

Template Alignment: 2020-11-19_F10_ASAS113BSP3

gtagcaccgcctacatacctcgctctgctaatacctgttaccagtggctgctgccagtggcgataagtcgtgtcttaccgggttggactcaagacgatagt

10

20

30

40

50

60

70

80

90

100

ori

template sequence pAS1.13 (J23119_v02-eYFP-TplcPX)

aligned sequence 2020-11-19_F10_ASAS113BSP3

taccggataaggcgcagcggctcgggctgaacgggggggttcgtgcacacagcccagcttggagcgaacgacctacaccgaactgagatacctacagcgtga

110

120

130

140

150

160

170

180

190

200

ori

template sequence pAS1.13 (J23119_v02-eYFP-TplcPX)

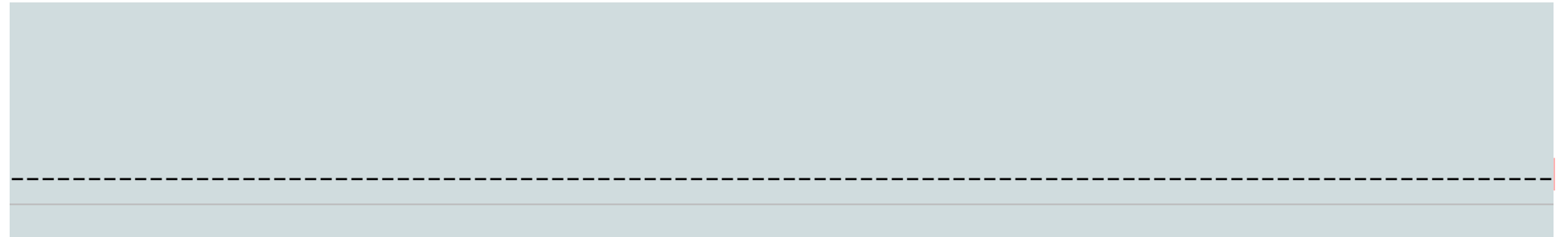
aligned sequence 2020-11-19_F10_ASAS113BSP3

gctatgagaaagcgccacgcttcccgaaggagaaaggcggacaggtatccggttaagcggcagggtcggaacaggagagcgcacgaggagcttccagg

210 220 230 240 250 260 270 280 290 300

ori

template sequence pAS1.13 (J23119_v02-eYFP-TplcPX)



aligned sequence 2020-11-19_F10_ASAS113BSP3

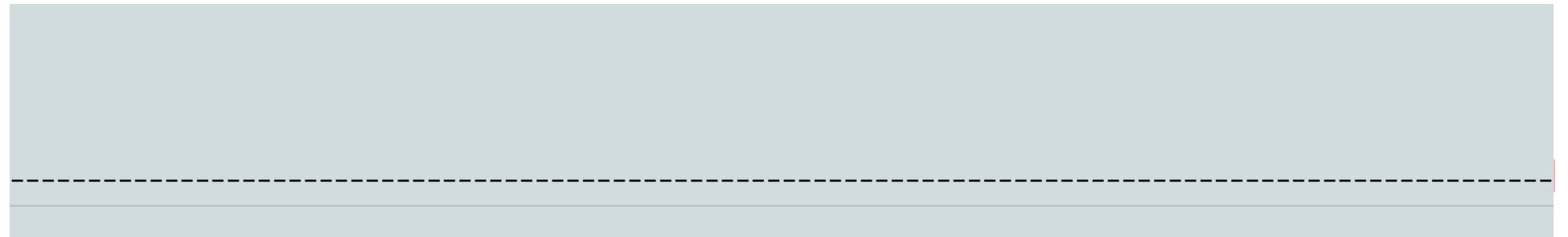
ggaaacgcctggtatctttatagtcctgtcgggtttcgccacctctgacttgagcgtcgatTTTTGTGATGCTCGTCAGGGGGGCGGAGCCTATGGAAAA

310 320 330 340 350 360 370 380 390 400

pBR322ori-F

ori

template sequence pAS1.13 (J23119_v02-eYFP-TplcPX)



aligned sequence 2020-11-19_F10_ASAS113BSP3

acgccagcaacgcggcctttttacggttcctggcagatcctagatgtggcgcaacgatgccggcgacaagcaggagcgcaccgacttcttccgcatcaag

410

420

430

440

450

460

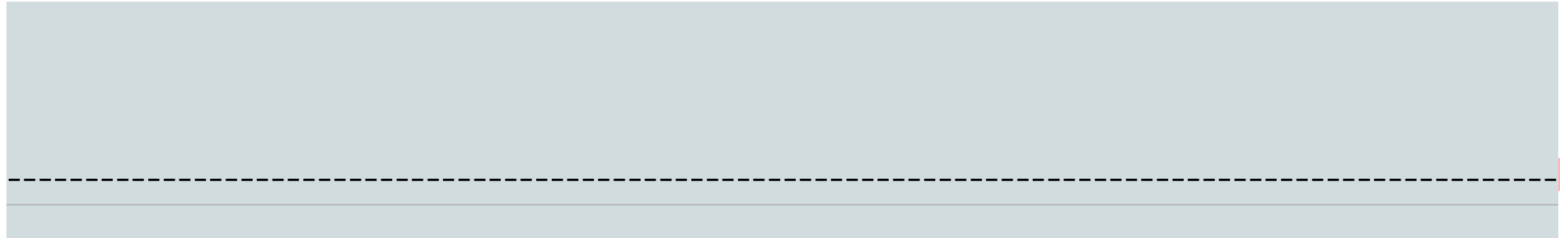
470

480

490

500

template sequence pAS1.13 (J23119_v02-eYFP-TplcPX)



aligned sequence 2020-11-19_F10_ASAS113BSP3

tgttttggctctcaggccgaggccacggcaagtatttgggcaaggggtcgctggtattcgtgcagggaagattcggaataccaagtacgagaaggacg

510

520

530

540

550

560

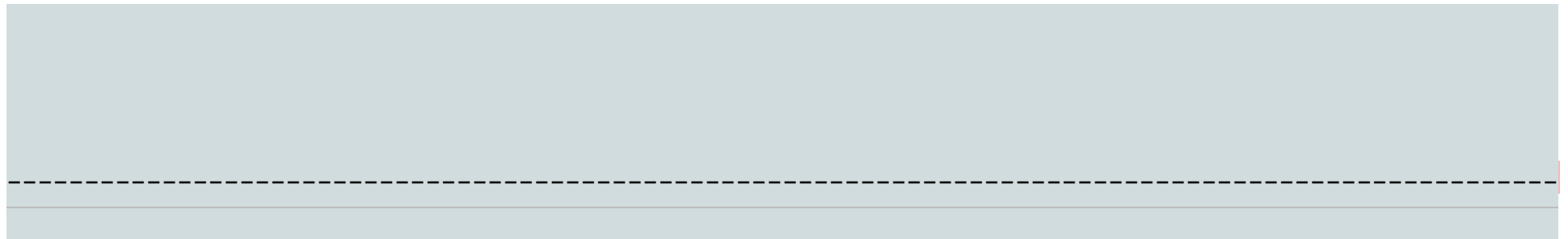
570

580

590

600

template sequence pAS1.13 (J23119_v02-eYFP-TplcPX)



aligned sequence 2020-11-19_F10_ASAS113BSP3

gccagacggtctacgggaccgacttcattgccgataaggtggattatctggacaccaaggcaccaggcggtcaaatcaggaataagggcacattgcccc

610

620

630

640

650

660

670

680

690

700

template sequence pAS1.13 (J23119_v02-eYFP-TplcPX)



aligned sequence 2020-11-19_F10_ASAS113BSP3

ggcgtgagtcggggcaatcccgcaaggagggtgaatgaatcggacgtttgaccggaaggcatacaggcaagaactgatcgacgcgggggttttccgccgag

710

720

730

740

750

760

770

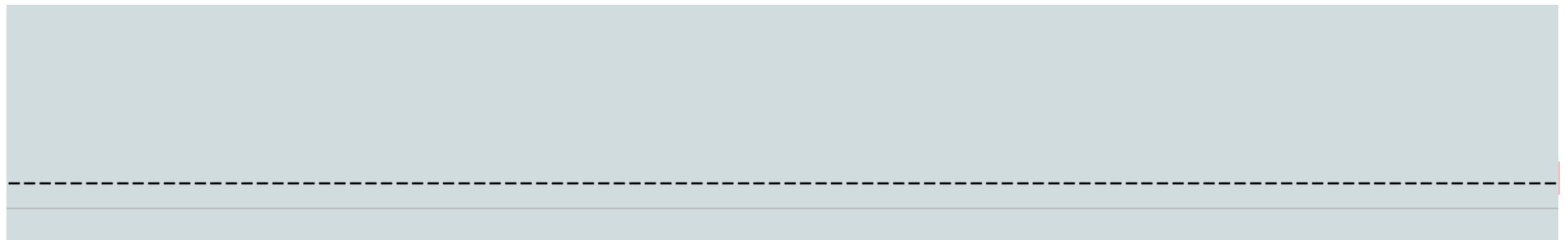
780

790

800

template sequence pAS1.13 (J23119_v02-eYFP-TplcPX)

trfA »»



aligned sequence 2020-11-19_F10_ASAS113BSP3

gatgccgaaaccatcgcaagccgcaccgtcatgcgtgcgccccgcgaaaccttccagtcgcgtcggctcgatgggtccagcaagctacggccaagatcgagc

810

820

830

840

850

860

870

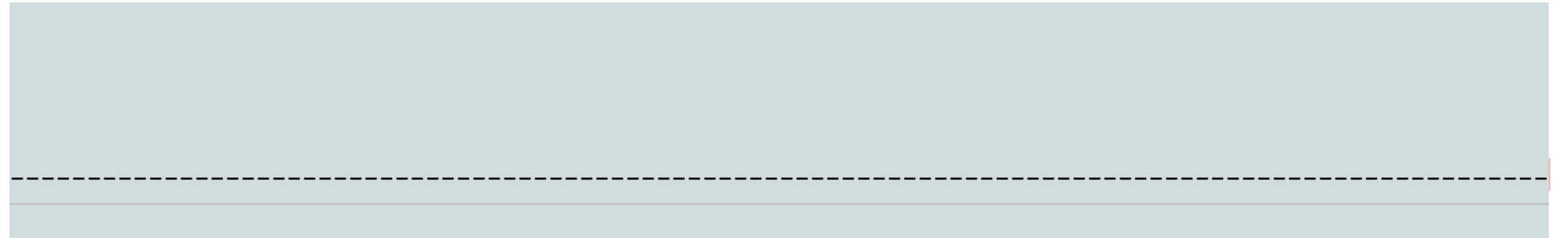
880

890

900

trfA

template sequence pAS1.13 (J23119_v02-eYFP-TplcPX)



aligned sequence 2020-11-19_F10_ASAS113BSP3

gcgacagcgtgcaactggctccccctgccctgcccgcgccatcggccgccgtggagcgttcgcgtcgtcttgaacaggaggcggcaggtttggcgaagtc

910

920

930

940

950

960

970

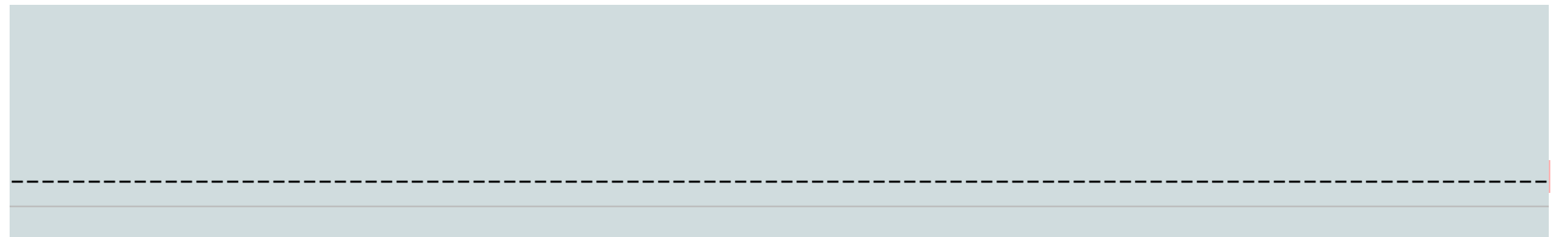
980

990

1,000

trfA

template sequence pAS1.13 (J23119_v02-eYFP-TplcPX)



aligned sequence 2020-11-19_F10_ASAS113BSP3

gatgaccatcgacacgcgaggaactatgacgaccaagaagcgaaaaaccgccggcgaggacctggcaaaacaggtcagcgaggccaagcaggccgcgttg

1,010

1,020

1,030

1,040

1,050

1,060

1,070

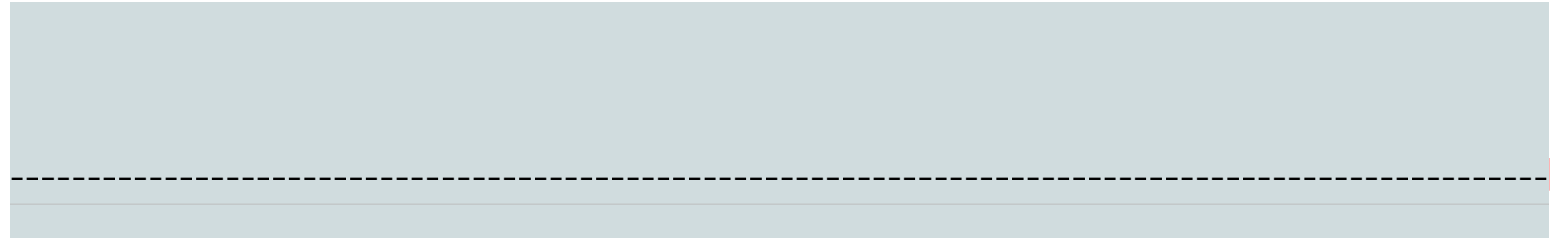
1,080

1,090

1,100

trfA

template sequence pAS1.13 (J23119_v02-eYFP-TplcPX)



aligned sequence 2020-11-19_F10_ASAS113BSP3

ctgaaacacacgaagcagcagatcaaggaaatgcagctttccttgttcgatattgcgccgtggccggacacgatgcgagcgatgccaaacgacacggccc

1,110

1,120

1,130

1,140

1,150

1,160

1,170

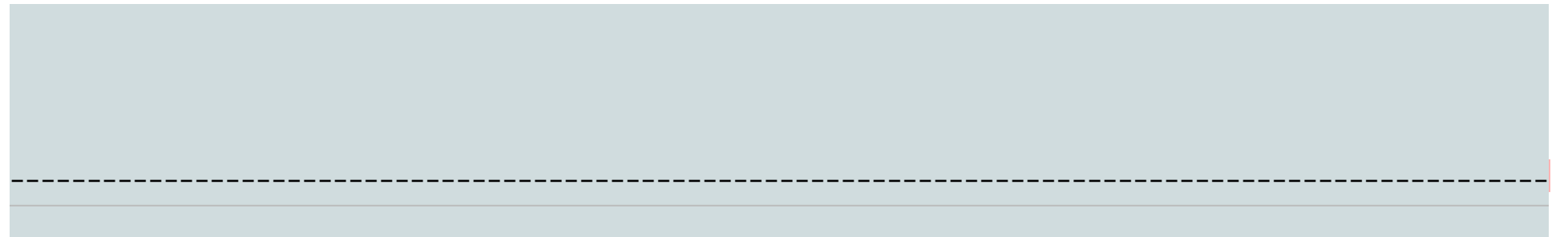
1,180

1,190

1,200

trfA

template sequence pAS1.13 (J23119_v02-eYFP-TplcPX)



aligned sequence 2020-11-19_F10_ASAS113BSP3

gctctgccctgttcaccacgcgcaacaagaaaatcccgcgcgaggcgctgcaaaacaaggatcattttccacgtcaacaaggacgtgaagatcacctacac

1,210

1,220

1,230

1,240

1,250

1,260

1,270

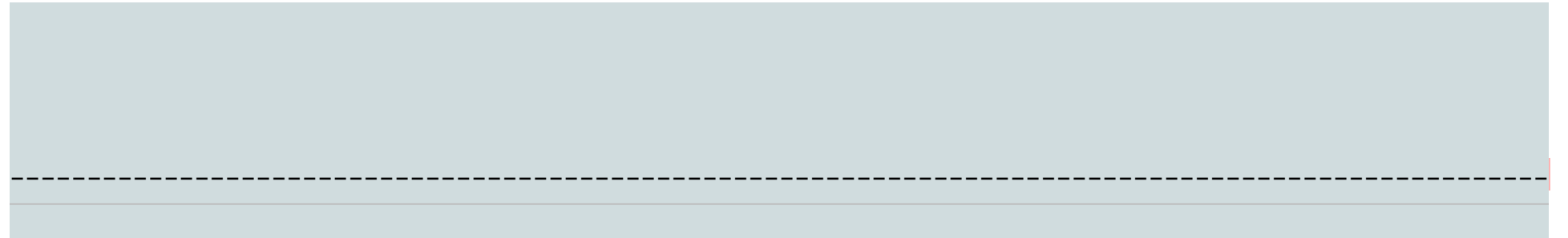
1,280

1,290

1,300

trfA

template sequence pAS1.13 (J23119_v02-eYFP-TplcPX)



aligned sequence 2020-11-19_F10_ASAS113BSP3

cggcgctcgagctgcgggccgacgatgacgaactggtgtggcagcaggtgttggagtacgcgaagcgcacccctatcggcgagccgatcaccttcacgttc

1,310

1,320

1,330

1,340

1,350

1,360

1,370

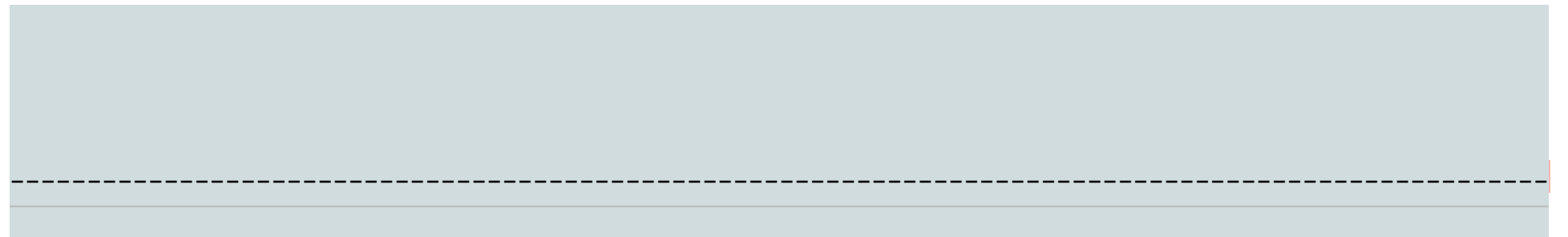
1,380

1,390

1,400

trfA

template sequence pAS1.13 (J23119_v02-eYFP-TplcPX)



aligned sequence 2020-11-19_F10_ASAS113BSP3

tacgagctttgccaggacctgggctggatcgatcaatggccggtattacacgaaggccgaggaatgcctgtcgcgcttacaggcgacggcgatgggcttca

1,410

1,420

1,430

1,440

1,450

1,460

1,470

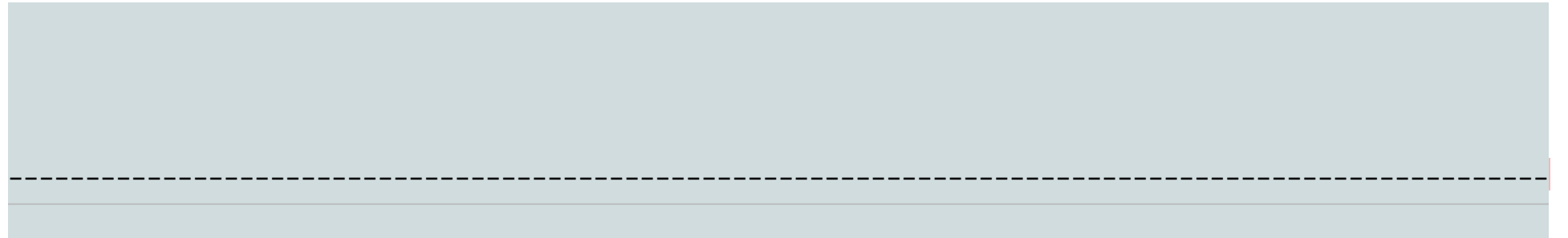
1,480

1,490

1,500

trfA

template sequence pAS1.13 (J23119_v02-eYFP-TplcPX)



aligned sequence 2020-11-19_F10_ASAS113BSP3

cgtccgaccgcgttgggcacctggaatcggtgtcgctgctgcaccgcttccgcgtcctggaccgtggcaagaaaacgtcccgttgccaggtcctgatcga

1,510

1,520

1,530

1,540

1,550

1,560

1,570

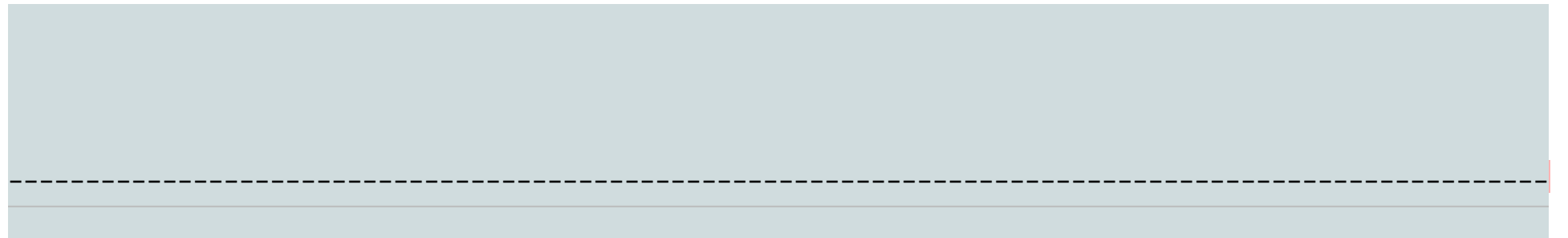
1,580

1,590

1,600

trfA

template sequence pAS1.13 (J23119_v02-eYFP-TplcPX)



aligned sequence 2020-11-19_F10_ASAS113BSP3

cgaggaaatcgtcgtgctgtttgctggcgaccactacacgaaattcatatgggagaagtaccgcaagctgtcgccgacggcccgcgacggatgttcgactat

1,610

1,620

1,630

1,640

1,650

1,660

1,670

1,680

1,690

1,700

trfA

template sequence pAS1.13 (J23119_v02-eYFP-TplcPX)



aligned sequence 2020-11-19_F10_ASAS113BSP3

ttcagctcgcaccgggagccgtaccgctcaagctggaaaccttccgcctcatgtgcggatcggattccacccgcgtgaagaagtggcgcgagcaggtcg

1,710

1,720

1,730

1,740

1,750

1,760

1,770

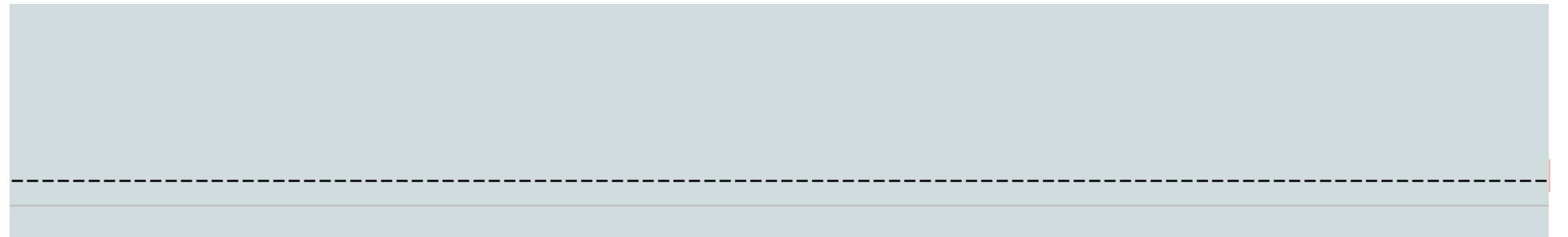
1,780

1,790

1,800

trfA

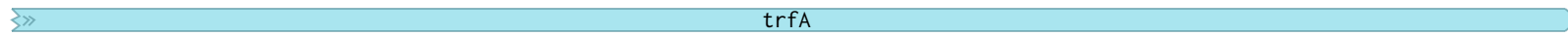
template sequence pAS1.13 (J23119_v02-eYFP-TplcPX)



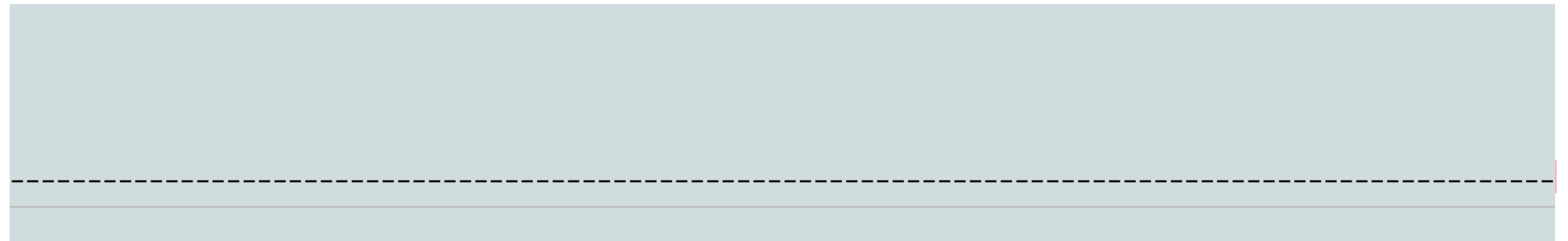
aligned sequence 2020-11-19_F10_ASAS113BSP3

gcgaagcctgcgaagagttgcgaggcagcggcctggtggaacacgcctgggtcaatgatgacctggtgcattgcaaacgctagggccttgtggggtcagt

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



template sequence pAS1.13 (J23119_v02-eYFP-TplcPX)

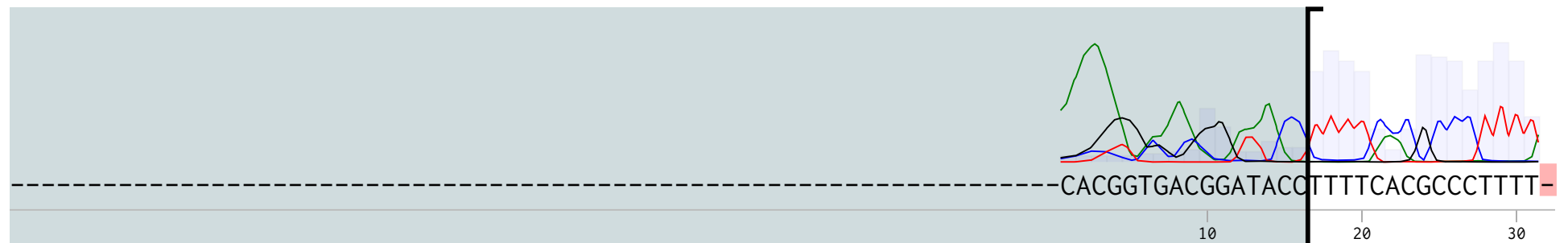


aligned sequence 2020-11-19_F10_ASAS113BSP3

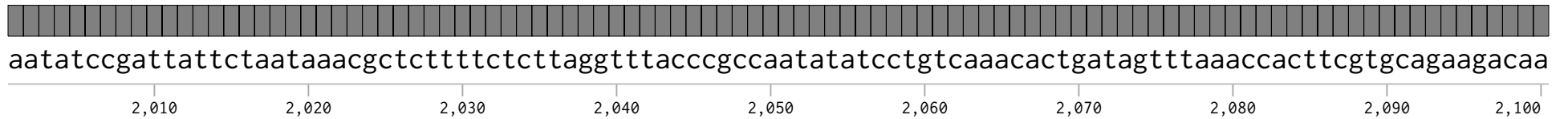
tccggctgggggttcagcagccagcgcctgatctgggggaaccctgtggttggcatgcacatacaaatggacgaacggataaaccttttcacgccctttta

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

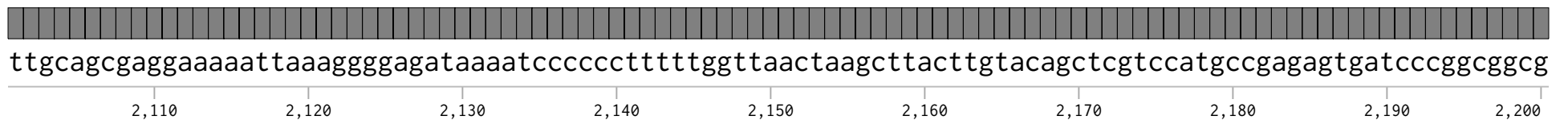
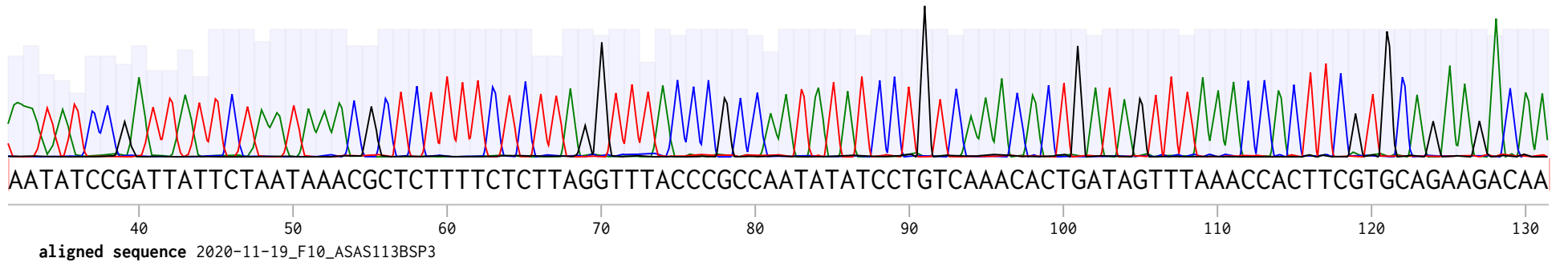
template sequence pAS1.13 (J23119_v02-eYFP-TplcPX)



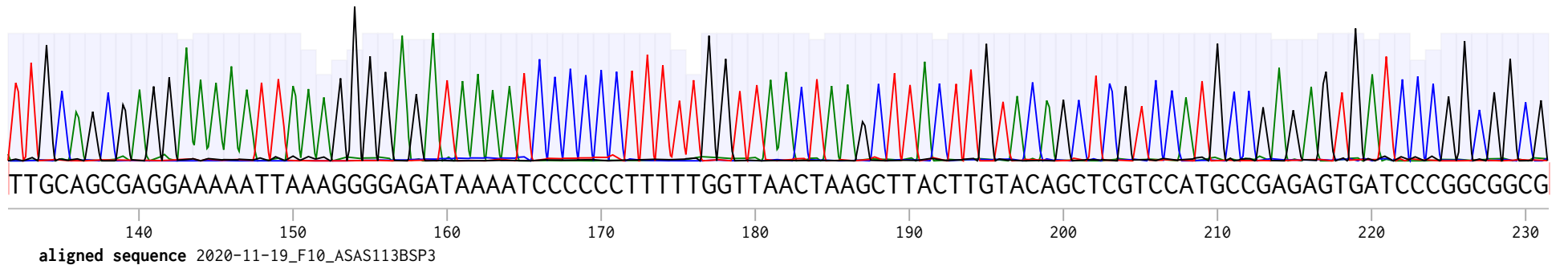
aligned sequence 2020-11-19_F10_ASAS113BSP3

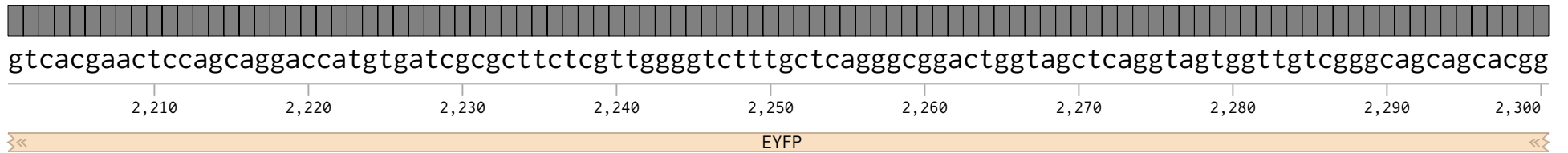


template sequence pAS1.13 (J23119_v02-eYFP-Tp1cPX)

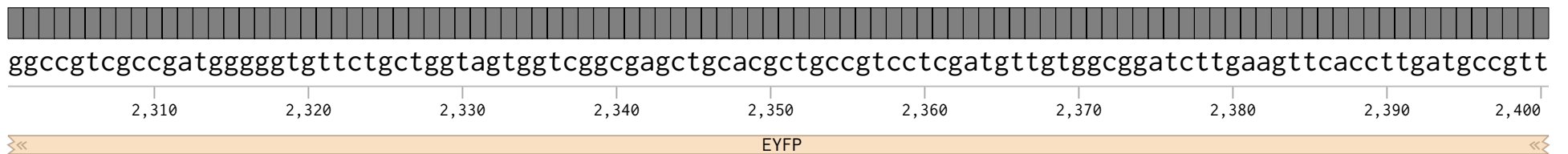
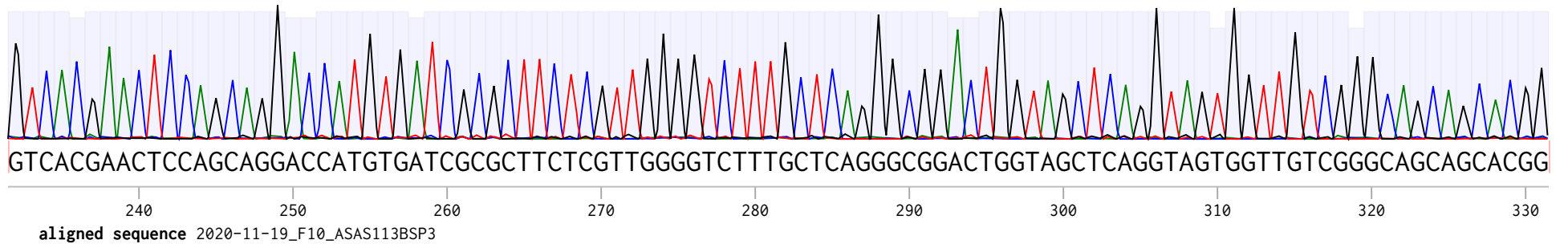


template sequence pAS1.13 (J23119_v02-eYFP-Tp1cPX)

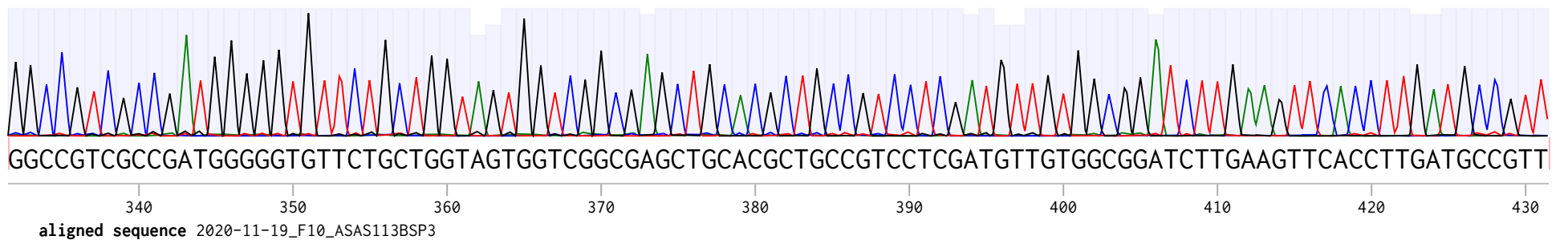


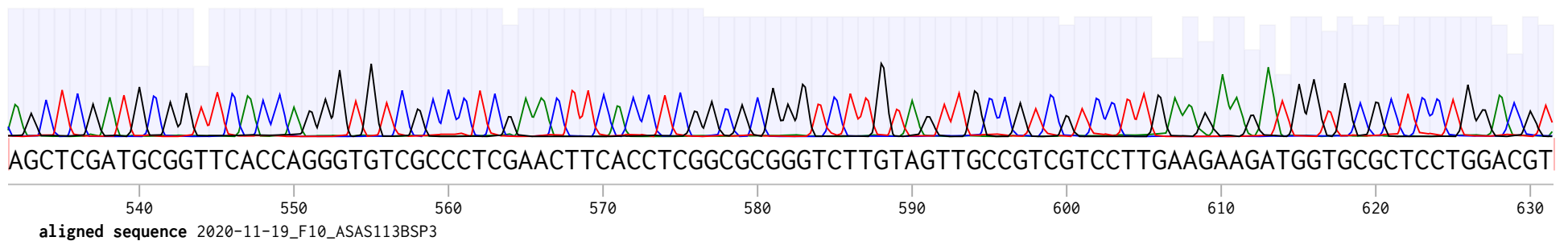
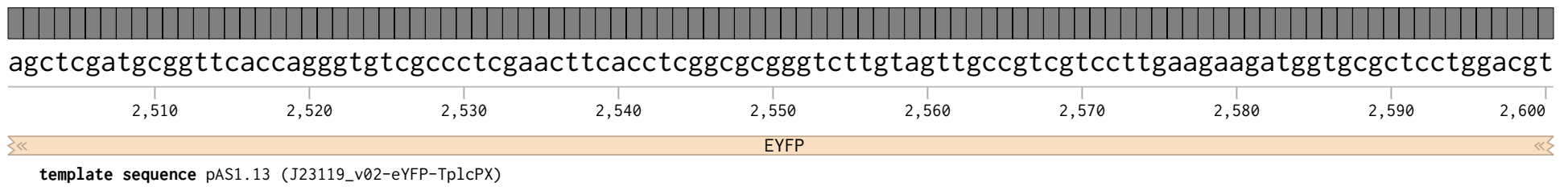
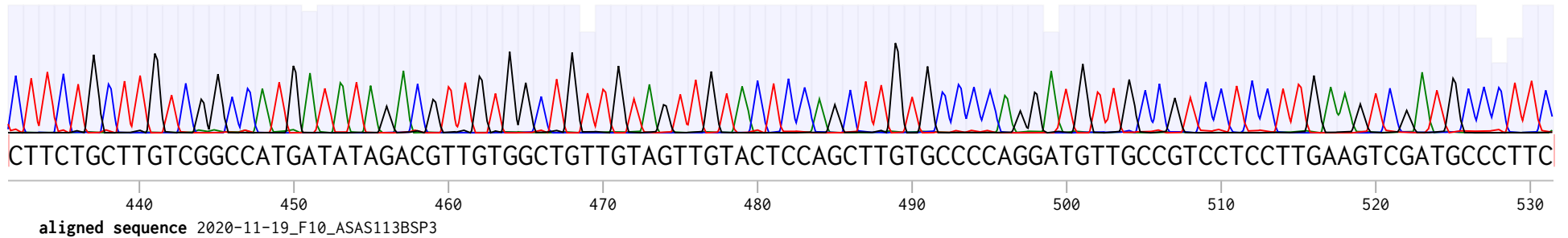
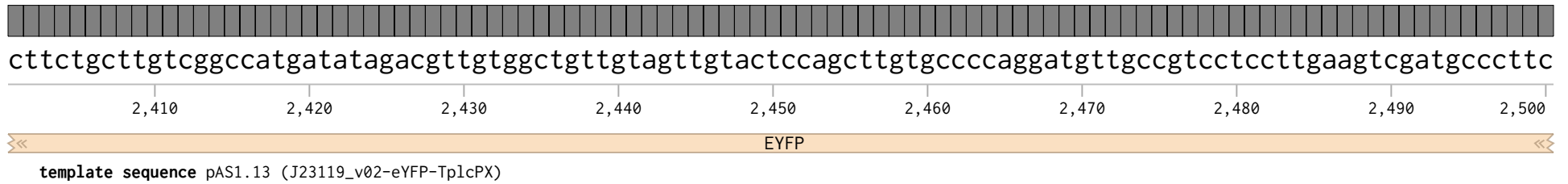


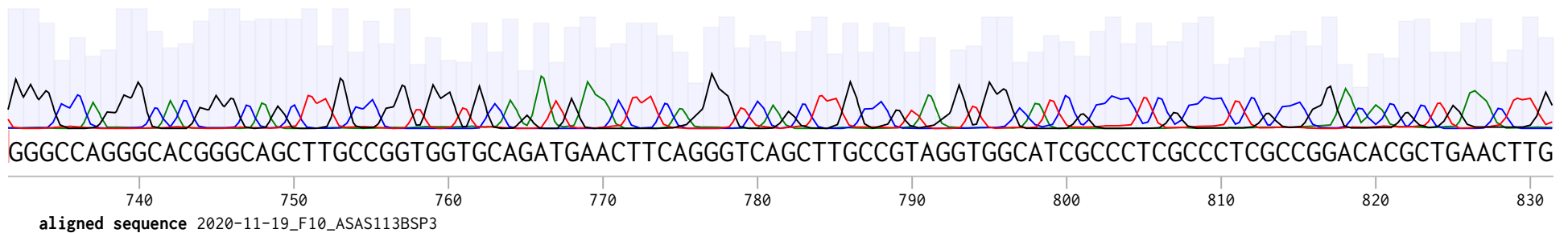
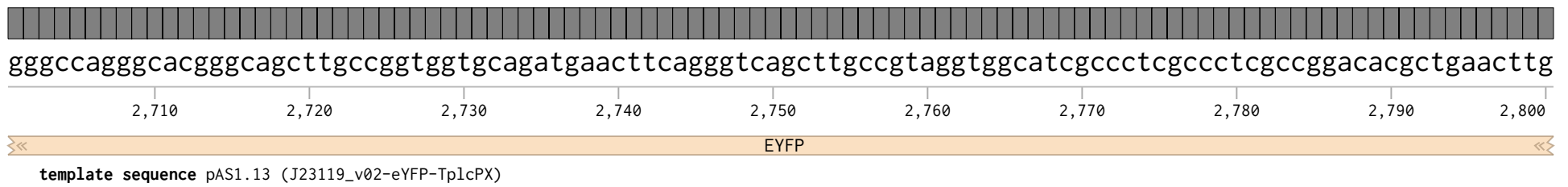
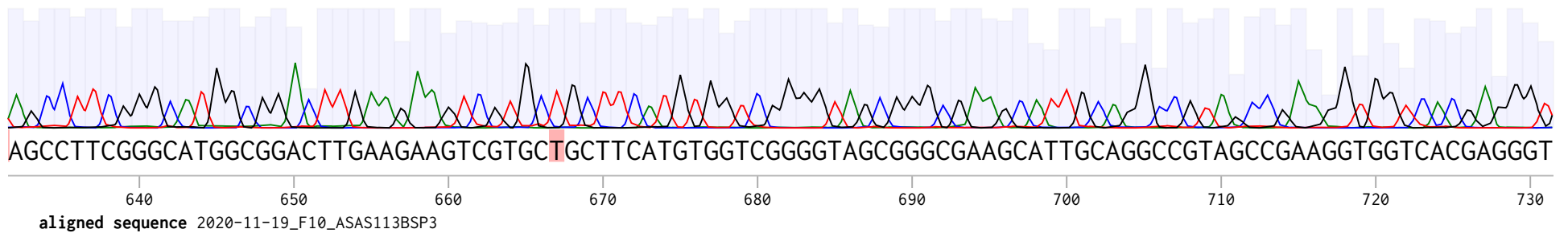
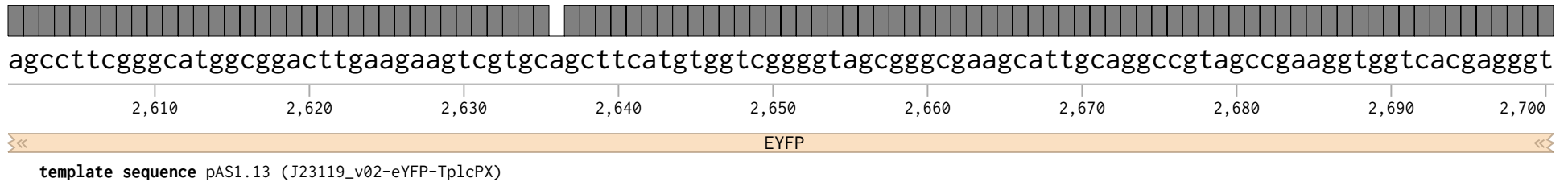
template sequence pAS1.13 (J23119_v02-eYFP-TplcPX)

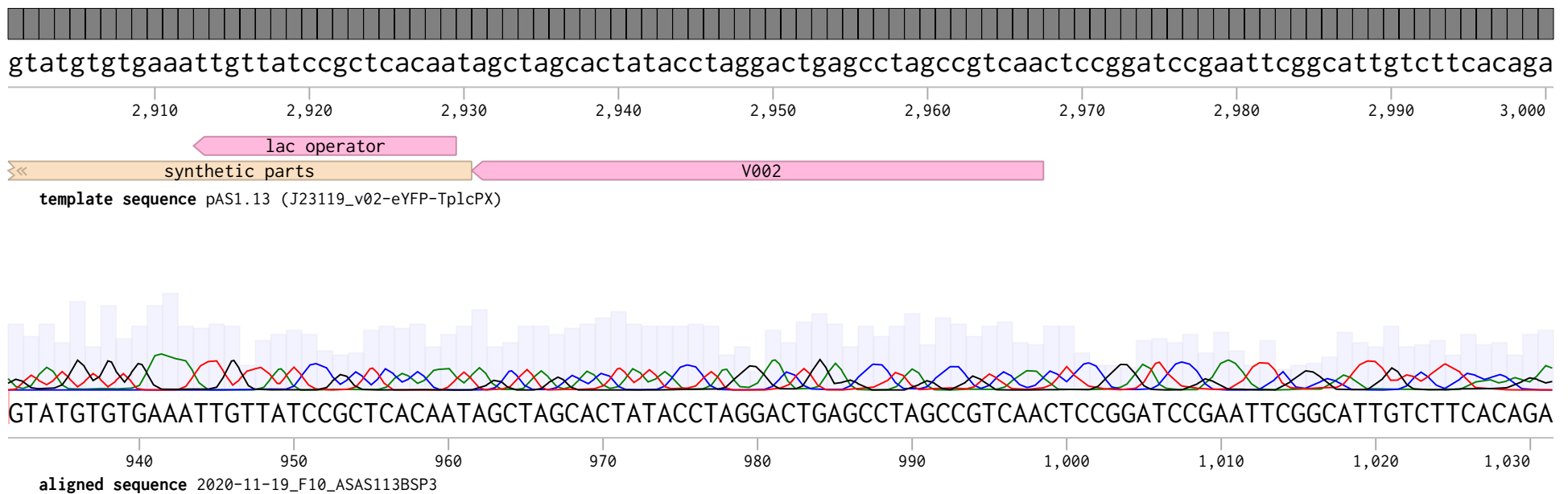
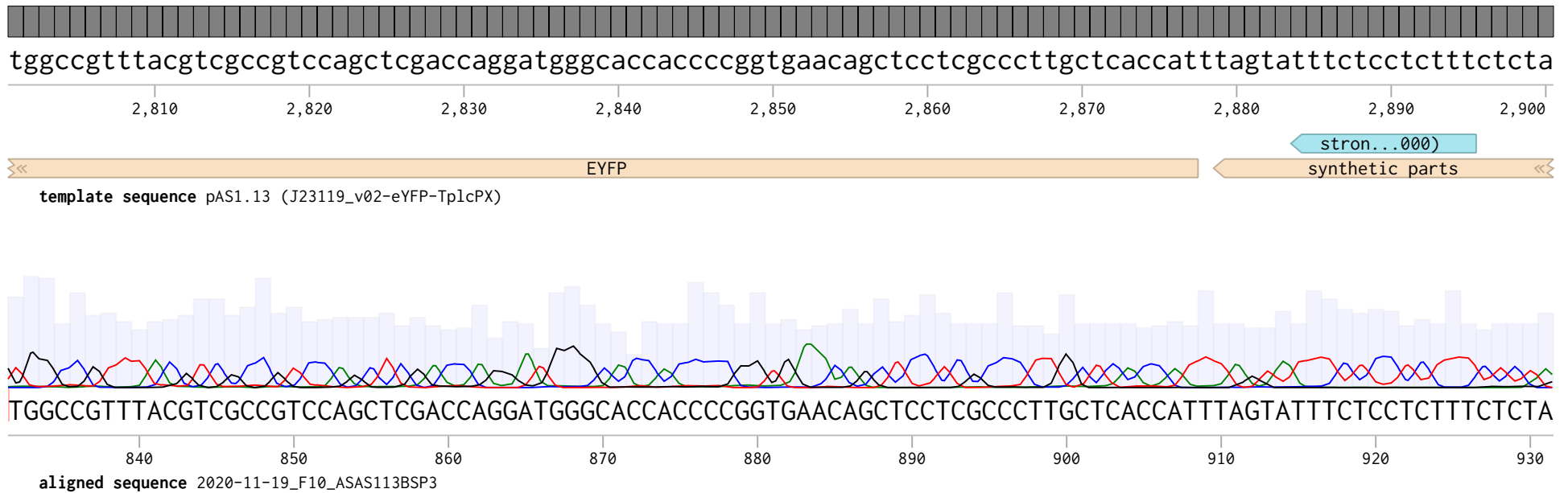


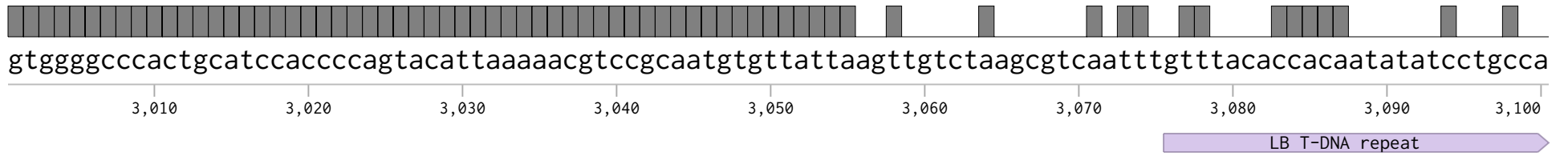
template sequence pAS1.13 (J23119_v02-eYFP-TplcPX)



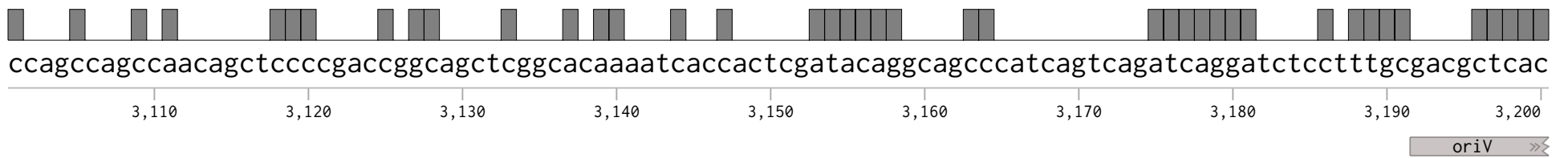
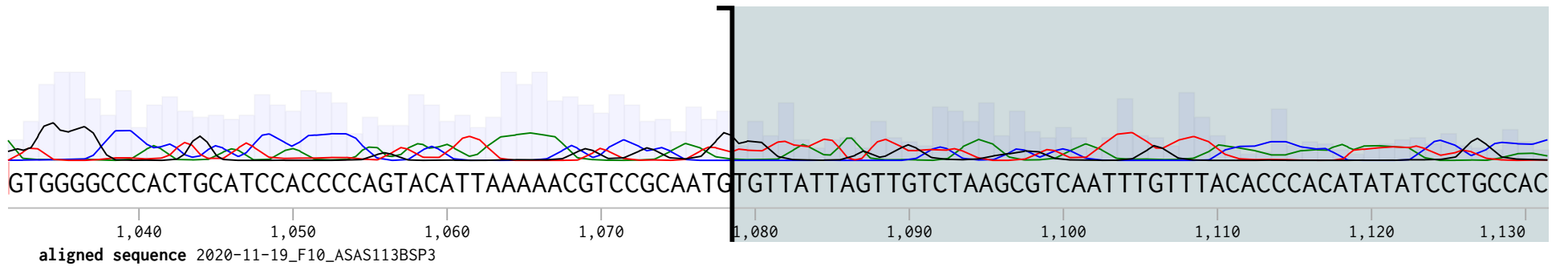




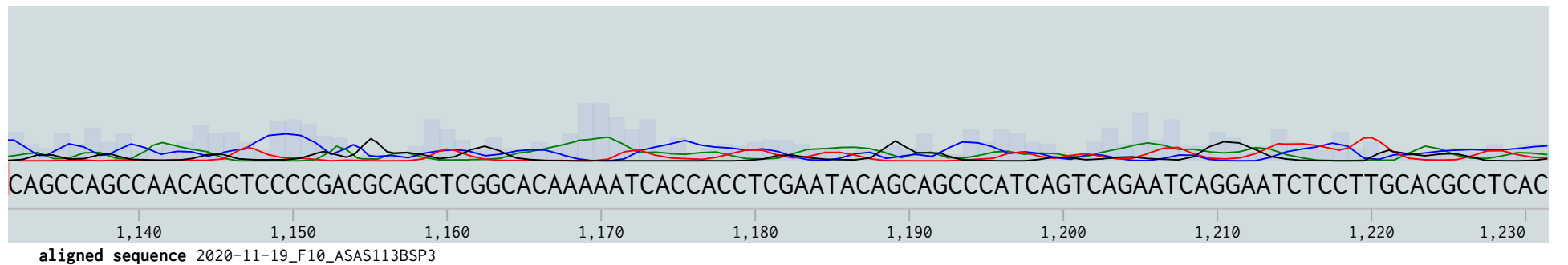


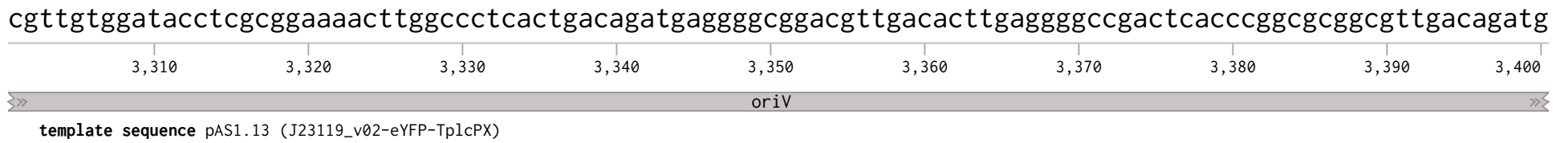
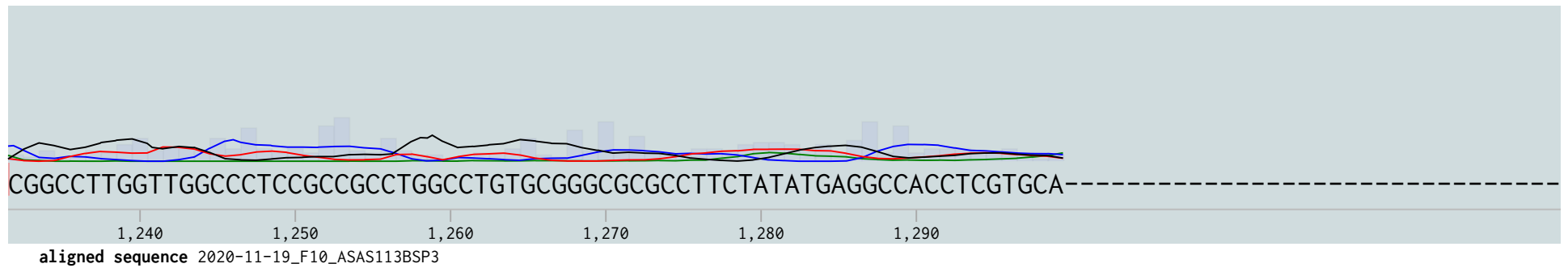
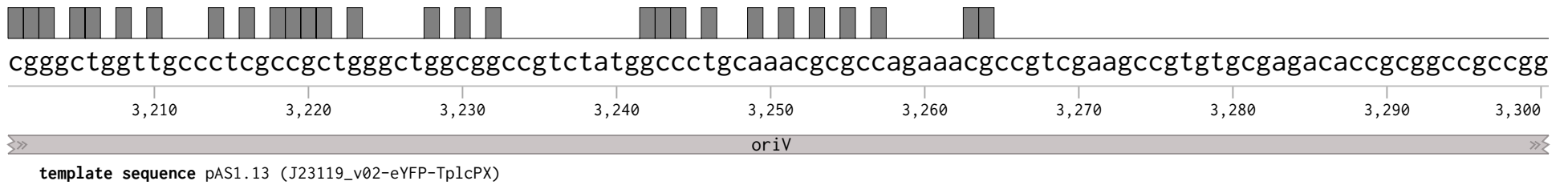


template sequence pAS1.13 (J23119_v02-eYFP-TplcPX)



template sequence pAS1.13 (J23119_v02-eYFP-TplcPX)





aggggcaggctcgatttcggccggcgacgtggagctggccagcctcgcaaatcggcgaaaacgcctgattttacgcgagtttcccacagatgatgtggac

3,410

3,420

3,430

3,440

3,450

3,460

3,470

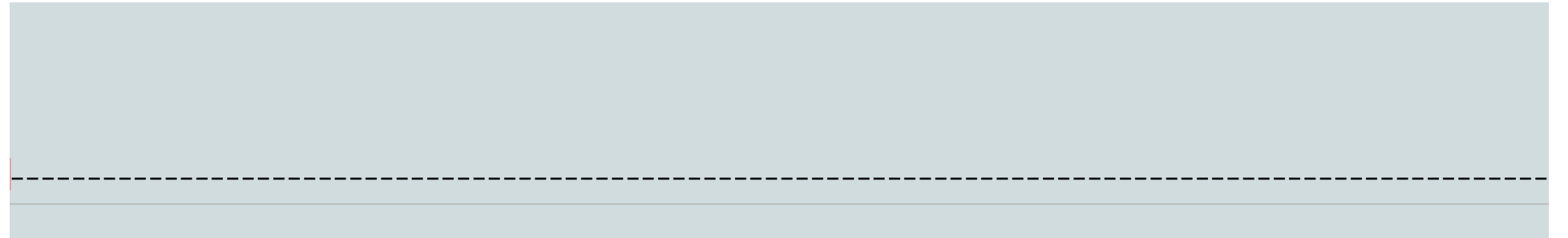
3,480

3,490

3,500

oriV

template sequence pAS1.13 (J23119_v02-eYFP-TplcPX)



aligned sequence 2020-11-19_F10_ASAS113BSP3

aagcctggggataagtgccctgcggtattgacacttgaggggcgcgactactgacagatgaggggcgcgatccttgacacttgaggggcagagtgctgac

3,510

3,520

3,530

3,540

3,550

3,560

3,570

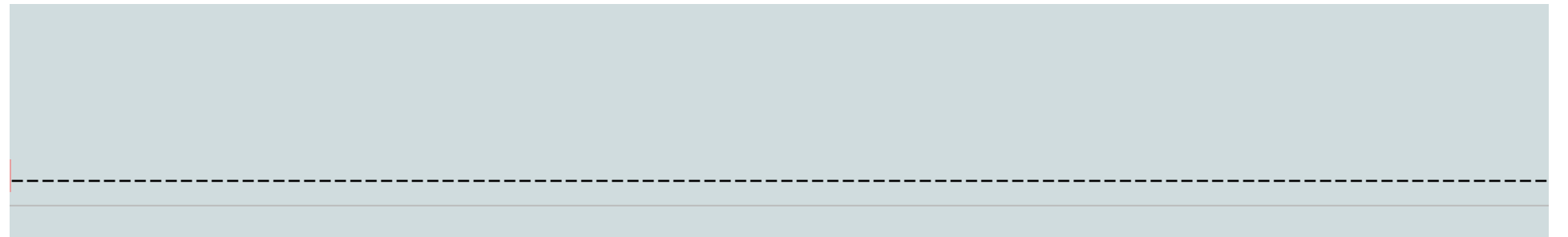
3,580

3,590

3,600

oriV

template sequence pAS1.13 (J23119_v02-eYFP-TplcPX)



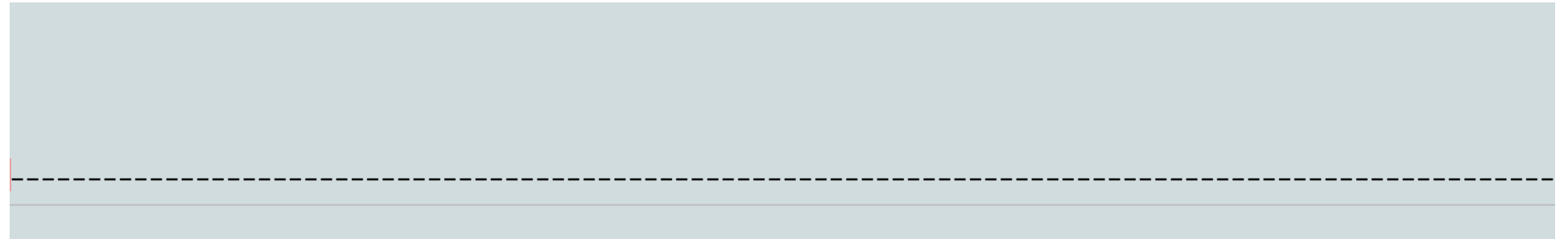
aligned sequence 2020-11-19_F10_ASAS113BSP3

agatgagggcgccacatttgacatttgaggggctgtccacaggcagaaaatccagcatttgcaagggtttccgcccgtttttcggccaccgctaacctg

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

>> oriV >>

template sequence pAS1.13 (J23119_v02-eYFP-TplcPX)



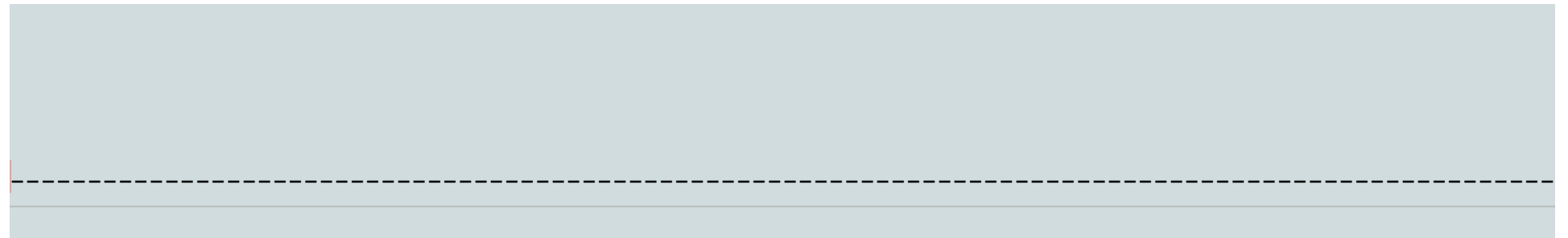
aligned sequence 2020-11-19_F10_ASAS113BSP3

tcttttaacctgcttttaaaccaatatttataaaccttgtttttaaccagggtgcgccctgtgcgcgtgaccgcgcacgccgaaggggggtgcccccc

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

>> oriV >>

template sequence pAS1.13 (J23119_v02-eYFP-TplcPX)



aligned sequence 2020-11-19_F10_ASAS113BSP3

ttctcgaaccctcccggcccgctaacgcgggcctcccatccccccaggggctgcgcccctcggccgcgaacggcctcaccaccaaaaatggcagcgctggc

3,810

3,820

3,830

3,840

3,850

3,860

3,870

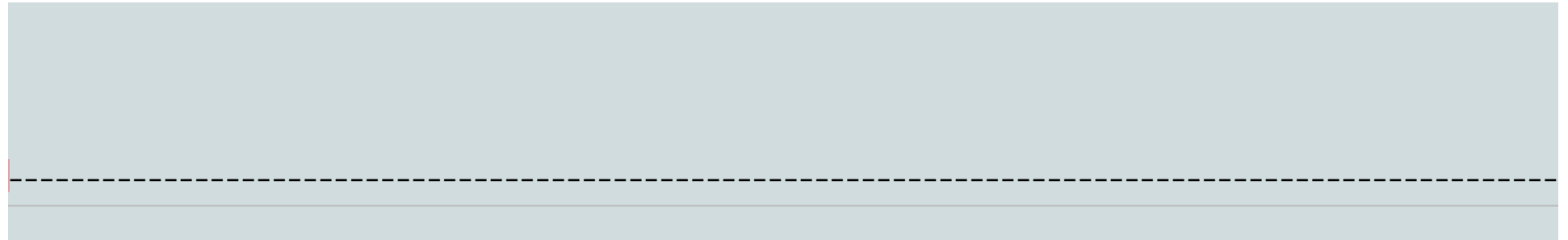
3,880

3,890

3,900

oriV

template sequence pAS1.13 (J23119_v02-eYFP-TplcPX)



aligned sequence 2020-11-19_F10_ASAS113BSP3

caattcgtgcgcggaaccctatttggtttatttttctaaatacattcaaatatgtatccgctcatgagacaataaccctgataaatgcttcaataatatt

3,910

3,920

3,930

3,940

3,950

3,960

3,970

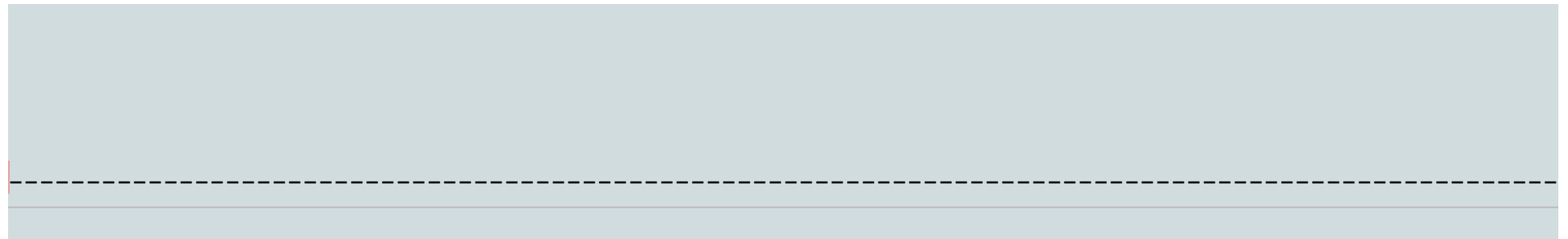
3,980

3,990

4,000

AmpR promoter

template sequence pAS1.13 (J23119_v02-eYFP-TplcPX)



aligned sequence 2020-11-19_F10_ASAS113BSP3

gaaaaaggaagagtatgagtattcaacatttcggtgctgcccttattcccttttttgcggcattttgccttcctgtttttgctcaccagaaacgctggt

4,010

4,020

4,030

4,040

4,050

4,060

4,070

4,080

4,090

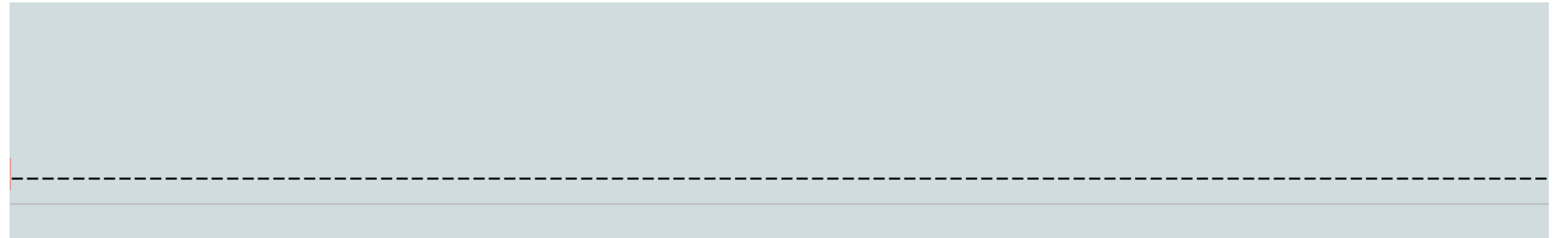
4,100

>> AmpR promoter

AmpR

>>

template sequence pAS1.13 (J23119_v02-eYFP-Tp1cPX)



aligned sequence 2020-11-19_F10_ASAS113BSP3

gaaagtaaaagatgctgaagatcagttgggtgcacgagtgggttacatcgaactggatctcaacagcggttaagatccttgagagttttcgccccgaagaa

4,110

4,120

4,130

4,140

4,150

4,160

4,170

4,180

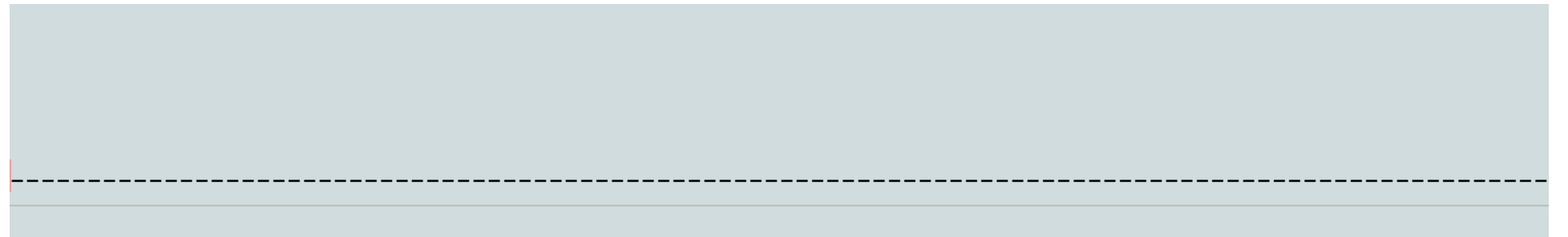
4,190

4,200

>> AmpR

>>

template sequence pAS1.13 (J23119_v02-eYFP-Tp1cPX)



aligned sequence 2020-11-19_F10_ASAS113BSP3

cgttttccaatgatgagcactttttaagtctgctatgtggcgcggtattatcccgtattgacgccgggcaagagcaactcggtcgccgcatacactatt

4,210

4,220

4,230

4,240

4,250

4,260

4,270

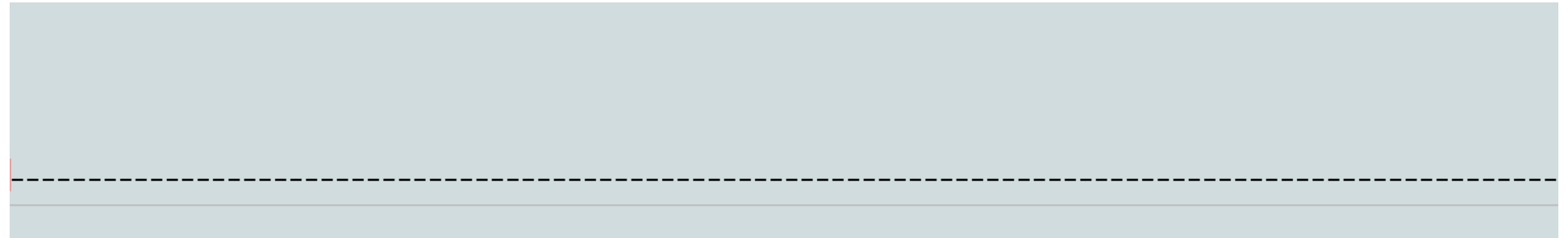
4,280

4,290

4,300



template sequence pAS1.13 (J23119_v02-eYFP-TplcPX)



aligned sequence 2020-11-19_F10_ASAS113BSP3

ctcagaatgacttggttgagtactcaccagtcacagaaaagcatcttacggatggcatgacagtaagagaattatgcagtgctgccataaccatgagtga

4,310

4,320

4,330

4,340

4,350

4,360

4,370

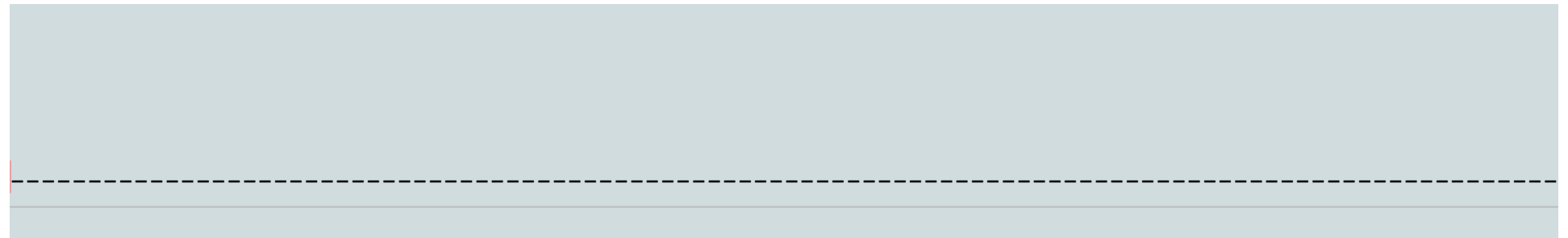
4,380

4,390

4,400



template sequence pAS1.13 (J23119_v02-eYFP-TplcPX)



aligned sequence 2020-11-19_F10_ASAS113BSP3

taacactgcgccaacttacttctgacaacgatcggaggaccgaaggagctaaccgctttttgcacaacatgggggatcatgtaactcgccttgatcgt

4,410

4,420

4,430

4,440

4,450

4,460

4,470

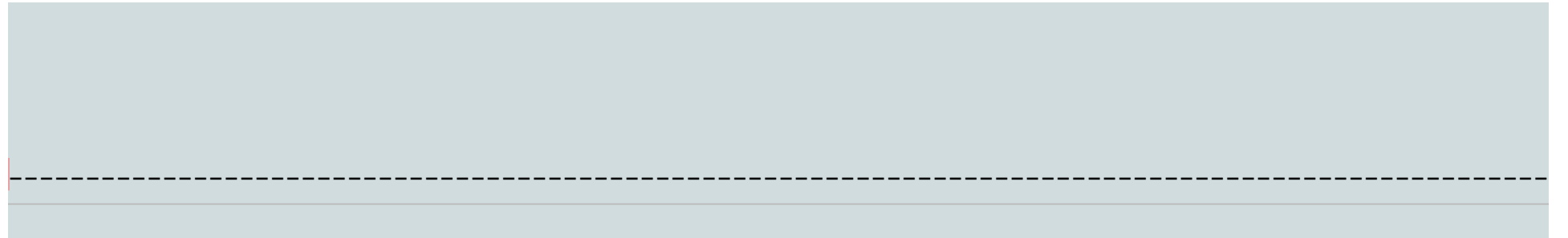
4,480

4,490

4,500

>> AmpR >>

template sequence pAS1.13 (J23119_v02-eYFP-TplcPX)



aligned sequence 2020-11-19_F10_ASAS113BSP3

tgggaaccggagctgaatgaagccataccaaacgacgagcgtgacaccacgatgcctgtagcaatggcaacaacgttgcgcaaactattaactggcggaac

4,510

4,520

4,530

4,540

4,550

4,560

4,570

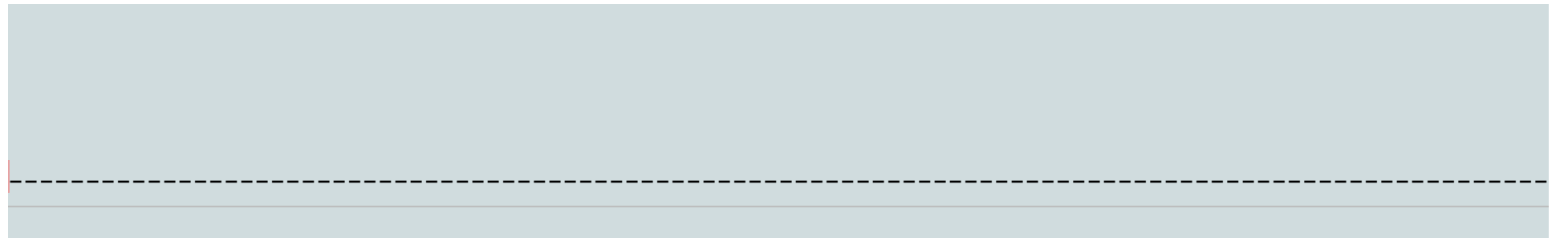
4,580

4,590

4,600

>> AmpR >>

template sequence pAS1.13 (J23119_v02-eYFP-TplcPX)



aligned sequence 2020-11-19_F10_ASAS113BSP3

tacttactctagcttcccggaacaattaatagactggatggaggcggataaagttgcaggaccacttctgcgctcggcccttccggctggctggtttat

4,610

4,620

4,630

4,640

4,650

4,660

4,670

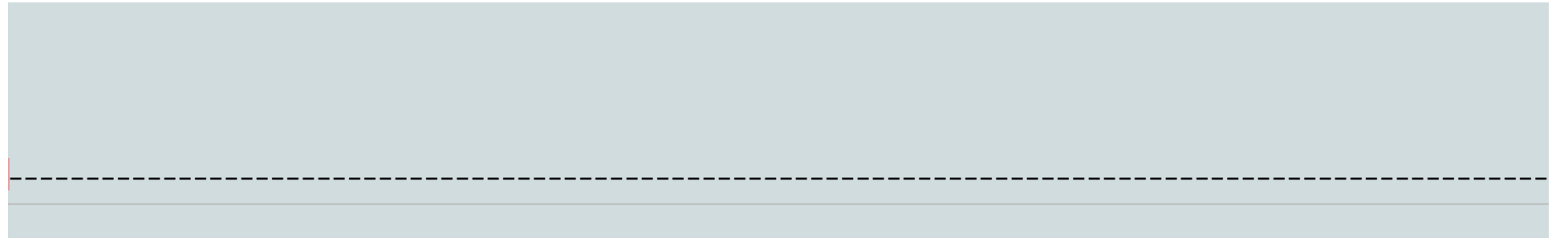
4,680

4,690

4,700

>> AmpR >>

template sequence pAS1.13 (J23119_v02-eYFP-Tp1cPX)



aligned sequence 2020-11-19_F10_ASAS113BSP3

tgctgataaatctggagccggtgagcgtggttctcgcggtatcattgcagcactggggccagatggtaagccctcccgtatcgtagttatctacacgacg

4,710

4,720

4,730

4,740

4,750

4,760

4,770

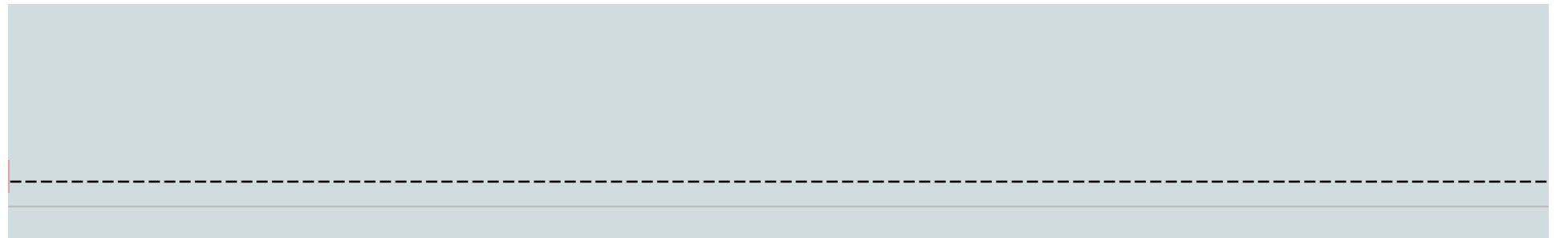
4,780

4,790

4,800

>> AmpR >>

template sequence pAS1.13 (J23119_v02-eYFP-Tp1cPX)



aligned sequence 2020-11-19_F10_ASAS113BSP3

gggagtcaggcaactatggatgaacgaaatagacagatcgctgagataggtgcctcactgattaagcattggtaactgtcagaccaagtttactcatata

4,810

4,820

4,830

4,840

4,850

4,860

4,870

4,880

4,890

4,900



AmpR

template sequence pAS1.13 (J23119_v02-eYFP-TplcPX)

aligned sequence 2020-11-19_F10_ASAS113BSP3

tacttttagattgatttaaaacttcatttttaatttaaaaggatctaggtgaagatccttttgataatctcatgaccaaatacccttaacgtgagtttc

4,910

4,920

4,930

4,940

4,950

4,960

4,970

4,980

4,990

5,000

template sequence pAS1.13 (J23119_v02-eYFP-TplcPX)

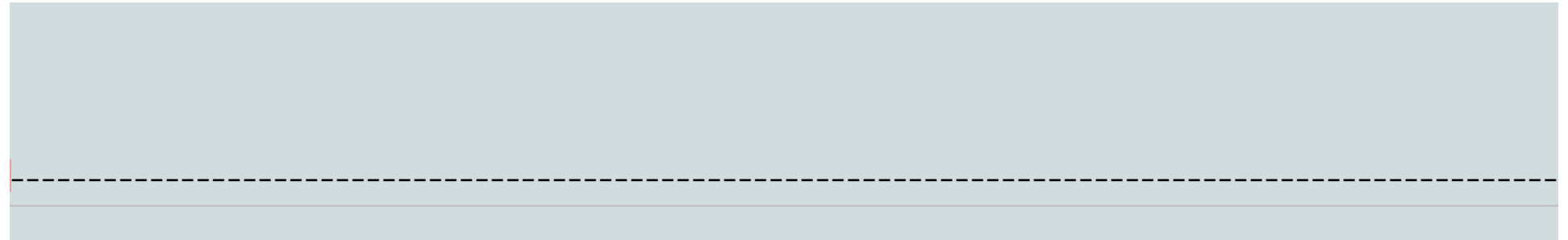
aligned sequence 2020-11-19_F10_ASAS113BSP3

gttccactgagcgtcagaccccgtagaaaagatcaaaggatcttcttgagatccttttttctgcgcgtaatctgctgcttgcaaacaaaaaaccaccg

5,010 5,020 5,030 5,040 5,050 5,060 5,070 5,080 5,090 5,100

ori

template sequence pAS1.13 (J23119_v02-eYFP-TplcPX)



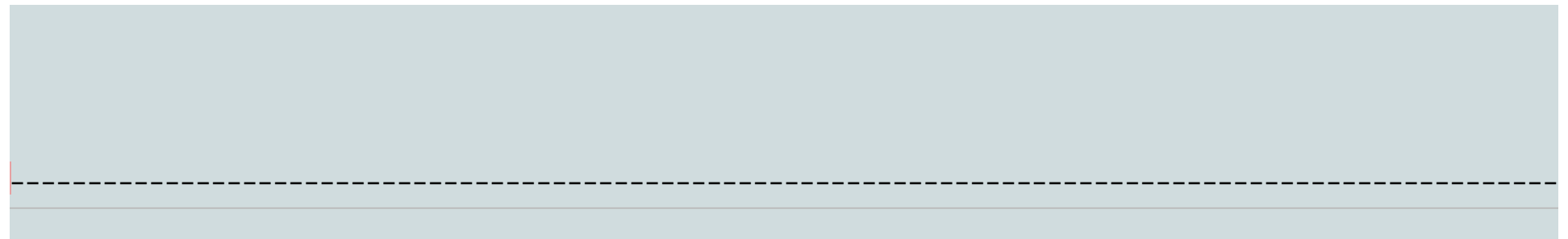
aligned sequence 2020-11-19_F10_ASAS113BSP3

ctaccagcggtaggtttgtttgccggatcaagagctaccaactctttttccgaaggtaactggcttcagcagagcgcagataccaaatactgtccttctag

5,110 5,120 5,130 5,140 5,150 5,160 5,170 5,180 5,190 5,200

ori

template sequence pAS1.13 (J23119_v02-eYFP-TplcPX)



aligned sequence 2020-11-19_F10_ASAS113BSP3

