

Template Alignment: 2020-09-07_G02_ASAS131SP3 (2020-09-07_G02_...

agggagcttccagggggaacgcctggtatctttatagtcctgtcgggtttcgccacctctgacttgagcgctcgatttttgtgatgctcgtcaggggggc

10 20 30 40 50 60 70 80 90 100

pBR322ori-F

ori

template sequence pAS1.3

aligned sequence 2020-09-07_G02_ASAS131SP3 (2020-09-07_G02_ASAS131SP3.ab1)

ggagcctatggaaaaacgccagcaacgcggcctttttacggttcctggcagatcctagatgtggcgcaacgatgccggcgacaagcaggagcgcaccgac

110 120 130 140 150 160 170 180 190 200

ori

template sequence pAS1.3

aligned sequence 2020-09-07_G02_ASAS131SP3 (2020-09-07_G02_ASAS131SP3.ab1)

ttcttccgcatcaagtgttttggctctcaggccgaggcccacggcaagtatttgggcaaggggtcgctggtattcgtgcagggcaagattcggaatacca

210

220

230

240

250

260

270

280

290

300

template sequence pAS1.3

aligned sequence 2020-09-07_G02_ASAS131SP3 (2020-09-07_G02_ASAS131SP3.ab1)

agtacgagaaggacggccagacggtctacgggaccgacttcattgccgataaggtggattatctggacaccaaggcaccaggcgggtcaaatacaggaata

310

320

330

340

350

360

370

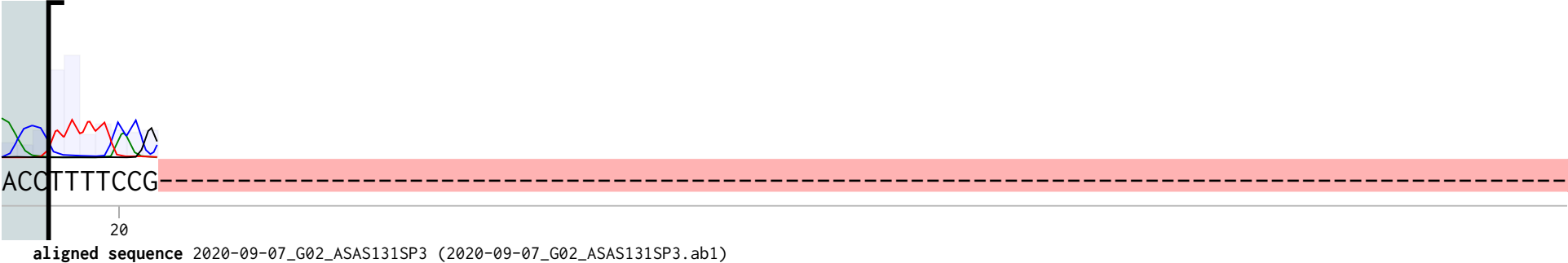
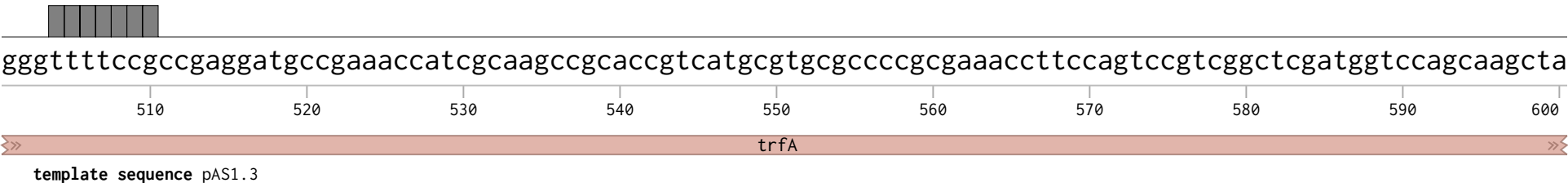
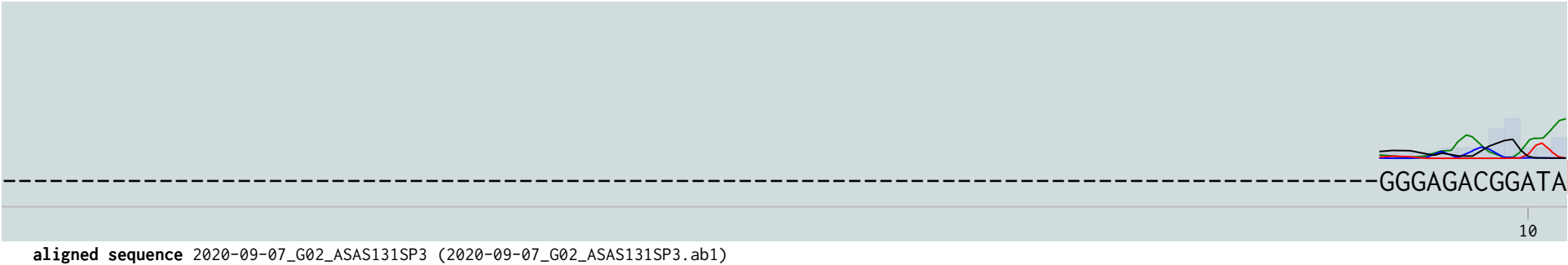
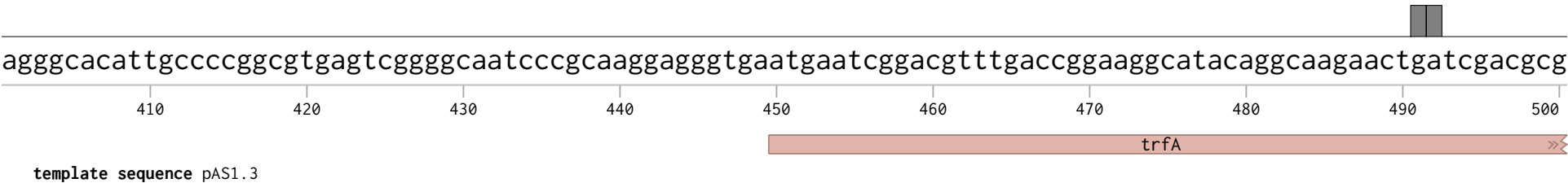
380

390

400

template sequence pAS1.3

aligned sequence 2020-09-07_G02_ASAS131SP3 (2020-09-07_G02_ASAS131SP3.ab1)



cggccaagatcgagcgcgacagcgtgcaactggctccccctgccctgcccgcgccatcggccgccgtggagcgttcgcgtcgtcttgaacaggaggcggc

610 620 630 640 650 660 670 680 690 700

>> trfA >>

template sequence pAS1.3

aligned sequence 2020-09-07_G02_ASAS131SP3 (2020-09-07_G02_ASAS131SP3.ab1)

aggtttggcgaagtcgatgaccatcgacacgcgaggaactatgacgaccaagaagcgaaaaaccgccggcgaggacctggcaaaacaggtcagcgaggcc

710 720 730 740 750 760 770 780 790 800

>> trfA >>

template sequence pAS1.3

aligned sequence 2020-09-07_G02_ASAS131SP3 (2020-09-07_G02_ASAS131SP3.ab1)

aagcaggccgcgttgctgaaacacacgaagcagcagatcaaggaaatgcagctttccttgttcgatattgcgccgtggccggacacgatgcgagcgatgc

810

820

830

840

850

860

870

880

890

900

>> trfA >>

template sequence pAS1.3

aligned sequence 2020-09-07_G02_ASAS131SP3 (2020-09-07_G02_ASAS131SP3.ab1)

caaacgacacggcccgcctctgccctgttcaccacgcgcaacaagaaaatcccgcgcgaggcgctgcaaaacaaggtcattttccacgtcaacaaggacgt

910

920

930

940

950

960

970

980

990

1,000

>> trfA >>

template sequence pAS1.3

aligned sequence 2020-09-07_G02_ASAS131SP3 (2020-09-07_G02_ASAS131SP3.ab1)

gaagatcacctacaccggcgtcgagctgcgggcccgcgatgacgaactggtgtggcagcaggtgttgagtagcgaagcgcacccctatcggcgagccg

1,010

1,020

1,030

1,040

1,050

1,060

1,070

1,080

1,090

1,100

>> trfA >>

template sequence pAS1.3

aligned sequence 2020-09-07_G02_ASAS131SP3 (2020-09-07_G02_ASAS131SP3.ab1)

atcaccttcacgttctacgagctttgccaggacctgggctggatcgatcaatggccggtattacacgaaggccgaggaatgcctgtcgcgccctacaggcga

1,110

1,120

1,130

1,140

1,150

1,160

1,170

1,180

1,190

1,200

>> trfA >>

template sequence pAS1.3

aligned sequence 2020-09-07_G02_ASAS131SP3 (2020-09-07_G02_ASAS131SP3.ab1)

cggc gatggg cttcac gtccgac cggttggg cacctg gaatcg gtgtcg ctgctgc accgct tccgcg tcctgg accgtgg caagaaa cgtccc gttg

1,210

1,220

1,230

1,240

1,250

1,260

1,270

1,280

1,290

1,300

>> trfA >>

template sequence pAS1.3

aligned sequence 2020-09-07_G02_ASAS131SP3 (2020-09-07_G02_ASAS131SP3.ab1)

ccagg tcctga tcgacg aggaat cgtcgt gctgtt ttgctg ggcgac cactac acgaaat tcatat gggaga agtacc gcaagc tgtcgc cgacgg cccga

1,310

1,320

1,330

1,340

1,350

1,360

1,370

1,380

1,390

1,400

>> trfA >>

template sequence pAS1.3

aligned sequence 2020-09-07_G02_ASAS131SP3 (2020-09-07_G02_ASAS131SP3.ab1)

cggatgttcgactat ttcagctcgcaccgggagccgtaccgcctcaagctggaaacctccgcctcatgtgcggatcggattccacccgcgtgaagaagt

1,410

1,420

1,430

1,440

1,450

1,460

1,470

1,480

1,490

1,500

» trfA »

template sequence pAS1.3

aligned sequence 2020-09-07_G02_ASAS131SP3 (2020-09-07_G02_ASAS131SP3.ab1)

ggcgcgagcaggtcggcgaagcctgcgaagagttgcgaggcagcggcctggtggaacacgcctgggtcaatgatgacctggtgcattgcaaacgctaggg

1,510

1,520

1,530

1,540

1,550

1,560

1,570

1,580

1,590

1,600

» trfA »

template sequence pAS1.3

aligned sequence 2020-09-07_G02_ASAS131SP3 (2020-09-07_G02_ASAS131SP3.ab1)

ccttgtggggtcagttccggctgggggttcagcagccagcgcctgatctggggaaccctgtggttggcatgcacatacaaatggacgaacggataaacct

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

template sequence pAS1.3

aligned sequence 2020-09-07_G02_ASAS131SP3 (2020-09-07_G02_ASAS131SP3.ab1)

tttcacgcccttttaaatatccgattattctaataaacgctcttttctcttaggtttaccgccaatatatcctgtcaaactgatagtttaaacct

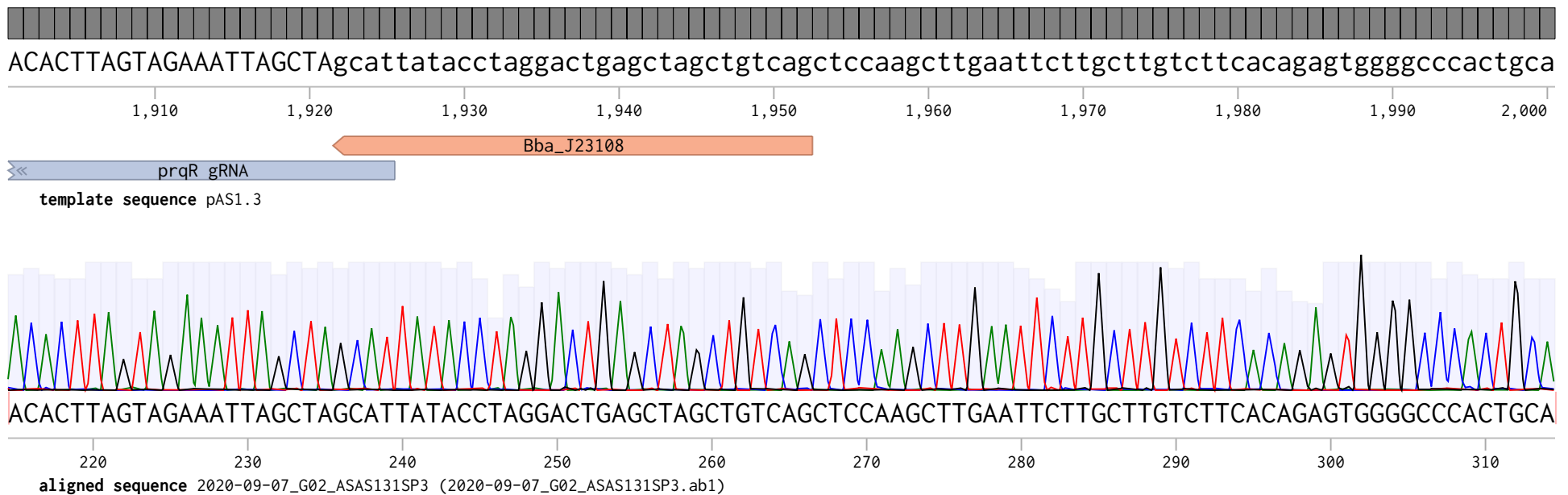
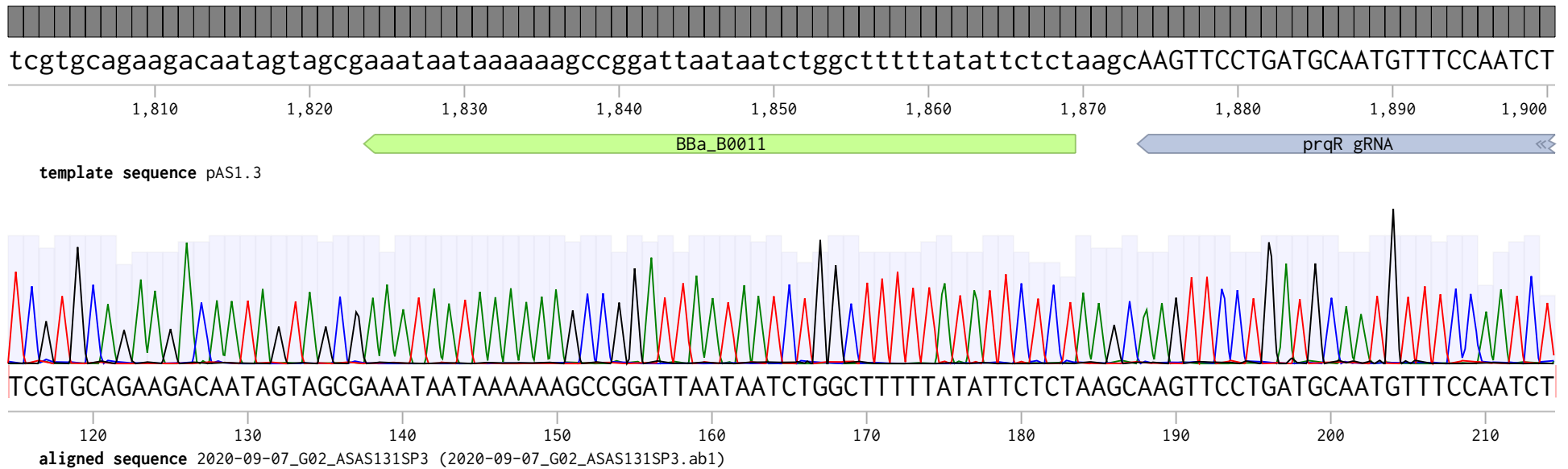
1,710 1,720 1,730 1,740 1,750 1,760 1,770 1,780 1,790 1,800

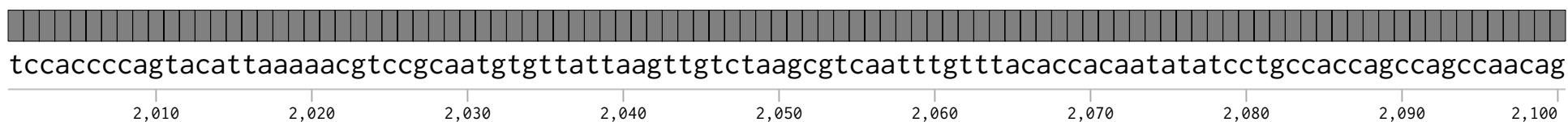
RB T-DNA repeat

template sequence pAS1.3

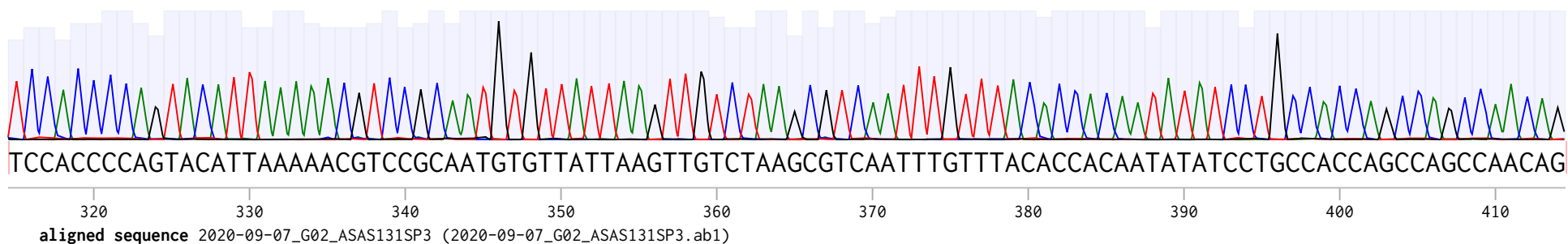
-----CCCTTTTAAATATCCGATTATTCTAATAAACGCTCTTTTCTCTTAGGTTTACCCGCCAATATATCCTGTCAAACACTGATAGTTTAAACCACT

aligned sequence 2020-09-07_G02_ASAS131SP3 (2020-09-07_G02_ASAS131SP3.ab1)

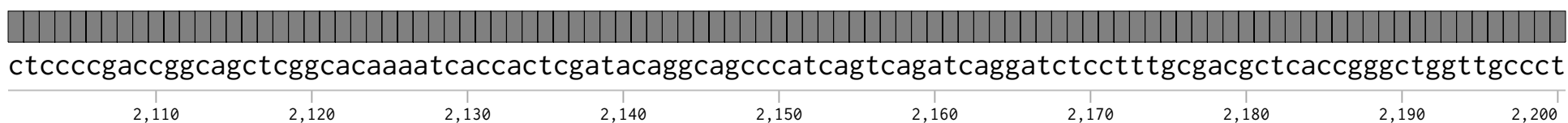




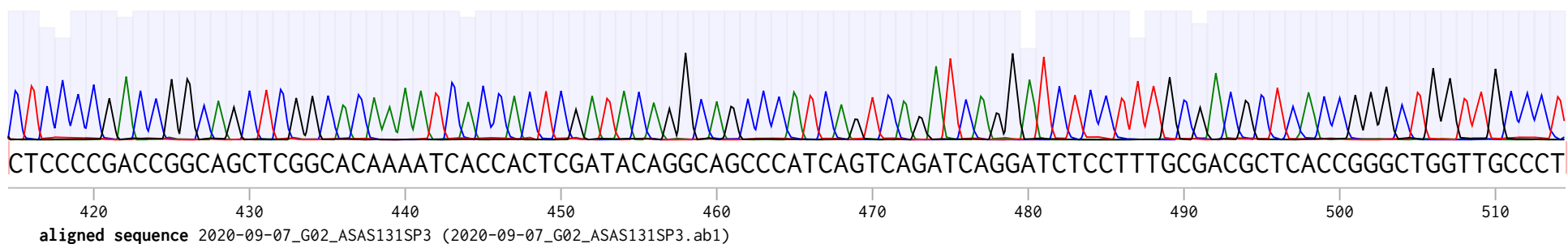
template sequence pAS1.3



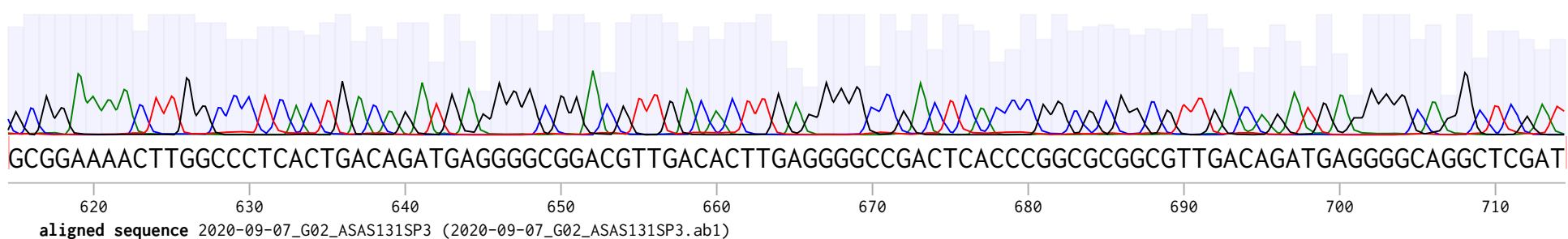
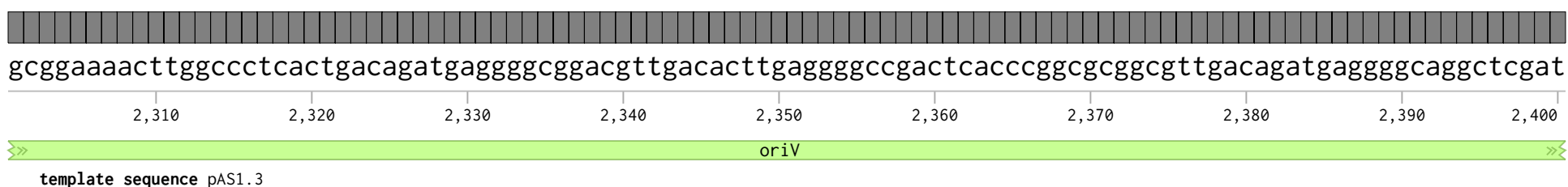
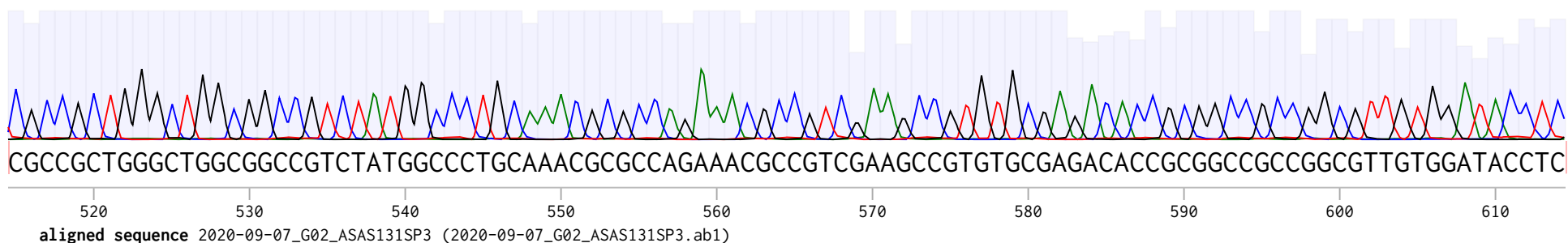
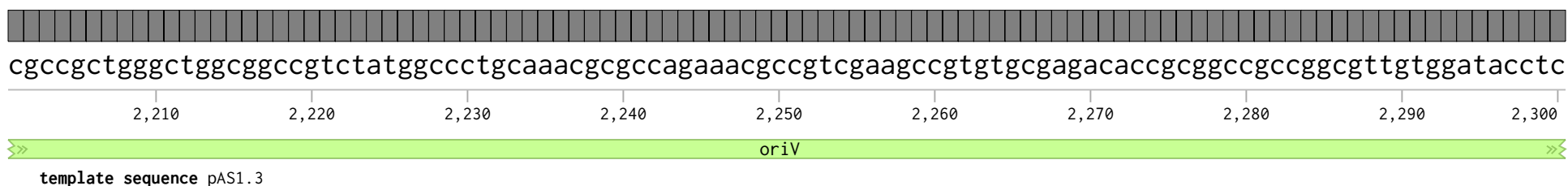
aligned sequence 2020-09-07_G02_ASAS131SP3 (2020-09-07_G02_ASAS131SP3.ab1)

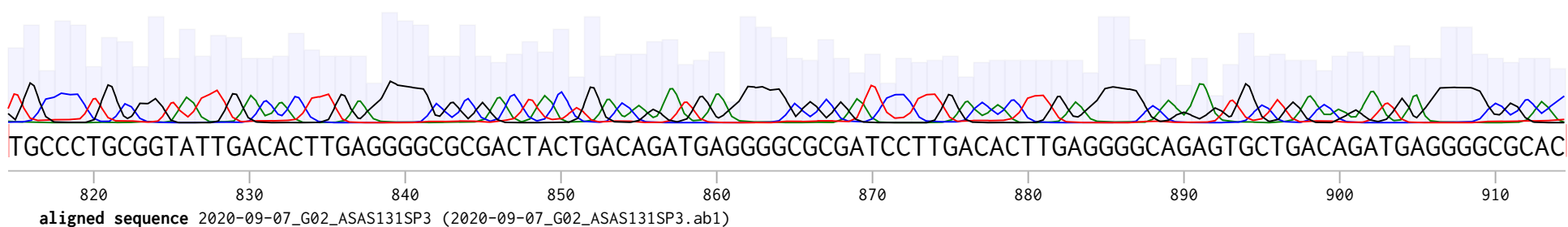
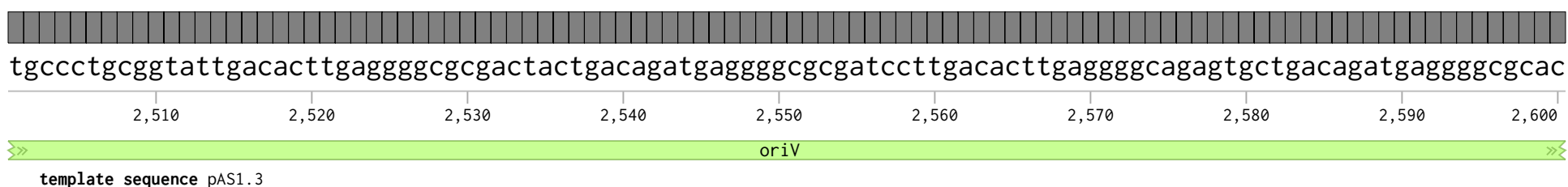
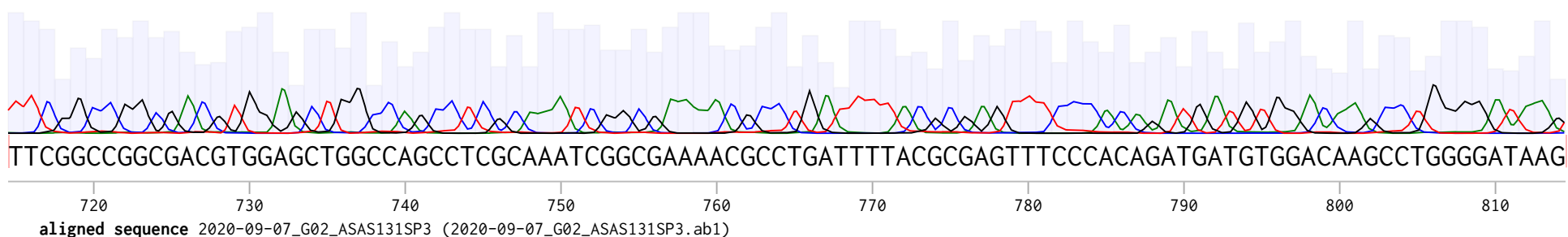
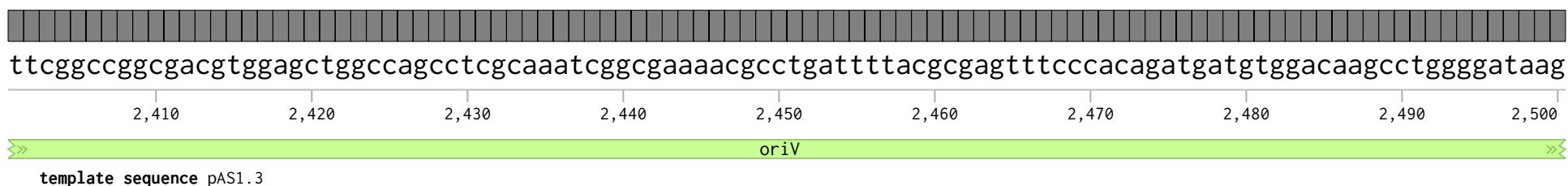


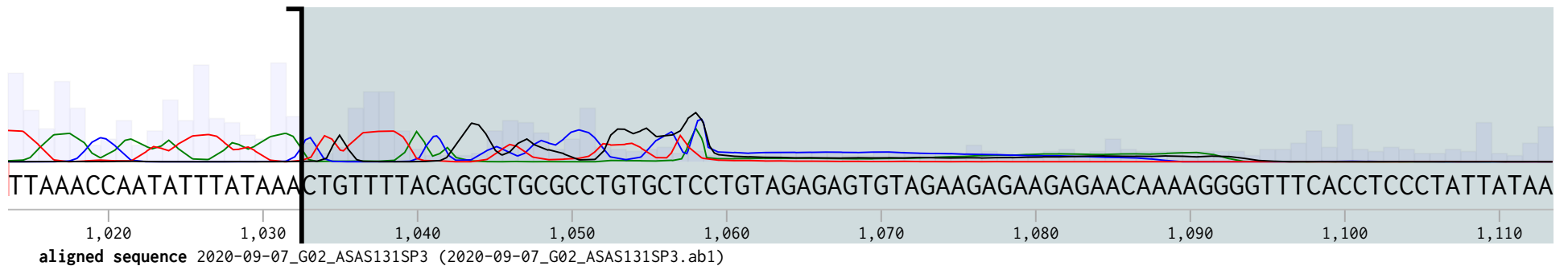
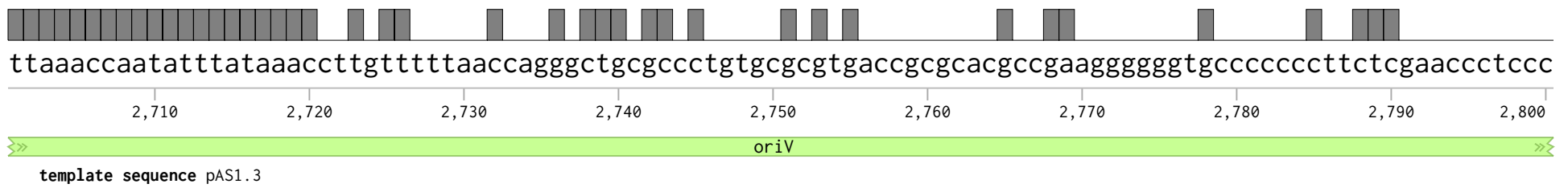
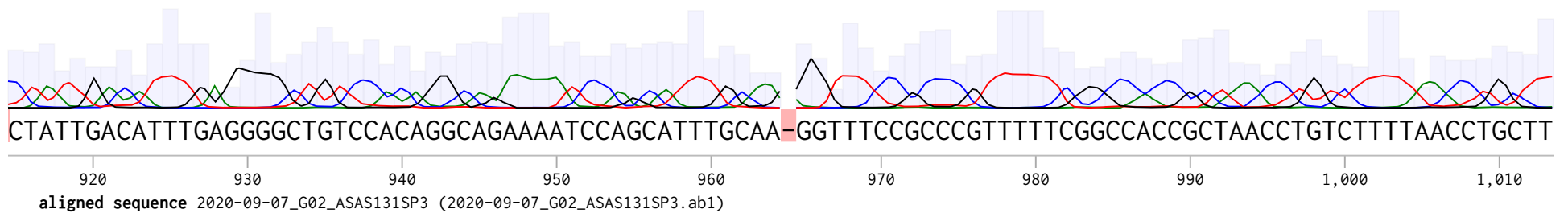
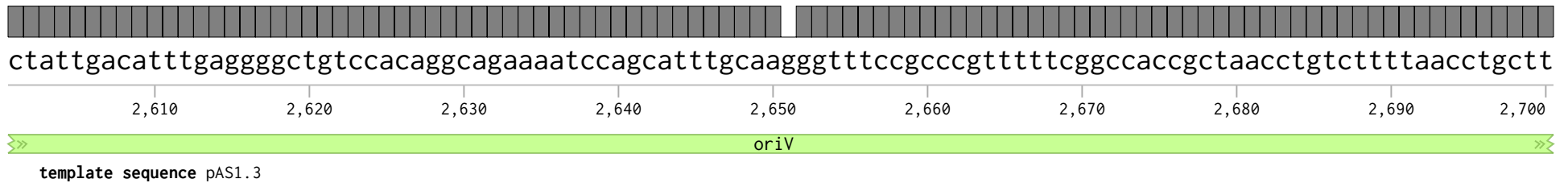
template sequence pAS1.3

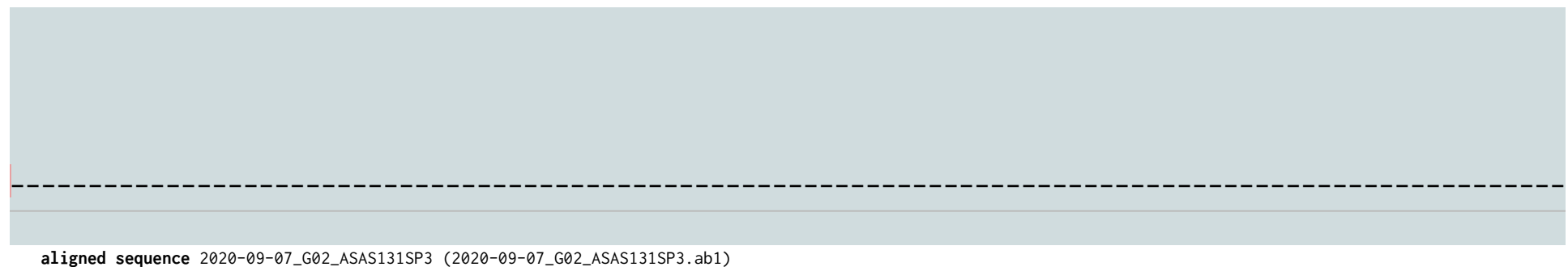
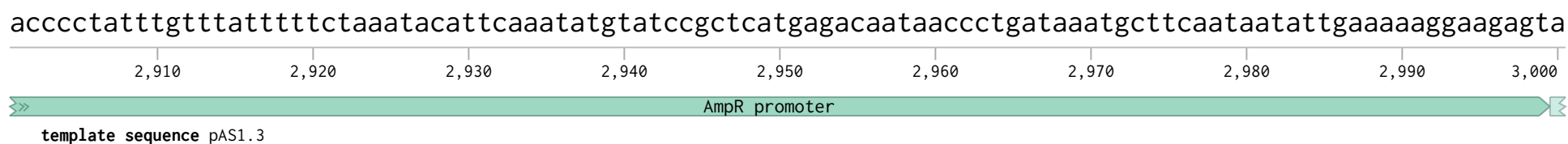
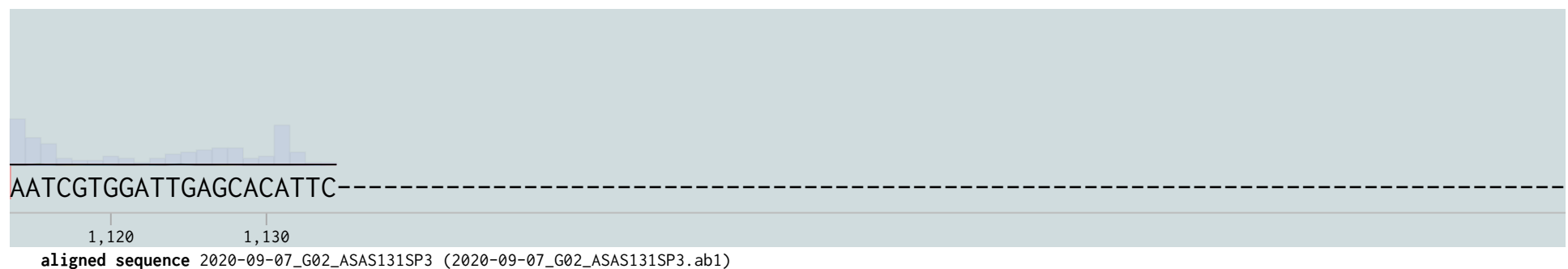
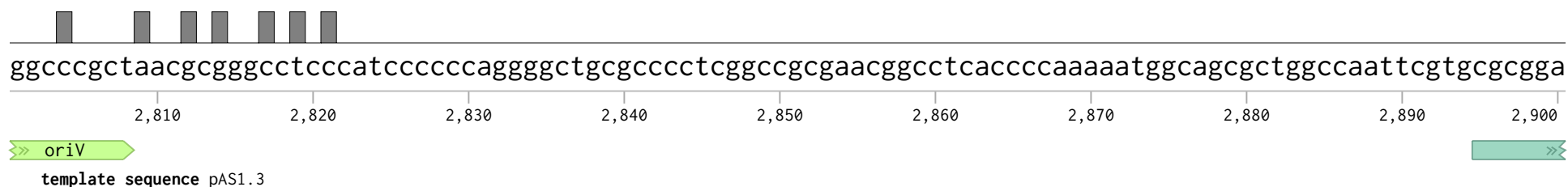


aligned sequence 2020-09-07_G02_ASAS131SP3 (2020-09-07_G02_ASAS131SP3.ab1)







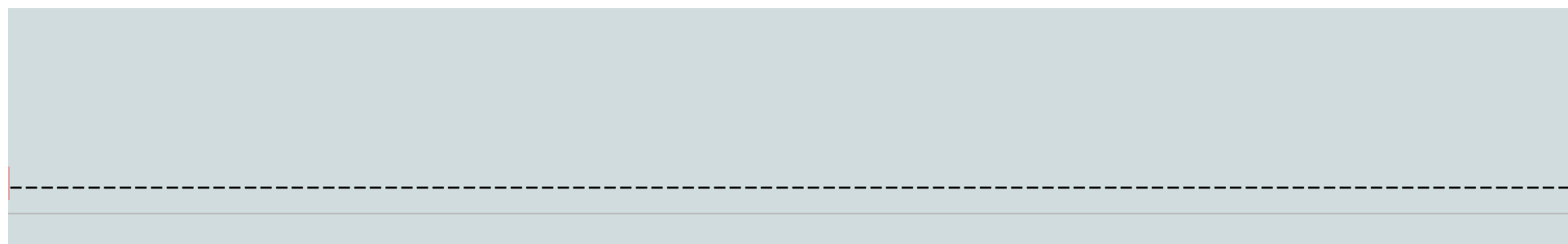


tgagtattcaacatttccgtgtcgcccttattcccttttttgcggcattttgccttcctgtttttgctcaccagaaacgctggtgaaagtaaaagatgc

3,010 3,020 3,030 3,040 3,050 3,060 3,070 3,080 3,090 3,100

>> AmpR >>

template sequence pAS1.3



aligned sequence 2020-09-07_G02_ASAS131SP3 (2020-09-07_G02_ASAS131SP3.ab1)

tgaagatcagttgggtgcacgagtgggttacatcgaactggatctcaacagcggtaagatccttgagagttttcgccccgaagaacgttttccaatgatg

3,110 3,120 3,130 3,140 3,150 3,160 3,170 3,180 3,190 3,200

>> AmpR >>

template sequence pAS1.3



aligned sequence 2020-09-07_G02_ASAS131SP3 (2020-09-07_G02_ASAS131SP3.ab1)

agcacttttaaagttctgctatgtggcgcggtattatcccgtattgacgccgggcaagagcaactcggtcgccgcatacactattctcagaatgacttgg

3,210 3,220 3,230 3,240 3,250 3,260 3,270 3,280 3,290 3,300

Amp-R

AmpR

template sequence pAS1.3

aligned sequence 2020-09-07_G02_ASAS131SP3 (2020-09-07_G02_ASAS131SP3.ab1)

ttgagtactcaccagtcacagaaaagcatcttacggatggcatgacagtaagagaattatgcagtgctgccataaccatgagtgataacactgcggccaa

3,310 3,320 3,330 3,340 3,350 3,360 3,370 3,380 3,390 3,400

AmpR

template sequence pAS1.3

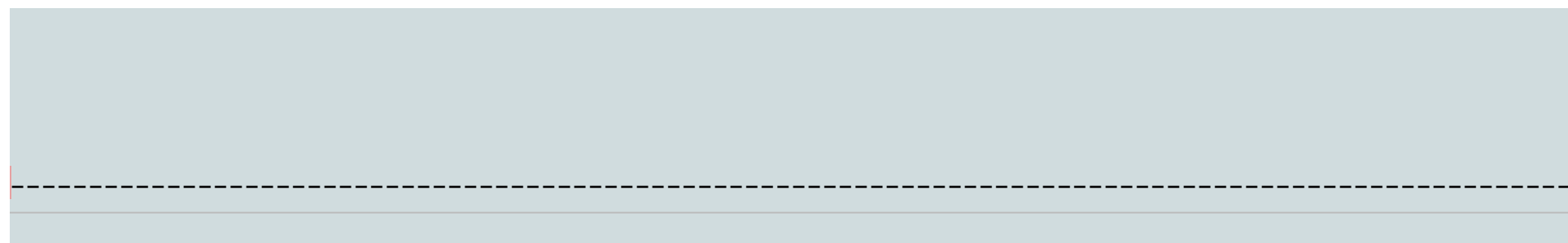
aligned sequence 2020-09-07_G02_ASAS131SP3 (2020-09-07_G02_ASAS131SP3.ab1)

cttacttctgacaacgatcggaggaccgaaggagctaaccgcttttttgcacaacatgggggatcatgtaactcgccttgatcgttgggaaccggagctg

3,410 3,420 3,430 3,440 3,450 3,460 3,470 3,480 3,490 3,500

>> AmpR >>

template sequence pAS1.3



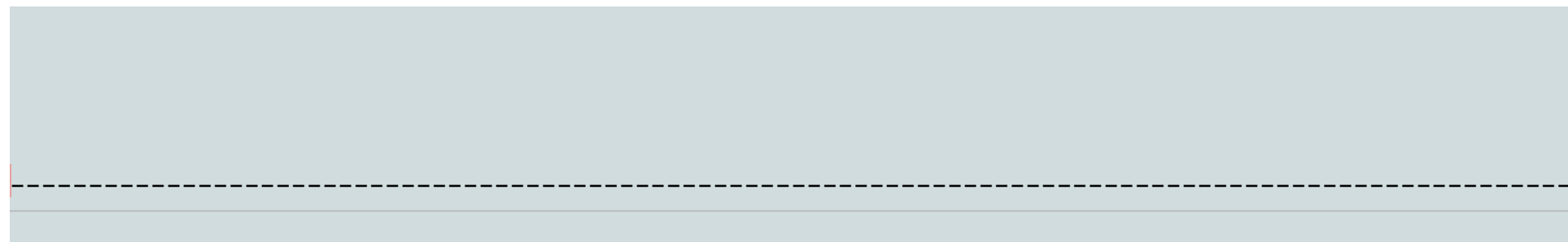
aligned sequence 2020-09-07_G02_ASAS131SP3 (2020-09-07_G02_ASAS131SP3.ab1)

aatgaagccatacacaacgacgagcgtgacaccacgatgcctgtagcaatggcaacaacgttgcgcaaactattaactggcgaactacttactctagctt

3,510 3,520 3,530 3,540 3,550 3,560 3,570 3,580 3,590 3,600

>> AmpR >>

template sequence pAS1.3



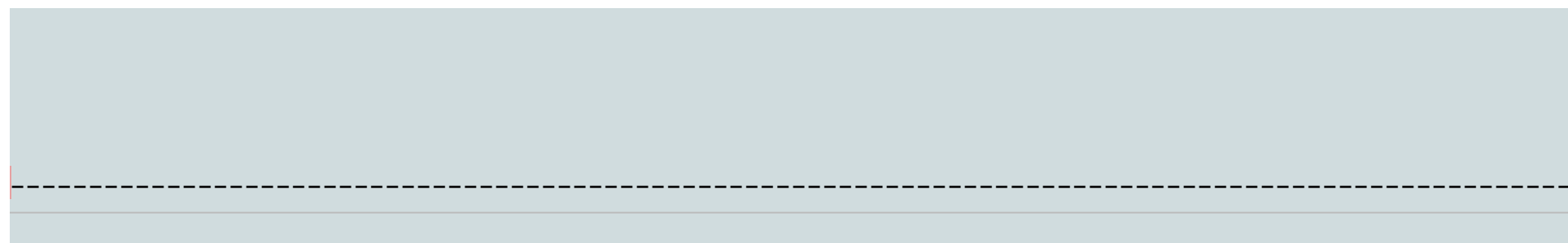
aligned sequence 2020-09-07_G02_ASAS131SP3 (2020-09-07_G02_ASAS131SP3.ab1)

cccggcaacaattaatagactggatggaggcggataaagttgcaggaccacttctgcgctcggcccttccggctggctggttttattgctgataaatctgg

3,610 3,620 3,630 3,640 3,650 3,660 3,670 3,680 3,690 3,700

>> AmpR >>

template sequence pAS1.3



aligned sequence 2020-09-07_G02_ASAS131SP3 (2020-09-07_G02_ASAS131SP3.ab1)

agccggtgagcgtggttctcgcggtatcattgcagcactggggccagatggtaagccctcccgtatcgtagttatctacacgacggggagtcaggcaact

3,710 3,720 3,730 3,740 3,750 3,760 3,770 3,780 3,790 3,800

>> AmpR >>

template sequence pAS1.3



aligned sequence 2020-09-07_G02_ASAS131SP3 (2020-09-07_G02_ASAS131SP3.ab1)

atggatgaacgaaatagacagatcgctgagataggtgcctcactgattaagcattggtaactgtcagaccaagtttactcatatatacttttagattgatt

3,810

3,820

3,830

3,840

3,850

3,860

3,870

3,880

3,890

3,900



template sequence pAS1.3

aligned sequence 2020-09-07_G02_ASAS131SP3 (2020-09-07_G02_ASAS131SP3.ab1)

taaaacttcatttttaatttaaaggatctaggtgaagatccttttgataatctcatgacaaaaatcccttaacgtgagttttcgttccactgagcgctc

3,910

3,920

3,930

3,940

3,950

3,960

3,970

3,980

3,990

4,000

template sequence pAS1.3

aligned sequence 2020-09-07_G02_ASAS131SP3 (2020-09-07_G02_ASAS131SP3.ab1)

agaccccgtagaaaagatcaaaggatcttcttgagatccttttttctgcgcgtaatctgctgcttgcaaacaaaaaaccaccgctaccagcggtggtt

4,010 4,020 4,030 4,040 4,050 4,060 4,070 4,080 4,090 4,100

ori

template sequence pAS1.3

aligned sequence 2020-09-07_G02_ASAS131SP3 (2020-09-07_G02_ASAS131SP3.ab1)

tgtttgccgatcaagagctaccaactctttttccgaaggtaactggcttcagcagagcgcagataccaaatactgtccttctagtgtagccgtagttag

4,110 4,120 4,130 4,140 4,150 4,160 4,170 4,180 4,190 4,200

ori

template sequence pAS1.3

aligned sequence 2020-09-07_G02_ASAS131SP3 (2020-09-07_G02_ASAS131SP3.ab1)

gccaccacttcaagaactctgttagcaccgcctacatacctcgctctgctaatcctgttaccagtggctgctgccagtggcgataagtcgtgtcttaccgg

4,210

4,220

4,230

4,240

4,250

4,260

4,270

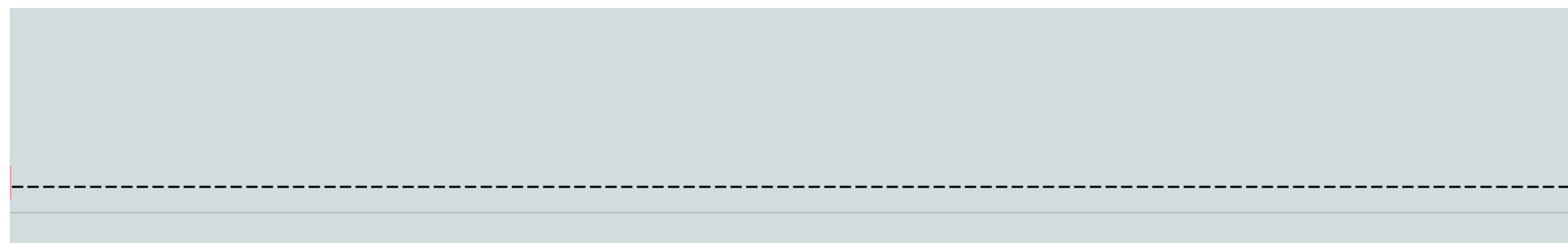
4,280

4,290

4,300

ori

template sequence pAS1.3



aligned sequence 2020-09-07_G02_ASAS131SP3 (2020-09-07_G02_ASAS131SP3.ab1)

gttggactcaagacgatagttaccggataaggcgcagcggctcgggctgaacgggggggttcgtgcacacagcccagcttggagcgaacgacctacaccgaa

4,310

4,320

4,330

4,340

4,350

4,360

4,370

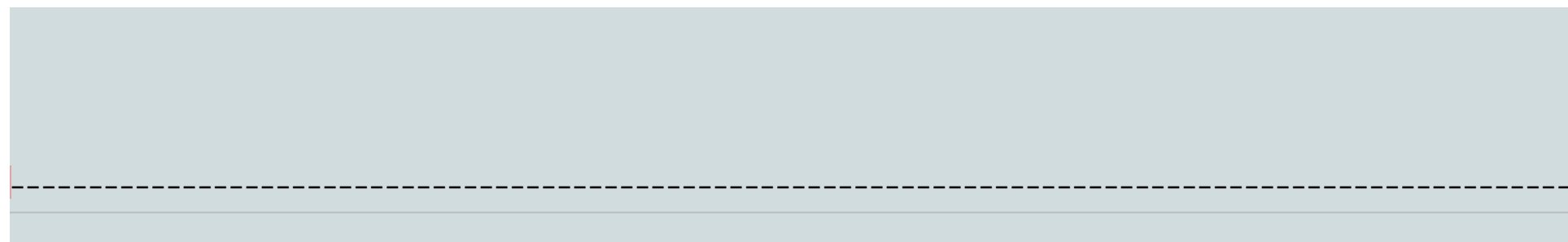
4,380

4,390

4,400

ori

template sequence pAS1.3



aligned sequence 2020-09-07_G02_ASAS131SP3 (2020-09-07_G02_ASAS131SP3.ab1)

ctgagatacctacagcgtgagctatgagaaagcgccacgcttcccgaagggagaaaggcggacaggtatccggttaagcggcagggtcggaacaggagagc

4,410

4,420

4,430

4,440

4,450

4,460

4,470

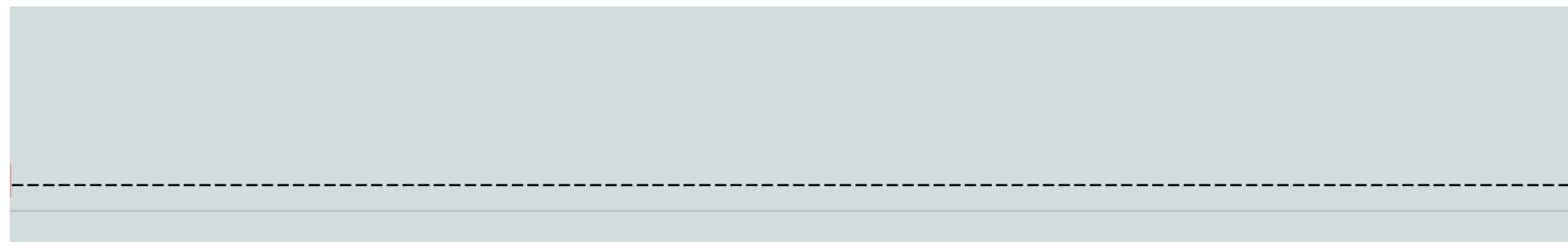
4,480

4,490

4,500

>> ori >>

template sequence pAS1.3



aligned sequence 2020-09-07_G02_ASAS131SP3 (2020-09-07_G02_ASAS131SP3.ab1)

gcacg

4,505

>> >>

template sequence pAS1.3



aligned sequence 2020-09-07_G02_ASAS131SP3 (2020-09-07_G02_ASAS131SP3.ab1)