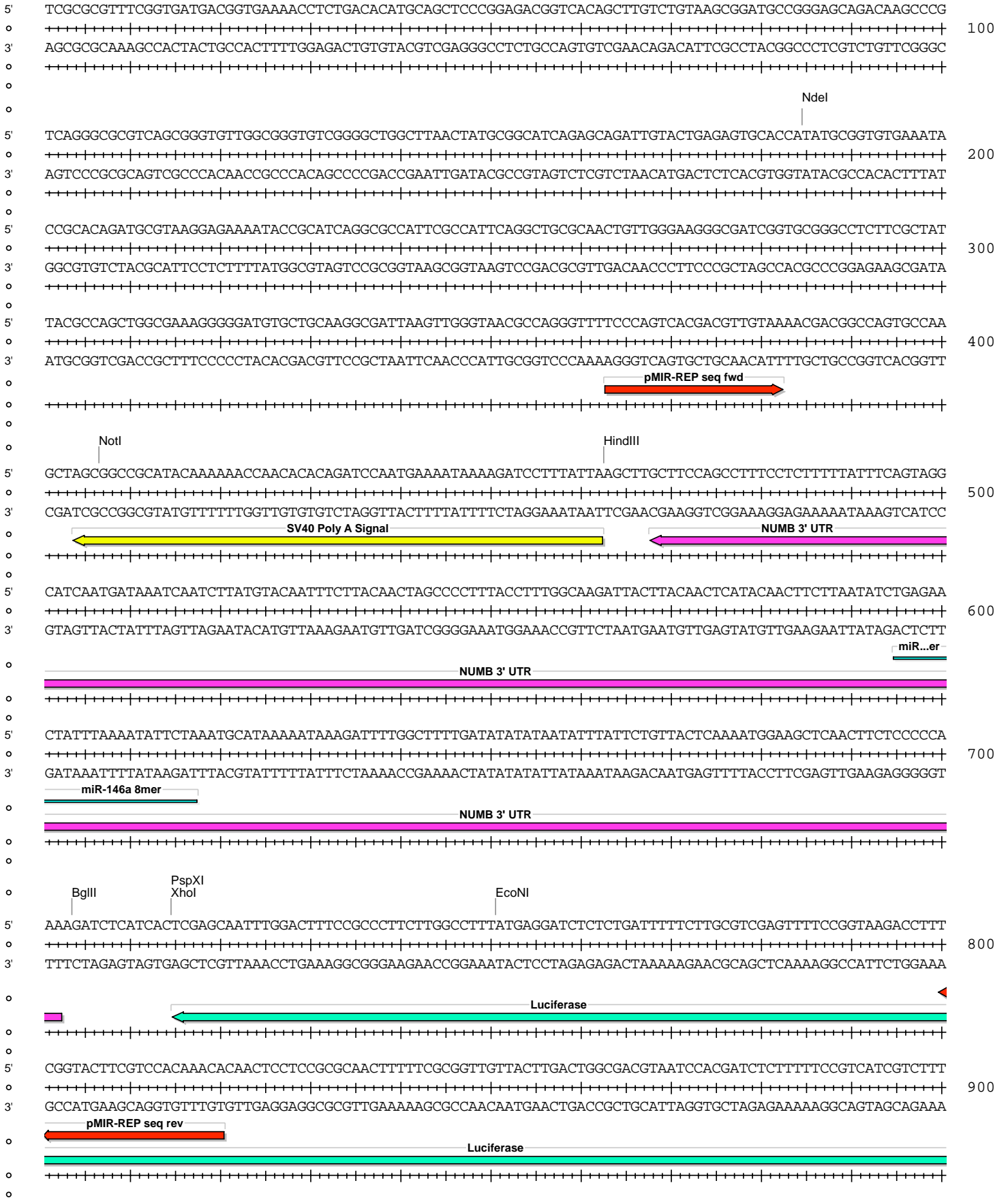


Absent Sites	0	AarI,AbstI,AfeI,AfII,AleI,Apal,Ascl,AsiSI,BaeI,BaeI',BarI,BarI',BbvCI,BclI,BlpI,BmgBI,Bpu10I,BsgI,BstXI,BstZ17I,EcoICRI,FseI,FspAI,MauBI,MluI,MreI,NaeI,NgoMIV,NruI,PasI,PfIMI,PmeI,PmlI,PshAI,PspOMI,SacI,SanDI,SgrDI,SpeI,SrfI,Swal
Acc65I	1	2639 (6309)
AccI	1	5774 (6309)
AgeI	1	5942 (6309)
AhdI	1	3996 (6309)
AjuI	1	1485 (6309)
AjuI'	1	1517 (6309)
Alol	1	2398 (6309)
Alol'	1	2366 (6309)
AlwNI	1	3519 (6309)
Arsl	1	1186 (6309)
Arsl'	1	1218 (6309)
AvrII	1	5993 (6309)
BamHI	1	2374 (6309)
BglII	1	704 (6309)
BsaBI	1	5158 (6309)
BsmI	1	5071 (6309)
BssHII	1	5426 (6309)
Bsu36I	1	1753 (6309)
BtgZI	1	2624 (6309)
Clal	1	1002 (6309)
CspCI	1	2588 (6309)
CspCI'	1	2553 (6309)
DraIII	1	5317 (6309)
EcoNI	1	751 (6309)
EcoO109I	1	1187 (6309)
EcoRV	1	1031 (6309)
HindIII	1	463 (6309)
HpaI	1	5057 (6309)
KpnI	1	2643 (6309)
MscI	1	5510 (6309)
NdeI	1	185 (6309)
NotI	1	407 (6309)
PacI	1	1047 (6309)
PciI	1	3103 (6309)
PpuMI	1	1187 (6309)
PspXI	1	715 (6309)
Psrl	1	2236 (6309)
Psrl'	1	2204 (6309)
PstI	1	5965 (6309)
RsrII	1	5766 (6309)
SacII	1	5673 (6309)
Sall	1	5773 (6309)
SbfI	1	5965 (6309)
Scal	1	4476 (6309)
SfiI	1	6047 (6309)
SgrAI	1	937 (6309)
SnaBI	1	2622 (6309)
Tth111I	1	5842 (6309)
XcmI	1	1635 (6309)
XhoI	1	715 (6309)
XmnI	1	4595 (6309)

pMIR-REP-dCMV-NUMB 3' UTR (523-757) wt



SgrAI

```
5' CCGTGCTCCAAAACAACAACGGCGGGGGAAGTTCACCGCGTCATCGTCGGAAGACCTGCCACGCCCGCTCGAAGATGTTGGGGTGTGTAACAATA 1000  
+-----+  
3' GGCACGAGGTTTTGTTGTTGCCGCCCTTCAAGTGCCGCGAGTAGCAGCCCTTCTGGACGGTGCAGGGCGCAGCTTCTACAACCCACAACATTGTTAT
```

Luciferase

Clal

EcoRV

Pacl

```
5' TCGATTCCAATTCAGCGGGGGCCACCTGATATCCTTTGTATTTAATTAAAGACTTCAAGCGGTCAACTATGAAGAAGTGTTCGTCTTCGTCCAGTAAGC 1100  
+-----+  
3' AGCTAAGGTTAAGTCGCCCGGTGGACTATAGGAAACATAAATTAATTTCTGAAGTTCGCCAGTTGATACTTCTTACAAGCAGAAGCAGGGTCATTTCG
```

Luciferase

ArsI
EcoO109I
PpuMI

```
5' TATGTCTCCAGAATGTAGCCATCCATCCTTGTCAATCAAGGCGTGGTTCGGATTGTTTACATAACCGGACATAATCATAGGTCTCTGACACAT 1200  
+-----+  
3' ATACAGAGGTCTTACATCGGTAGGTAGGAACAGTTAGTTCCGCAACCAGCGAAGGCCAACAAATGTATTGGCCTGTATTAGTATCCAGGAGACTGTGTA
```

Luciferase

ArsI'

```
5' AATTCGCTCTCTGATTAACGCCCAGCGTTTTCCCGGTATCCAGATCCACAACCTTCGCTTCAAAAAATGGAACAACTTTACCGACCGCGCCCGGTTTAT 1300  
+-----+  
3' TTAAGCGGAGAGACTAATTGCCGGTTCGCAAAGGCCATAGGTCTAGGTGTGGAAGCGAAGTTTTTACCTTGTGAAATGGCTGGCGCGGGCCAAATA
```

Luciferase

```
5' CATCCCCCTCGGGTGAATCAGAATAGCTGATGTAGTCTCAGTGAGCCATATCCTTGTTCGTATCCCTGGAAGATGGAAGCGTTTTGCAACCGCTTCCCC 1400  
+-----+  
3' GTAGGGGAGCCACATTAGTCTTATCGACTACATCAGAGTCACTCGGGTATAGGAACAGCATAGGGACCTTCTACCTTCGCAAAACGTTGGCGAAGGGG
```

Luciferase

Ajul

```
5' GACTTCTTTCGAAAGAGGTGCGCCCCAGAAGCAATTCGTGTAATTAGATAAATCGTATTGTCAATCAGAGTGCTTTTGCGGAAGAATGAAAATAGG 1500  
+-----+  
3' CTGAAGAAAGCTTCTCCACGCGGGGCTTTCGTTAAAGCACATTTAATCTATTTAGCATAAACAGTTAGTCTCACGAAAACCGCTTCTTACTTTTATCC
```

Luciferase

Ajul'

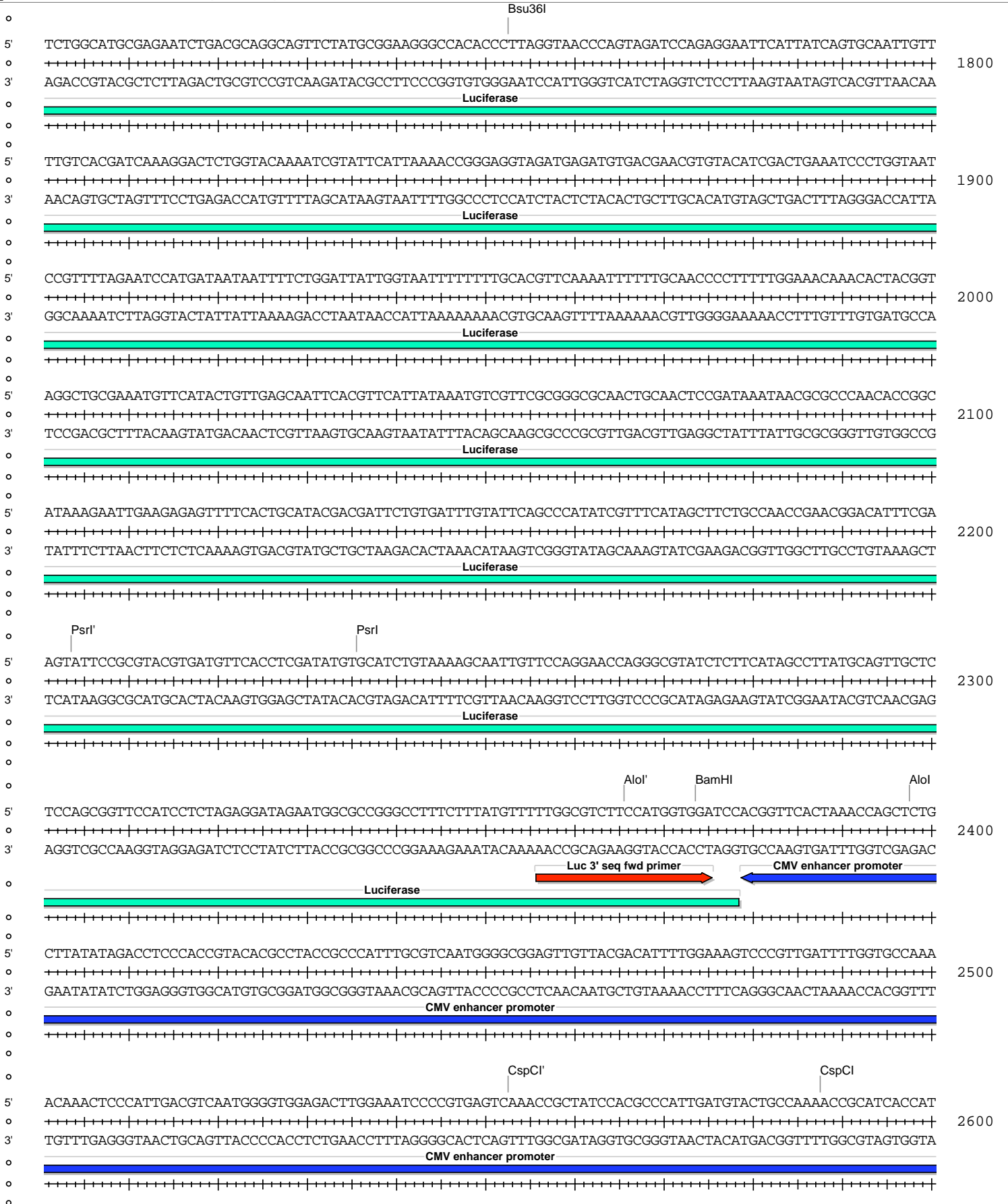
```
5' GTTGGTACTAGCAACGCACTTTGAATTTGTAATCCTGAAGGGATCGTAAAAACAGCTCTTCTTCAAATCTATACATTAAGACGACTCGAAATCCACATA 1600  
+-----+  
3' CAACCATGATCGTTGCGTGAAACTTAAACATTAGGACTTCCCTAGCATTTTGTGCGAGAAGAAGTTTAGATATGTAATTCTGCTGAGCTTTAGGTGTAT
```

Luciferase

XcmI

```
5' TCAAATATCCGAGGTAGTAAACATTCCAAAACCGTGATGGAATGGGACAACACTTAAAATCGCAGTATCCGGAACGATTTGATTGCCAAAAATAGGATC 1700  
+-----+  
3' AGTTTATAGGCTCACATCATTTGTAAGGTTTTGGCACTACCTTACCCTGTGTGAAATTTAGCGTCATAGGCCCTTGCTAAACTAACGGTTTTTATCCTAG
```

Luciferase



pMIR-REP-dCMV-NUMB 3' UTR (523-757) wt

5' AAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAAAAACCACCGCTGGTAGCGGT
 3' TTCTTGTACATAAACCATAGACGCGAGACGACTTCGGTCAATGGAAGCCTTTTCTCAACCATCGAGAAGTAGGCCGTTTTTTGGTGGCGACCATCGCCA
 ColE1 origin

5' GGTTTTTTTGTTTGAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTCTACGGGTCTGACGCTCAGTGAACGAAA
 3' CCAAAAAACAACGTTTCGTCGCTAATGCGCGTCTTTTTTTCCTAGAGTTCTTCTAGGAACTAGAAAAGATGCCCGACTGCGAGTCACTTGCCTTT
 ColE1 origin

5' ACTCACGTTAAGGGATTTGGTCATGAGATTATCAAAAAGGATCTTCACCTAGATCCTTTTAAATTAATAAAGTTTAAATCAATCTAAAAGTATATA
 3' TGAGTGCAATTCCCTAAAACAGTACTCTAATAGTTTTTCTAGAAAGTGGATCTAGGAAAATTAATTTTACTTCAAATTTAGTTAGATTTTCATATAT
 ColE1 origin

5' TGAGTAAACTTGGTCTGACAGTTACCAATGCTTAATCAGTGAGGCACCTATCTCAGCGATCTGTCTATTTTCGTTTCATCCATAGTTGCCTGACTCCCGGTC
 3' ACTCATTGTAACCAGACTGTCAATGGTTACGAATTAGTCACTCCGTGGATAGAGTCGCTAGACAGATAAAGCAAGTAGGTATCAACGGACTGAGGGGCAG
 AMPr

5' GTGTAGATAACTACGATACGGGAGGGCTTACCATCTGGCCCCAGTGTGCAATGATACCGCGAGACCCACGCTCACCGGCTCCAGATTTATCAGCAATAA
 3' CACATCTATTGATGCTATGCCCTCCCGAATGGTAGACCGGGTCAAGCAGTTACTATGGCGCTCTGGGTGCGAGTGGCCGAGGCTAAATAGTCGTTATT
 AMPr

5' ACCAGCCAGCCGAAGGGCCGAGCGCAGAAGTGGTCTGCAACTTTATCCGCTCCATCCAGTCTATTAATTGTTGCCGGGAAGCTAGAGTAAGTAGTTC
 3' TGGTCCGTCGGCCTTCCCGGCTCGCGTCTTACCAGGACGTTGAAATAGCGGAGGTAGGTCAGATAATTAACAACGGCCCTTCGATCTCATTCATCAAG
 AMPr

5' GCCAGTTAATAGTTTGCACACGTTGTTGCCATTGCTACAGGCATCGTGGTGTACGCTCGTCTGTTGGTATGGCTTCATTCAGCTCCGGTCCCAACGA
 3' CGGTCAATTATCAAACCGGTTGCAACAACGGTAACGATGTCCGTAGCACCACAGTGCAGCAGCAAAACCATAACCGAAGTAAGTCGAGGCCAAGGGTTGCT
 AMPr

5' TCAAGGCGAGTTACATGATCCCCATGTTGTGCAAAAAAGCGTTAGCTCCTTCGGTCTCCGATCGTTGTGCAAGTAAGTTGGCCGAGTGTATCAC
 3' AGTTCGCTCAATGTACTAGGGGTACAACACGTTTTTTTCGCCAATCGAGGAAGCCAGGAGGCTAGCAACAGTCTTCATTCACCCGGCTCACAATAGTG
 AMPr

5' TCATGGTTATGGCAGCACTGCATAATTCTTACTGTCTATGCCATCCGTAAGATGCTTTTCTGTGACTGGTGGTACTCAACCAAGTCAATCTGAGAATA
 3' AGTACCAATACCGTCGTGACGTATTAAGAGAATGACAGTACGGTAGGCATTTCTACGAAAAGACACTGACCACCTCATGAGTTGGTTAGTAAAGACTCTTAT
 AMPr

5' GTGTATGCGCGACCGAGTTGCTCTTGCCCGGCTCAATACGGGATAATACCGGCCACATAGCAGAACTTTAAAAGTGCTCATCATTGGAAAACGTTCT
 3' CACATACGCCGCTGGCTCAACGAGAACGGGCCGAGTTATGCCCTATTATGGCGCGGTGTATCGTCTTGAAATTTTACAGAGTAGTAACTTTTGCAAGA
 AMPr

AhdI

Scal

XmnI

pMIR-REP-dCMV-NUMB 3' UTR (523-757) wt

