

Absent Sites	0	AarI,Abst,AjuI,AjuI',AlfI,AlfI',Alol,Alol',AscI,AsiSI,AvrII,BaeI,BaeI',BamHI,BarI,BarI',BmgBI,BsaBI,BsiWI,BspMI,BstBI,BstEII,BstXI,BstZ17I,FspAI,HpaI,MauBI,MreI,PmlI,PsiI,PspXI,PsrI,PsrI',RsrII,SbfI,SexAI,SfiI,SgrAI,SphI,SrfI,StuI,Swal,Tth111I,XcmI,XhoI
Acc65I	1	6781 (9165)
AfeI	1	3195 (9165)
AgeI	1	3199 (9165)
AhdI	1	8246 (9165)
BbeI	1	984 (9165)
BbvCI	1	1767 (9165)
BclI	1	3972 (9165)
BlpI	1	4262 (9165)
BmtI	1	3194 (9165)
BssHII	1	1054 (9165)
DrdI	1	7461 (9165)
EcoNI	1	1513 (9165)
EcoRI	1	4741 (9165)
FseI	1	1491 (9165)
FspI	1	8468 (9165)
KasI	1	980 (9165)
KpnI	1	6785 (9165)
NarI	1	981 (9165)
NheI	1	3190 (9165)
NotI	1	3931 (9165)
NsiI	1	2598 (9165)
PacI	1	5957 (9165)
PciI	1	5933 (9165)
PshAI	1	4564 (9165)
SapI	1	1443 (9165)
SfoI	1	982 (9165)
SgrDI	1	2 (9165)
SmaI	1	4207 (9165)
SpeI	1	253 (9165)
TstI	1	4022 (9165)
TstI'	1	3990 (9165)
XbaI	1	2576 (9165)
XmaI	1	4205 (9165)

p201 (pPRIME-CMV-GFP-FF3)

SgrDI

5' gtcgacggatcgggagatctcccgatcccctatggtgcactctcagtacaatctgctctgatgccgcatagttaagccagtatctgctccctgcttgtgt
 100
 3' cagctgcctagccctctagagggctaggggataccacgtgagagtcaggttagacgagactacggcgtatcaattcgggtcatagacgagggacgaacaca
 +

5' gttggaggtcgctgagtagtgcgcgagcaaaathtaagctacaacaaggcaaggcttgaccgacaattgcatgaagaatctgcttaggggttaggcgttt
 200
 3' caacctccagcgactcatcacgcgctcgttttaattcgatggtgttccgttccgaactggctgtaacgtacttcttagacgaatccaatccgcaaaa
 +

Spel

5' gcgctgcttcgogatgtacgggcccagatatacgcgcttgacattgattattgactagttattaatagtaatacaattacgggggtcattagttcatagcccat
 300
 3' cgcgacgaagcgctacatgcccggctctatatgcgcaactgtaactaataactgatcaataattatcattagttaatgcccagtaatacaagtatcgggta
 +

5' atatggagttccgcttacataaacttacggtaaatggcccgcctggctgaccgcccaacgacccccgccattgacgtcaataatgacgtatgttcccat
 400
 3' tatacctcaaggcgcaatgtattgaatgccatttacggggcggaccgactggcgggtgctggggcgggtaactgcagttattactgcatacaagggt
 +

5' agtaacgccaatagggactttccattgacgtcaatgggtggagatattacggtaaacgcccaactggcagtcacatcaagtgtatcatatgccaaagtacg
 500
 3' tcatgcggttatccctgaaaggtaactgcagttaccacctcataaatgccattgacgggtgaaccgtcatgtagttcacatagatagcgttcatgc
 +

5' cccctattgacgtcaatgacggtaaatggcccgcctggcattatgccagtcacatgacctatgggactttcctacttggcagtcacatctacgtattag
 600
 3' gggggataactgcagttactgccatttaccgggcccggaccgtaatacgggtcatgtactggaataccctgaaaggatgaaccgtcatgtagatgcataatc
 +

5' tcatcgctattaccatgggtgatgcgggttttggcagtcacatcaatgggcgtggatagcgggttgactcacggggatttccaagtctccacccattgacgt
 700
 3' agtagcgataatggtaccactacgcaaaaaccgtcatgtagttaccgcacctatcgccaaactgagtgcccctaaagggttcagaggtgggtaactgca
 +

5' caatgggagttgttttggcaccaaaatcaacgggactttccaaaatgtcgtacaactccgccccattgacgcaaatggcggtaggcgtgtacgggtg
 800
 3' gttaccctcaaacaaaaccgtggttttagttgcctgaaagggttttacagcatggttgaggcgggtaactgcgtttaccggccatccgcacatgccacc
 +

5' gaggtctatagaccagatctgagcctgggagctctctggctaactaggaaccactgcttaagcctcaataaagcttgcttgagtgctcaagtagtg
 900
 3' ctccagatatctggctagactcggaccctcgagagaccgattgatccctgggtgacgaattcggagttatttgaacggaactcacgaagttcatcac
 +

LTR

KasI
 NarI
 SfoI
 BbeI

5' tgtgccgctctgttgtgtgactctggttaactagagatccctcagacccttttagtcagtggtgaaaaatctctagcagtgggcggccgaacagggacttgaa
 1000
 3' acacgggcagacaacacactgagaccattgatctctagggagctctgggaaaaatcagtcacaccttttagagatcgtcaccgcgggcttgctccctgaactt
 +

LTR

BssHII

5' agcgaagggaaccagaggagctctctcgacgcaggactcggcttgcctgaagcgcgcacggcaagaggcgaggggcggcactggtagtagcgcacaaa
 1100
 3' tcgctttcccttggctcctcagagagactgcgctcctgagccgaacgacttcgcgcgctgcccgttctccgctccccgcgctgaccactcatgcggtttt
 +

LTR

p201 (pPRIME-CMV-GFP-FF3)

5' attttgactagcggaggctagaaggagagagatgggtgcgagagcgtcagtattaagcgggggagaattagatcgcgatgggaaaaattcgggtaaggc
 o ++++++
 3' taaaactgatcgctccgatcttctctctctaccacgctctcgcagtcataattcgccccctcttaattctagcgtacccttttttaagccaattccg
 o
 o

LTR

1200

5' caggggaaagaaaaatataataaacatatagtatgggcaagcaggagctagaacgattcgcagttaatcctggcctgttagaaacatcagaaggct
 o ++++++
 3' gtcccccttcttttttatattttgtatatacataccggttcgctcctcgatcttgtaagcgtcaattaggaccggacaatctttagtagtcttccga
 o
 o

LTR

1300

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 o ++++++
 3' catctgtttatgacctgtcgatgttggtaggaagtctgtcctagtctcttgaatctagtaatatattatgtcatcgttgggagataacacacgtagt
 o
 o

LTR

1400

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 o ++++++
 3' ttctatctctatcttctgtggttctctcgaaatctgttctatctccttctcgtttcttctcattctggtggcgtgctcgttcgccggccggccgacta
 o
 o

LTR

1500

SapI

FseI

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 o ++++++
 3' gaagtctggacctcctcctctataactcctgtaacctctcacttaatatattatattcatcatttttaacttggtaatcctcatcgtgggtggttc
 o
 o

EcoNI

LTR

HIV RRE

1600

5' gcaaagagaagagtggcagagagaaaaagagcagtggaataggagctttgttccttgggttcttgggagcagcaggaagcactatgggagcagcgt
 o ++++++
 3' cgtttctctctcaccacgtctctcttttctcgtcacccttatcctcgaacaaggaaccaagaaccctcgtcgtcctcgtgataaccgcgctcgca
 o
 o

HIV RRE

1700

5' caatgacgctgacggtacaggccagacaattatgtctggtatagtcagcagcagaacaatttgctgagggctattgaggcgcaacagcatctgttgca
 o ++++++
 3' gttactgagactgccatgtccggtctgtaataacagaccatatacagtcgctcgtcttggtaaacgactcccgataactccgcgtgtcgttagacaacgt
 o
 o

HIV RRE

BbvCI

1800

5' actcacagtctggggcatcaagcagctccaggcaagaatcctggctgtgaaagatacctaaaggatcaacagctcctggggatttggggtgctctgga
 o ++++++
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 o
 o

HIV RRE

1900

5' aaactcatttgcaccactgctgtgccttggaaatgctagttggagtaataatctctggaacagatttggaaatcacacgacctggatggagtgggacagag
 o ++++++
 3' tttgagtaaacggtgacgacacggaaccttacgatcaacctcattatttagagaccttctctaaaccttagtgtgctggacctacctcaccctgtctc
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 o

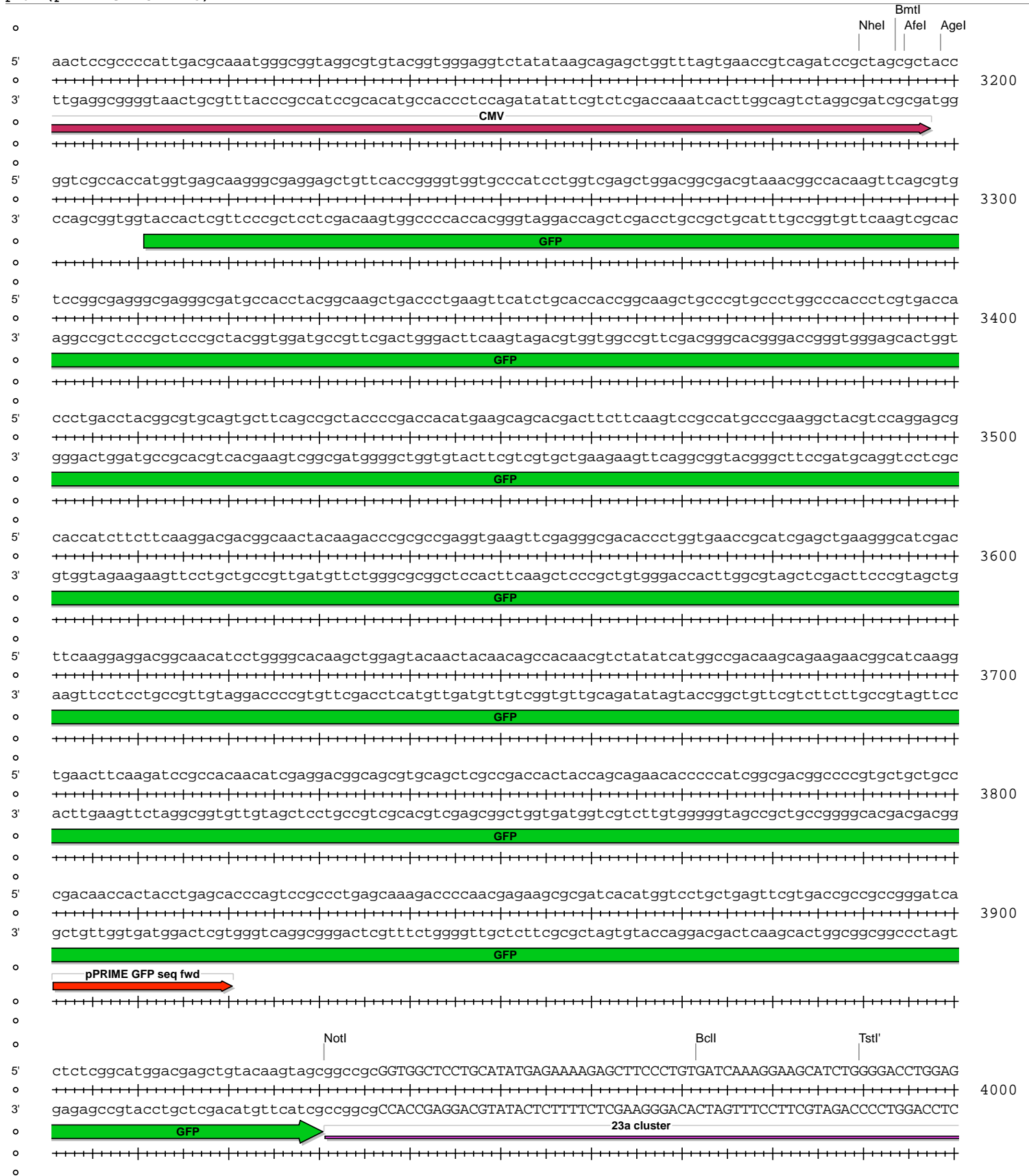
HIV RRE

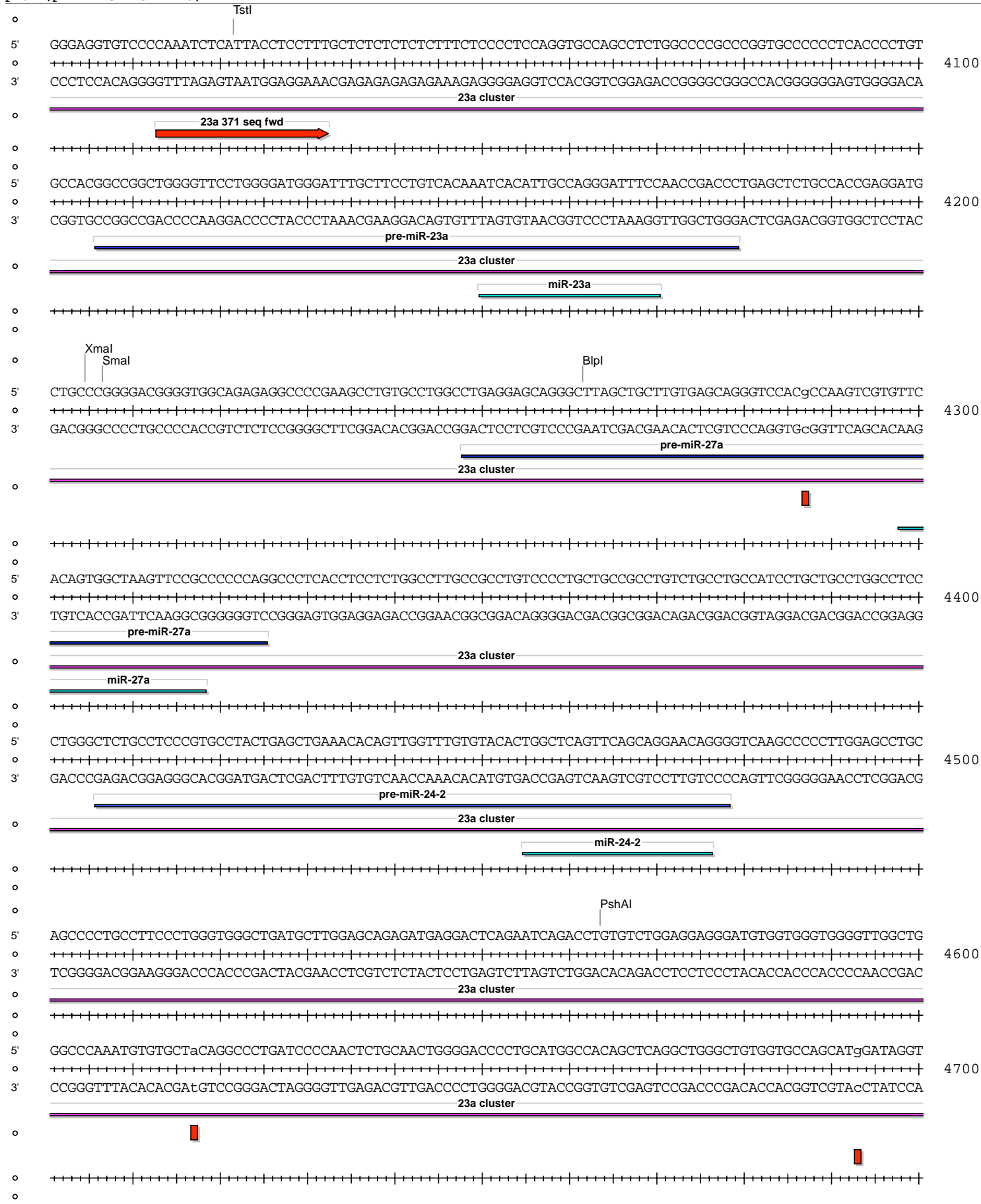
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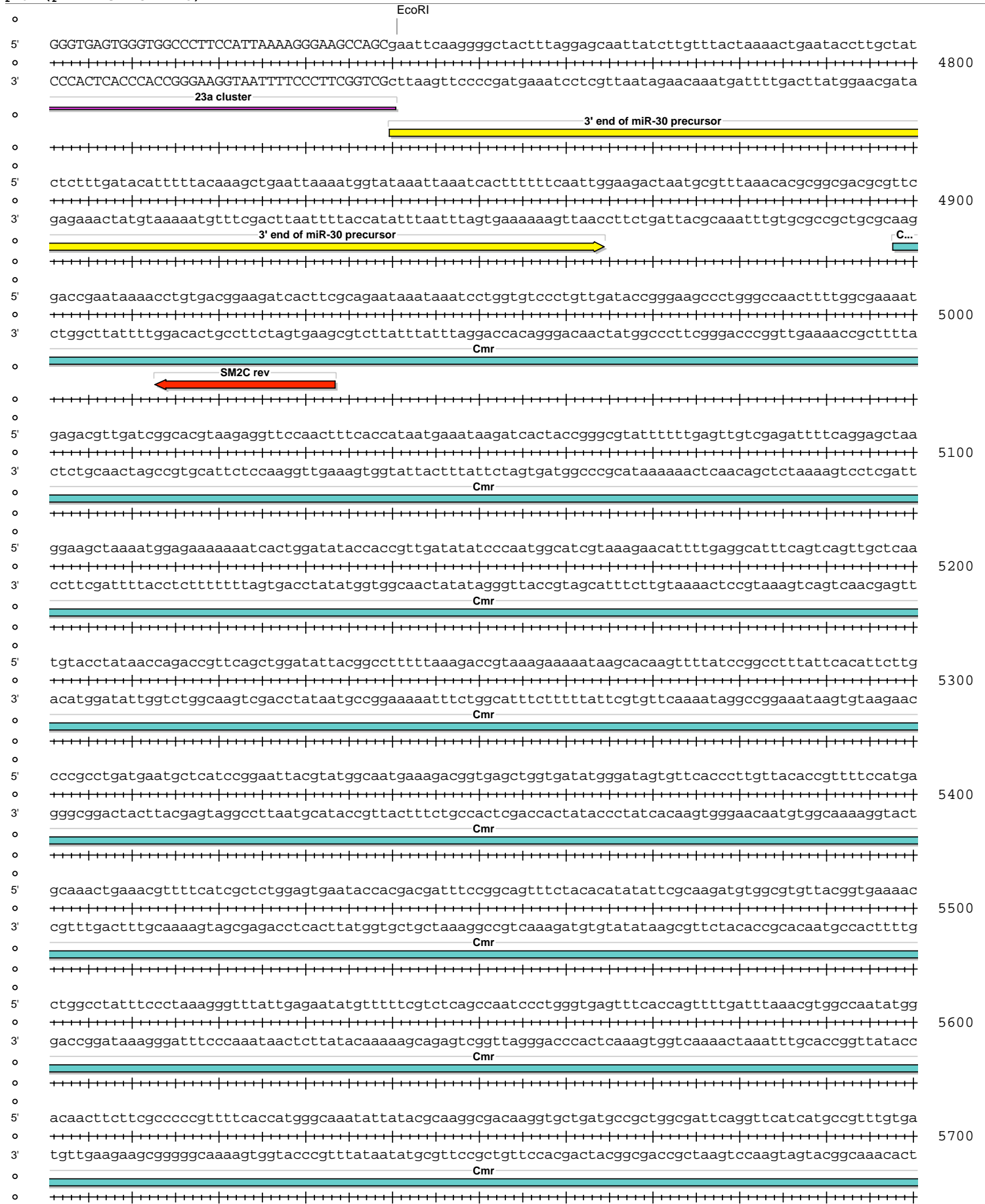
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 o ++++++
 3' ttaattgttaatgtgttcgaattatgtgaggaattaacttcttagcgttttggctgcttcttcttacttgttcttaataaccttaacttatttaccg
 o
 o

HIV RRE

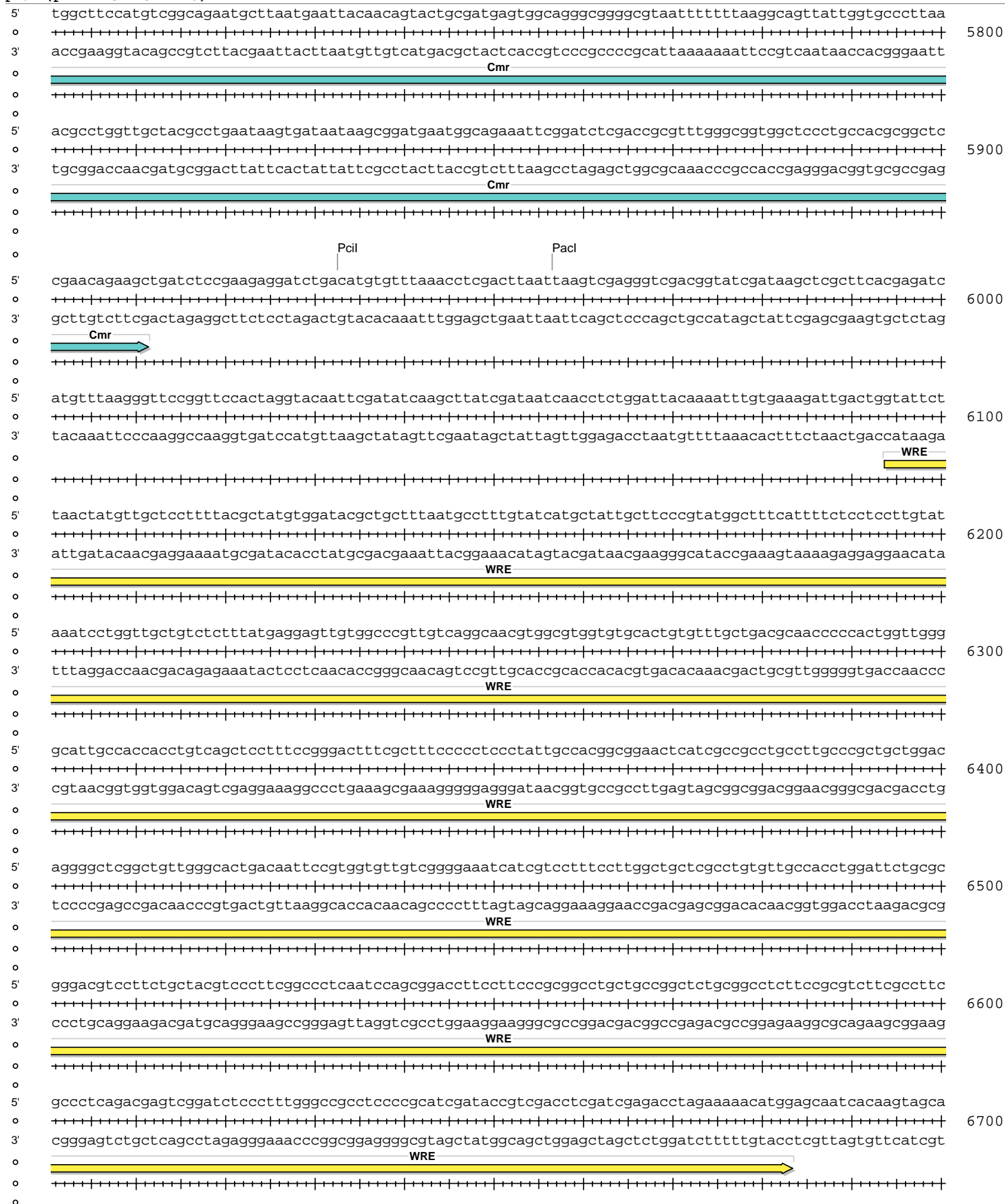
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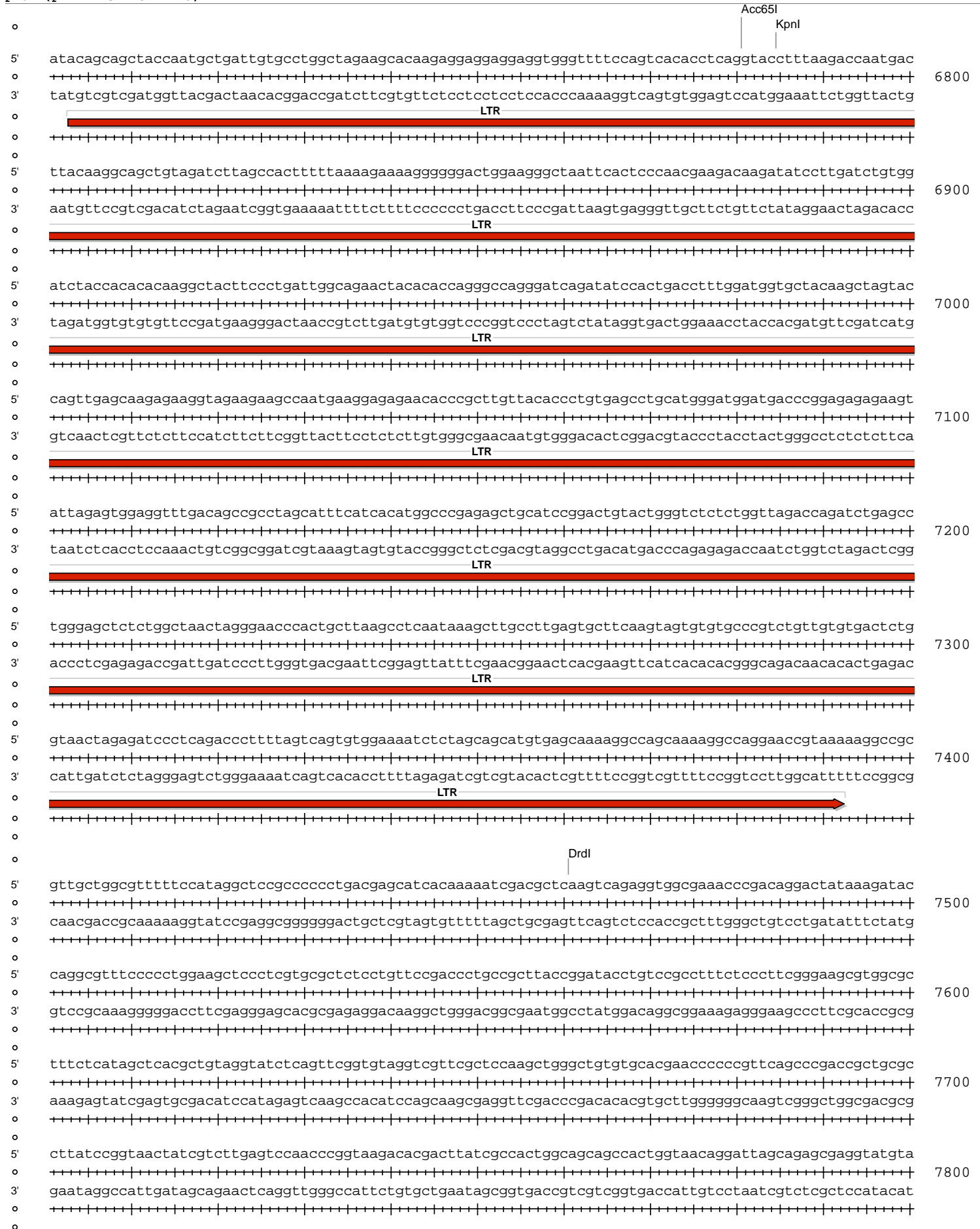






p201 (pPRIME-CMV-GFP-FF3)





p201 (pPRIME-CMV-GFP-FF3)

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5' ggcggtgctacagagtcttgaagtgggtggcctaactacggctacactagaagaacagatttggatctgctgctgctgaagccagttaccttcggaa
o ++++++
3' ccgccacgatgtctcaagaacttcaccaccggattgatgccgatgtgatcttcttgtcataaacatagacgcgagacgacttcggtcaatggaagcctt
o ++++++
o
5' aaagagttggtagctcttgatccggcaaacaccaccgctggtagcgggtggttttttggttgcaagcagcagattacgcgcagaaaaaaggatctca
o ++++++
3' tttctcaaccatcgagaactaggcgtttggttggggcaccatcgccacaaaaaaacaaacggttcgctcgtctaatacgcgctcttttttctagagt
o ++++++
o
5' agaagatcctttgatctttctacggggtctgacgctcagtggaacgaaaactcacggttaagggttttggatcatgagattatcaaaaaggatcttcacc
o ++++++
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o ++++++
o
5' ctteggctcctccgatcgttgtcagaagtaagttggccgagtggtatcactcatggttatggcagcactgcataattctcttactgtcatgccatccgta
o ++++++
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o
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o ++++++
3' tctacgaaaagacactgaccactcatgagttggttcagtaagactcttatcacatacgcgctggctcaacgagaacgggcccagttatgccctattat
o ++++++
o
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o ++++++
o
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o ++++++
o
5' ataaggcgacacggaatggtgaatactcactcttctcttttcaatattattgaagcatttatcaggggtattgtctcatgagcggatataatattg
o ++++++
3' tattcccgtgtgctttacaacttatgagtatgagaaggaaaaagttataataacttcgtaaatagtcaccaataacagagtagctcgctatgtataaac
o ++++++
o
o

```

AhdI

FspI

7900
8000
8100
8200
8300
8400
8500
8600
8700
8800
8900
9000
9100

p201 (pPRIME-CMV-GFP-FF3)

5' aatgtatttagaaaaataaacaatataggggttcgcgcacatttccccgaaaagtgccacctgac
o ++++++|+++++|+++++|+++++|+++++|+++++|+++++|+++++|+++++|+++++|
3' ttacataaatctttttatttgtttatccccaaggcgcgtgtaaaggggcttttcacggtggactg
o ++++++|+++++|+++++|+++++|+++++|+++++|+++++|+++++|+++++|+++++|
o

9165