

Absent Sites	0	AarI, AbsI, AjuI, AjuI', Aloi, Aloi', AscI, AsiSI, AvrII, BaeI, BaeI', BamHI, BarI, BarI', BclI, BlnI, BmgBI, BsaBI, BsiWI, BspMI, BstBI, BstEII, BstXI, BstZ17I, FspAI, HpaI, MauBI, MreI, PmlI, PshAI, PstI, PspXI, PstI, PstI', RsrII, SbfI, SexAI, SfiI, SgrAI, SmaI, SphI, SrfI, StuI, SwaI, TstI, TstI', Tth111I, XcmI, XhoI, XmaI
Acc65I	1	6430
AfeI	1	3195
AgeI	1	3199
AhdI	1	7895
ApaI	1	2572
BbeI	1	984
BbvCI	1	1767
BmtI	1	3194
BsaXI	1	2191
BsaXI'	1	2161
BsrGI	1	3921
BssHII	1	1054
Bsu36I	1	6426
DrdI	1	7110
EcoNI	1	1513
EcoO109I	1	2277
EcoRI	1	4390
FseI	1	1491
FspI	1	8117
KasI	1	980
KpnI	1	6434
MscI	1	5241
NarI	1	981
NheI	1	3190
NotI	1	3932
NsiI	1	2598
PacI	1	5606
PciI	1	5582
PpuMI	1	2277
PspOMI	1	2568
PstI	1	2380
SacII	1	6207
SanDI	1	2277
SapI	1	1443
SfoI	1	982
SgrDI	1	2
SpeI	1	253
XbaI	1	2576

p201 (pPRIME-CMV-GFP-FF3)

SgrDI

5' gtcgacggatcgggagatctcccgatcccctatggtgcactctcagtacaatctgctctgatgccgcatagttaagccagtatctgctccctgcttgtgt
 100
 3' cagctgcctagccctctagagggctaggggataccacgtgagagtcaggttagacgagactacggcgtatcaattcgggtcatagacgagggacgaacaca
 +

5' gttggaggtcgctgagtagtgcgcgagcaaaathtaagctacaacaaggcaaggcttgaccgacaattgcatgaagaatctgcttaggggttaggcgttt
 200
 3' caacctccagcgactcatcacgcgctcgttttaattcgatggtgttccgttccgaactggctgtaacgtacttcttagacgaatccaatccgcaaaa
 +

Spel

5' gcgctgcttcgogatgtacgggcccagatatacgcgcttgacattgattattgactagttattaatagtaatacaattacgggggtcattagttcatagcccat
 300
 3' cgcgacgaagcgctacatgcccggctctatatgcgcaactgtaactaataactgatcaataattatcattagttaatgcccagtaatacaagtatcgggta
 +

5' atatggagttccgcttacataaacttacggtaaatggcccgcctggctgaccgcccacgacccccgccattgacgtcaataatgacgtatgttcccat
 400
 3' tatacctcaaggcgcaatgtattgaatgccatttacggggcggaccgactggcgggtgctggggcgggtaactgcagttattactgcatacaagggt
 +

5' agtaacgccaatagggactttccattgacgtcaatgggtggagatattacggtaaaactgcccaacttggcagtacatcaagtgtatcatatgccaaagtacg
 500
 3' tcatgcggttatccctgaaaggtaactgcagttaccacctcataaatgccattgacgggtgaaccgtcatgtagttcacatagatacggttcatgc
 +

5' cccctattgacgtcaatgacggtaaatggcccgcctggcattatgccagtacatgacctatgggactttcctacttggcagtacatctacgtattag
 600
 3' gggggataactgcagttactgccatttaccgggcccggaccgtaatacgggtcatgtactggaataccctgaaaggatgaaccgtcatgtagatgcataatc
 +

5' tcatcgctattaccatgggtgatgcgggttttggcagtacatcaatgggcgtggatagcgggttgactcacggggatttccaagtctccacccattgacgt
 700
 3' agtagcgataatggtaccactacgcaaaaaccgtcatgtagttaccgcacctatcgccaaactgagtgcccctaaagggttcagaggtgggtaactgca
 +

5' caatgggagttgttttggcaccaaaatcaacgggactttccaaaatgtcgtacaactccgccccattgacgcaaatggcggttaggcgtgtacgggtg
 800
 3' gttaccctcaaacaaaaccgtggttttagttgcctgaaagggttttacagcatggttgaggcgggtaactgcgtttaccggccatccgcacatgccacc
 +

5' gaggtctatagaccagatctgagcctgggagctctctggctaactaggaaccactgcttaagcctcaataaagcttgcttgagtgctcaagtagtg
 900
 3' ctccagatatctggctagactcggaccctcgagagaccgattgatccctgggtgacgaattcggagttatttgaacggaactcacgaagttcatcac
 +

LTR

KasI
 NarI
 SfoI
 BbeI

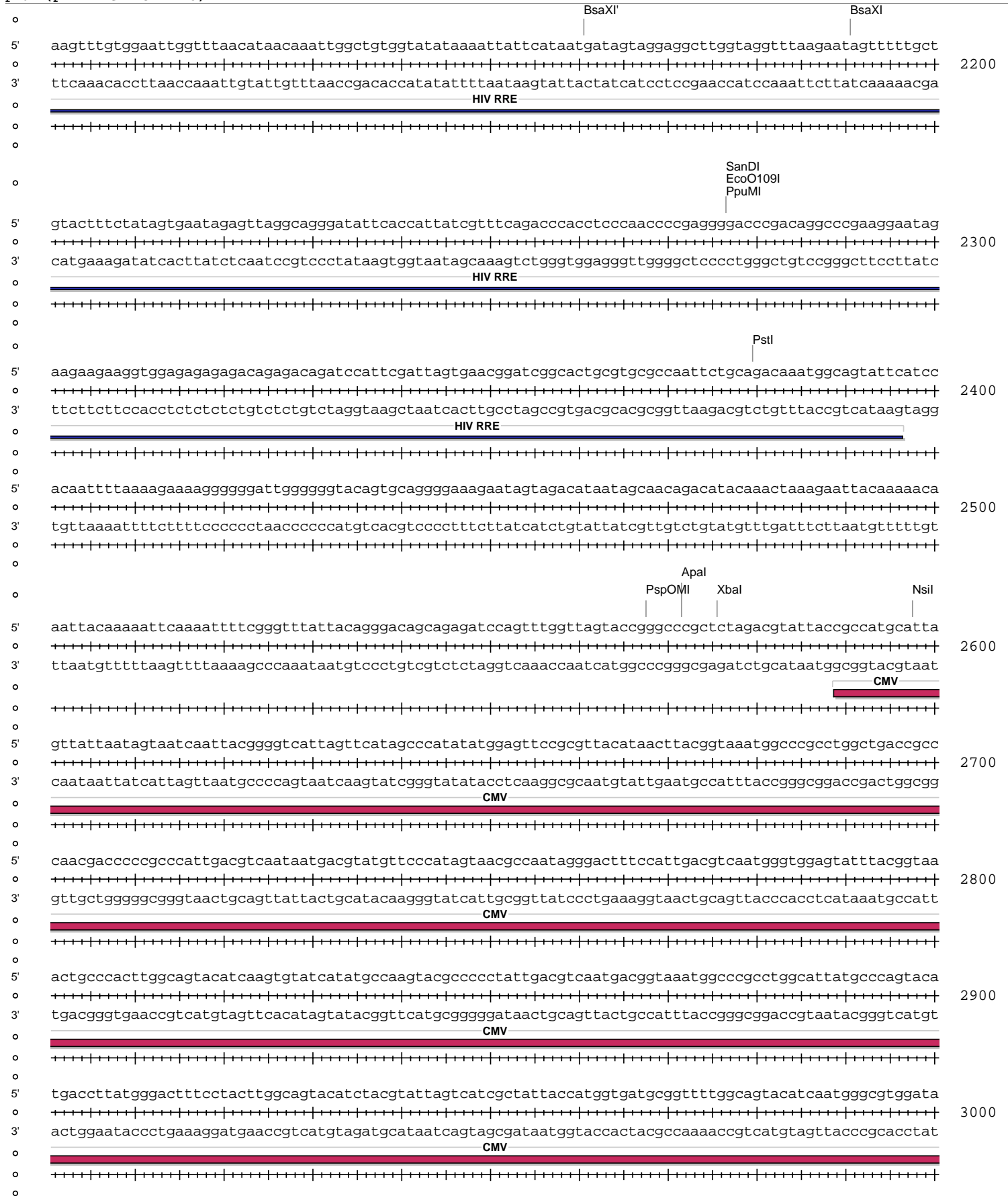
5' tgtgccgctctgttgtgtgactctggtaaactagagatccctcagacccttttagtcagtggtgaaaaatctctagcagtgggcggccgaacagggacttgaa
 1000
 3' acacgggcagacaacacactgagaccattgatctctagggagctctgggaaaaatcagtcacaccttttagagatcgtcaccgcgggcttgcctcctgaactt
 +

LTR

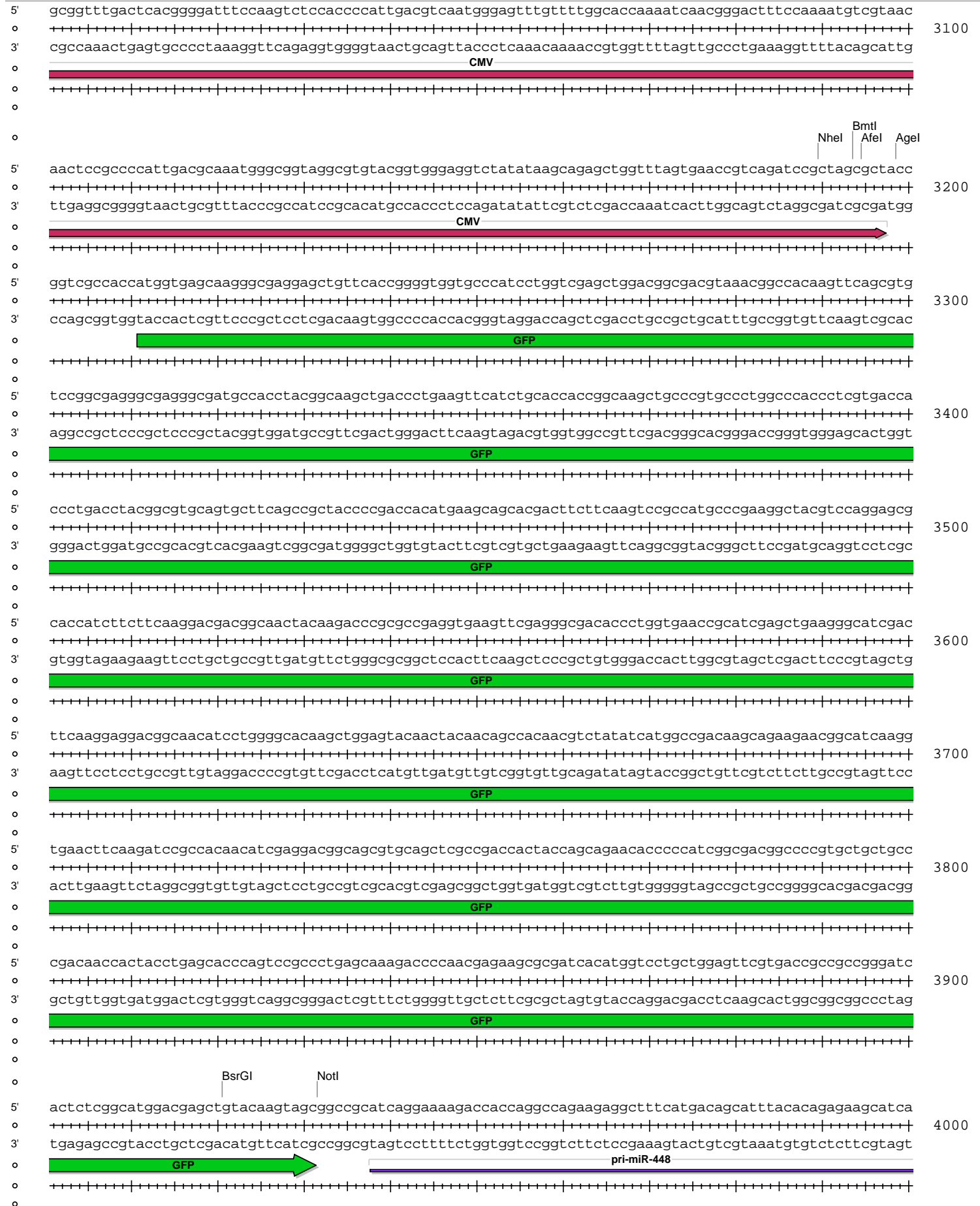
BssHII

5' agcgaagggaaccagaggagctctctcgacgcaggactcggcttgcctgaagcgcgcacggcaagaggcgaggggcggcactggtgagtagcgcacaaa
 1100
 3' tcgctttcccttggctcctcagagagactgcgctcctgagccgaacgacttcgcgcgctgcccgttctccgctccccgcccgtgaccactcatgcggtttt
 +

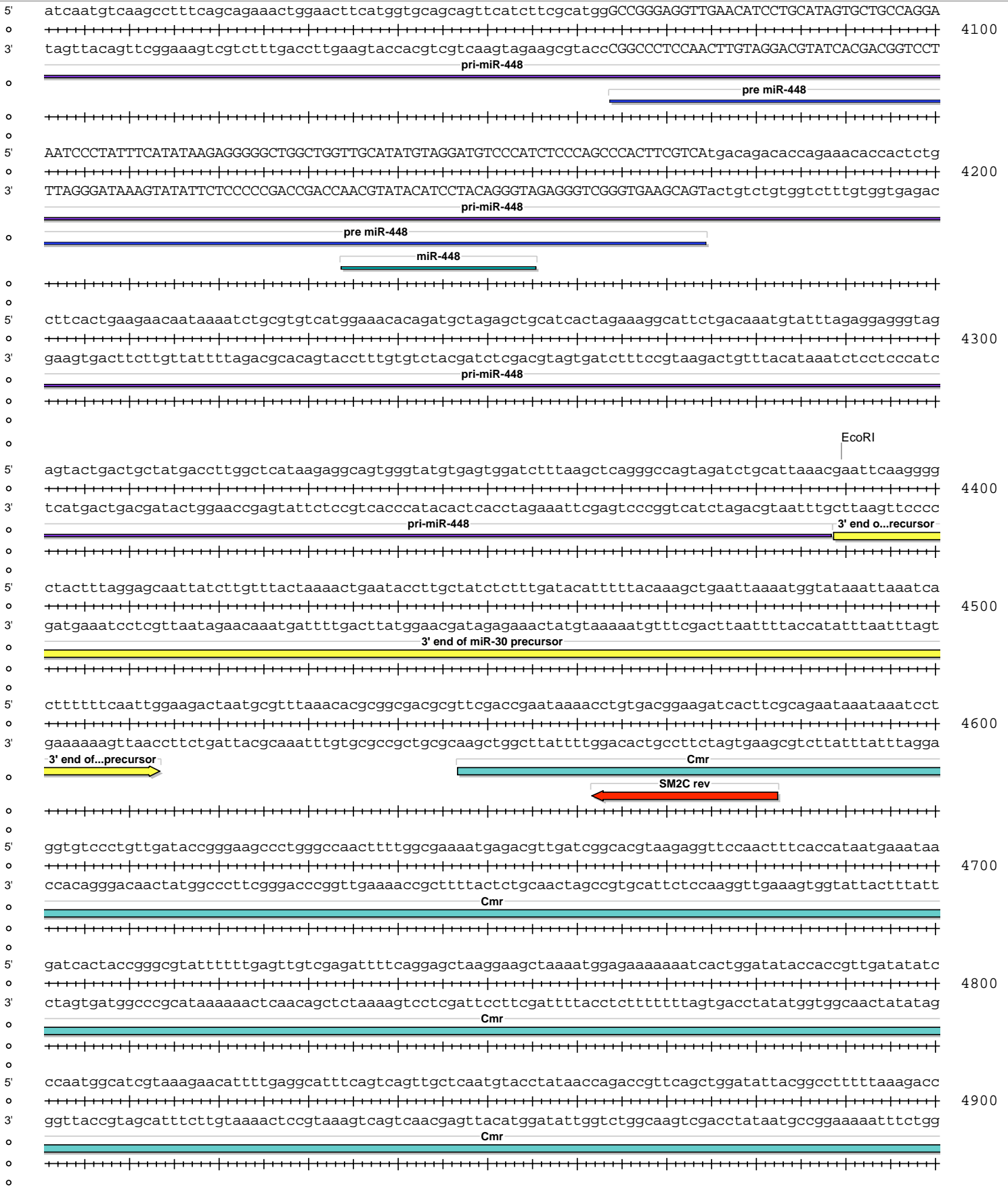
LTR



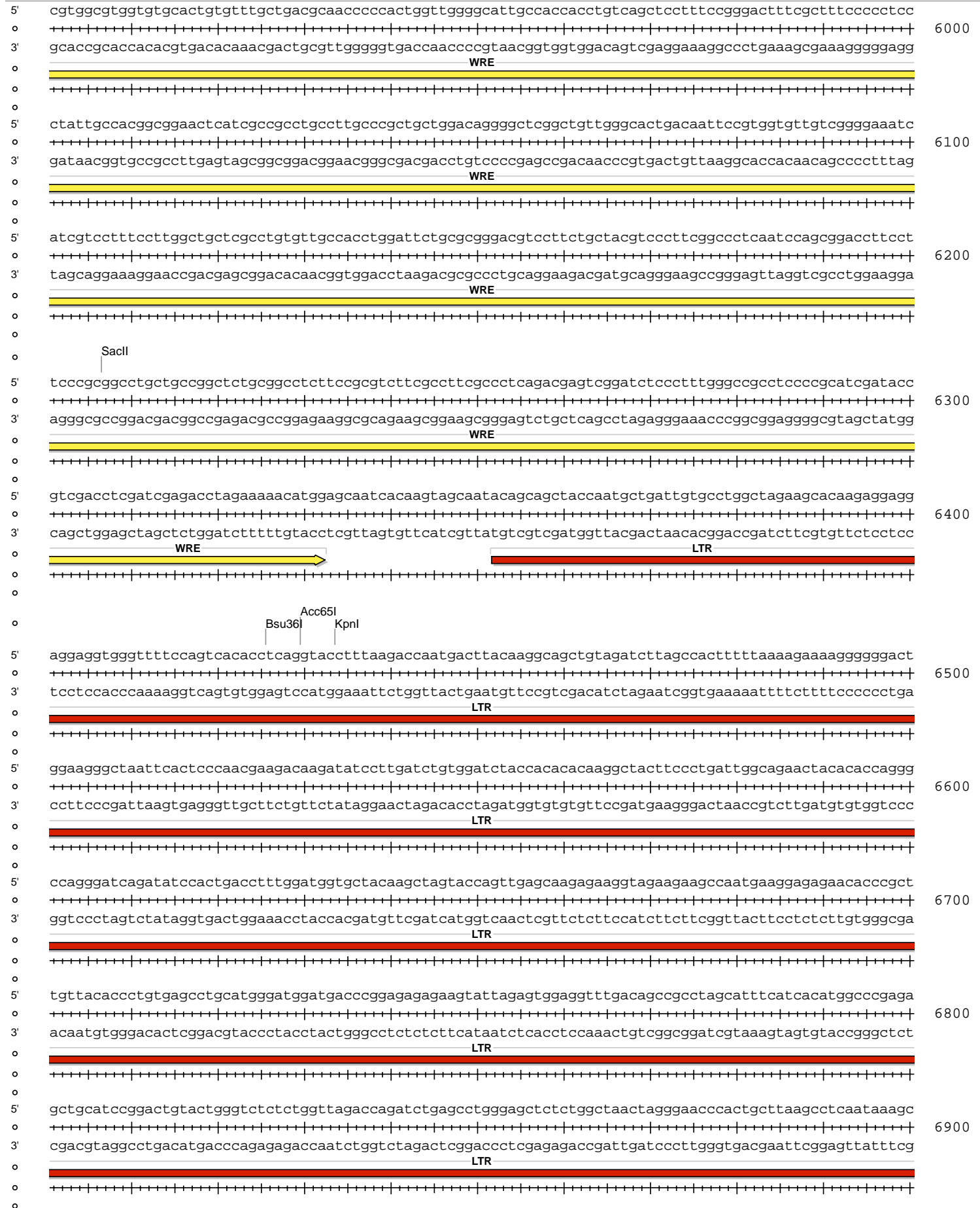
p201 (pPRIME-CMV-GFP-FF3)



p201 (pPRIME-CMV-GFP-FF3)



p201 (pPRIME-CMV-GFP-FF3)



p201 (pPRIME-CMV-GFP-FF3)

```

5'   ttgccttgagtgcctcaagtagtggtgcccgtctggtggtgactctggaactagagatccctcagacccttttagtcagtgaggaaaatctctagca
  o   ++++++
3'   aacggaactcacgaagttcatcacacacgggcagacaacacactgagaccattgatctctagggagctctgggaaaatcagtcacaccttttagagatcgt
  o   ++++++
                    LTR
  o   +-----+
  o   ++++++
5'   gcatgtgagcaaaaggccagcaaaaggccaggaaccgtaaaaaggccgcttgcctggcgttttccataggctccgccccctgacgagcatcacaaaaa
  o   ++++++
3'   cgtacactcgtttccggctgctttccggctcctggcattttccggcgcaacgaccgcaaaaaggtatccgaggcggggggactgctcgtagtggtttt
  o   ++++++
                    LTR
  o   +-----+
  o   ++++++
                    Drdl
  o   +-----+
5'   tgcagcctcaagtcagaggtggcgaaaccgcacaggactataaagataaccaggcgtttcccccctggaagctccctcgtgacctctcctgttccgacctg
  o   ++++++
3'   agctgcgagttcagctccaccgctttgggctgtcctgatatttctataggtccgcaaaaggggaccctcgaggggagcacgcgagaggaagaaggctgggac
  o   ++++++
5'   ccgcttaccggatactcgtccgcctttctcccttcgggaagcgctggcgctttctcatagctcacgctgtaggtatctcagttcgggtgtaggtcgttcgc
  o   ++++++
3'   ggcgaatggcctatggacagcgcaaaggaggaagccctcgcaccgcgaagagtatcgagtgcgacatccatagagtcaagccacatccagcaagcga
  o   ++++++
5'   ccaagctgggctgtgtgcacgaacccccggttcagcccaccgctgcgcttatccggaactatcgtcttgagtccaaccggtaagacacgacttatc
  o   ++++++
3'   ggttcgaccgcacacagtgcttgggggcaagtccgggctggcgcgcaatagccattgatagcagaactcaggttgggcatctcgtgctgaatag
  o   ++++++
5'   gccactggcagcagccactggaacaggattagcagagcaggtatgttaggggctacacagagttcttgaagtggtggcctaactacggctacactaga
  o   ++++++
3'   cggtgaccgtcgtcggtgaccattgtcctaactcgtctcgtccatacatccgccacgatgtctcaagaacttcaccaccggattgatgcccagatgtgatc
  o   ++++++
5'   agaacagtatttggatctgcgctctgctgaagccagttaccctcggaaaagagttggtagctcttgatccggcaaaacaccaccgctggtagcggtg
  o   ++++++
3'   tcttgcataaacatagacgcgagacgacttcggtcaatggaagccttttctcaaccatcgagaactaggcgttggttgggacccatcgccac
  o   ++++++
5'   gttttttgttgcaagcagcagattacgcgcagaaaaaaggatctcaagaagatcctttgatcctttctacggggctgacgctcagtggaacgaaaa
  o   ++++++
3'   caaaaaaacaacggtcgtcgtcctaatgagcgtctttttcttagagttcttctaggaaactagaaaagatgccccagactgcgagtcaccttgcttt
  o   ++++++
5'   ctcacgttaaggattttggatcatgagattatcaaaaaggatcctcacctagatccttttaaataaaaatgaagtttttaaatcaatctaaagtatat
  o   ++++++
3'   gaggcaattccctaaccagctactcctaagatgttttcttagaagtggtctaggaatataatttttacttcaaaatttagttagattccatata
  o   ++++++
                    Ahdl
  o   +-----+
5'   gagtaaaccttggctgacagttaccaatgcttaatcagtgaggcacctatctcagcgatctgtctatttggttcatccatagttgcctgactccccgctg
  o   ++++++
3'   ctcatattgaaccagactgtcaatggttacgaattagtcactccgtggatagagtcgctagacagataaagcaagtaggtatcaaccggactgaggggagc
  o   ++++++
5'   tgtagataactacgatacggggagggttaccatctggcccccagtcgtgcaatgataccgagagaccacgctcaccggctccagatttatcagcaataaa
  o   ++++++
3'   acatctattgatgctatgccctcccgaatggtagaccgggctcagcagcttactatggcgctctgggtgagtgaggccaggtctaataatagtcggtatt
  o   ++++++
5'   ccagccagccggaaggccgagcgcagaagtggcctcgtgcaactttatccgctccatccagctctattaattggtgcccgggaagctagagtaagtagtctg
  o   ++++++
3'   ggtcggtcggccttcccggctcgcgctctcaccaggacgtgaaaataggcggaggtagggtcagataattaacaacggcccttcgatctcattcatcaagc
  o   ++++++

```

o
FspI
|
5' ccagttaatagtttgcgcaacggttgtgcccattgctacagggcatcgtgggtgtcacgctcgtcgtttggtaggcttcattcagctccgggtcccaacgat 8200
o ++++++
3' ggtcaattatcaaacgcttgcaacaacggtaacgatgtccgtagcaccacagtgcgagcagcaaaccataccgaagtaagtcgaggccaagggttgcta
o ++++++
o
5' caaggcgagttacatgatccccatggtgtgcaaaaaagcggtagctccttcggctcctccgatcgttgtcagaagtaagttggccgcagtggtatcact 8300
o ++++++
3' gttccgctcaatgtactaggggtacaacacgtttttcgccaatcgaggaagccaggaggctagcaacagcttctcattcaaccggcgtcacaatagtga
o ++++++
o
5' catggttatggcagcactgcataattctcttactgtcatgccatccgtaagatgcttttctgtgactggtagtactcaaccaagtcattctgagaatag 8400
o ++++++
3' gtaccaataccgctcgtgacgtattaagagaatgacagtagcggtaggcattctacgaaaagacactgaccactcatgagttgggtcagtaagactcttatac
o ++++++
o
5' tgtatgcccgcaccgagttgctcttgcccggcgtcaatacgggataataaccgcccacatagcagaactttaaagtgtcatcattggaaaacggtctct 8500
o ++++++
3' acatacgcctggtcaacgagaacgggcccagttatgcctattatggcgggtgtatcgtcttgaaatttcacgagtagtaaccttttgcaagaa
o ++++++
o
5' cggggcgaaaactctcaaggatcttaccgctgttgagatccagttcgatgtaaccactcgtgcaccaactgatcttcagcatctttactttcaccag 8600
o ++++++
3' gcccgcctttgagagttcctagaatggcgacaactctagggtcaagctacattgggtgagcacgtgggtgactagaagtcgtagaaaatgaaagtggtc
o ++++++
o
5' cgtttctgggtgagcaaaaacaggaaggcaaaatgccgcaaaaaaggaataagggcgacacggaaatgtgaatactcatactcttccttttcaatat 8700
o ++++++
3' gcaaagaccactcgtttttgtccttccggttttacggcgtttttccctattcccgtgtgcctttacaactatgagtatgagaaggaaaaagttata
o ++++++
o
5' tattgaagcatttatcagggttattgtctcatgagcggatacataattgaaatgatttagaaaaataaacaataggggttccgcgcacatttccccgaa 8800
o ++++++
3' ataacttcgtaaatagtcccaataacagagtactcgcctatgtataaacttacataaatctttttattgtttatccccaggcgcgtgtaaaggggctt
o ++++++
o
5' aagtgccacctgac 8814
o ++++++
3' ttcacggtggactg
o ++++++
o