,PspOMI,SanDI,SgrDI,SrfI,Swal
Acc65I	1	3439
AccI	1	6574
AfIII	1	1254
AgeI	1	6742
AhdI	1	4796
AjuI	1	2285
AjuI'	1	2317
AleI	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
Sall	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' CTGCCTTTAAAAGATGAGGTGCCAATTTTCCTCCTCCATTTCAAAAACATCTCCTTGTAGGCAGGGTGTGTTGACTCTCATCAAGGGCAATATCTCTTGGTG
 1000
 3' GACGGAAATTTTCTACTCCACGGTTAAAAGGAGAGGTTAAAGTTTGTAGAGGAACATCCGTCCCACAACTGAGAGTAGTTCCCCGTTATAGAGAACCAC
 ATRN 3' UTR

BstXI

5' GGCCTGGCTATCTAGAACCACCGCAATGGCTGGAGCCAAGTTTGGTCAATGGGGTAAACATTTGAGAAGGTAGGCAGGGCATGCCCTGAGGCCAGGAGG
 1100
 3' CCGGACCGATAGATCTTTGGTGGCGTTACCGACCTCGGTTCAAACAGTTACCCCATTTGTAAAGTCTTCCATCCGTCCCGTACGGGACTCCGGTCTCTC
 ATRN 3' UTR

5' CCTCTGCCGTCCTGGCTGTGTCTCAGGATGGCCAATTTCTCACAGAAACCACCACAAGGAAAGATCTCCTGGGATGACAGGGGTGTGAGGACTTGGATTT
 1200
 3' GGAGACGGCAGGACCGACACAGGAGTCTACCGGTTAAGAGTGTCTTTGGTGGTGTCTCTTTCTAGAGGACCCCTACTGTCCCACACTCTGAACCTAAA
 ATRN 3' UTR

AflIII

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



5' TGAAATGGAAGGATCAAAGATGTTTCATGAAAACACCACCATCTCCAAGGAAGTGAATCAGCCCTGGCCCCAGTACACCCATTAAATCAAAGGAGCAG
 1400
 3' ACTTTACCTTCCTAGTTTCTACAAGTACTTTTGTGGTGGTAGAGGGTTCCTTCACTTAGTTCGGGACCGGGTTCATGTGGGGTAATTTAGTTTCTCTCGTC
 ATRN 3' UTR

MluI

5' GATTTGCACTGGAAGGTAAAATGCCTCTTCCCACCAGCAGTGCCCTGCTCTTTTATTTCCAGGTGTCTCCAGTCTTGAATGGCAGGACTTACCCACGC
 1500
 3' CTAAACGTGACCTTCCATTTTACGGAGAAGGGTGGTTCGTACGGGACGAGAAAAATAAAGGGTCCACAGAGGTCAGAACCTTACCGTCTGAATGGGTGCG
 ATRN 3' UTR

PspXI
XhoI

EcoNI

5' GTAGATCTCATCACTCGAGCAATTTGGACTTTCGCCCTTCTTGGCCTTTATGAGGATCTCTCTGATTTTCTTGCCTCGAGTTTCCGGTAAGACCTTT
 1600
 3' CATCTAGAGTAGTGAGCTCGTTAAACCTGAAAGCGGGGAAGAACCAGAAATACTCTAGAGAGACTAAAAGAAGCAGCTCAAAAGGCCATTTCTGGAAA
 Luciferase

pMIR-REP seq rev

Luciferase

5' CCGTACTTCGTCCACAAACACAACCTCTCCGCGCAACTTTTTCGGGTGTGTTACTTGACTGGCGACGTAATCCACGATCTCTTTTCCGTCATCGTCTTT
 1700
 3' GCCATGAAGCAGGTGTTGTGTTGAGGAGGCGGTTGAAAAGCGCCAACAATGAACTGACCGCTGCATTAGGTGCTAGAGAAAAAGGCAGTAGCAGAAA
 Luciferase

SgrAI

5' CCGTGTCTCCAAAACAACAACGGCGGCGGGAAGTTCACCGCGTCATCGTCGGAAGACCTGCCACGCCCGCTCGAAGATGTTGGGGTGTGTAACAATA 1800
+ + + + +
3' GGCACGAGGTTTTGTGTTGCCGCCGCCCTTCAAGTGGCCGAGTAGCAGCCCTTCTGGACGGTGC GGCGCAGCTTCTACAACCCACAACATTGTTAT

Luciferase

Clal

EcoRV

PacI

5' TCGATTCCAATTCAGCGGGGCCACCTGATATCCTTTGTATTTAATTAAGACTTCAAGCGGTCAACTATGAAGAAGTGTTCGTCTTCGTCCAGTAAGC 1900
+ + + + +
3' AGCTAAGGTTAAGTCGCCCGGTGGACTATAGGAAACATAAATTAATTTCTGAAGTTCGCCAGTTGATACTTCTTACAAGCAGAAGCAGGGTCATTTCG

Luciferase

EcoO109I
PpuMI

5' TATGTCTCCAGAATGTAGCCATCCATCCTTGTCATCAAGGCGTTGGTCGCTTCCGGATTGTTTACATAACCGACATAATCATAGGTCCTCTGACACAT 2000
+ + + + +
3' ATACAGAGGCTTACATCGGTAGGTAGGAACAGTTAGTTCGCAACCAGCGAAGGCCTAACAAATGTATTGGCCTGTATTAGTATCCAGGAGACTGTGTA

Luciferase

5' AATTGCCTCTCTGATTAACGCCAGCGTTTCCCGGTATCCAGATCCACAACCTTCGCTTCAAAAAATGGAACAACCTTACCGACCGCGCCCGGTTTAT 2100
+ + + + +
3' TTAAGCGGAGAGACTAATTGCGGGTCGCAAAGGGCCATAGGTCTAGGTGTTGGAAGCGAAGTTTTTTACCTTGTGAAATGGCTGGCGCGGGCCAAATA

Luciferase

5' CATCCCCCTCGGGTGAATCAGAATAGCTGATGTAGTCTCAGTGAGCCCATATCCTTGTCGTATCCCTGGAAGATGGAAGCGTTTTGCAACCGCTTCCCC 2200
+ + + + +
3' GTAGGGGAGCCACATTAGTCTTATCGACTACATCAGAGTCACTCGGGTATAGGAACAGCATAGGGACCTTCTACCTTCGAAAACGTTGGCGAAGGGG

Luciferase

AjuI

5' GACTTCTTTCGAAAGAGGTGCGCCCCAGAAGCAATTCGTGTAATTAGATAAATCGTATTTGTCAATCAGAGTGCTTTTGGCGAAGAATGAAAATAGG 2300
+ + + + +
3' CTGAAGAAAGCTTCTCCACGCGGGGTCTTCGTAAAGCACATTTAATCTATTTAGCATAAACAGTTAGTCTCACGAAAACCGCTTCTTACTTTTATCC

Luciferase

AjuI

5' GTTGGTACTAGCAACGCACTTTGAATTTGTAATCCTGAAGGGATCGTAAAAACAGCTCTTCTTCAAATCTATACATTAAGACGACTCGAAATCCACATA 2400
+ + + + +
3' CAACCATGATCGTTGCGTGAAACTTAAACATTAGGACTTCCCTAGCATTTTGTGCGAGAAGAGTTTAGATATGTAATCTGCTGAGCTTTAGGTGTAT

Luciferase

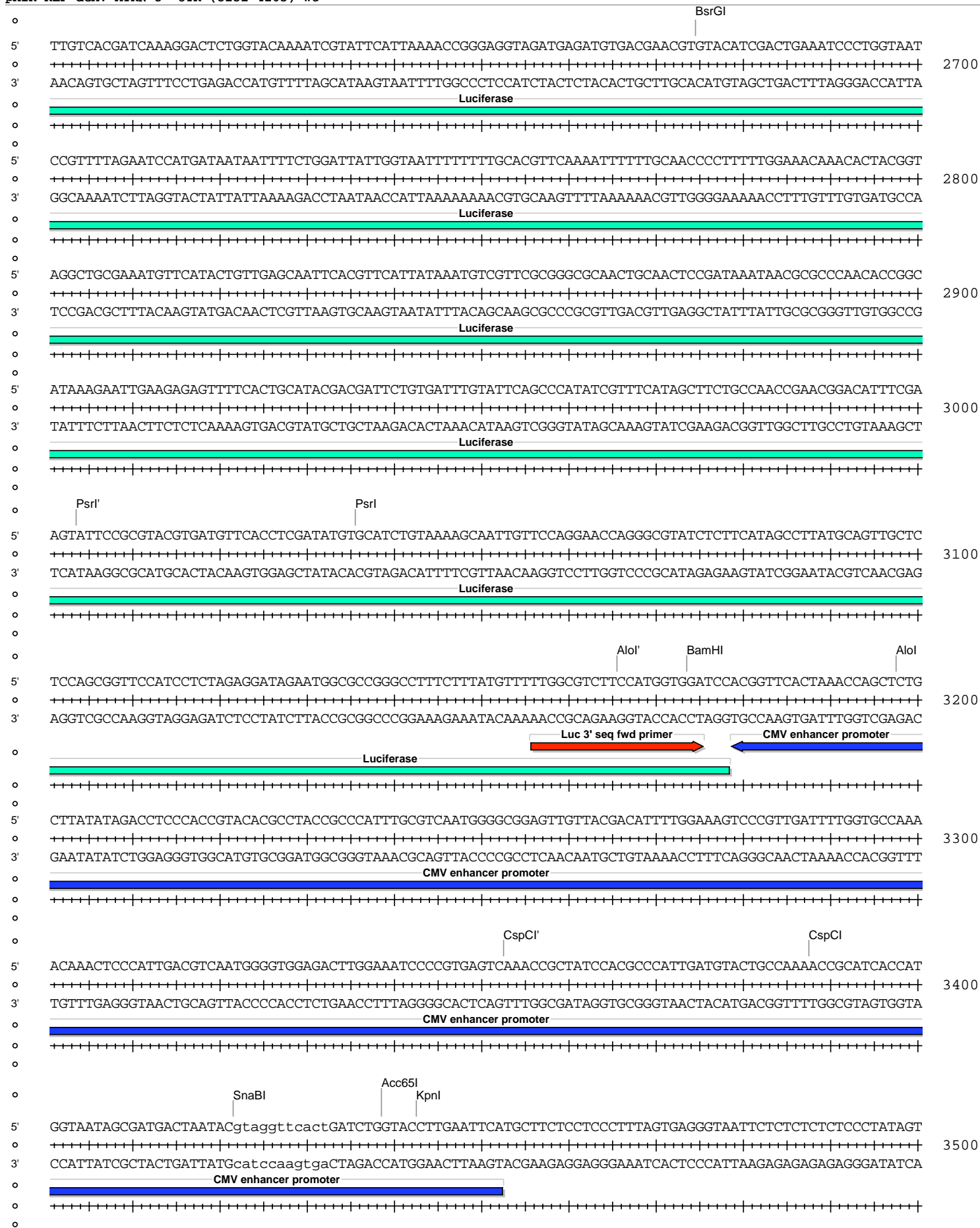
XcmI

5' TCAAATATCCGAGTGTAGTAAACATTCAAAACCGTGATGGAATGGGACAACACTTAAAATCGCAGTATCCGGAACGATTTGATTGCCAAAATAGGATC 2500
+ + + + +
3' AGTTTATAGGCTCACATCATTGTAAGGTTTTGGCACTACCTTACCCTGTTGTGAAATTTAGCGTCATAGGCCTTGCTAAACTAACGGTTTTTATCCTAG

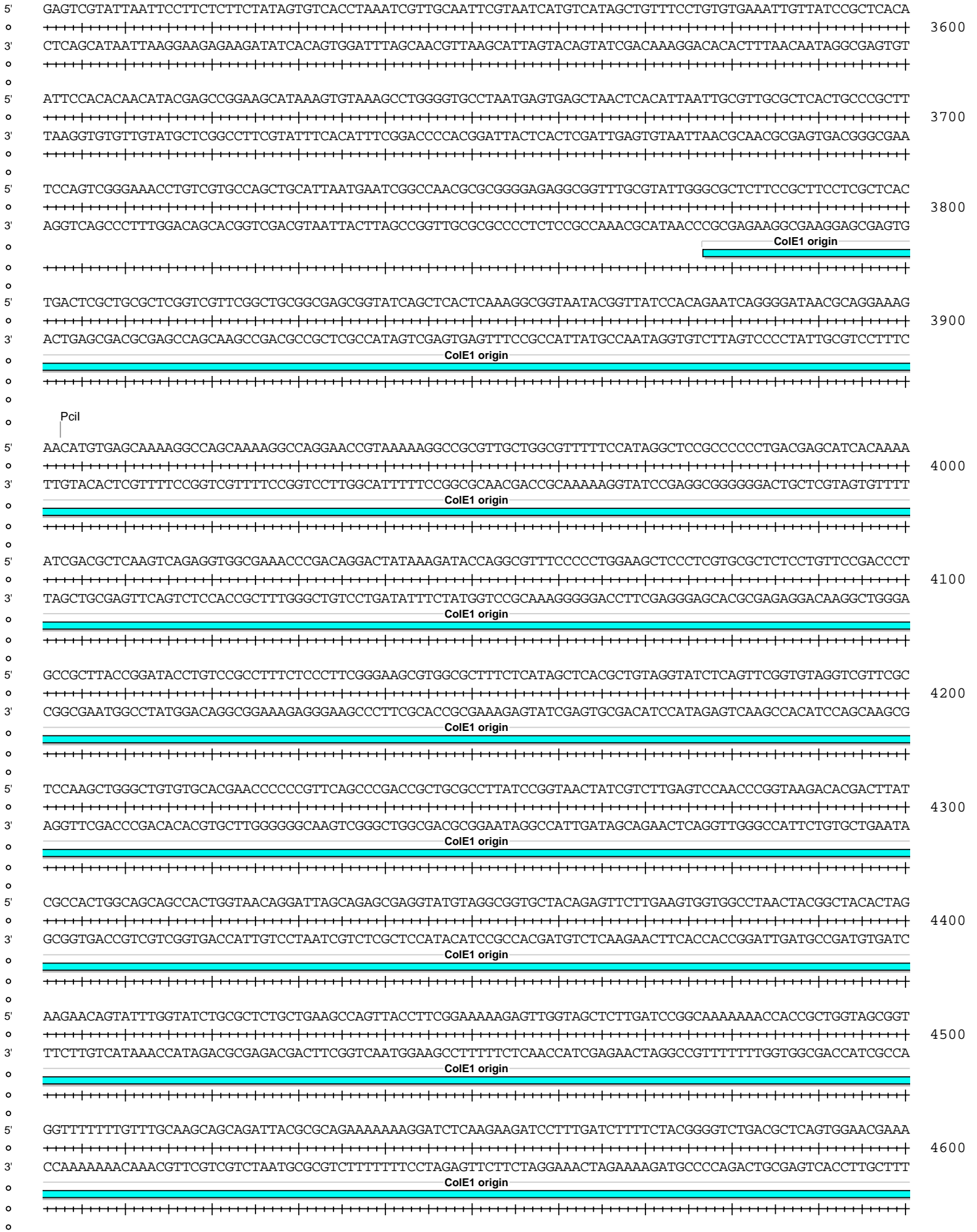
Luciferase

5' TCTGGCATGCGAGAATCTGACGAGGCAGTTCTATGCGGAAGGGCCACACCTTAGGTAACCCAGTAGATCCAGAGGAATTCATTATCAGTGCAATTGTT 2600
+ + + + +
3' AGACCGTACGCTCTTAGACTGCGTCCGTC AAGATACGCCTTCCCGGTGTGGGAATCCATTGGGTCATCTAGGTCCTTAAAGTAATAGTCACGTTAACAA

Luciferase



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



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

