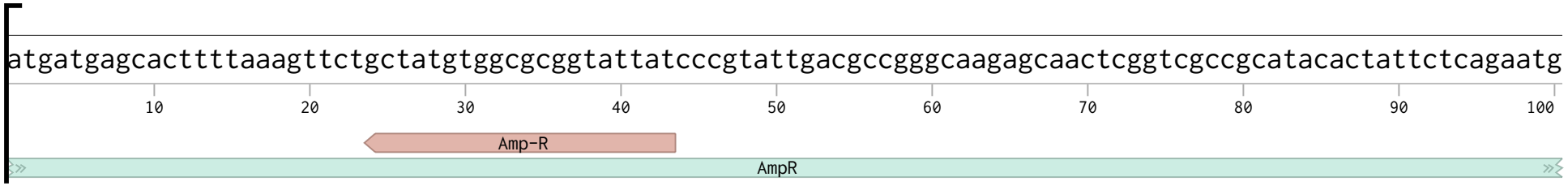
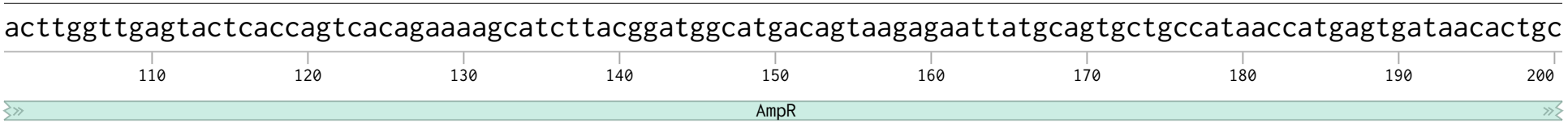
Template Alignment: 2020-11-19_F08_ASAS14BSP3



template sequence pAS1.4 (prqR-gRNA-2)

aligned sequence 2020-11-19_F08_ASAS14BSP3



template sequence pAS1.4 (prqR-gRNA-2)

aligned sequence 2020-11-19_F08_ASAS14BSP3

ggccaacttacttctgacaacgatcggaggaccgaaggagctaaccgctttttgcacaacatgggggatcatgtaactcgccttgatcgttgggaaccg

210 220 230 240 250 260 270 280 290 300

AmpR

template sequence pAS1.4 (prqR-gRNA-2)

aligned sequence 2020-11-19_F08_ASAS14BSP3

gagctgaatgaagccataccaaacgacgagcgtgacaccacgatgcctgtagcaatggcaacaacgttgcgcaaactattaactggcgaactacttactc

310 320 330 340 350 360 370 380 390 400

AmpR

template sequence pAS1.4 (prqR-gRNA-2)

aligned sequence 2020-11-19_F08_ASAS14BSP3

tagcttcccggcaacaattaatagactggatggaggcggataaagttgcaggaccacttctgcgctcggcccttccggctggctggtttattgctgataa

410 420 430 440 450 460 470 480 490 500

AmpR

template sequence pAS1.4 (prqR-gRNA-2)

aligned sequence 2020-11-19_F08_ASAS14BSP3

atctggagccggtgagcgtggttctcgcggtatcattgcagcactggggccagatggtaagccctcccgtatcgtagttatctacacgacggggagtcag

510 520 530 540 550 560 570 580 590 600

AmpR

template sequence pAS1.4 (prqR-gRNA-2)

aligned sequence 2020-11-19_F08_ASAS14BSP3

gcaactatggatgaacgaaatagacagatcgctgagataggtgcctcactgattaagcattggtaactgtcagaccaagtttactcatatatactttaga

610 620 630 640 650 660 670 680 690 700

AmpR

template sequence pAS1.4 (prqR-gRNA-2)

aligned sequence 2020-11-19_F08_ASAS14BSP3

ttgatttaaaacttcatttttaatttaaaaggatctaggtgaagatccttttgataatctcatgaccaaaatcccttaacgtgagttttcgttccactg

710 720 730 740 750 760 770 780 790 800

template sequence pAS1.4 (prqR-gRNA-2)

aligned sequence 2020-11-19_F08_ASAS14BSP3

agcgtcagaccccgtagaaaagatcaaaggatcttcttgagatccttttttctgcgcgtaatctgctgcttgcaaacaaaaaaaccaccgctaccagcg

810 820 830 840 850 860 870 880 890 900

ori

template sequence pAS1.4 (prqR-gRNA-2)

aligned sequence 2020-11-19_F08_ASAS14BSP3

gtggtttgtttgccggatcaagagctaccaactctttttccgaaggtaactggcttcagcagagcgcagataccaaatactgtccttctagtgtagccgt

910 920 930 940 950 960 970 980 990 1,000

ori

template sequence pAS1.4 (prqR-gRNA-2)

aligned sequence 2020-11-19_F08_ASAS14BSP3

agttaggccaccacttcaagaactctgtagcaccgcctacatacctcgctctgctaatcctgttaccagtggctgctgccagtggcgataagtcgtgtct

1,010 1,020 1,030 1,040 1,050 1,060 1,070 1,080 1,090 1,100

ori

template sequence pAS1.4 (prqR-gRNA-2)

aligned sequence 2020-11-19_F08_ASAS14BSP3

taccgggttggactcaagacgatagttaccggataaggcgcagcggtcgggctgaacgggggggttcgtgcacacagcccagcttggagcgaacgacctac

1,110 1,120 1,130 1,140 1,150 1,160 1,170 1,180 1,190 1,200

ori

template sequence pAS1.4 (prqR-gRNA-2)

aligned sequence 2020-11-19_F08_ASAS14BSP3

accgaactgagatacctacagcgtgagctatgagaaagcgccacgcttcccgaagggagaaaggcggacaggtatccggtaagcggcagggtcggaacag

1,210 1,220 1,230 1,240 1,250 1,260 1,270 1,280 1,290 1,300

ori

template sequence pAS1.4 (prqR-gRNA-2)

aligned sequence 2020-11-19_F08_ASAS14BSP3

gagagcgcacgagggagcttccagggggaaacgcctggtatctttatagtcctgtcgggtttcgccacctctgacttgagcgtcgattttgtgatgctc

1,310 1,320 1,330 1,340 1,350 1,360 1,370 1,380 1,390 1,400

pBR322ori-F

ori

template sequence pAS1.4 (prqR-gRNA-2)

aligned sequence 2020-11-19_F08_ASAS14BSP3

gtcaggggggcggagcctatggaaaaacgccagcaacgcggccttttacggttcctggcagatcctagatgtggcgcaacgatgccggcgacaagcagg

1,410 1,420 1,430 1,440 1,450 1,460 1,470 1,480 1,490 1,500

ori

template sequence pAS1.4 (prqR-gRNA-2)

aligned sequence 2020-11-19_F08_ASAS14BSP3

agcgcaccgacttcttccgcatcaagtgttttggctctcaggccgaggcccacggcaagtatttgggcaaggggtcgctggtattcgtgcagggcaagat

1,510 1,520 1,530 1,540 1,550 1,560 1,570 1,580 1,590 1,600

template sequence pAS1.4 (prqR-gRNA-2)

aligned sequence 2020-11-19_F08_ASAS14BSP3

tcggaataccaagtacgagaaggacggccagacggtctacgggaccgacttcattgccgataaggtggattatctggacaccaaggcaccaggcgggtca

1,610 1,620 1,630 1,640 1,650 1,660 1,670 1,680 1,690 1,700

template sequence pAS1.4 (prqR-gRNA-2)

aligned sequence 2020-11-19_F08_ASAS14BSP3

aatcaggaataagggcacattgccccggcgtgagtcggggcaatcccgcaaggagggtgaatgaatcggacgtttgaccggaaggcatacaggcaagaac

1,710 1,720 1,730 1,740 1,750 1,760 1,770 1,780 1,790 1,800

trfA

template sequence pAS1.4 (prqR-gRNA-2)

aligned sequence 2020-11-19_F08_ASAS14BSP3

tgatcgacgcggggttttccgccgaggatgccgaaaccatcgcaagccgcaccgtcatgcgtgcgccccgcgaaaccttccagtccgtcggctcgatggt

1,810 1,820 1,830 1,840 1,850 1,860 1,870 1,880 1,890 1,900

trfA

template sequence pAS1.4 (prqR-gRNA-2)

aligned sequence 2020-11-19_F08_ASAS14BSP3

ccagcaagctacggccaagatcgagcgcgacagcgtgcaactggctccccctgccctgcccgcgccatcggccgccgtggagcgttcgcgtcgtcttgaa

1,910 1,920 1,930 1,940 1,950 1,960 1,970 1,980 1,990 2,000

trfA

template sequence pAS1.4 (prqR-gRNA-2)

aligned sequence 2020-11-19_F08_ASAS14BSP3

caggaggcggcaggtttggcgaagtcgatgaccatcgacacgcgaggaactatgacgaccaagaagcgaaaaaccgccggcgaggacctggcaaaacagg

2,010 2,020 2,030 2,040 2,050 2,060 2,070 2,080 2,090 2,100

trfA

template sequence pAS1.4 (prqR-gRNA-2)

aligned sequence 2020-11-19_F08_ASAS14BSP3

tcagcgaggccaagcaggccgcgttgctgaaacacacgaagcagcagatcaaggaaatgcagctttccttgttcgatattgcgccgtggccggacacgat

2,110 2,120 2,130 2,140 2,150 2,160 2,170 2,180 2,190 2,200

trfA

template sequence pAS1.4 (prqR-gRNA-2)

aligned sequence 2020-11-19_F08_ASAS14BSP3

gcgagcgatgccaaacgacacggcccgctctgccctgttcaccacgcgcaacaagaaaatcccgcgcgaggcgctgcaaaacaaggtcattttccacgtc

2,210 2,220 2,230 2,240 2,250 2,260 2,270 2,280 2,290 2,300

trfA

template sequence pAS1.4 (prqR-gRNA-2)

aligned sequence 2020-11-19_F08_ASAS14BSP3

aacaaggacgtgaagatcacctacaccggcgtcgagctgcgggccgacgatgacgaactggtgtggcagcaggtgttggagtacgcgaagcgcaccccta

2,310 2,320 2,330 2,340 2,350 2,360 2,370 2,380 2,390 2,400

trfA

template sequence pAS1.4 (prqR-gRNA-2)

aligned sequence 2020-11-19_F08_ASAS14BSP3

tcggcgagccgatcaccttcacgttctacgagctttgccaggacctgggctggtcgatcaatggccggtattacacgaaggccgaggaatgcctgtcgcg

2,410 2,420 2,430 2,440 2,450 2,460 2,470 2,480 2,490 2,500

trfA

template sequence pAS1.4 (prqR-gRNA-2)

aligned sequence 2020-11-19_F08_ASAS14BSP3

cctacaggcgacggcgatgggcttcacgtccgaccgcgttgggcacctggaatcggtgtcgctgctgcaccgcttccgcgtcctggaccgtggcaagaaa

2,510 2,520 2,530 2,540 2,550 2,560 2,570 2,580 2,590 2,600

trfA

template sequence pAS1.4 (prqR-gRNA-2)

aligned sequence 2020-11-19_F08_ASAS14BSP3

acgtcccgttgccaggtcctgatcgacgaggaaatcgtcgtgctgtttgctggcgaccactacacgaaattcatatgggagaagtaccgcaagctgtcgc

2,610 2,620 2,630 2,640 2,650 2,660 2,670 2,680 2,690 2,700

trfA

template sequence pAS1.4 (prqR-gRNA-2)

aligned sequence 2020-11-19_F08_ASAS14BSP3

cgacggcccgacggatgttcgactatttcagctcgcaccgggagccgtacccgctcaagctggaaaccttccgcctcatgtgcggatcggattccacccg

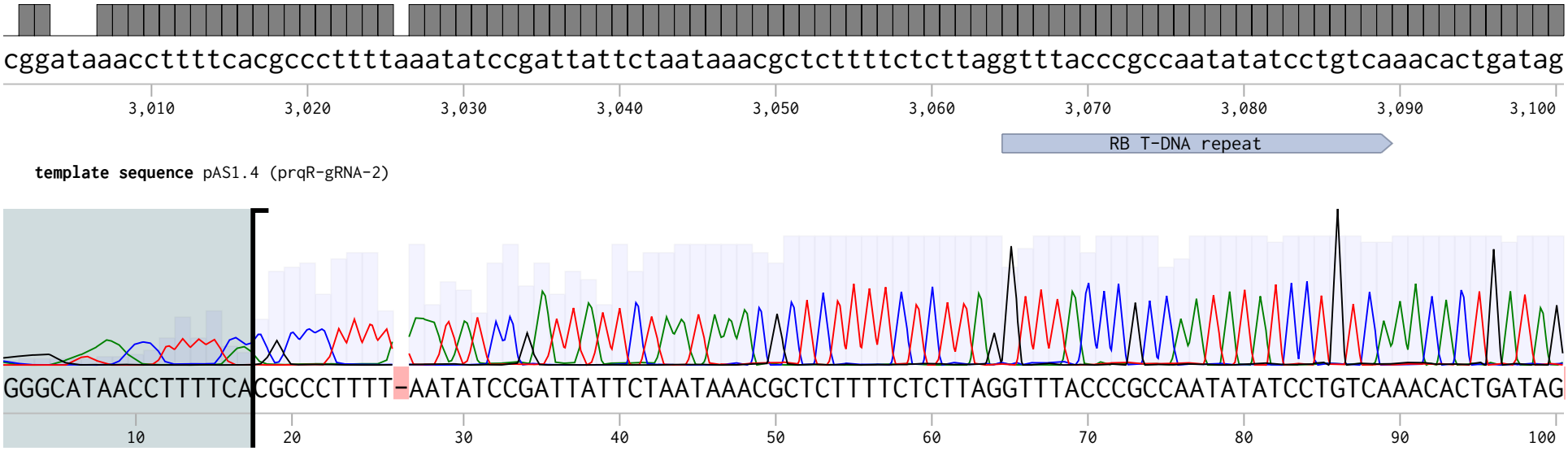
2,710 2,720 2,730 2,740 2,750 2,760 2,770 2,780 2,790 2,800

trfA

template sequence pAS1.4 (prqR-gRNA-2)

aligned sequence 2020-11-19_F08_ASAS14BSP3

cgtgaagaagtggcgcgagcaggtcggcgaagcctgcgaagagttgcgaggcagcggcctggtggaacacgcctgggtcaatgatgacctggtgcattgc
2,810
2,820
2,830
2,840
2,850
2,860
2,870
2,880
2,890
2,900
trfA
template sequence pAS1.4 (prqR-gRNA-2)
aligned sequence 2020-11-19_F08_ASAS14BSP3
aaacgctagggccttgtggggtcagttccggctgggggttcagcagccagcgcctgatctggggaaccctgtggttggcatgcacatacaaatggacgaa
2,910
2,920
2,930
2,940
2,950
2,960
2,970
2,980
2,990
3,000
trfA
template sequence pAS1.4 (prqR-gRNA-2)
A
1
aligned sequence 2020-11-19_F08_ASAS14BSP3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3,020
3,030
3,040
3,050
3,060
3,070
3,080
3,090
3,100
RB T-DNA repeat
template sequence pAS1.4 (prqR-gRNA-2)
GGGCATAACCTTTTCACGCCCTTTT-AATATCCGATTATTCTAATAAACGCTCTTTTCTCTTAGGTTTACCCGCCAATATATCCTGTCAAACACTGATAG
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20
30
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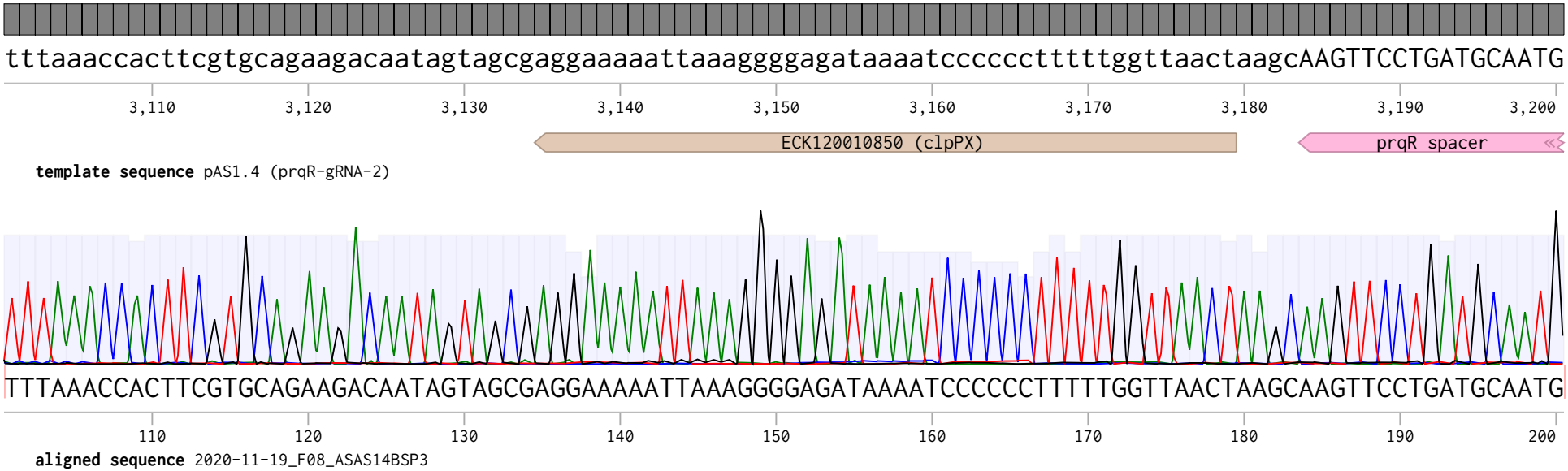
50
60
70
80
90
100
aligned sequence 2020-11-19_F08_ASAS14BSP3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3,120
3,130
3,140
3,150
3,160
3,170
3,180
3,190
3,200
ECK120010850 (clpPX)
prqR spacer
template sequence pAS1.4 (prqR-gRNA-2)
TTTAAACCACTTCGTGCAGAAGACAATAGTAGCGAGGAAAAATTAAAGGGGAGATAAAATCCCCCCTTTTTTGGTTAACTAAGCAAGTTCCTGATGCAATG
110
120
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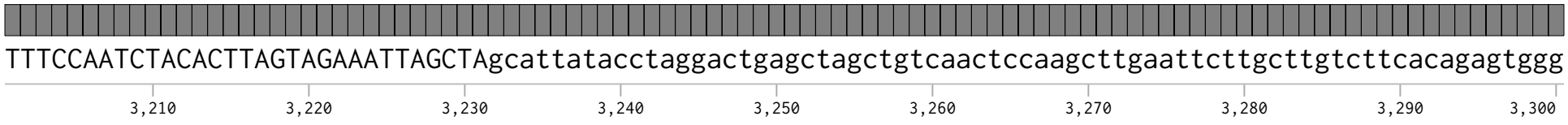
190
200
aligned sequence 2020-11-19_F08_ASAS14BSP3



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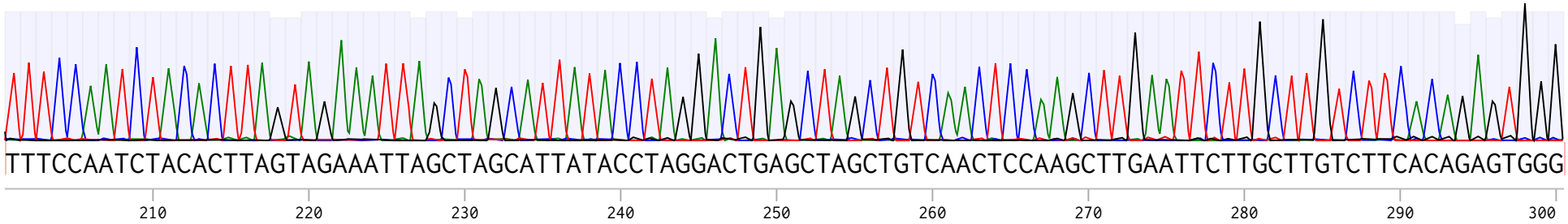
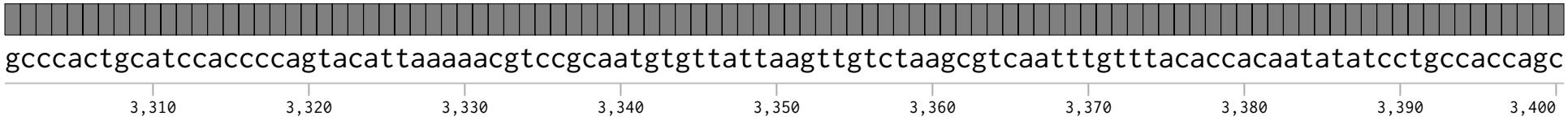
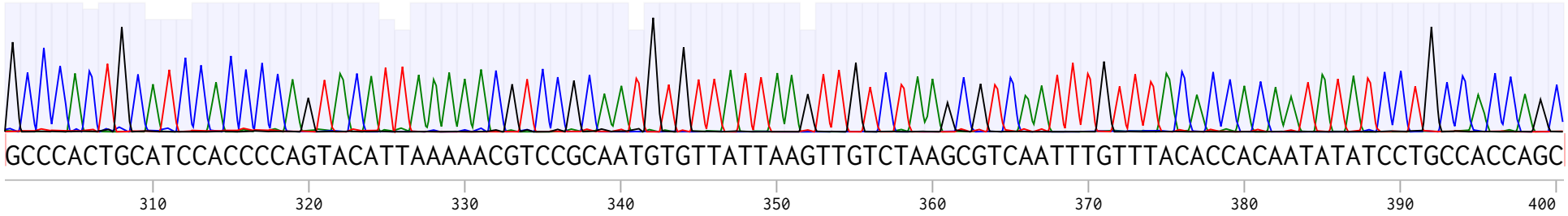


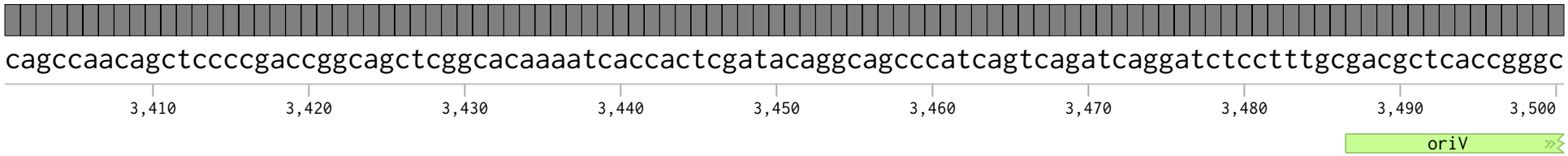
aligned sequence 2020-11-19_F08_ASAS14BSP3



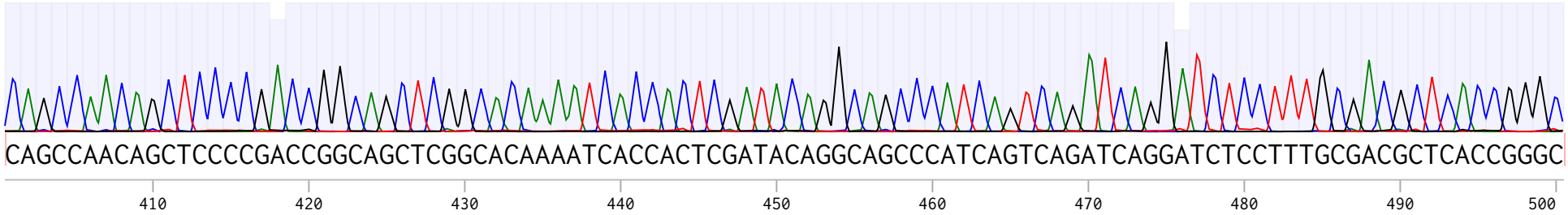
template sequence pAS1.4 (prqR-gRNA-2)



aligned sequence 2020-11-19_F08_ASAS14BSP3



template sequence pAS1.4 (prqR-gRNA-2)



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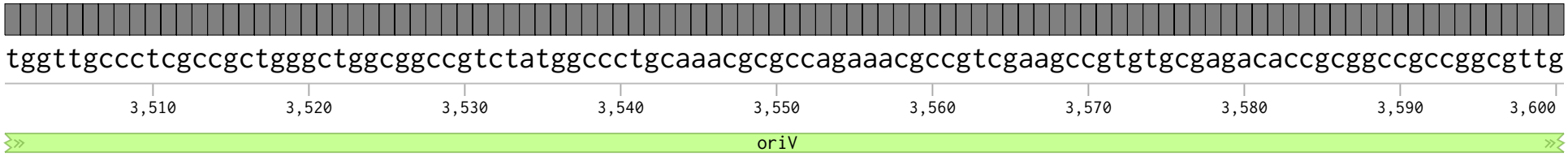
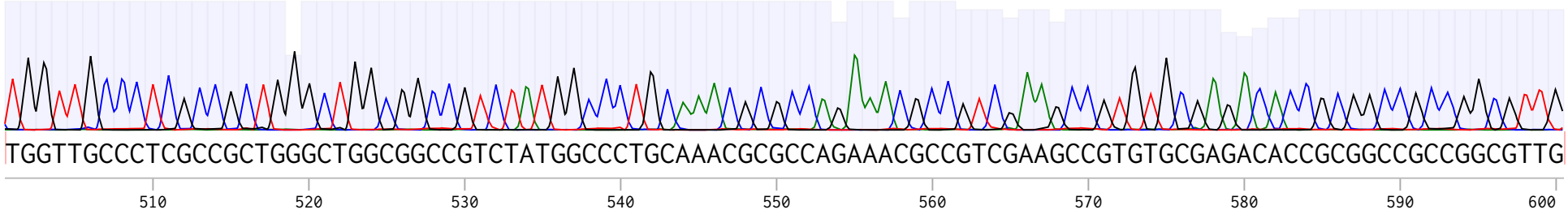
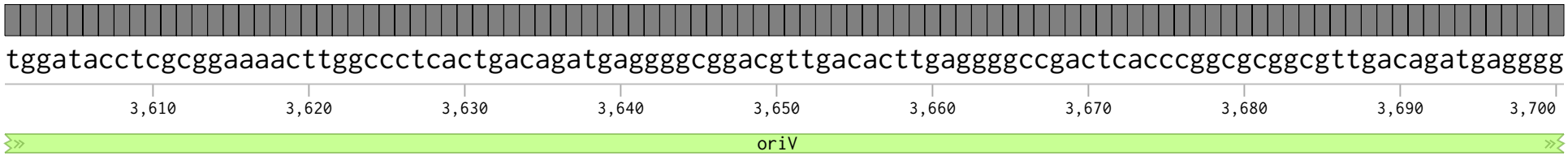


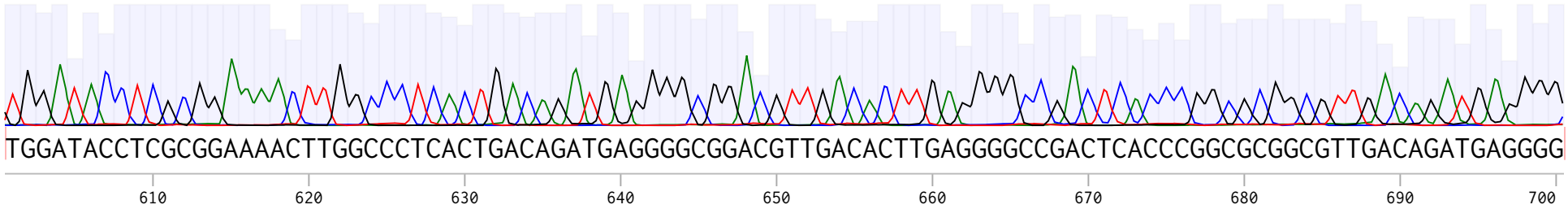
template sequence pAS1.4 (prqR-gRNA-2)



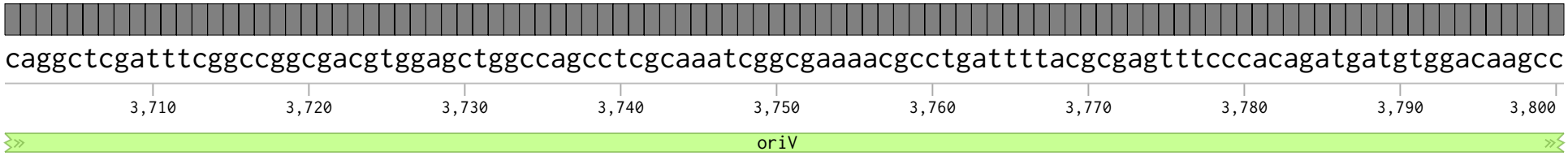
aligned sequence 2020-11-19_F08_ASAS14BSP3



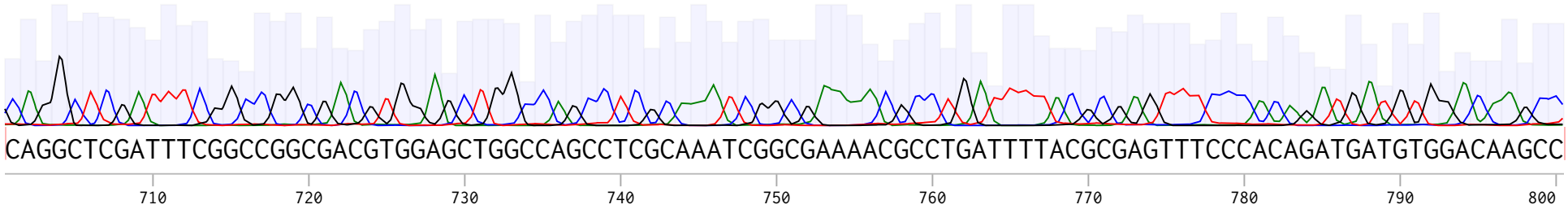
template sequence pAS1.4 (prqR-gRNA-2)



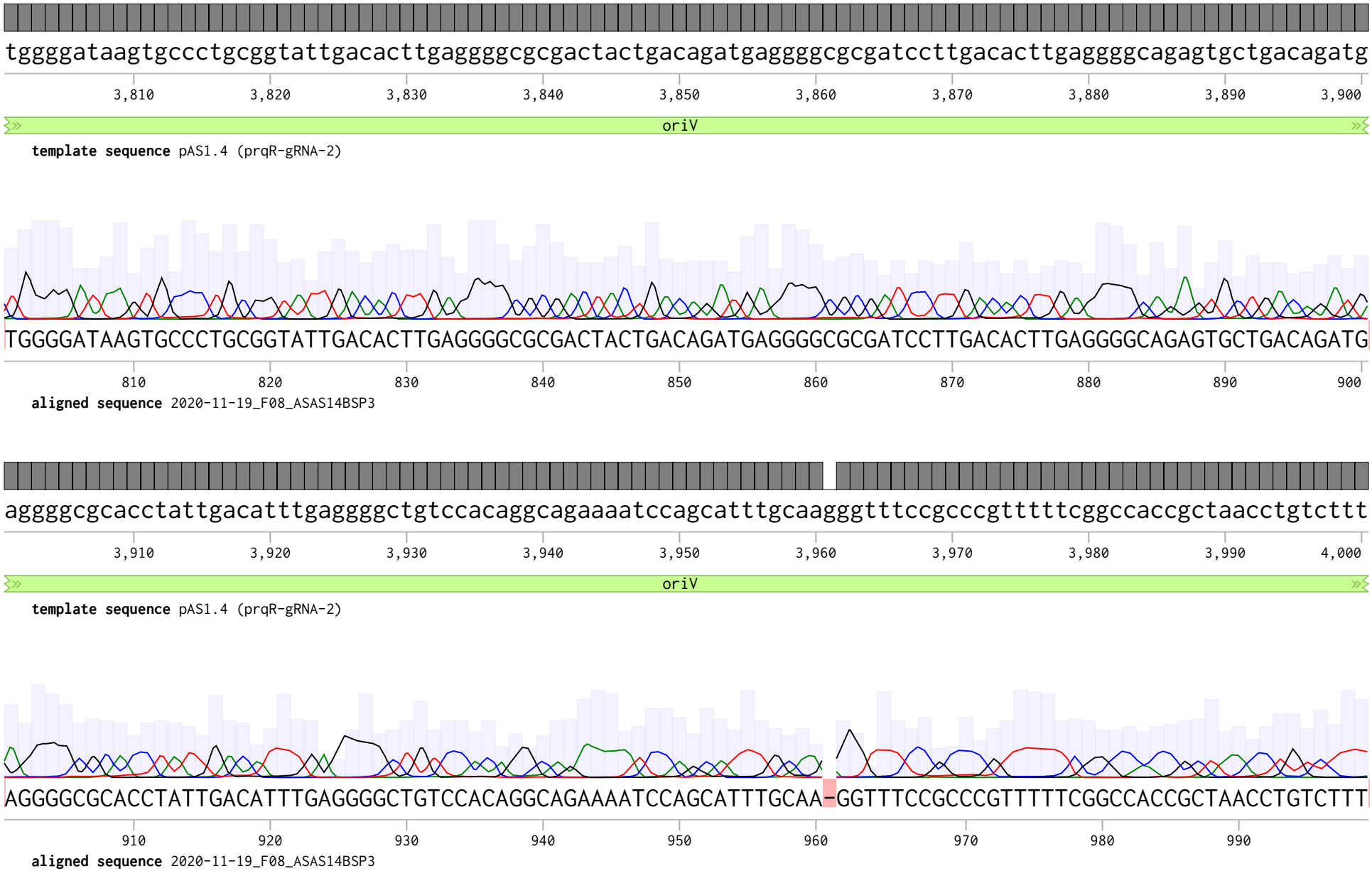
aligned sequence 2020-11-19_F08_ASAS14BSP3



template sequence pAS1.4 (prqR-gRNA-2)



aligned sequence 2020-11-19_F08_ASAS14BSP3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3,810
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3,830
3,840
3,850
3,860
3,870
3,880
3,890
3,900
oriV
template sequence pAS1.4 (prqR-gRNA-2)
TGGGGATAAGTGCCCTGCGGTATTGACACTTGAGGGGCGCGACTACTGACAGATGAGGGGCGCGATCCTTGACACTTGAGGGGCAGAGTGCTGACAGATG
810
820
830
840
850
860
870
880
890
900
aligned sequence 2020-11-19_F08_ASAS14BSP3
aggggcgcacctattgacatttgaggggctgtccacaggcagaaaatccagcatttgcaagggtttccgcccgttttcggccaccgctaacctgtcttt
3,910
3,920
3,930
3,940
3,950
3,960
3,970
3,980
3,990
4,000
oriV
template sequence pAS1.4 (prqR-gRNA-2)
AGGGGCGCACCTATTGACATTTGAGGGGCTGTCCACAGGCAGAAAATCCAGCATTTGCAA-GGTTTCCGCCCGTTTTTCGGCCACCGCTAACCTGTCTTT
910
920
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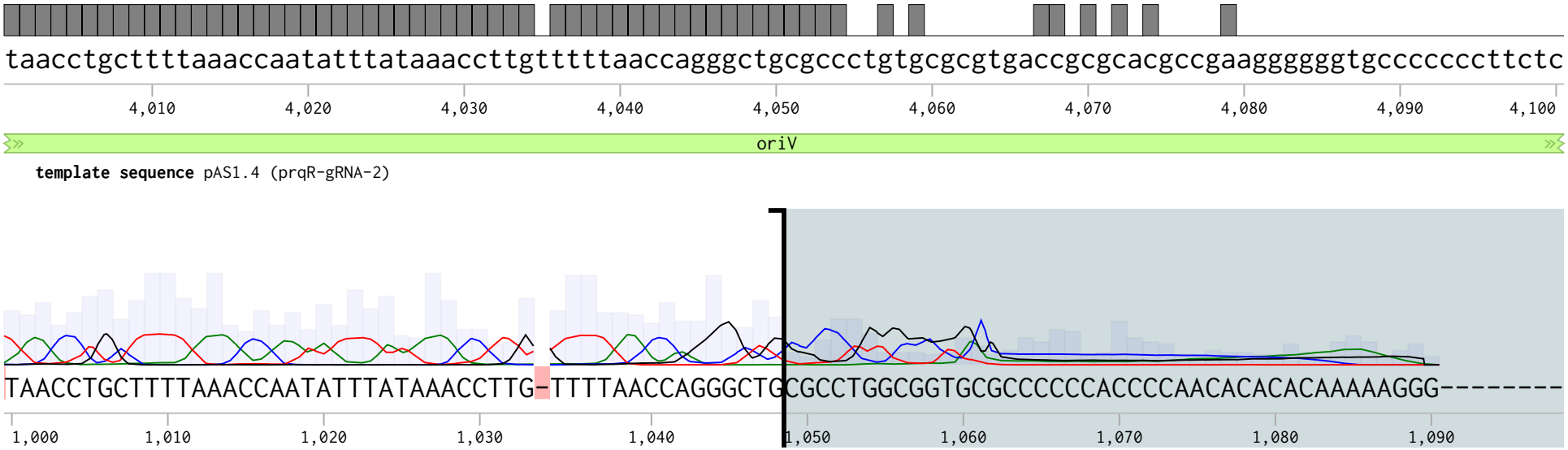
940
950
960
970
980
990
aligned sequence 2020-11-19_F08_ASAS14BSP3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4,010
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4,030
4,040
4,050
4,060
4,070
4,080
4,090
4,100
oriV
template sequence pAS1.4 (prqR-gRNA-2)
TAACCTGCTTTTAAACCAATATTTATAAACCTTG-TTTTAACCAGGGCTGCGCCTGGCGGTGCGCCCCCCACCCCAACACACACAAAAAGGG--------
1,000
1,010
1,020
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1,060
1,070
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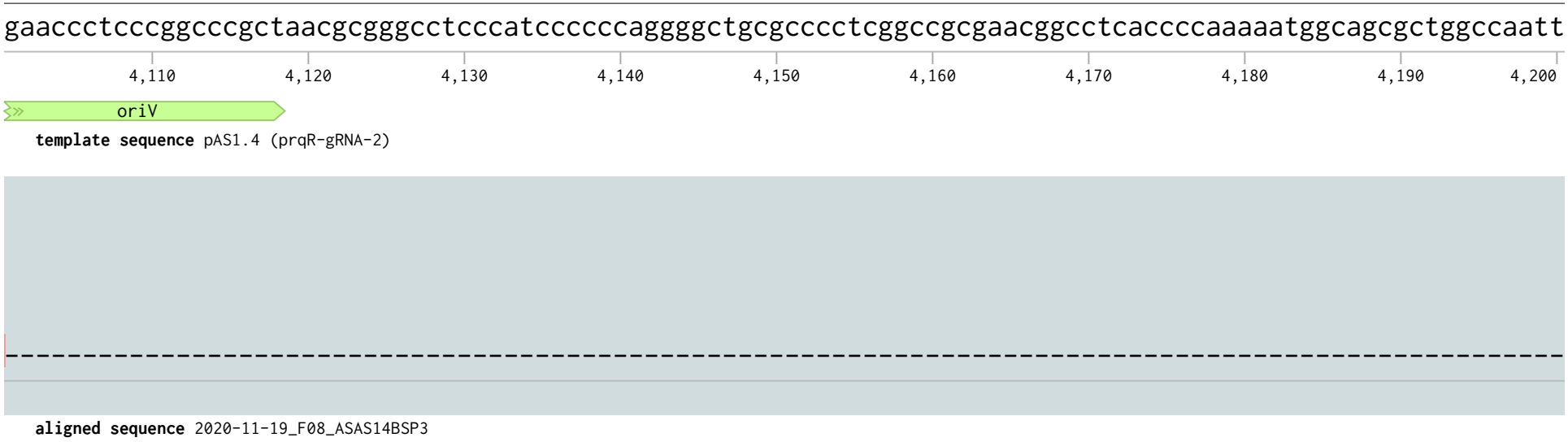
1,090
aligned sequence 2020-11-19_F08_ASAS14BSP3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4,120
4,130
4,140
4,150
4,160
4,170
4,180
4,190
4,200
oriV
template sequence pAS1.4 (prqR-gRNA-2)
aligned sequence 2020-11-19_F08_ASAS14BSP3

cgtgcgcggaacccctatttgtttatttttctaaatacattcaaatatgtatccgctcatgagacaataaccctgataaatgcttcaataatattgaaaa

4,210 4,220 4,230 4,240 4,250 4,260 4,270 4,280 4,290 4,300

AmpR promoter

template sequence pAS1.4 (prqR-gRNA-2)

aligned sequence 2020-11-19_F08_ASAS14BSP3

aggaagagtatgagtattcaacatttccgtgtcgcccttattccctttttgcggcattttgccttcctgttttgctcacccagaaacgctggtgaaag

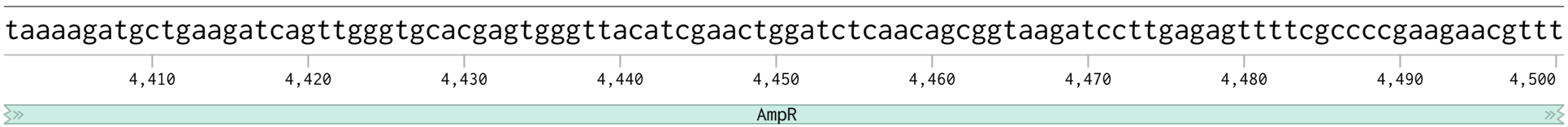
4,310 4,320 4,330 4,340 4,350 4,360 4,370 4,380 4,390 4,400

Amp...er

AmpR

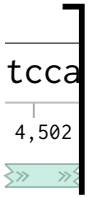
template sequence pAS1.4 (prqR-gRNA-2)

aligned sequence 2020-11-19_F08_ASAS14BSP3



template sequence pAS1.4 (prqR-gRNA-2)

aligned sequence 2020-11-19_F08_ASAS14BSP3



template sequence pAS1.4 (prqR-gRNA-2)

aligned sequence 2020-11-19_F08_ASAS14BSP3