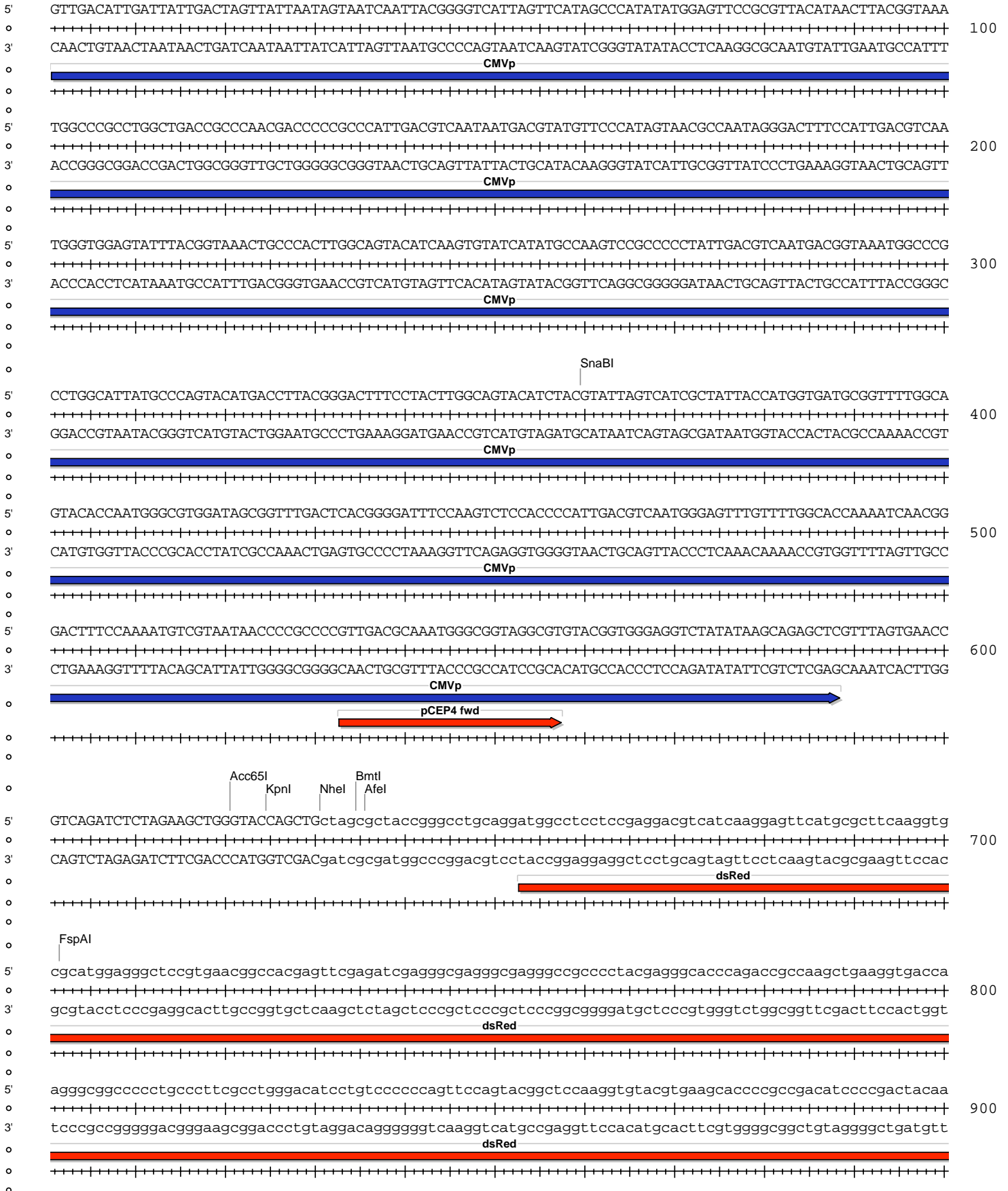


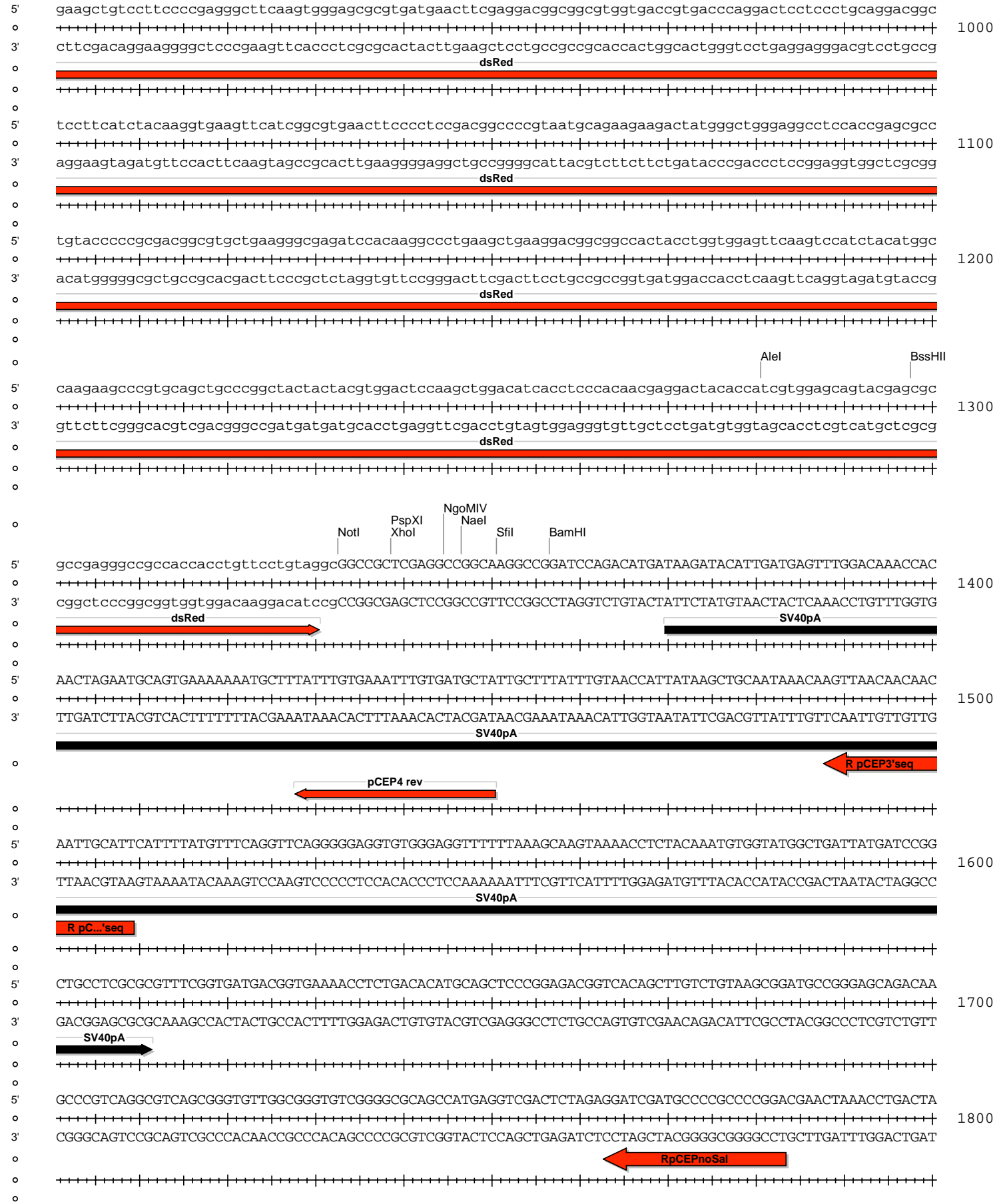
pCEP4-dsRed

Absent Sites	0	AarI,AbstI,AfIII,Agel,AscI,BarI,BarI',BbeI,BclI,BlpI,BsiWI,BstZ17I,FseI,HindIII,KasI,MauBI,MreI,NarI,Pacl,PmeI,PmlI,Psrl,Psrl',SapI,SfoI,SgrDI,SphI,SrfI,Swal
Acc65I	1	621
AfeI	1	636
AjuI	1	9808
AjuI'	1	9776
AleI	1	1281
AsiSI	1	9459
AvrII	1	6188
BaeI	1	2827
BaeI'	1	2794
BamHI	1	1357
BbvCI	1	4513
BmtI	1	635
BsrGI	1	10834
BssHII	1	1298
BstBI	1	8946
EcoNI	1	6548
EcoRV	1	2347
FspAI	1	702
KpnI	1	625
NaeI	1	1347
NgoMIV	1	1345
NheI	1	631
NotI	1	1333
NruI	1	8645
NsiI	1	3898
PshAI	1	9122
PspXI	1	1339
SfiI	1	1351
SgrAI	1	4714
SnaBI	1	360
XhoI	1	1339
XmnI	1	7044

pCEP4-dsRed



pCEP4-dsRed



pCEP4-dsRed

5' CGACATCTCTGCCCTTCTTCGCGGGGCAGTGCATGTAATCCCTTCAGTTGGTTGGTACAACCTTGCCAACCTGGGCCCTGTTCCACATGTGACACGGGGG 1900
 +-----+
 3' GCTGTAGAGACGGGAAGAAGCGCCCGTCACGTACATTAGGGAAGTCAACCAACCATGTTGAACGGTTGACCCGGGACAAGGTGTACTACTGTGCCCCC
 +-----+

5' GGACCAACACAAAGGGTTCTCTGACTGTAGTTGACATCCTTATAAATGGATGTGCACATTTGCCAACACTGAGTGGCTTTCATCCTGGAGCAGACTTT 2000
 +-----+
 3' CCTGGTTTGTGTTTCCCCAAGAGACTGACATCAACTGTAGGAATATTTACCTACACGTGTAACGGTTGTGACTCACCGAAAGTAGGACCTCGTCTGAAA
 +-----+

5' GCAGTCTGTGGACTGCAACACAACATTGCCTTTATGTGTAACCTTTGGCTGAAGCTCTTACACCAATGCTGGGGGACATGTACCTCCCAGGGGCCAGGA 2100
 +-----+
 3' CGTCAGACACCTGACGTTGTGTTGTAACGGAATACACATTGAGAACCAGCTTCGAGAATGTGGTTACGACCCCCGTACATGGAGGGTCCCCGGTCTCT
 +-----+
 OriP

5' AACTACGGGAGGCTACACCAACGTCATCAGAGGGCCTGTGTAGCTACCGATAAGCGGACCCCAAGAGGGCATTAGCAATAGTGTTTATAAGCCCC 2200
 +-----+
 3' TCTGATGCCCTCCGATGTGGTTGCAGTTAGTCTCCCCGGACACATCGATGGCTATTTCGCTGGGAGTTCTCCCGTAATCGTTATCACAAATATCCGGGG
 +-----+
 OriP

5' CTGTGTAACCTAAACGGGTAGCATATGCTTCCCAGGTTAGTAGTATATACTATCCAGACTAACCTAAATCAATAGCATATGTTACCAACGGGAAGCAT 2300
 +-----+
 3' GAACAATTGGGATTTGCCCATCGTATACGAAGGGCCATCATATATGATAGGTCTGATTGGGATTAAGTTATCGTATAACAATGGGTTGCCCTTCGTA
 +-----+
 OriP

5' ATGCTATCGAATTAGGGTTAGTAAAAGGGTCTAAGGAACAGCGATATCTCCCACCCCATGAGCTGTACGTTTTTATTTACATGGGGTCAGGATTCCAC 2400
 +-----+
 3' TACGATAGCTTAATCCCAATCATTTTCCCAGGATTCTTGTGCTATAGAGGGTGGGGTACTCGACAGTGCCAAAATAAATGTACCCAGTCTAAGGTG
 +-----+
 OriP

EcoRV

5' GAGGGTAGTGAACCATTTTAGTCACAAGGGCAGTGGCTGAAGATCAAGGAGCGGGCAGTGAACCTCCTGAATCTTCGCCTGCTTCTTCATTCTCCTTCG 2500
 +-----+
 3' CTCCCATCACTTGGTAAAATCAGTGTTCGCGTCACCGACTTCTAGTTCTCGCCGTCCTTGAGAGGACTTAGAAGCGGACGAAGAAGTAAGAGGAAGC
 +-----+
 OriP

5' TTTAGCTAATAGAATAACTGCTGAGTTGTGAACAGTAAGGTGTATGTGAGGTGCTCGAAAACAAGGTTTCAGGTGACGCCCCAGAATAAAATTTGGACG 2600
 +-----+
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 +-----+
 OriP

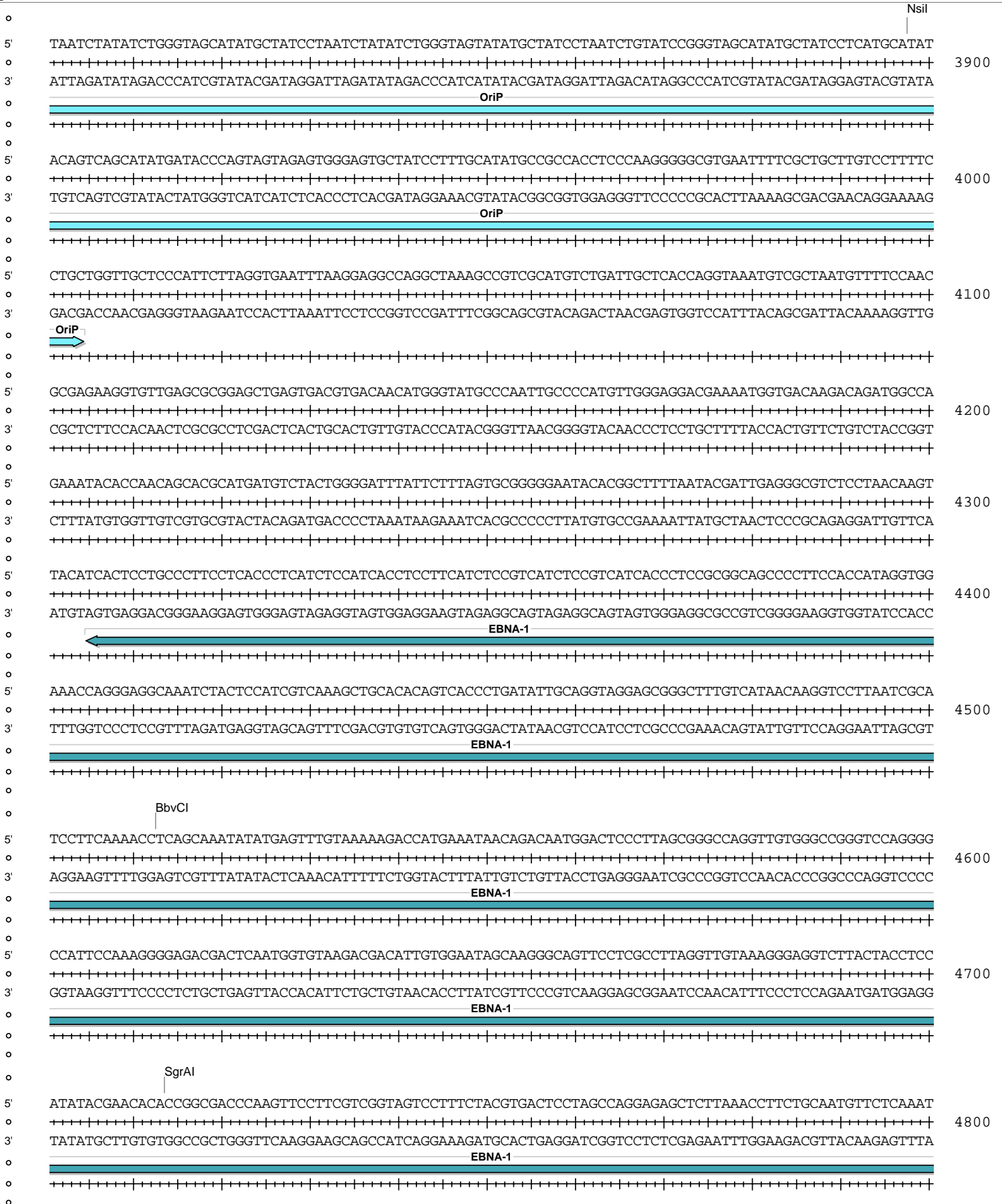
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 +-----+
 3' CCCCCAAGTCACCACCGTAACACGATACTGTGGTTATATTGGGAGTGTGGGGAACCCGTTATTTATGATCACATCCTTACTTTGTAAGACTTATAGAA
 +-----+
 OriP

Bael'

5' TAACAATAGAAATCCATGGGGTGGGGACAAGCCGTAAGACTGGATGTCCATCTCACACGAATTTATGGCTATGGGCAACACATAATCCTAGTGAATAT 2800
 +-----+
 3' ATTGTTATCTTTAGGTACCCACCCTGTTTCGGCATTTCTGACCTACAGGTAGAGTGTGCTTAAATACCGATACCCGTTGTGTATTAGGATCACGTTATA
 +-----+
 OriP

BaeI

o
5' GATACTGGGGTTATTAAGATGTGTCCCAGGCAGGGACCAAGACAGGTGAACCATGTTGTTACACTCTATTTGTAACAAGGGGAAAGAGAGTGGACGCCGA 2900
o
3' CTATGACCCCAATAATTCTACACAGGGTCCGTCCCTGGTTCTGTCCACTTGGTACAACAATGTGAGATAAACATTGTTCCCTTTCTCTCACCTGCGGCT
o
OriP
o
o
5' CAGCAGCGGACTCCACTGGTTGTCTCTAACACCCCGAAAATTAACGGGGCTCCACGCCAATGGGGCCATAAACAAAGACAAGTGGCCACTCTTTTTT 3000
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3' GTCGTGCGCTGAGGTGACCAACAGAGATTGTGGGGCTTTTAATTTGCCCGGAGGTGCGGTTACCCCGGGTATTTGTTTCTGTTCCCGGTGAGAAAAA
o
OriP
o
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5' TTGAAATGTGGAGTGGGGGCACGCGTCAGCCCCACACGCCGCCCTGCGGTTTGGACTGTAAAATAAGGGTGTAACTTGGCTGATTGTAACCCCG 3100
o
3' AACTTTAACACCTCACCCCGTGCAGCTCGGGGTGTGCGGCGGACGCCAAAACCTGACATTTTATCCACATTATTGAACCGACTAACATTGGGGC
o
OriP
o
o
5' CTAACCACTGCGGTCAAACCACTTGCCACAAAACCACTAATGGCACCCGGGGAATACCTGCATAAGTAGGTGGGCGGGCCAAGATAGGGGCGCGATTG 3200
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3' GATTGGTGACGCCAGTTTGGTGAACGGGTGTTTGGTGATTACCGTGGGGCCCTTATGGACGTATTCATCCACCCGCGGTTCTATCCCCGCGCTAAC
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OriP
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5' CTGCGATCTGGAGACAAATTACACACACTTGCGCCTGAGCGCAAGCACAGGGTGTGTTGGTCCATATTCACGAGGTCGCTGAGAGCACGGTGGGCTA 3300
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3' GACGCTAGACCTCCTGTTAATGTGTGTGAACGCGGACTCGCGGTTCTGTGCCAACCAACAGGAGTATAAGTGTCCAGCGACTCTCGTGCCACCCGAT
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OriP
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o
OriP
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5' AGCATATGCTATCCTAATCTATATCTGGGTAGTATATGCTATCCTAATTTATATCTGGGTAGCATAGGCTATCCTAATCTATATCTGGGTAGCATATGCT 3500
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3' TCGTATACGATAGGATTAGATATAGACCCATCATATACGATAGGATTAAATATAGACCCATCGTATCCGATAGGATTAGATATAGACCCATCGTATACGA
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OriP
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3' TAGGATTAGATATAGACCCATCATATACGATAGGATTAGACATAGGCCATCGTATACGATAGGATTATCTCTAATCCCATCATATACGATAGGATTAAA
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OriP
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o
5' ATATCTGGGTAGCATATACTACCCAAATATCTGGATAGCATATGCTATCCTAATCTATATCTGGGTAGCATATGCTATCCTAATCTATATCTGGGTAGCA 3700
o
3' TATAGACCCATCGTATATGATGGGTTTATAGACCTATCGTATACGATAGGATTAGATATAGACCCATCGTATACGATAGGATTAGATATAGACCCATCGT
o
OriP
o
o
5' TAGGCTATCCTAATCTATATCTGGGTAGCATATGCTATCCTAATCTATATCTGGGTAGTATATGCTATCCTAATTTATATCTGGGTAGCATAGGCTATCC 3800
o
3' ATCCGATAGGATTAGATATAGACCCATCGTATACGATAGGATTAGATATAGACCCATCATATACGATAGGATTAAATATAGACCCATCGTATCCGATAGG
o
OriP
o
o



pCEP4-dsRed

5' TTCGGGTTGGAACCTCCTTGACCACGATGCTTTCCAACACACCTCCTTTTTTTCGCGCTGCCTCCATCACCTGACCCCGGGTCCAGTGCTTGGGCCTT
 4900
 3' AAGCCCAACCTTGAGGAACTGGTGCTACGAAAGTTTGGTGGGAGGAAAAACGCGGACGGAGGTAGTGGGACTGGGGCCCCAGGTACGAACCCGGAA
 EBNA-1

5' CTCCTGGGTCATCTGCGGGGCCCTGCTCTATCGCTCCCGGGGCACGTCAGGCTCACCATCTGGGCCACCTTCTTGGTGGTATTCAAAATAATCGGCTTC
 5000
 3' GAGGACCCAGTAGACGCCCGGGACGAGATAGCGAGGGCCCCGTGCAGTCCGAGTGGTAGACCCGGTGAAGAACCACCATAAGTTTATTAGCCGAAG
 EBNA-1

5' CCCTACAGGGTGGAAAAATGGCCTTCTACCTGGAGGGGCCCTGCGCGGTGGAGACCCGGATGATGATGACTGACTACTGGGACTCCTGGGCCTCTTTTCT
 5100
 3' GGGATGTCCACCTTTTTACCGAAGATGGACCTCCCCGGACGCGCCACCTCTGGGCCTACTACTACTGACTGATGACCCTGAGGACCCGGAGAAAAGA
 EBNA-1

5' CCACGTCCACGACCTCTCCCCCTGGCTCTTTACGACTTCCCCCTGGCTCTTTACGTCCTCTACCCCGCGGGCCTCCACTACCTCCTCGACCCCGGC
 5200
 3' GGTGCAGGTGCTGGAGAGGGGACCGAGAAAGTGTGAAGGGGGGACCGAGAAAGTGCAGGAGATGGGGCCCGCGAGGTGATGGAGGAGCTGGGGCCG
 EBNA-1

5' CTCCACTACCTCCTCGACCCCGGCCTCCACTGCCTCCTCGACCCCGGCCTCCACTCCTGCTCCTGCCCCCTCTGCTCCTGCCCCCTCTCCTGCTCCTGC
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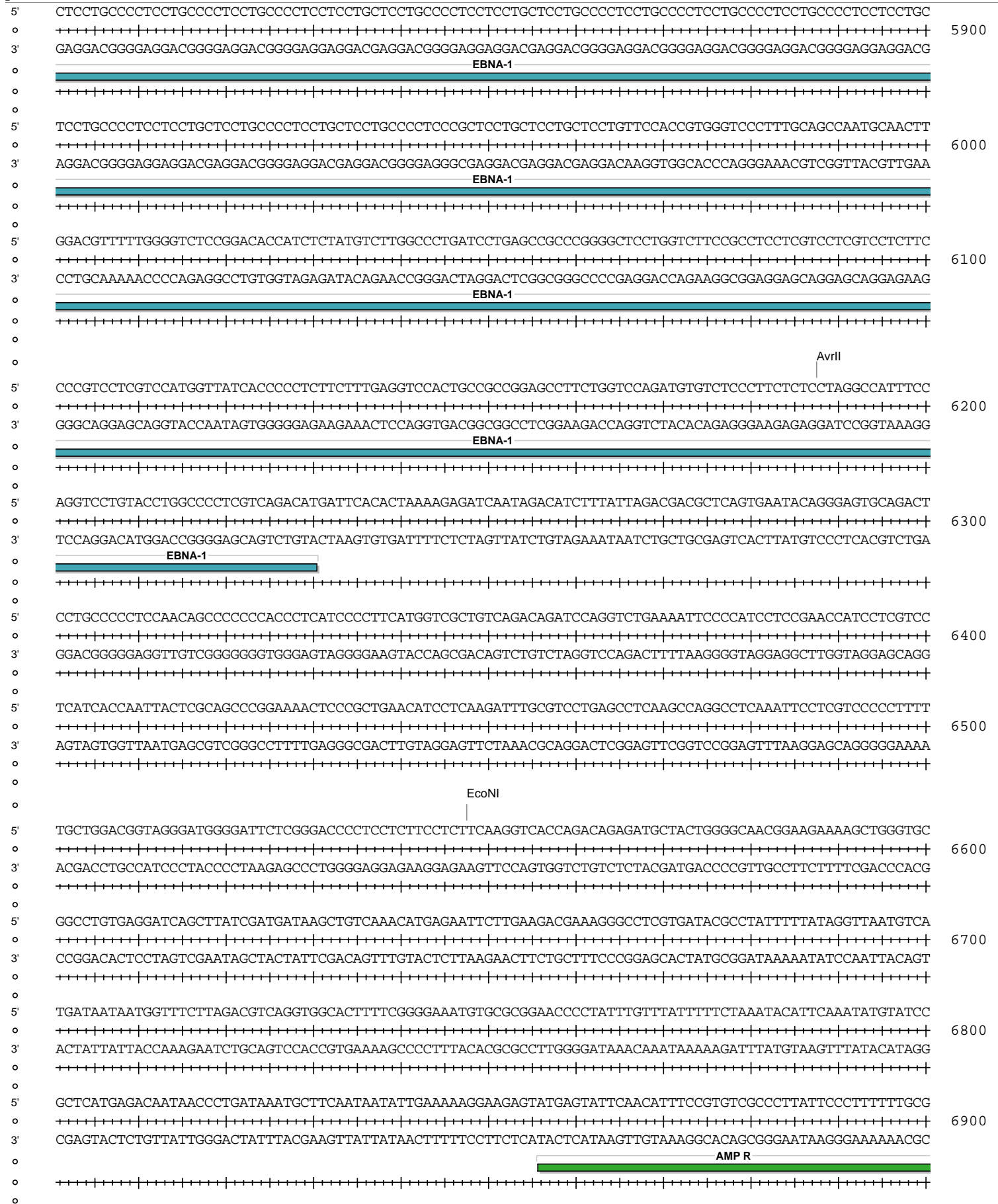
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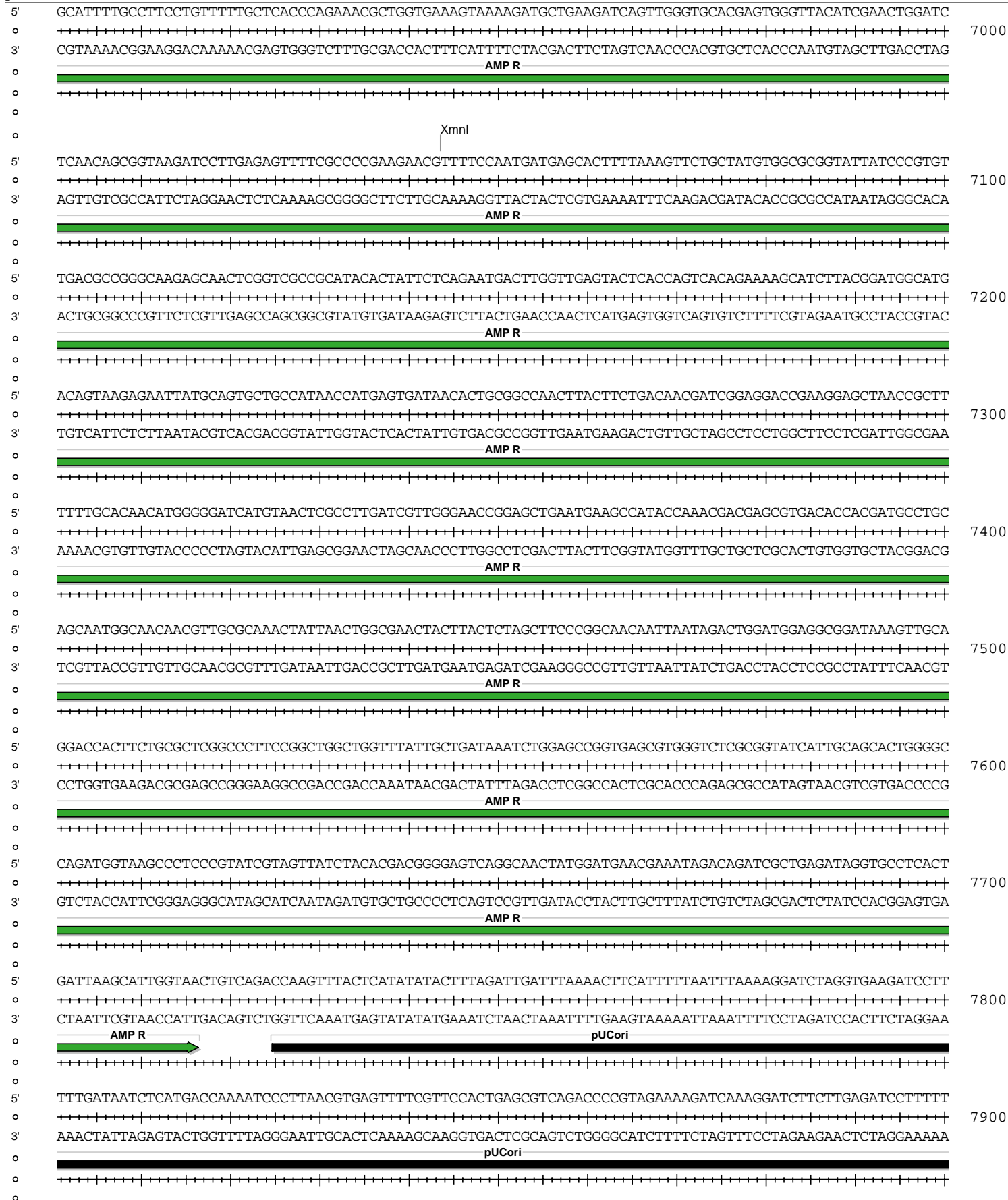
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 EBNA-1

5' TGCCCCCTCTGCCCCCTCTGCTCCTGCCCCCTCTGCTCCTGCCCCCTCTGCTCCTGCCCCCTCTGCTCCTGCCCCCTCTGCTCCTGCC
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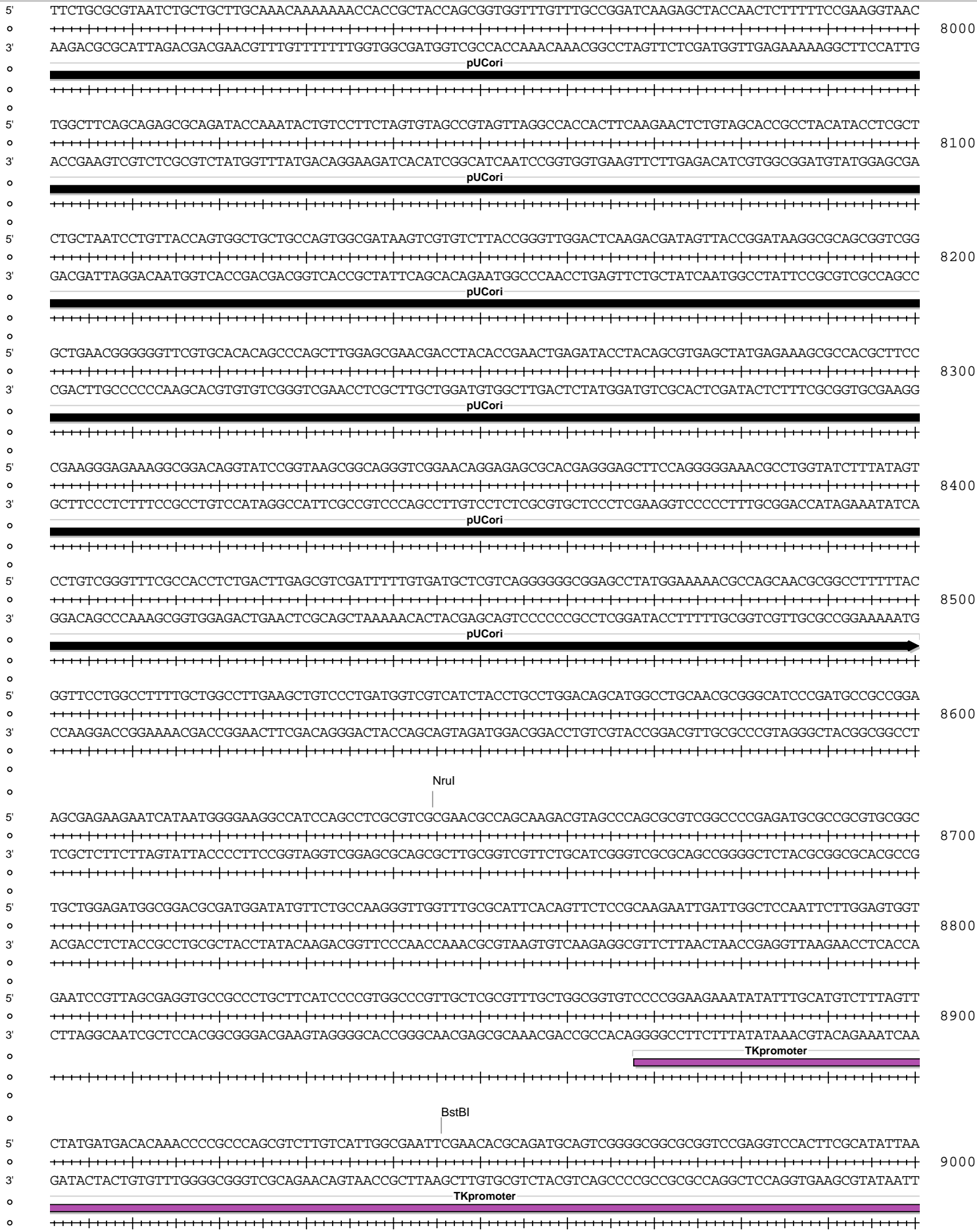
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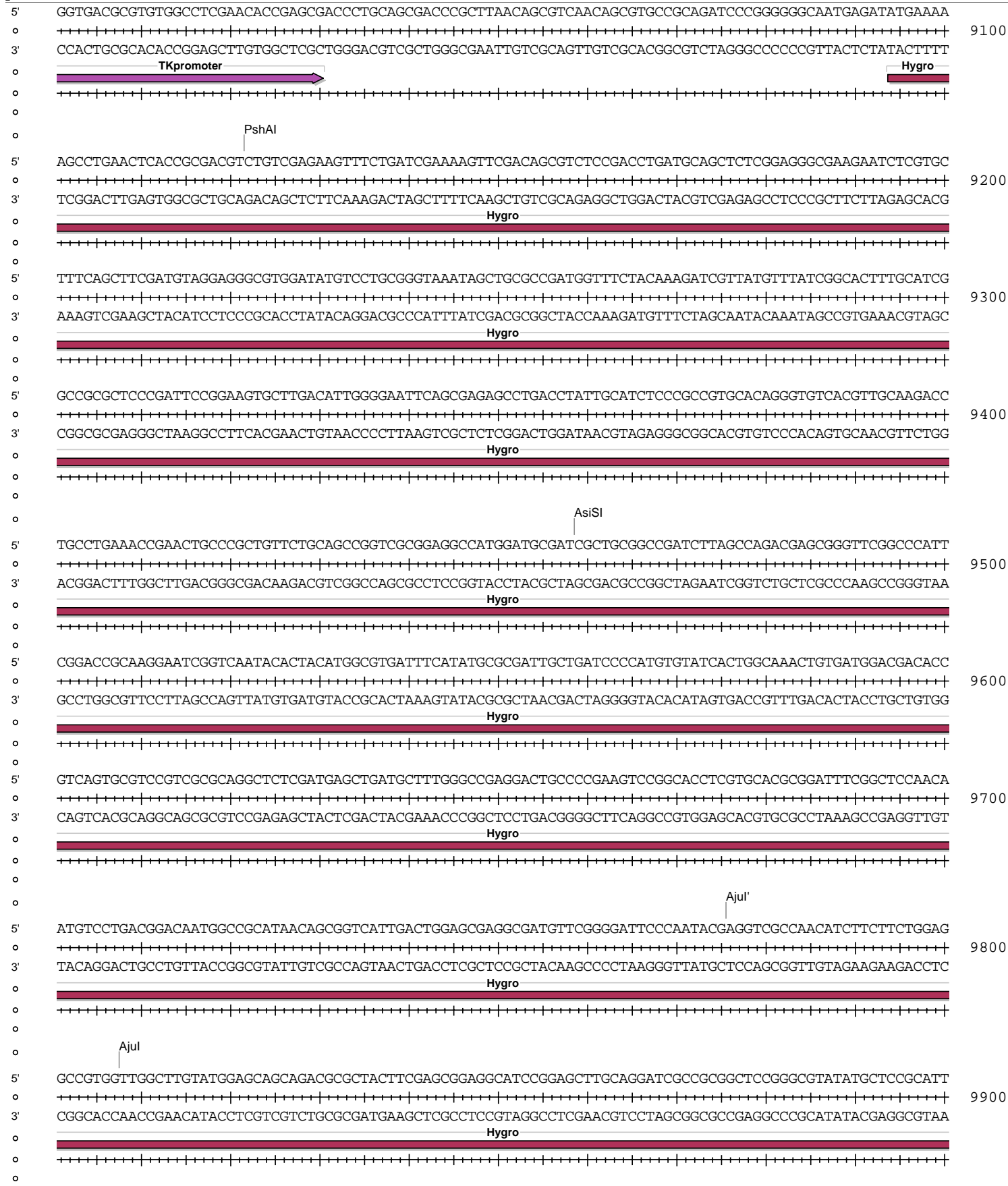
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