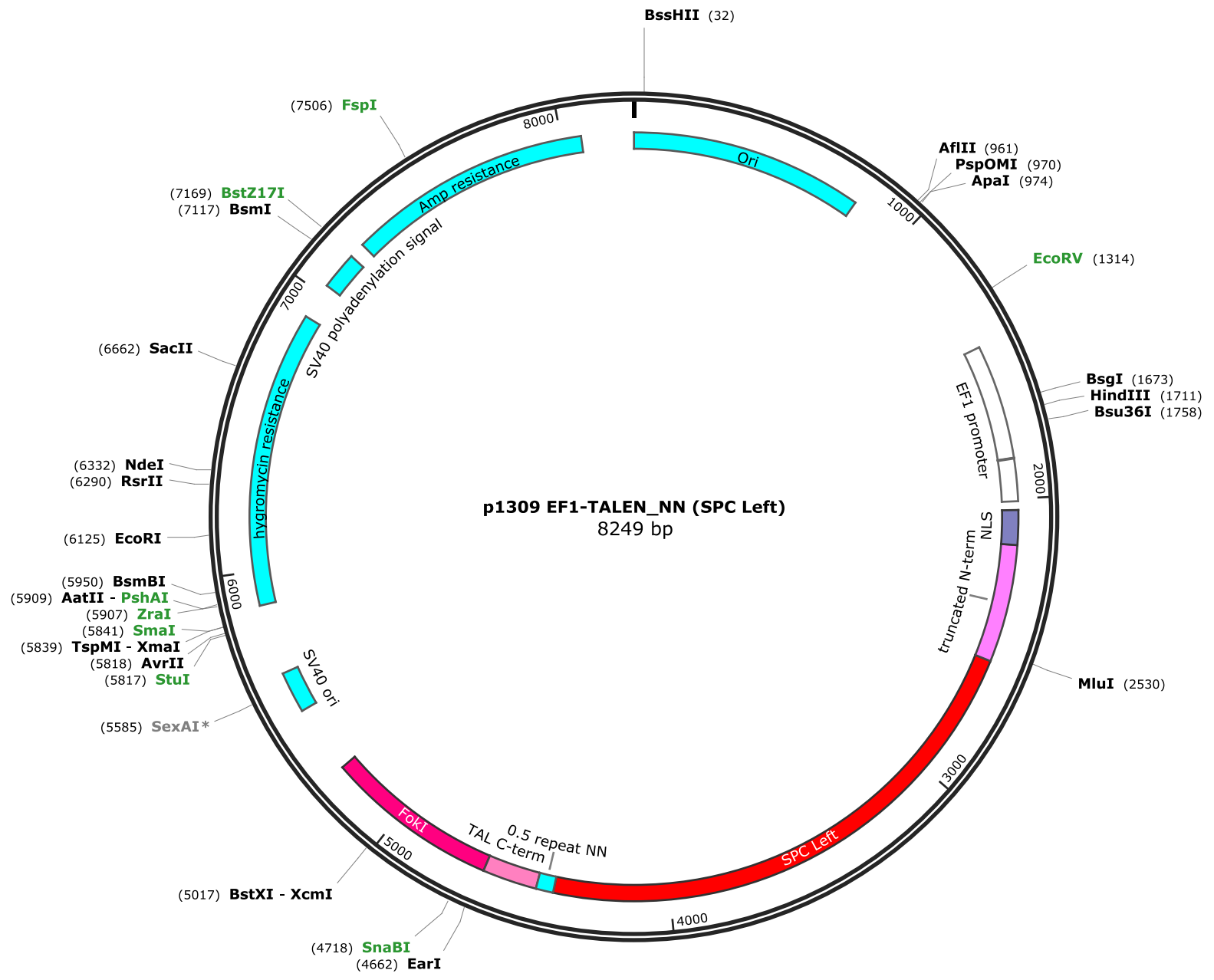
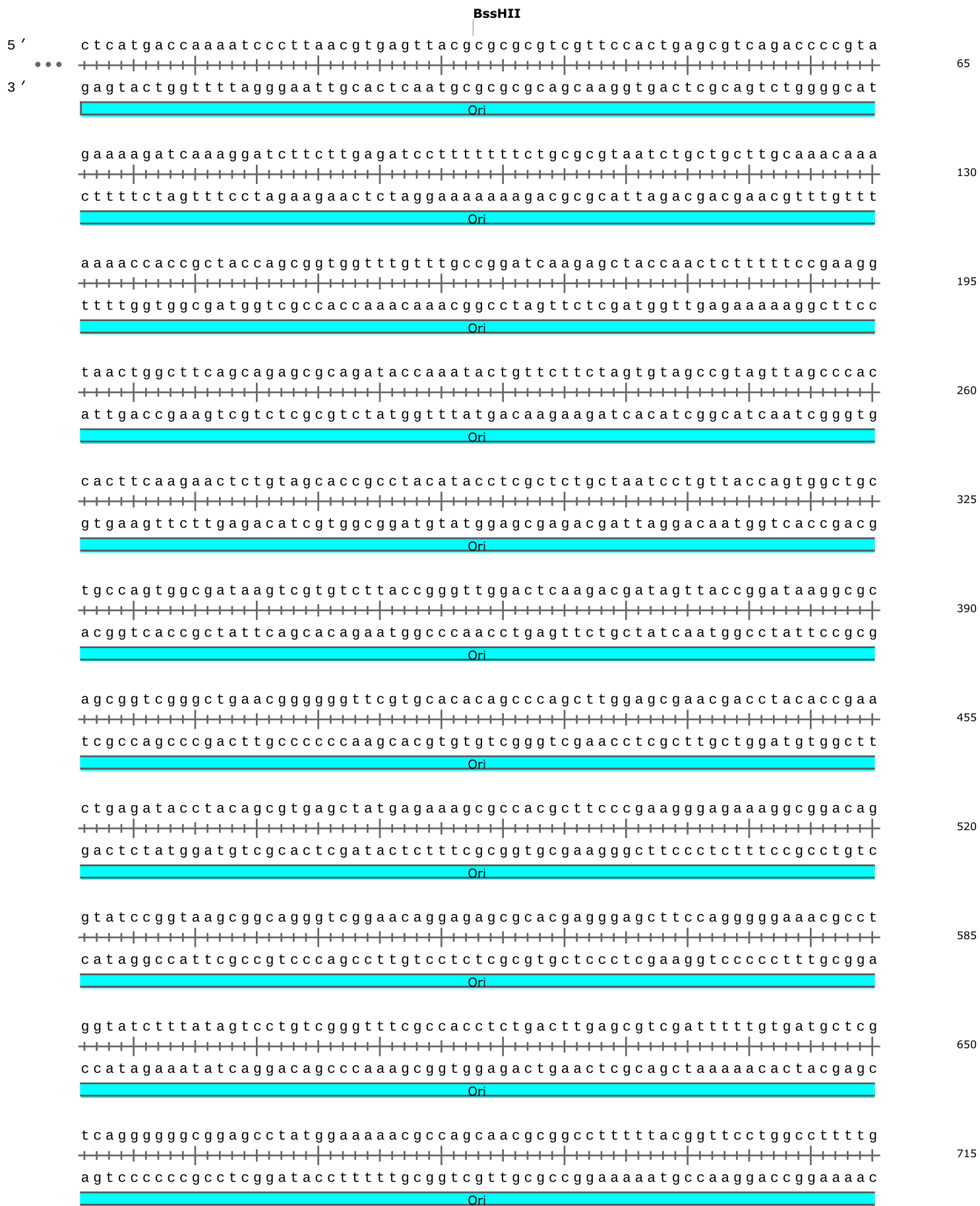
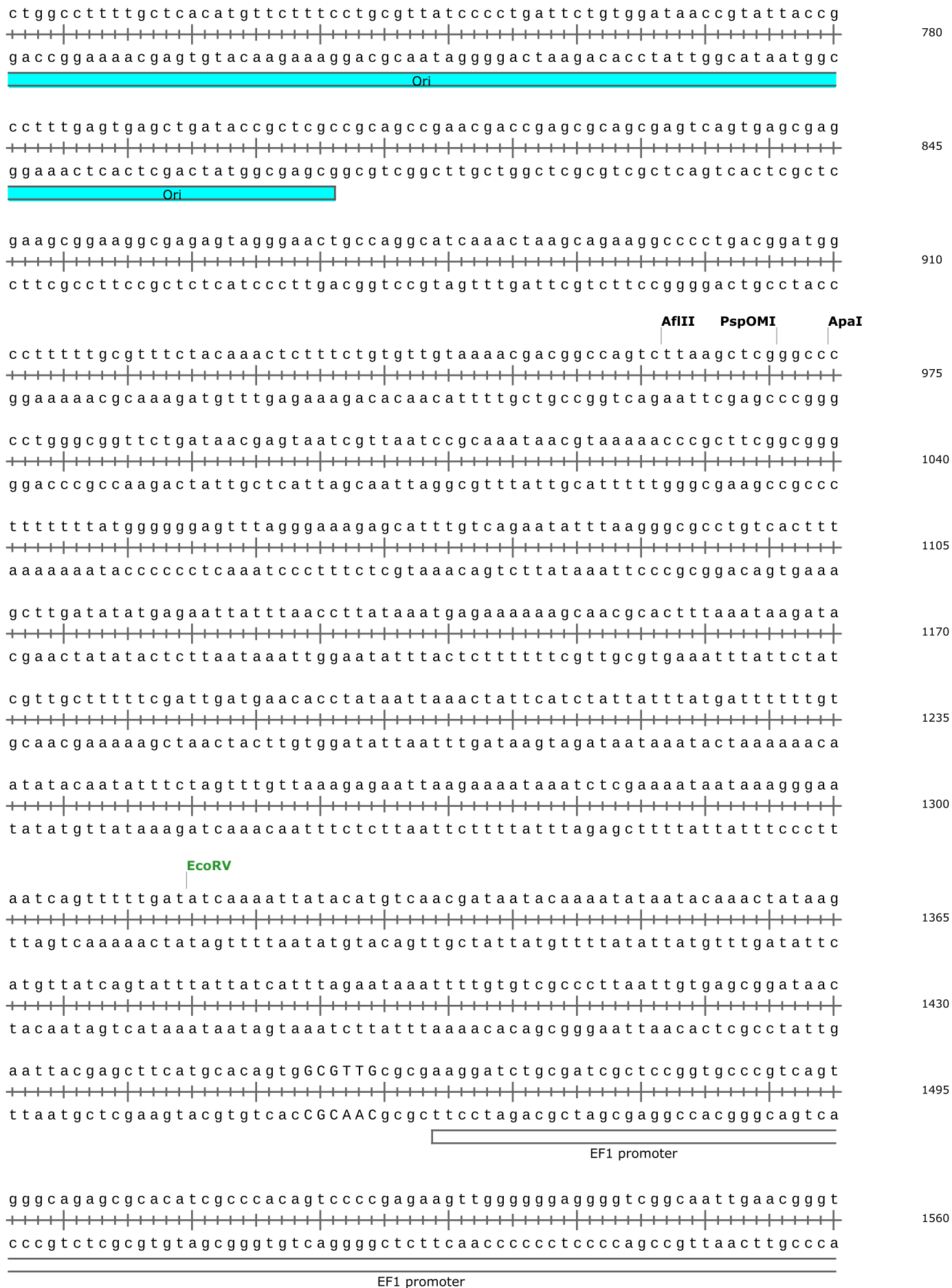
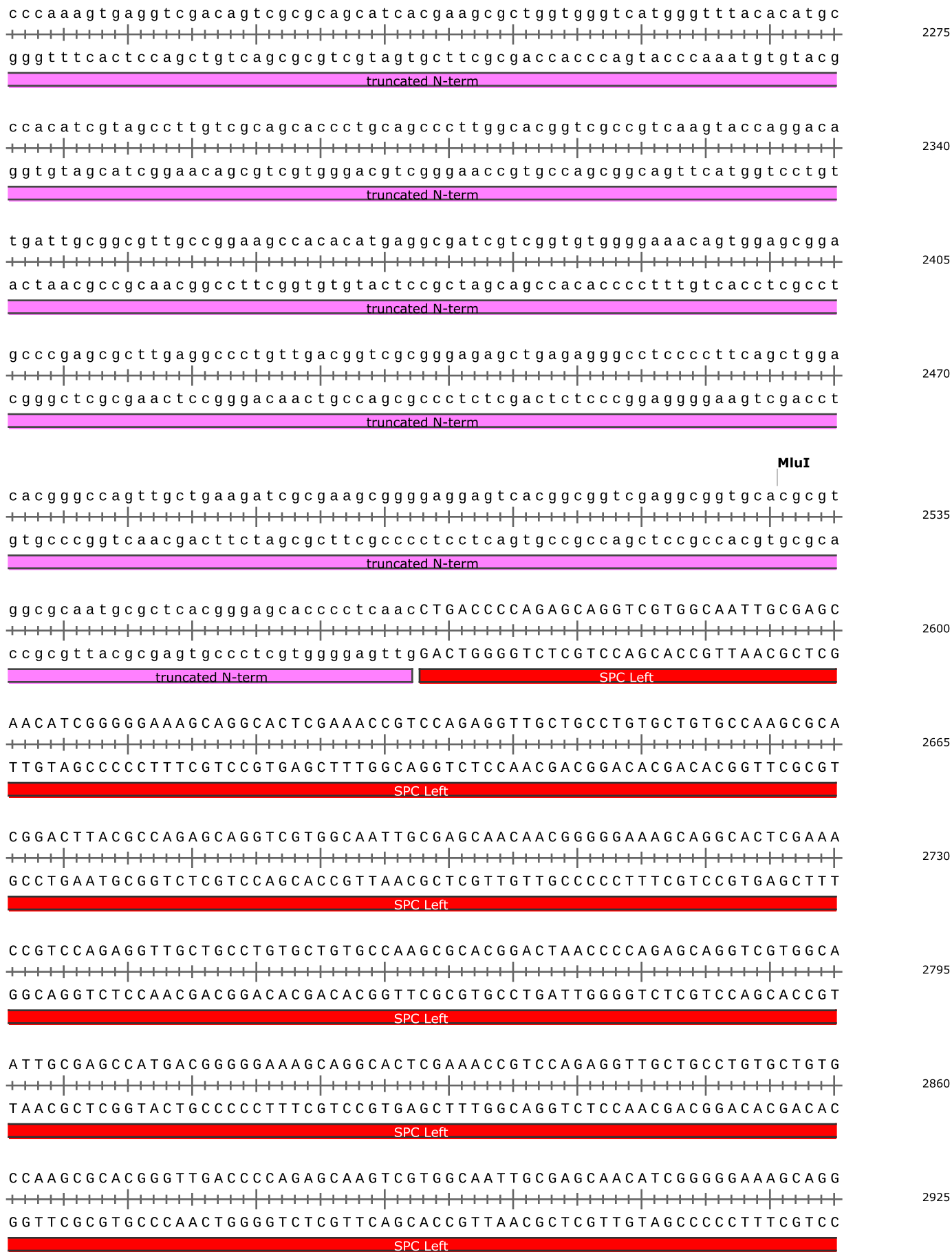










SPC Left

GTCGTGGCAATTGCGAGCCATGACGGGGGAAAGCAGGCACCTCGAAACCGTCCAGAGGTTGCTGCC
 CAGCACCGTTAACGCTCGGTACTGCCCCCTTTCTGTCCTGAGCTTTGGCAGGTCTCCAACGACGG

SPC Left

TGTGCTGTGCCAAGCGCACGGA CTGACACCAGAGCAGGTCGTGGCAATTGCGAGCCATGACGGGG
ACACGACACGGTTTCGCGTGCCTGACTGTGGTCTCGTCCAGCACCGTTAACGCTCGGTA CTGCCCC

SPC Left

GAAAGCAGGCACTCGAAACCGTCCAGAGGTTGCTGCCTGTGCTGTGCCAAGCGCACGGACTTACA
 CTTTCGTCCGTGAGCTTTGGCAGGTCCTCAACGACGACGACGACGGTTCGCGTGCTGAAATGT

SPC Left

CCCGAACAAGTCGTGGCAATTGCGAGCAACGGAGGGGGAAAGCAGGCACTCGAAACCGTCCAGAG
GGGCTTGTTCAGCACCGTTAACGCTCGTTGCCTCCCCCTTTCTCGTCCGTGAGCTTTGGCAGGTTCTC

SPC Left

GTTGCTGCCTGTGCTGTGGCAAGCGCACGGACTTACGCCAGAGCAGGTCGTGGCAATTGCAGCA
 CAACGACGGACACGACACGGTTCGCGTGCCCTGAATGCGGTCTCTGTCACGACACCGTTAACGCTCGT

SPC Left

ACAACGGGGGAAAGCAGGCACCTCGAAACCGTTCAGAGGTTGCTGCCTGTGCTGTGCCAAGCGCAC
TGTTGCCCCCTTTCTCCGTGAGCTTTGGCAGGTCTCCAACGACGGACACGACACGGTTTCGCGTG

SPC Left

GGACTAACCCAGAGCAGGTCGTGGCAATTGCGAGCCATGACGGGGGAAAGCAGGCACTCGAAAC
 CCTGATTGGGGTCTCGTCCAGCACC GTTAACGCTCGGTACTGCCCCCTTTCGTCCGTGAGCTTTG

SPC Left

[illegible]

SPC Left

TTGCGAGCAACATCGGGGGAAGCAGGCACTCGAAACCGTCCAGAGGTTGCTGCCTGTGCTGTGC
AACGCTCGTTGTAGCCCCCTTTCGTCCGTGAGCTTTGGCAGGTCCTCCAACGACGGACACGACACG

SPC Left

CAAGCGCACGGCCTGACCCAGAGCAGGTCGTGGCAATTACGAGCAACAACGGGGGAAAGCAGGC
GTTTCGCGTGCCGGACTGGGGTCTCTGTCACAGCACCGTTAATGCTCGTTGTGCCCCCTTTCGTCCG

SPC Left

SPC Left

TCGTGGCAATTGCGAGCCATGACGGGGGAAAGCAGGCACCTCGAAACCGTCCAGAGGTTGCTGCCT
AGCACCGTTAACGCTCGGTACTGCCCCCTTTCTGTCCTGAGCTTTGGCAGGTCTCCAACGACGGA

SPC Left

GTGCTGTGCGCAAGCGCACGGCCTCACCCCAGAGCAGGTCGTGGCAATTGCGAGCAACATCGGGGG
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SPC Left

AAAGCAGGCACTCGAAACCGTCCAGAGGTTGCTGCCTGTGCTGTGCCAAGCGCACGGACTTACGC
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SPC Left

CAGAGCAGGTCGTGGCAATTGCGAGCAACATCGGGGGGAAAGCAGGCACTCGAAACCGTCCAGAGG
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SPC Left

[illegible]

SPC Left

CAACGGGGGAAAGCAGGCCACTCGAAACCGTCCAGAGGTTGCTGCCTGTGCTGTGCGCAAGCGCACG
GTTGCCCCCTTTCTCCGTGAGCTTTGGCAGGTCTCCAACGACGGACACGACACGGTTCTGCGTGC

SPC Left

G G T T G A C C C C A G A G C A G G T C G T G G C A A T T G C G A G C A A C A T C G G G G G A A A G C A G G C A C T C G A A A C C
+ + + + +
C C A A C T G G G G T C T C G T C C A G C A C C G T T A A C G C T C G T T G T A G C C C C T T T C G T C C G T G A G C T T T G G

SPC Left

GTCCAGAGGTTTGCTGCCCTGTGCTGTGCCAAGCGCACGGCCTGACCCACAGAGCAGGTCGTGGCAAT
 CAGGTCTCCAACGACGGACACGACACGGTTTCGCGTGCCGGACTGGGGTCTCGTCCAGCACCGTTA

SPC Left

TGCGAGCAACGGAGGGGGAAAGCAGGCACTCGAAACCGTCCAGAGGTTGCTGCCTGTGCTGTGCC
ACGCTCGTTGCCTCCCCCTTTCGTCCGTGAGCTTTGGCAGGTCTCCAACGACGGACACGACACGG

SPC Left

AAGCGCACGGACTGACACCAGAGCAGGTCGTGGCAATTGCGAGCAACAACGGGGGAAAGCAGGCA
TTCGCGTGCCTGACTGTGGTCTCGTCCAGCACCGTTAACGCTCGTTGTTGCCCCCTTTCGTCCGT

SPC Left



XcmI
BstXI

caatccaaatgagtgggtggaagtgtatccttcattcagtgaccgagtttaagtttttgttgtct
gttaggtttactcaccacctttcacataggaagttagtcactggctcaaattcaaaaacaaacaga

5070

FokI

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5135

FokI

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5200

FokI

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5265

FokI

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5330

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ccttccacggtgaggggtgacaggaaaggattattttactcctttaacgtagtgttgtagtggg

5395

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atagagccagataagaaaactaaatatccctaaaacggctaaagccggataaccaattttttac

5460

agctgatttaacaaaaatttaacgcgaattaatctgtggaatgtgtgtcagttagggtgtggaa
tcgactaaattgtttttaaatgtcgcttaattaagacaccttacacacagtcfaatccacacctt

5525

SV40 ori

SexAI*

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tcaggggtccgaggggtcgctccgtcttcatacgtttcgtagctagagttaatcagtcggttggtcc

5590

SV40 ori

tgtggaaagtccccagggtccccagcaggcagaagtatgcaaagcatgcatctcaattagtcagc
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5655

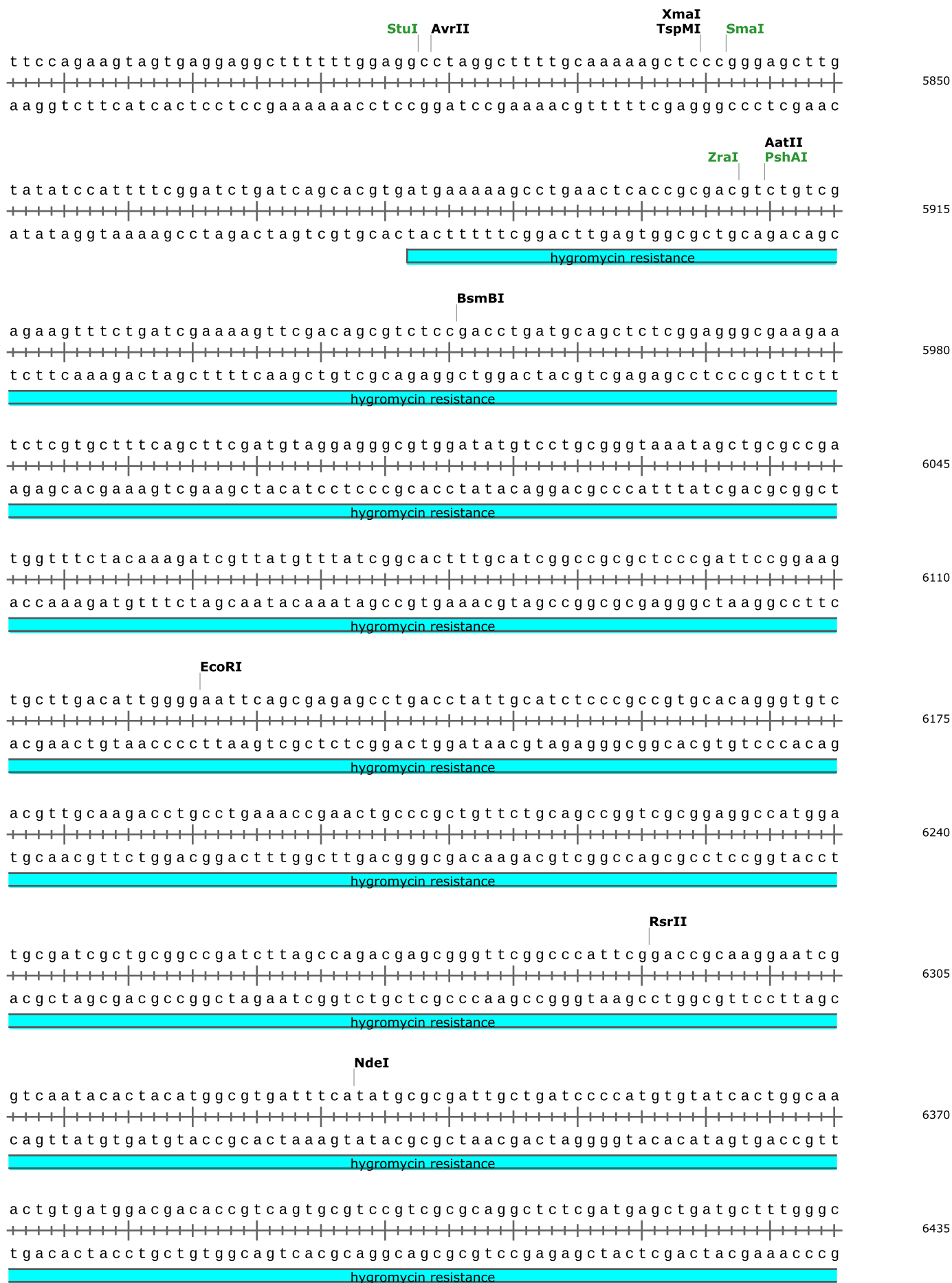
SV40 ori

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5720

cgccccatggctgactaattttttttatattatgcagaggccgaggccgcctctgcctctgagcta
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5785



BstZ17I

gtatcttatcatgtctgtatatccgtcgcacctctagctagagcttggcgtaatcatgggtcattacc
catagaatagtacagacatatggcagctggagatcgatctcgaaccgcattagtagcagtaatgg

7215

SV40 polyadenylation signal

aatgcttaatcagtgaggcacctatctcagcgatctgtctatttcgttcattccatagttgcctga
ttacgaattagtcactccgtggatagagtcgctagacagataaagcaagtaggtatcaacggact

7280

Amp resistance

ctccccgtcgtgtagataactacgatacgggagggccttaccatctggccccagcgtgcgatgat
gaggggcagcacatctattgatgctatgccctcccgaaatggtagaccggggtcgcgacgctacta

7345

Amp resistance

accgcgagaaccacgctcaccggctccggatttatcagcaataaaccagccagccggaagggccg
tggcgctcttgggtgcgagtggccgagggcctaaatagtcgttatttgggtcggctcgccctcccggc

7410

Amp resistance

agcgcagaagtggctcctgcaactttatccgcctccatccagtcctattaattggttgccgggaagct
tcgcgctcttcaccaggacgttgaaataggcggaggtaggtcagataattaacaacggcccttcga

7475

Amp resistance

FspI

agagtaagtagttcgccagttaatagtttgcgcaacggtgttgccatcgctacaggcatcgtgggt
tctcattcatcaagcgggtcaattatcaaacgcgttgcaacaacggtagcgatgtccgtagcacca

7540

Amp resistance

gtcacgctcgtcgtttggataggcttcattcagctccgggttcccaacgatcaaggcgagttacat
cagtgcgagcagcaaaccataccgaagtaagtcgaggccaagggttgctagttccgctcaatgta

7605

Amp resistance

gatcccccatgttgtgcaaaaaagcggttagctccttcgggtcctccgatcgttgtcagaagtaag
ctagggggtacaacacgttttttcgccaatcgagggaagccaggaggctagcaacagtcttcattc

7670

Amp resistance

ttggccgcagtggttatcactcatggttatggcagcactgcataattctcttactgtcatgccatc
aaccggcgtcaccaatagttagtaccataaccgtcgtgacgtattaagagaatgacagtacggtag

7735

Amp resistance

cgtaagatgcttttctgtgactgggtgagtactcaaccaagtcattctgagaatagtgtatgcggc
gcattctacgaaaagacactgaccactcatgagttgggttcagtaagactcttatcacatacgccg

7800

Amp resistance

gaccgagttgctcttggccggcgtcaatacgggataataaccgcgccacatagcagaactttaaaa
ctggctcaacgagaacggggccgcagttatgccctattatggcgcggtgtatcgtcttgaaatttt

7865

Amp resistance

Enzymes	Sites	
AatII	1	5909
AflII	1	961
ApaI	1	974
AvrII	1	5818
BsgI	1	1673
BsmI	1	7117
BsmBI	1	5950
BssHII	1	32
BstXI	1	5017
BstZ17I	1	7169
Bsu36I	1	1758
EarI	1	4662
EcoRI	1	6125
EcoRV	1	1314
FspI	1	7506
HindIII	1	1711
MluI	1	2530
NdeI	1	6332
PshAI	1	5909
PspOMI	1	970
RsrII	1	6290
SacII	1	6662
SexAI	1*	5585*
SmaI	1	5841
SnaBI	1	4718
StuI	1	5817
TspMI	1	5839
XcmI	1	5017
XmaI	1	5839
ZraI	1	5907

	Feature	Location	Size (bp)			Type
✓	Ori /label = Ori	1 .. 806	806			misc_feature
✓	EF1 promoter ▶ 3 segments	1464 .. 2009	546			promoter
✓	NLS /label = NLS	2040 .. 2159	120			misc_feature
✓	truncated N-term /label = truncated N-term	2160 .. 2567	408			misc_feature
✓	SPC Left	2568 .. 4403	1836			misc_feature
✓	0.5 repeat NN /label = 0.5 repeat NN	4404 .. 4463	60			misc_feature
✓	TAL C-term /label = TAL C-term	4464 .. 4652	189			misc_feature
✓	FokI /label = FokI	4653 .. 5255	603			misc_feature
✓	SV40 ori /label = SV40 ori	5493 .. 5636	144			misc_feature
✓	hygromycin resistance /label = hygromycin resistance	5882 .. 6907	1026			misc_feature
✓	SV40 polyadenylation signal /label = SV40 polyadenylation signal	7035 .. 7165	131			misc_feature
✓	Amp resistance /label = Amp resistance	7220 .. 8068	849			misc_feature

Description: TALENs were constructed using EZ-TAL TALE Assembly Kit (System Bioscience), according to manufacturer's instructions, and the resulting SFTPC TALENS encoding plasmids were named EF1a-TALEN_NN (SPC left) and EF1a-TALEN_HD (SPC right), respectively. TALENs were designed to target the sequences close to the translation initiation (ATG) site of the human SFTPC gene. All TALENs and donor template plasmid maps and sequences are available at www.kottonlab.com. The SFTPC TALEN recognition sequences are: left TALEN 5'-TAG CAC CTG CAG CAA GAT GG-3' and right TALEN 5'-TCA CCG GCG GGC TCT CCA TC-3'. Between the two binding sites is a 22 bp spacer (ATG TGG GCA GCA AAG AGG TCC T).

Created: Mar 12, 2015

Last Modified: Sep 19, 2017

Accession Number:

Code Number:

Sequence Author:

DNA Type: Synthetic DNA

Laboratory Host Organism:

Bacterial Transformation Strain: DH5aTM
Dam⁺ Dcm⁺ EcoKI⁺

Comments:

References: