

## Template Alignment: 2020-12-10\_A10\_AST41DSPTF, 2020-12-10\_G09\_...

tatgaatttcgtgtagtggtcgccagcaaacagcacgacgatttcctcgtcgatcaggacctggcaacgggacgttttcttgccacggtccaggacgcgg

10 20 30 40 50 60 70 80 90 100

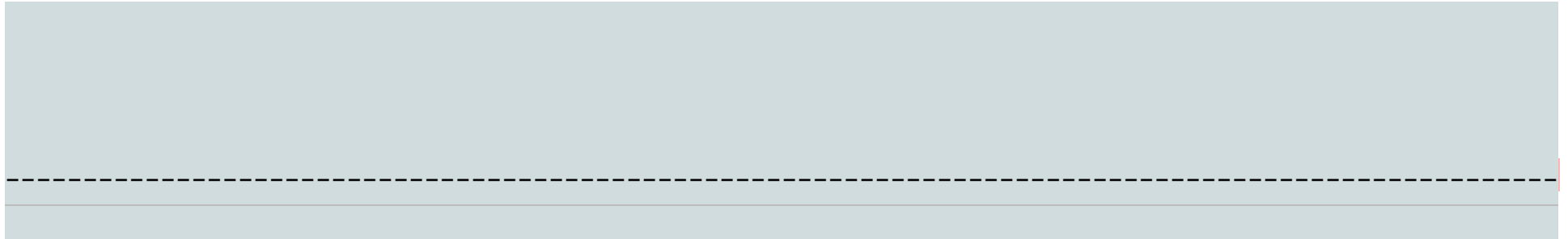
trfA

template sequence pAST.041 (PprqR-eYFP-TclpPX)

aligned sequence 2020-12-10\_A10\_AST41DSPTF

aligned sequence 2020-12-10\_G09\_AST41BSPTF

aligned sequence 2020-12-10\_F09\_AST41ASPTF



**aligned sequence** 2020-12-10\_H09\_AST41CSPTF

aagcgggtgcagcagcgacaccgattccagggtgcccacgcggtcggacgtgaagcccatcgccgtcgcctgtaggcgacaggcattcctcggccttcg

110 120 130 140 150 160 170 180 190 200

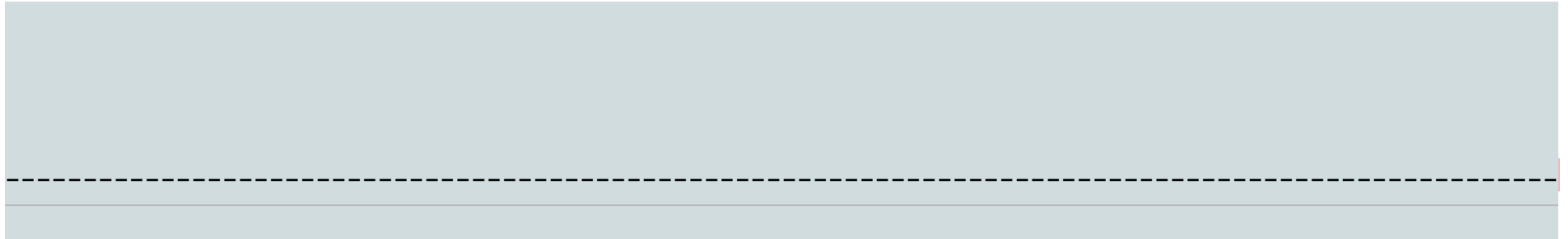
<< trfA >>

template sequence pAST.041 (PprqR-eYFP-TclpPX)

aligned sequence 2020-12-10\_A10\_AST41DSPTF

aligned sequence 2020-12-10\_G09\_AST41BSPTF

aligned sequence 2020-12-10\_F09\_AST41ASPTF



**aligned sequence** 2020-12-10\_H09\_AST41CSPTF

tgtaataccggccattgatcgaccagcccaggtcctggcaaagctcgtagaacgtgaagggtgatcggctcgccgataggggtgcgcttcgcggtactccaa

210 220 230 240 250 260 270 280 290 300

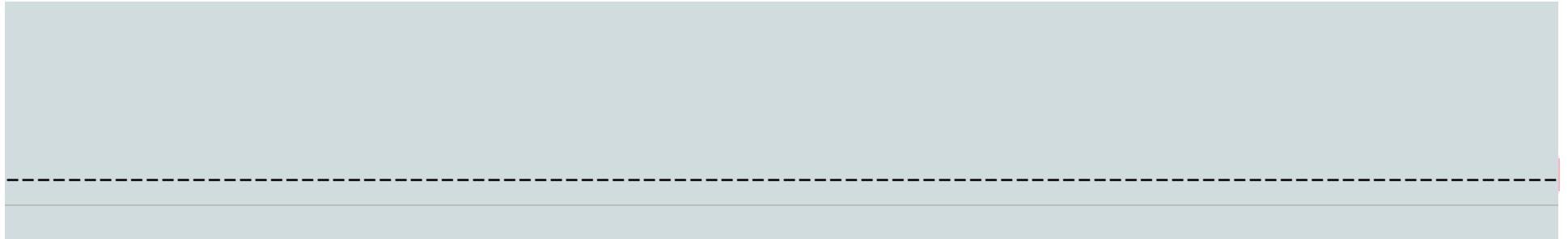
trfA

template sequence pAST.041 (PprqR-eYFP-TclpPX)

aligned sequence 2020-12-10\_A10\_AST41DSPTF

aligned sequence 2020-12-10\_G09\_AST41BSPTF

aligned sequence 2020-12-10\_F09\_AST41ASPTF



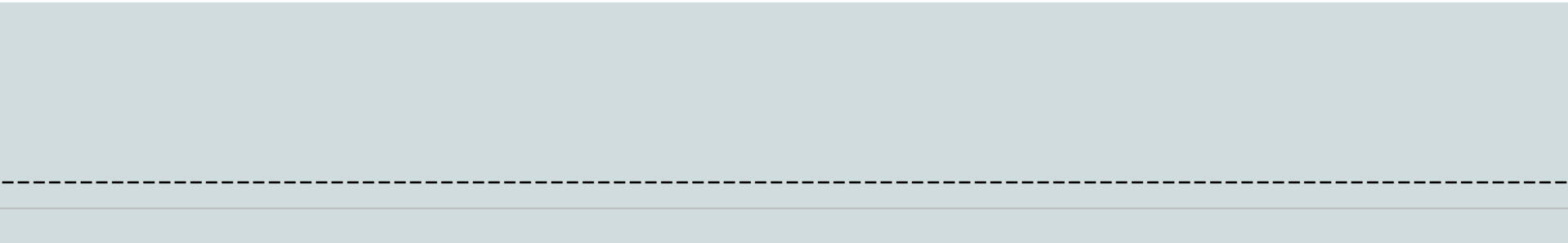
**aligned sequence** 2020-12-10\_H09\_AST41CSPTF

cacctgctgccacaccagttcgtcatcgtcggcccgagctcgacgccggtgtaggtgatcttcacgtccttggttgacgtggaaaatgaccttgttttgc

310 320 330 340 350 360 370 380 390 400

<< trfA >>

template sequence pAST.041 (PprqR-eYFP-TclpPX)



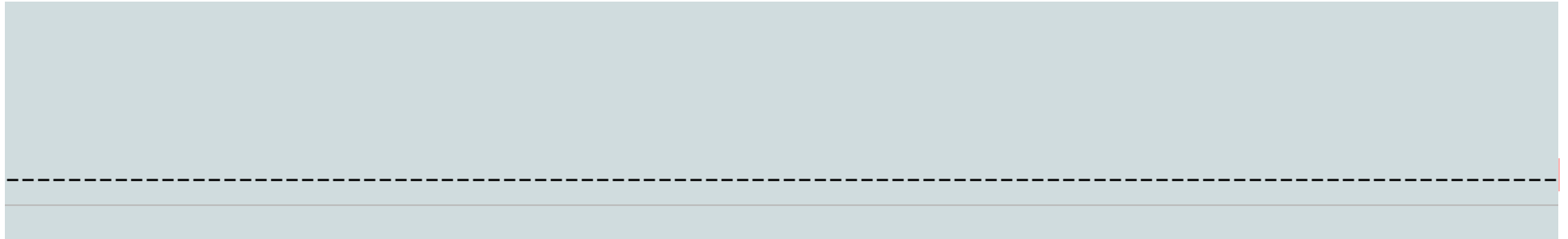
aligned sequence 2020-12-10\_A10\_AST41DSPTF



aligned sequence 2020-12-10\_G09\_AST41BSPTF



aligned sequence 2020-12-10\_F09\_AST41ASPTF



**aligned sequence** 2020-12-10\_H09\_AST41CSPTF

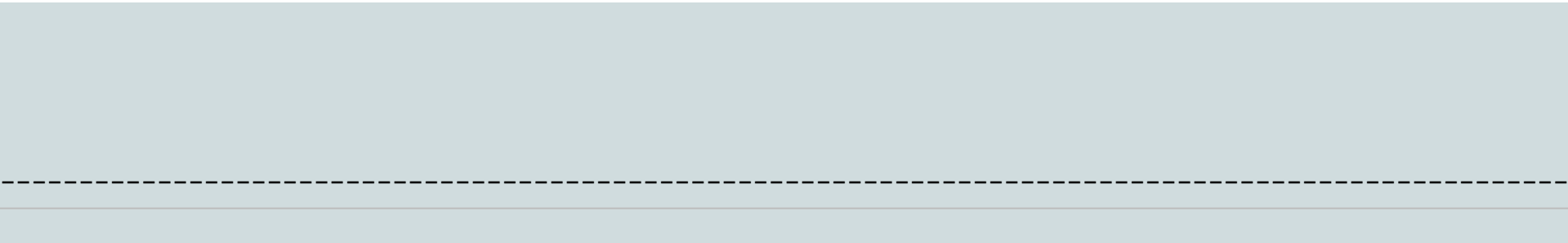


agcgcctcgcgcgggattttcttggtgcgcggtggtgaacagggcagagcgggccgtgtcgtttggcatcgctcgcatcgtgtccggccacggcgcaatat

410 420 430 440 450 460 470 480 490 500

<< trfA >>

template sequence pAST.041 (PprqR-eYFP-TclpPX)



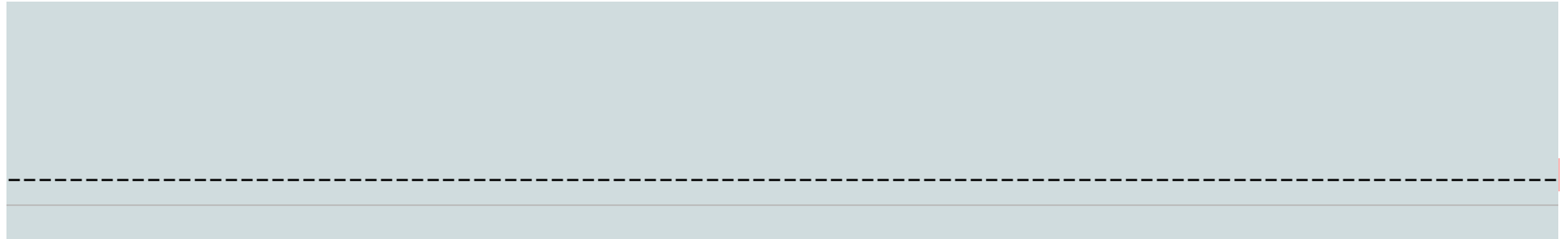
aligned sequence 2020-12-10\_A10\_AST41DSPTF



aligned sequence 2020-12-10\_G09\_AST41BSPTF



aligned sequence 2020-12-10\_F09\_AST41ASPTF



**aligned sequence** 2020-12-10\_H09\_AST41CSPTF

cgaacaaggaaagctgcatttccttgatctgctgcttcgtgtgtttcagcaacgcggcctgcttggcttcgctgacctgttttgccaggtcctcgccggc

510 520 530 540 550 560 570 580 590 600

<< trfA >>

template sequence pAST.041 (PprqR-eYFP-TclpPX)

aligned sequence 2020-12-10\_A10\_AST41DSPTF

aligned sequence 2020-12-10\_G09\_AST41BSPTF

aligned sequence 2020-12-10\_F09\_AST41ASPTF



**aligned sequence** 2020-12-10\_H09\_AST41CSPTF

ggtttttcgcttcttggtcgtcatagttcctcgcgtgtcgatggtcacgacttcgccaacctgccgcctcctgttcgagacgacgcgaacgctccacg

610 620 630 640 650 660 670 680 690 700

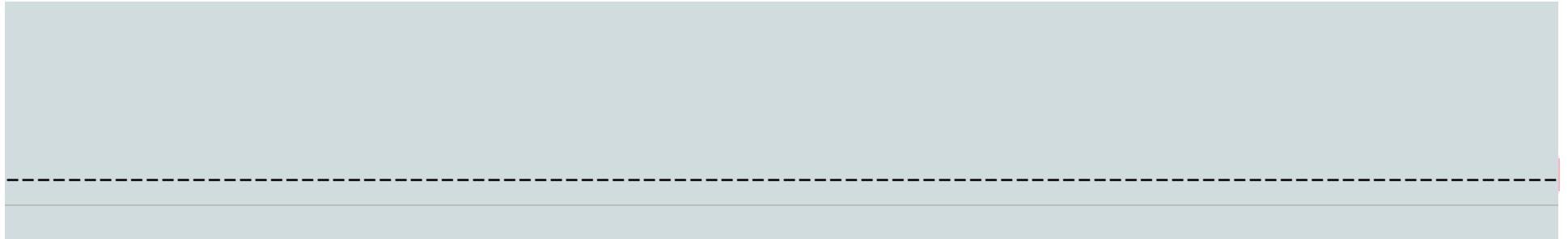
<< trfA >>

template sequence pAST.041 (PprqR-eYFP-TclpPX)

aligned sequence 2020-12-10\_A10\_AST41DSPTF

aligned sequence 2020-12-10\_G09\_AST41BSPTF

aligned sequence 2020-12-10\_F09\_AST41ASPTF



**aligned sequence** 2020-12-10\_H09\_AST41CSPTF

gcggccgatggcgcgggcagggcagggggagccagttgcacgctgtcgcgctcgatccttgccgtagcttgctggactatcgagccgacggactggaagg

710 720 730 740 750 760 770 780 790 800

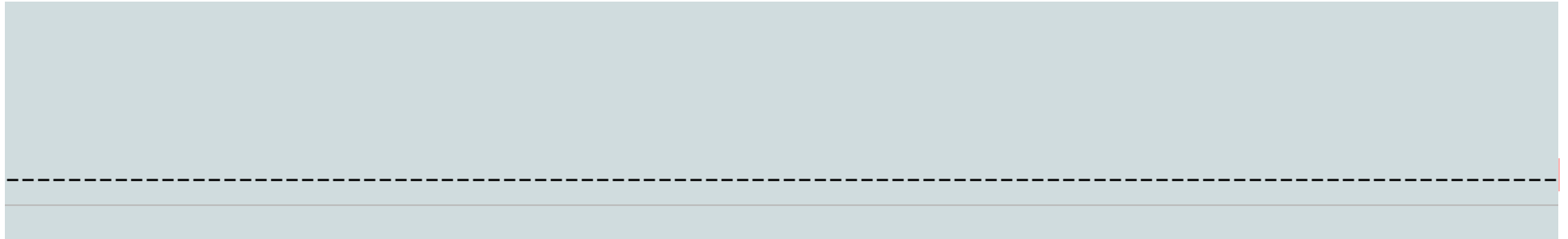
<< trfA >>

template sequence pAST.041 (PprqR-eYFP-TclpPX)

aligned sequence 2020-12-10\_A10\_AST41DSPTF

aligned sequence 2020-12-10\_G09\_AST41BSPTF

aligned sequence 2020-12-10\_F09\_AST41ASPTF



**aligned sequence** 2020-12-10\_H09\_AST41CSPTF



tttcgcggggcgcacgcatgacggtgcggcttgcgatggtttcggcatcctcggcggaaaaccccgctcgatcagttcttgcctgtatgccttccggtc

810 820 830 840 850 860 870 880 890 900

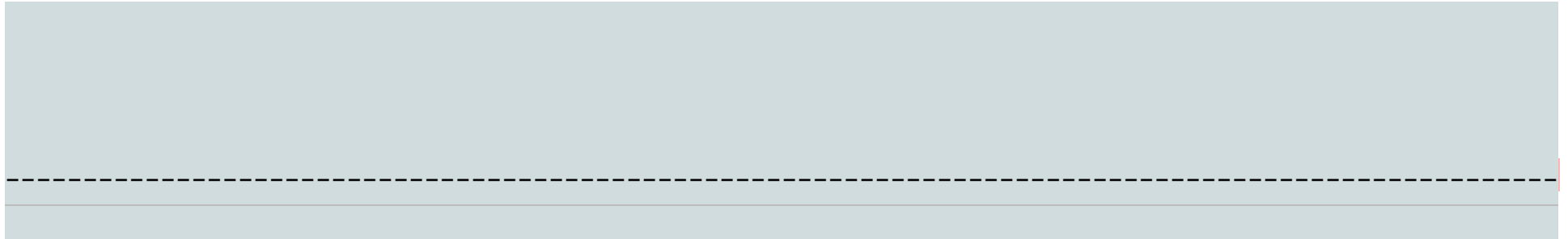
<< trfA >>

template sequence pAST.041 (PprqR-eYFP-TclpPX)

aligned sequence 2020-12-10\_A10\_AST41DSPTF

aligned sequence 2020-12-10\_G09\_AST41BSPTF

aligned sequence 2020-12-10\_F09\_AST41ASPTF



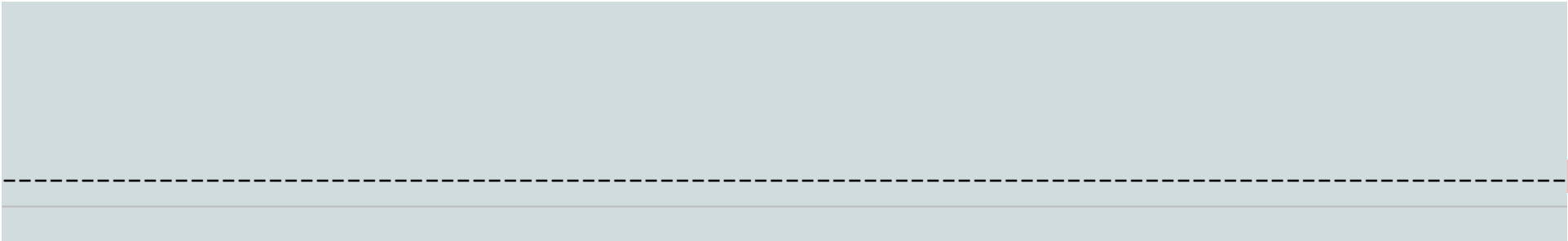
**aligned sequence** 2020-12-10\_H09\_AST41CSPTF

aaacgtccgattcattcaccctccttgcgggattgccccggaattaattccccggatcgatccgtcgatcttgatcccctgcgccatcagatccttggcg

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

<< trfA

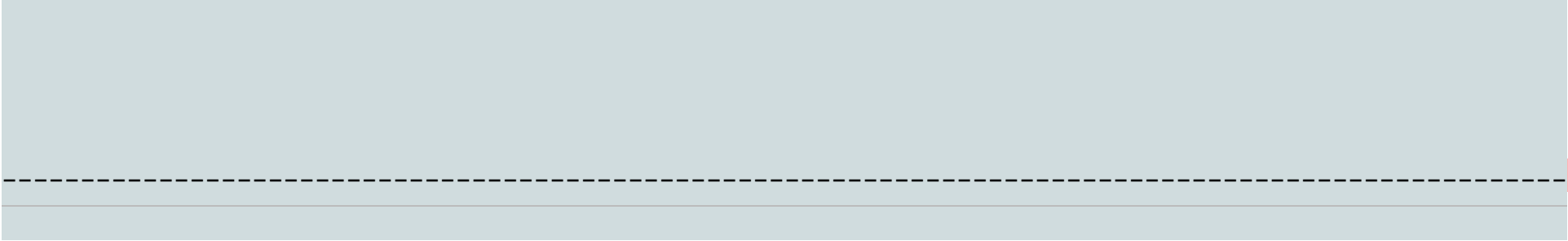
template sequence pAST.041 (PprqR-eYFP-TclpPX)



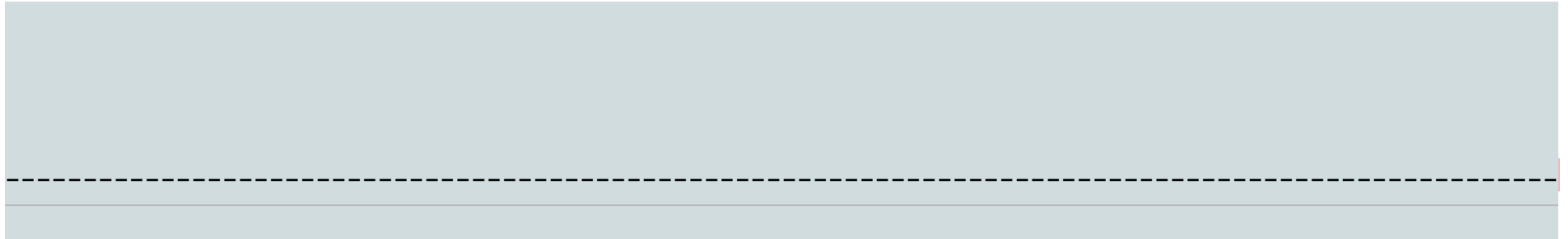
aligned sequence 2020-12-10\_A10\_AST41DSPTF



aligned sequence 2020-12-10\_G09\_AST41BSPTF



aligned sequence 2020-12-10\_F09\_AST41ASPTF



**aligned sequence** 2020-12-10\_H09\_AST41CSPTF

gcaagaaagccatccagtttactttgcagggttcccaaccttaccagagggcgccccagctggcaattccggttcgcttgctgtccataaaaccgcca

1,010 1,020 1,030 1,040 1,050 1,060 1,070 1,080 1,090 1,100  
template sequence pAST.041 (PprqR-eYFP-TclpPX)



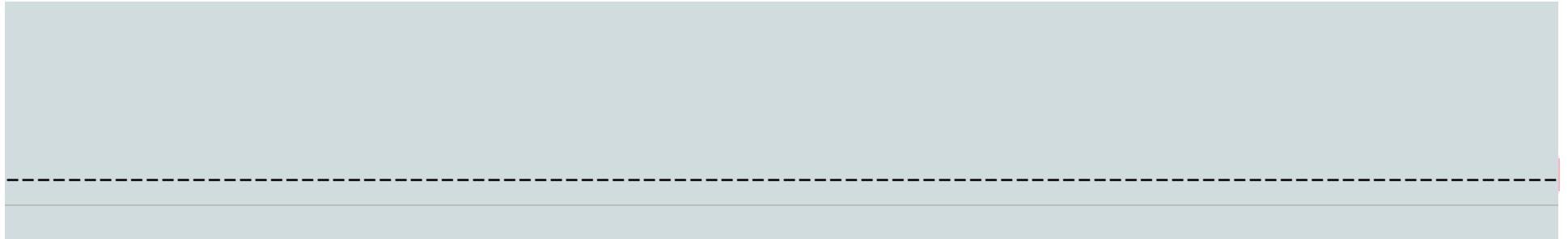
aligned sequence 2020-12-10\_A10\_AST41DSPTF



aligned sequence 2020-12-10\_G09\_AST41BSPTF



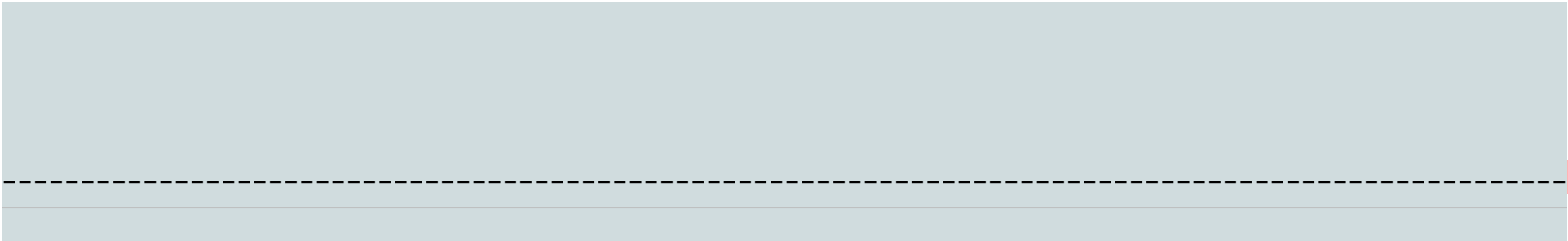
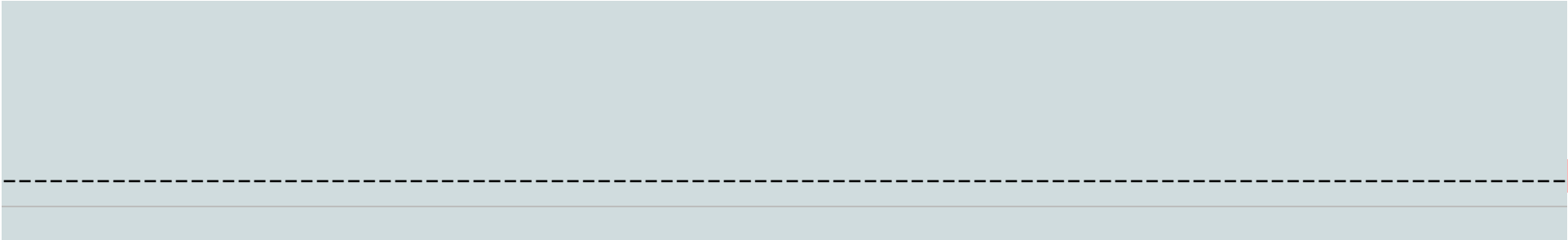
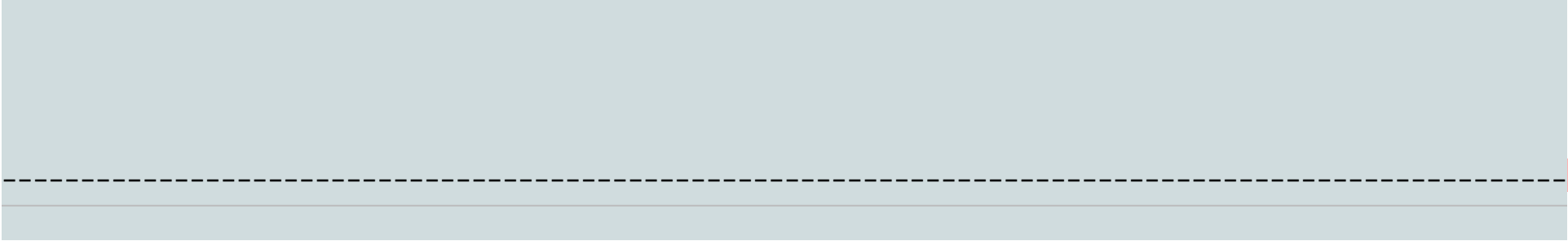
aligned sequence 2020-12-10\_F09\_AST41ASPTF

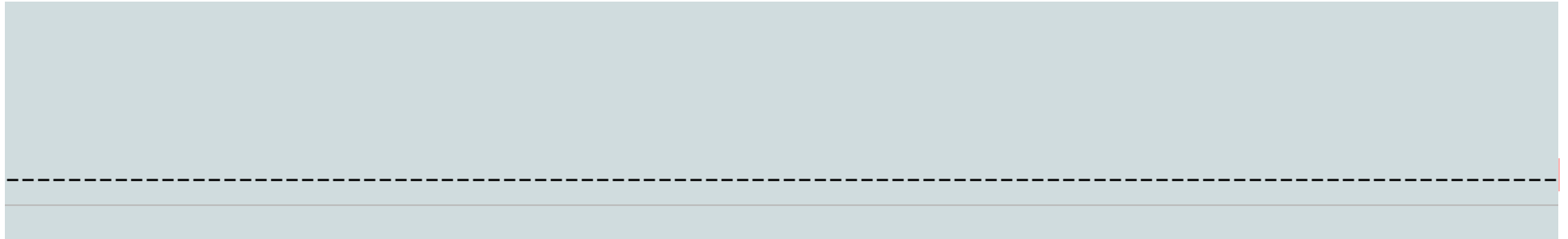


**aligned sequence** 2020-12-10\_H09\_AST41CSPTF

gtctagctatcgccatgtaagcccactgcaagctacctgcttttctctttgcgcttgcgttttcccttgtccagatagcccagtagctgacattcatccgg

1,110 1,120 1,130 1,140 1,150 1,160 1,170 1,180 1,190 1,200  
template sequence pAST.041 (PprqR-eYFP-TclpPX)





**aligned sequence** 2020-12-10\_H09\_AST41CSPTF

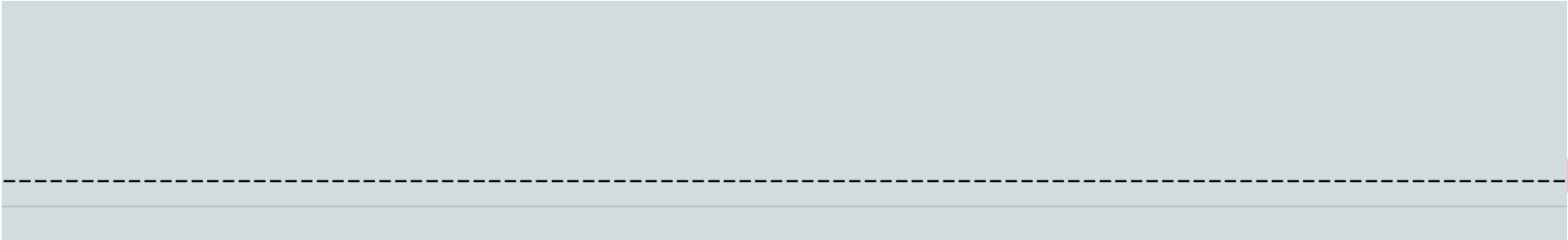


gggtcagcaccgtttctgcggactggctttctacgtggctgccatttttgggggtgaggccgttcgcggccgagggg'gcagcccctgggggggatgggaggc

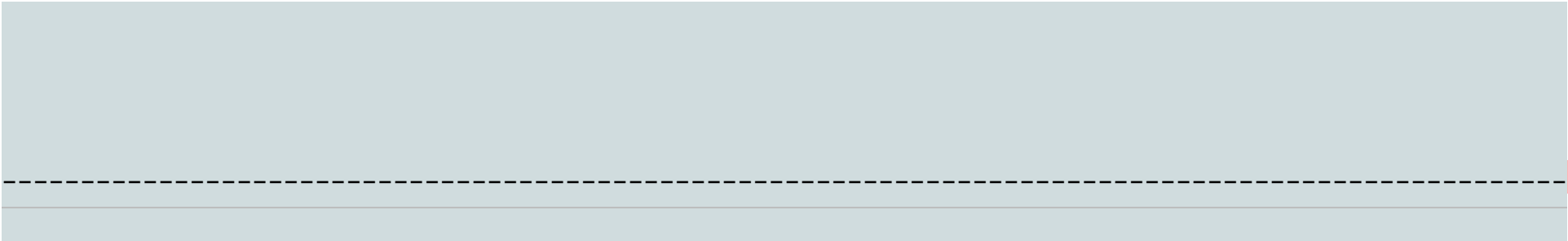
1,210 1,220 1,230 1,240 1,250 1,260 1,270 1,280 1,290 1,300  
template sequence pAST.041 (PprqR-eYFP-TclpPX)



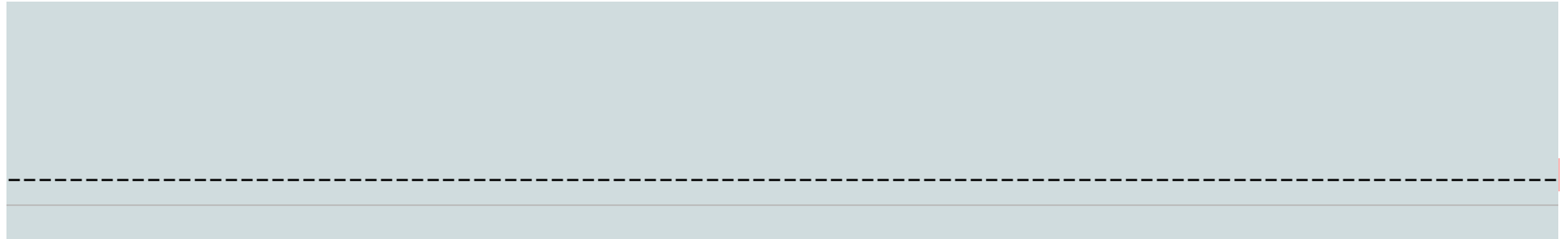
aligned sequence 2020-12-10\_A10\_AST41DSPTF



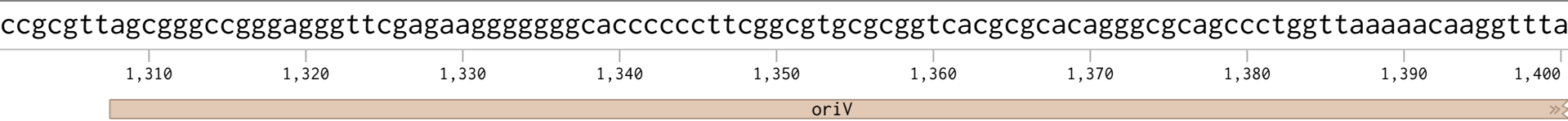
aligned sequence 2020-12-10\_G09\_AST41BSPTF



aligned sequence 2020-12-10\_F09\_AST41ASPTF



**aligned sequence** 2020-12-10\_H09\_AST41CSPTF

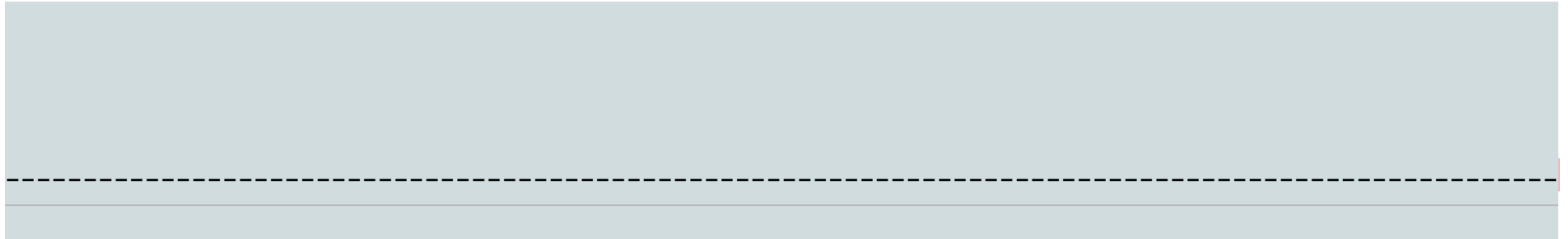


template sequence pAST.041 (PprqR-eYFP-TclpPX)

aligned sequence 2020-12-10\_A10\_AST41DSPTF

aligned sequence 2020-12-10\_G09\_AST41BSPTF

aligned sequence 2020-12-10\_F09\_AST41ASPTF



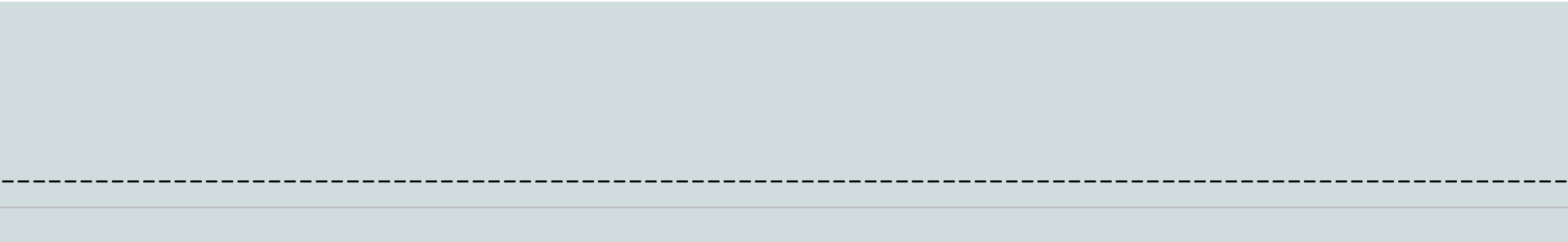
**aligned sequence** 2020-12-10\_H09\_AST41CSPTF

taaatattggtttaaagcaggttaaagacaggttagcggtggccgaaaaacgggcggaacccttgcaaattgctggattttctgcctgtggacagccc

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

>> oriV >>

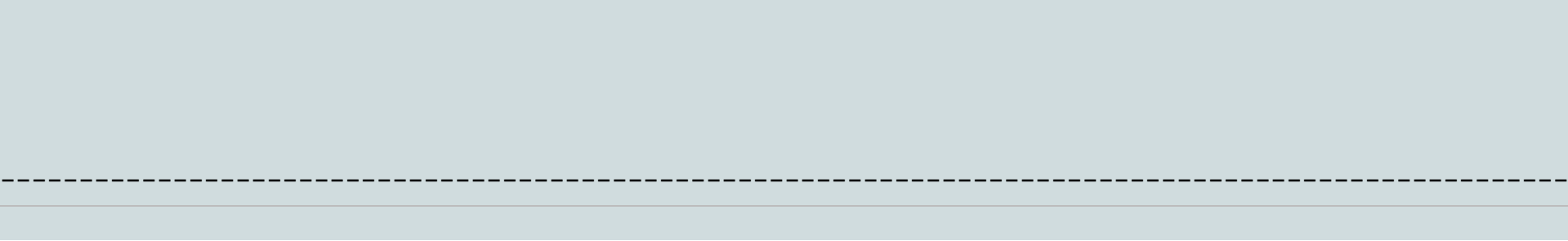
template sequence pAST.041 (PprqR-eYFP-TclpPX)



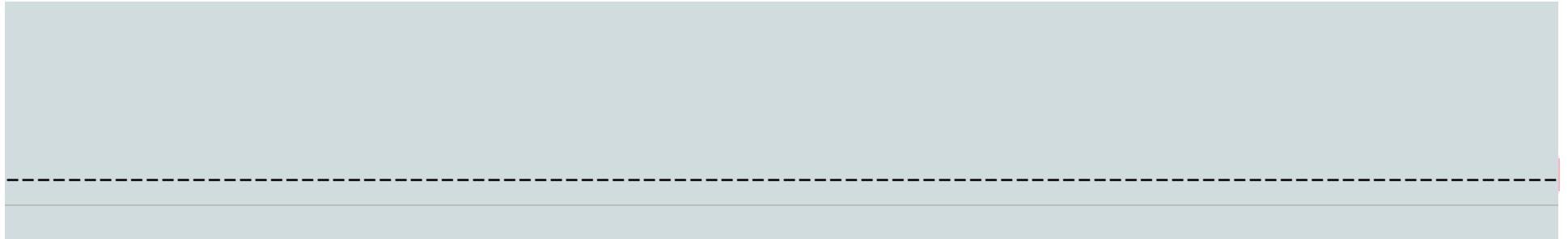
aligned sequence 2020-12-10\_A10\_AST41DSPTF



aligned sequence 2020-12-10\_G09\_AST41BSPTF



aligned sequence 2020-12-10\_F09\_AST41ASPTF



**aligned sequence** 2020-12-10\_H09\_AST41CSPTF

ctcaaatgtcaataggtgcgccccctcatctgtcagcactctgccccctcaagtggtcaaggatcgcgccccctcatctgtcagtagtcgcgccccctcaagtggt

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

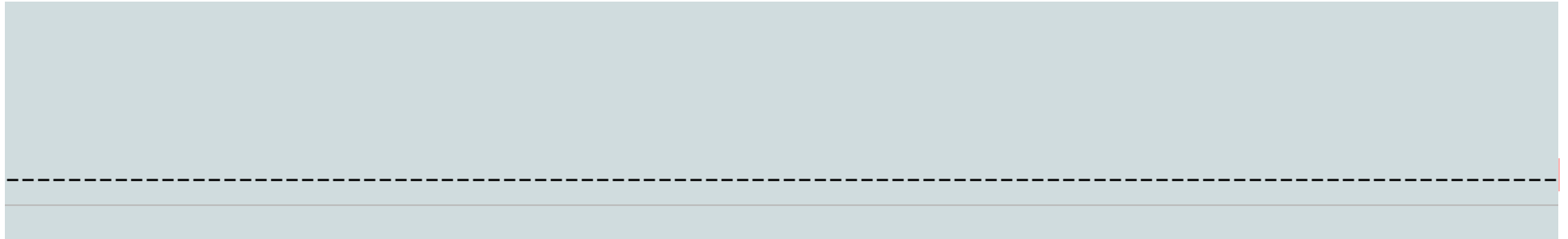
>> oriV >>

template sequence pAST.041 (PprqR-eYFP-TclpPX)

aligned sequence 2020-12-10\_A10\_AST41DSPTF

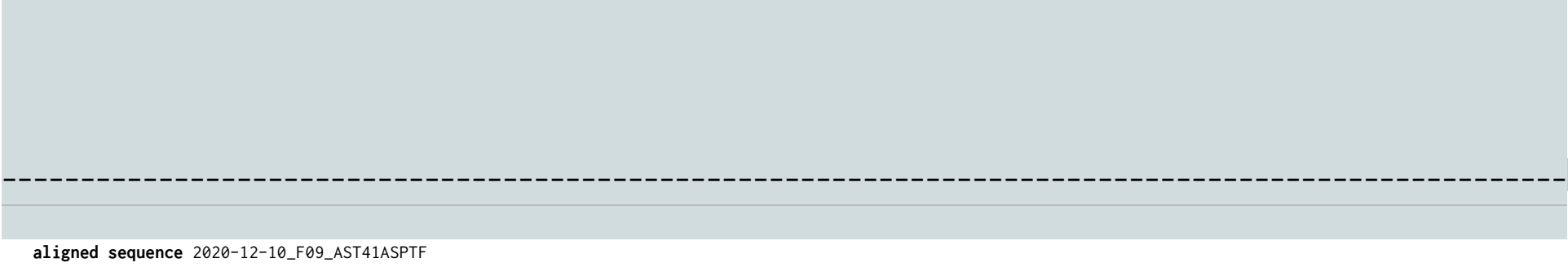
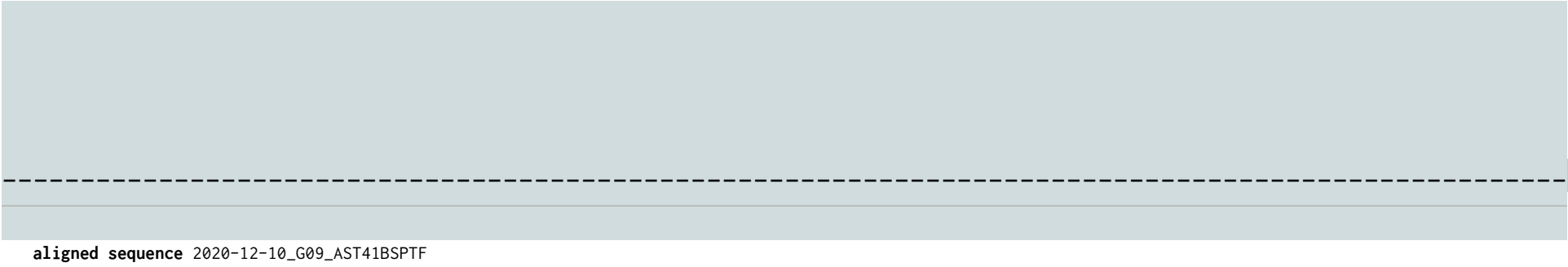
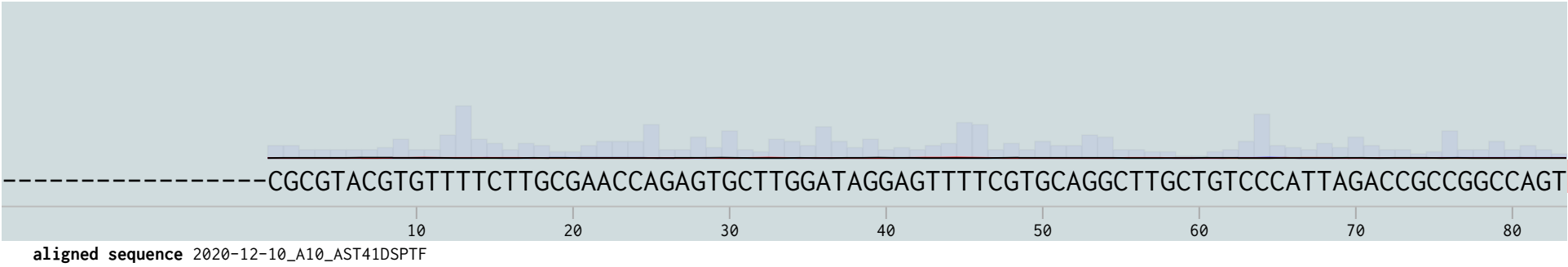
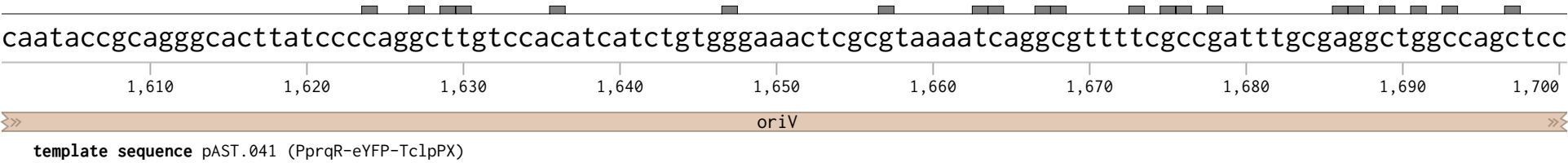
aligned sequence 2020-12-10\_G09\_AST41BSPTF

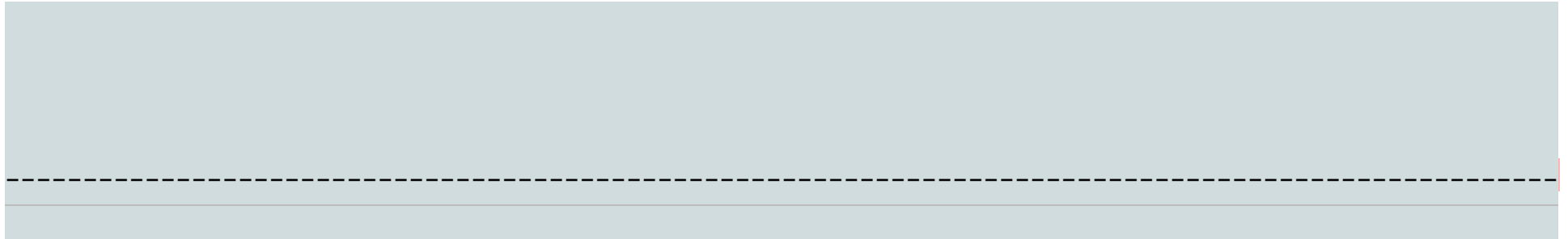
aligned sequence 2020-12-10\_F09\_AST41ASPTF



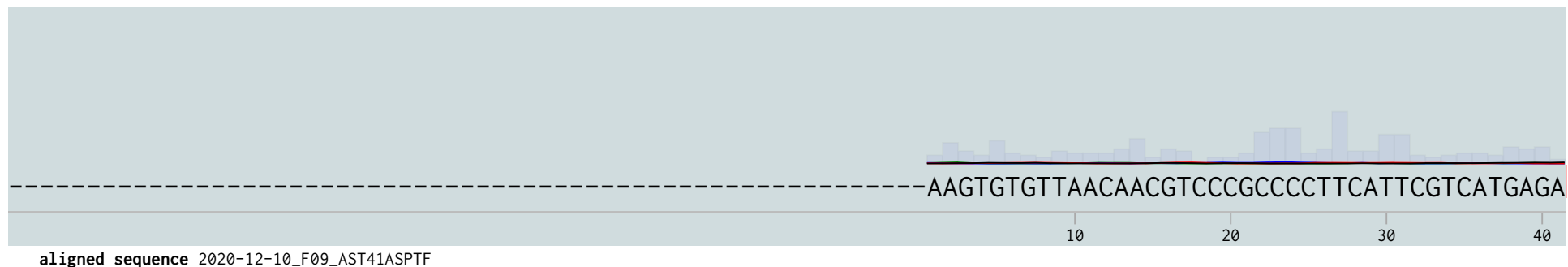
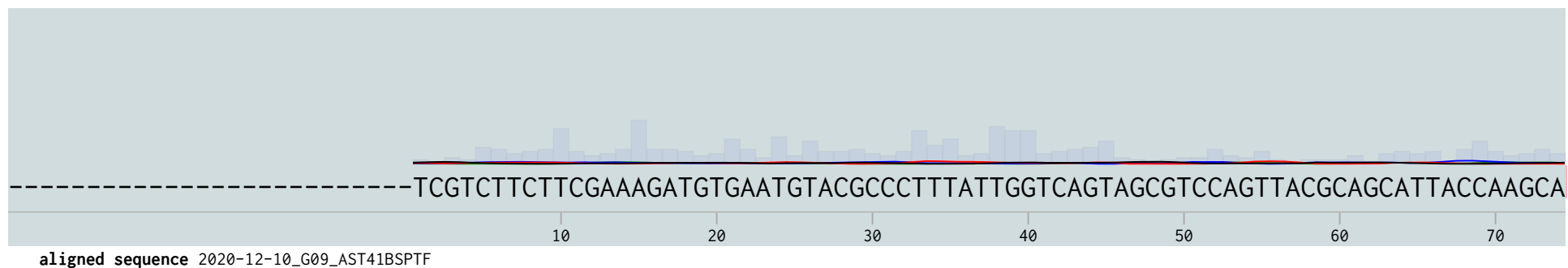
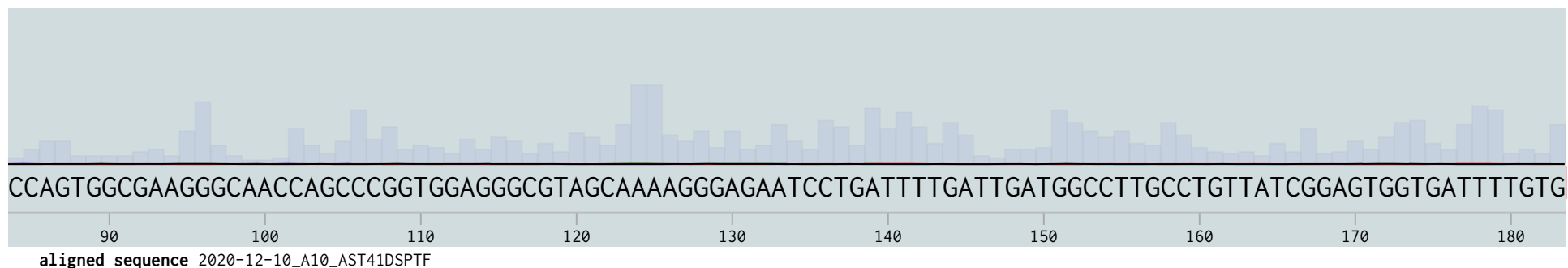
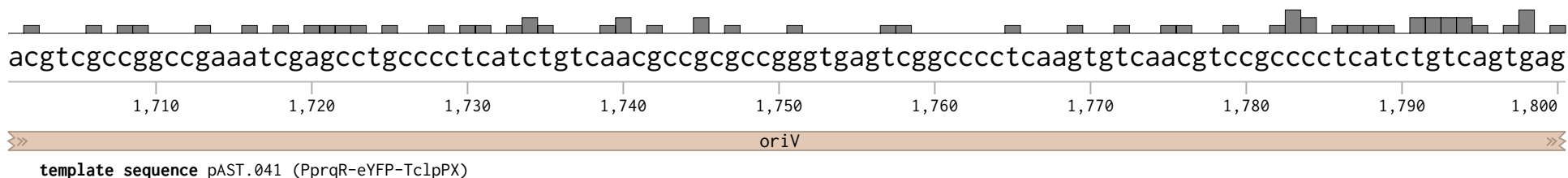
**aligned sequence** 2020-12-10\_H09\_AST41CSPTF

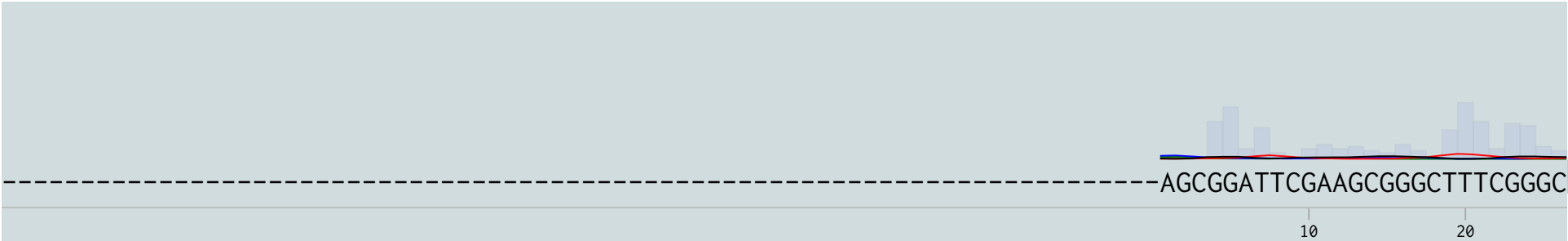




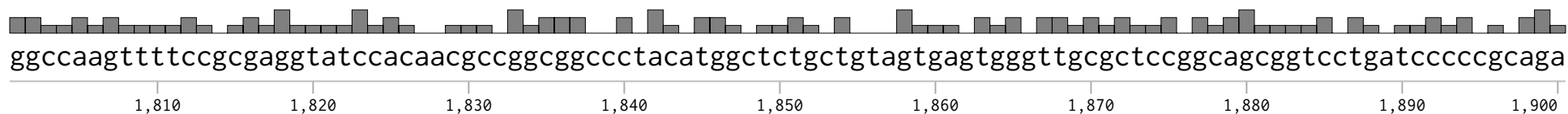


**aligned sequence** 2020-12-10\_H09\_AST41CSPTF



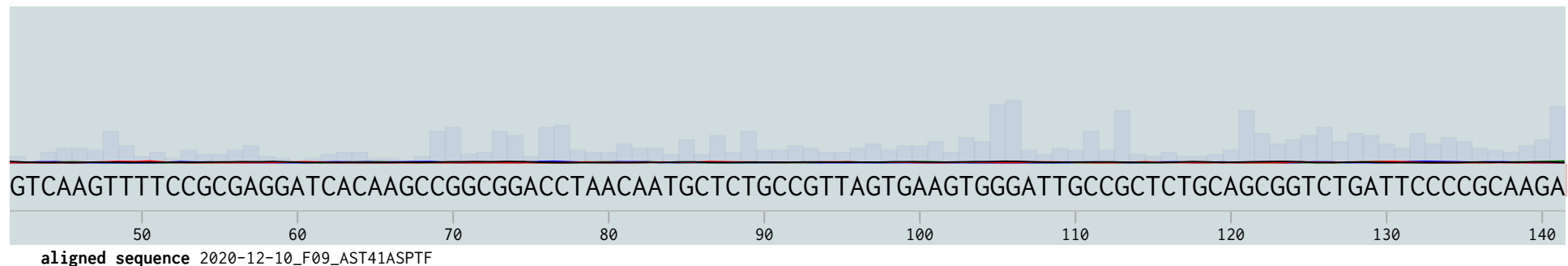
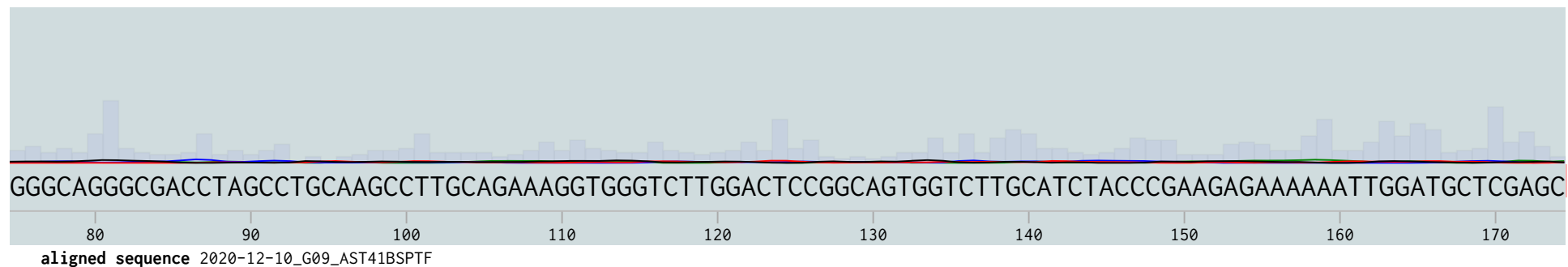
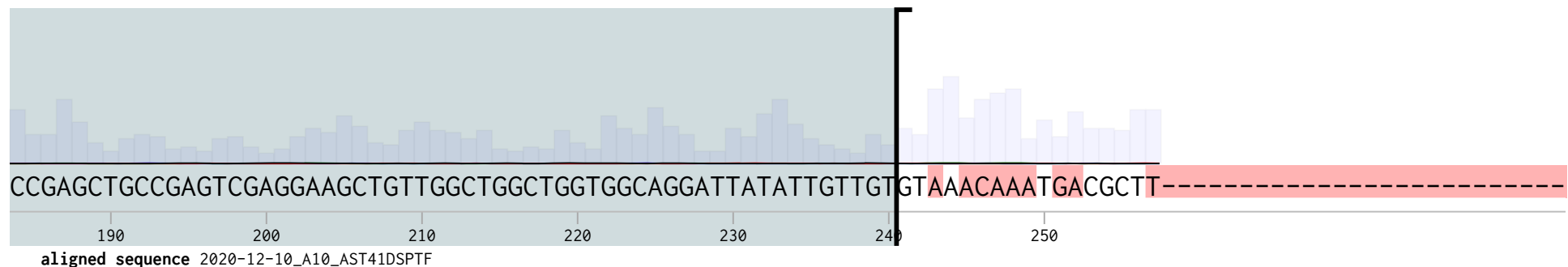


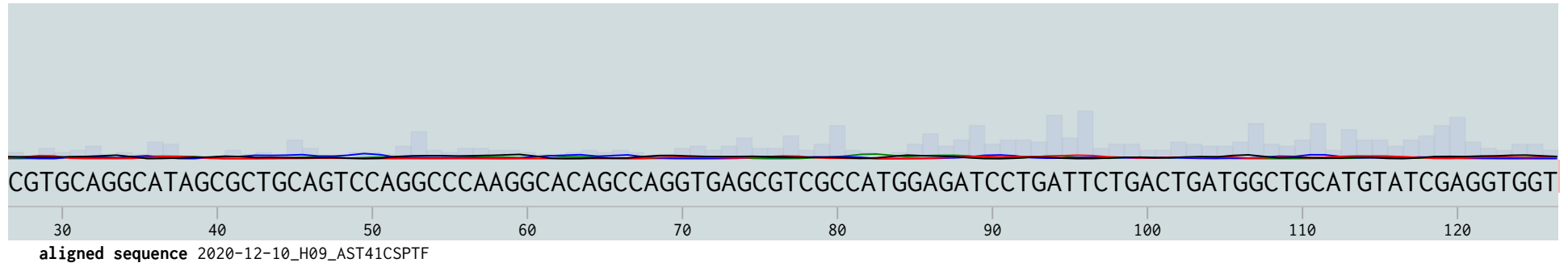
aligned sequence 2020-12-10\_H09\_AST41CSPTF

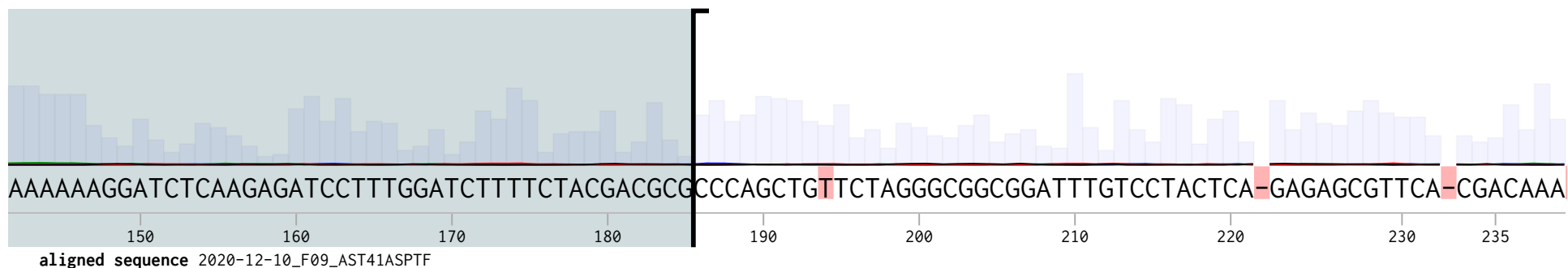
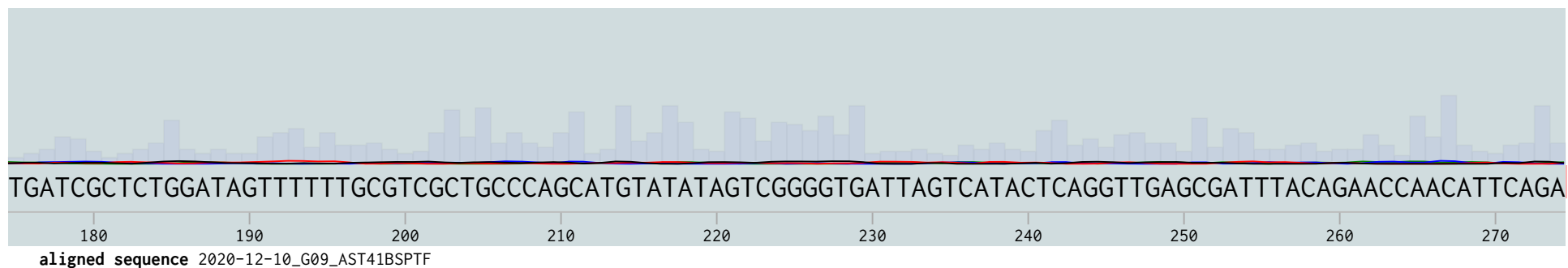
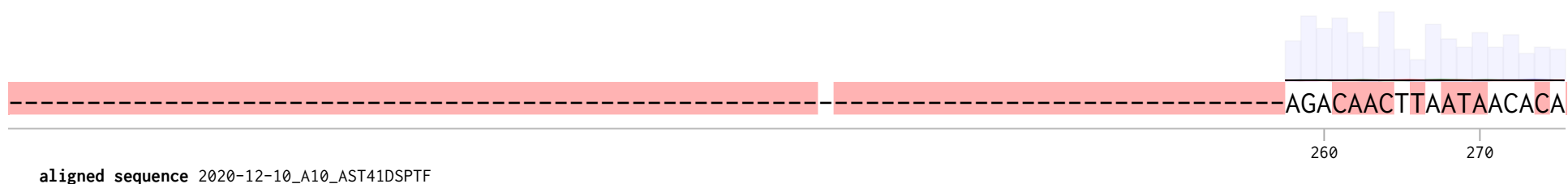
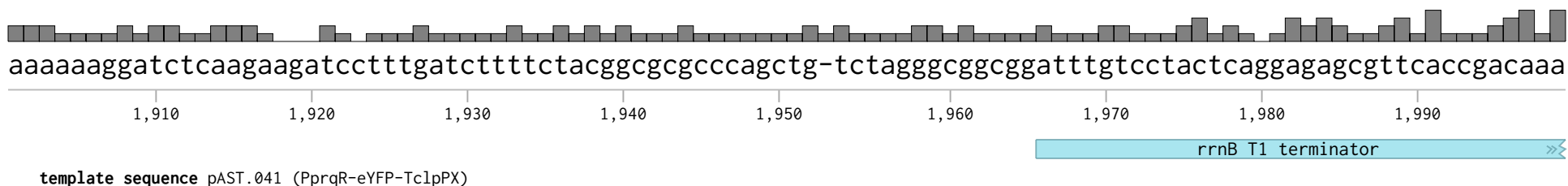


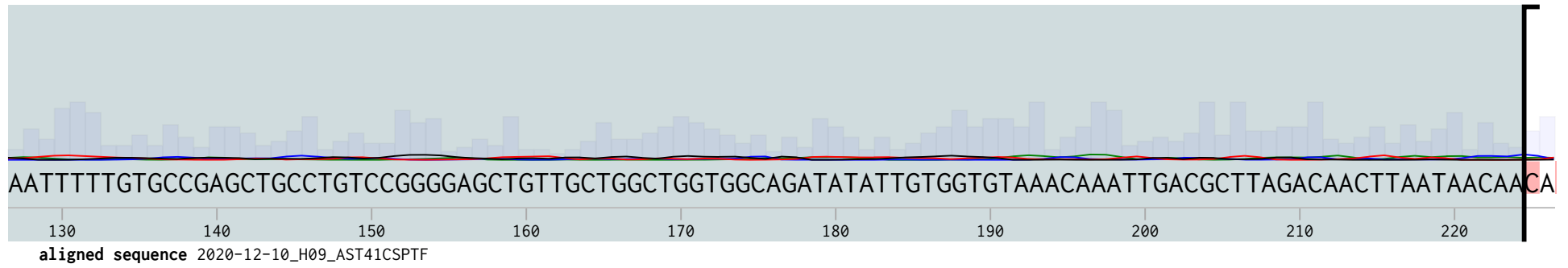
oriV

template sequence pAST.041 (PprqR-eYFP-TclpPX)

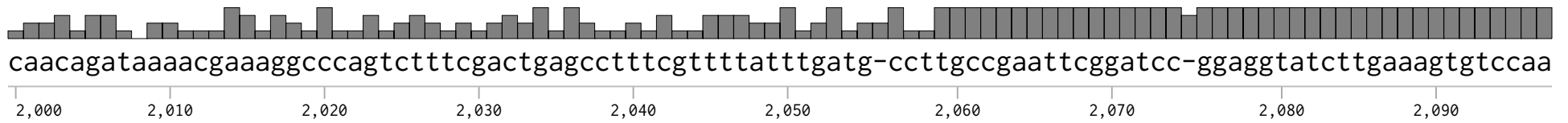








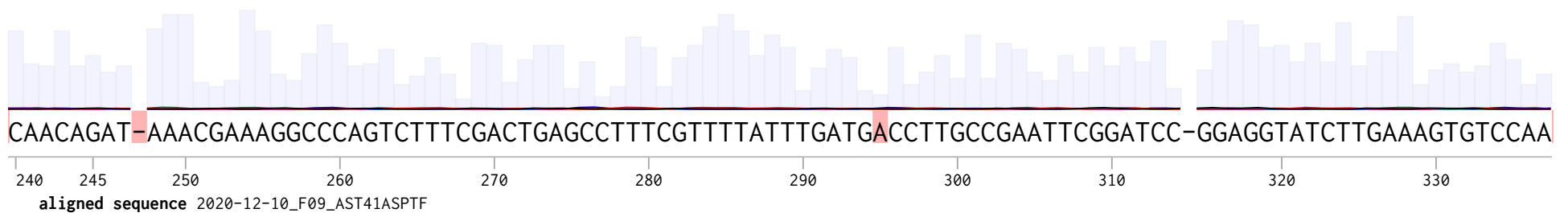
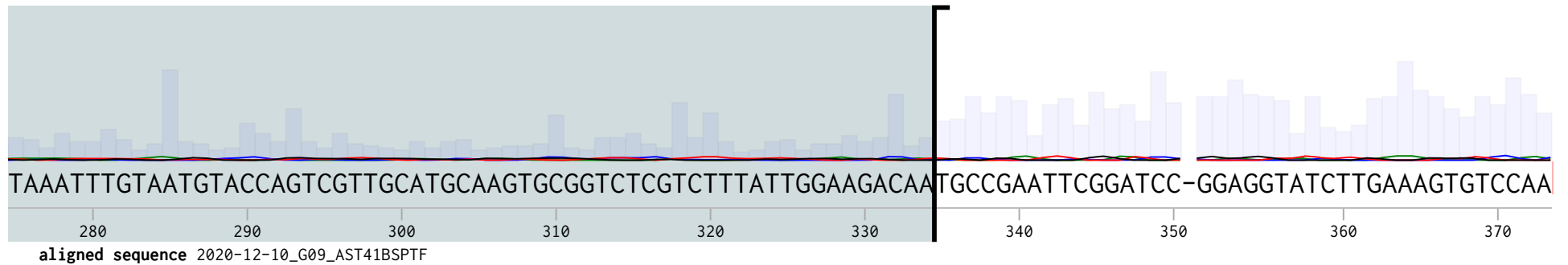
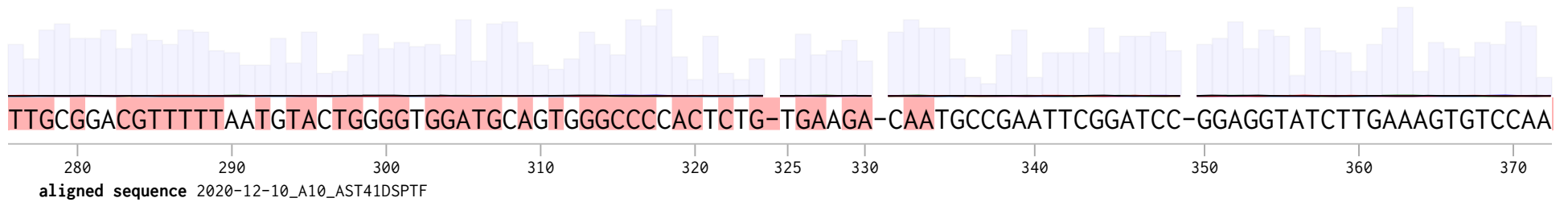


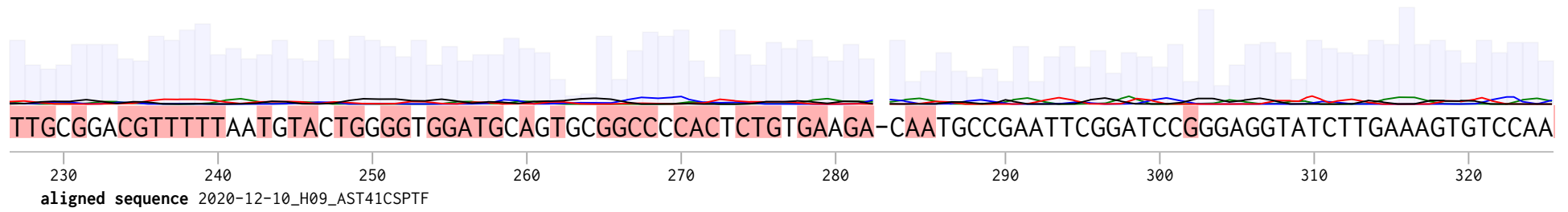


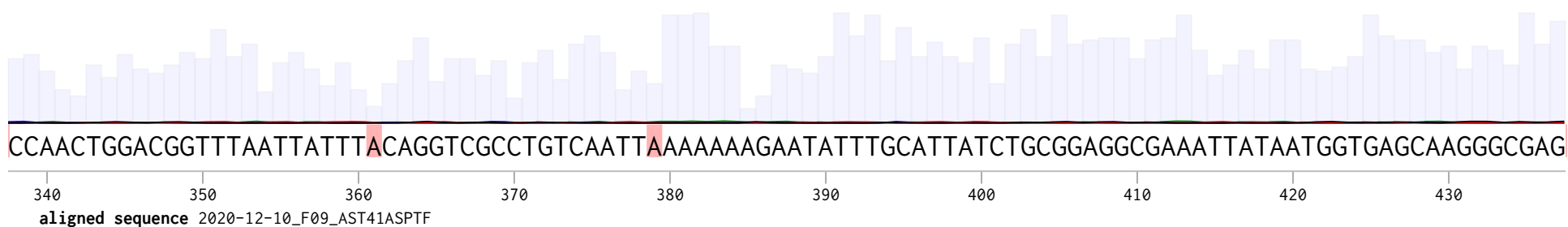
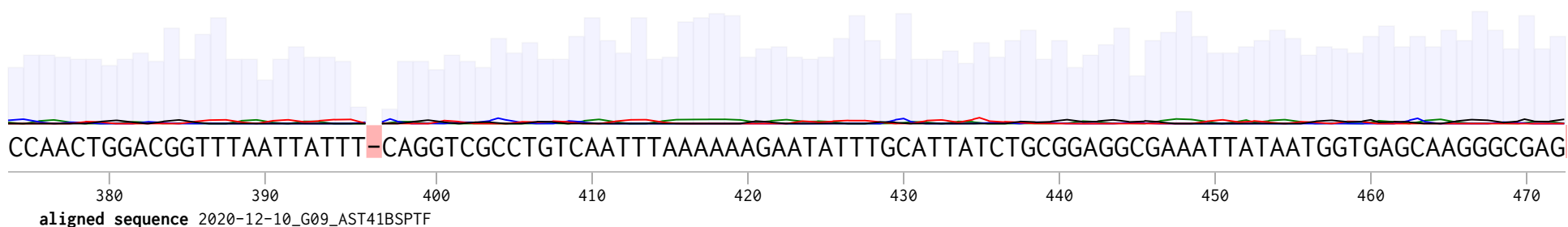
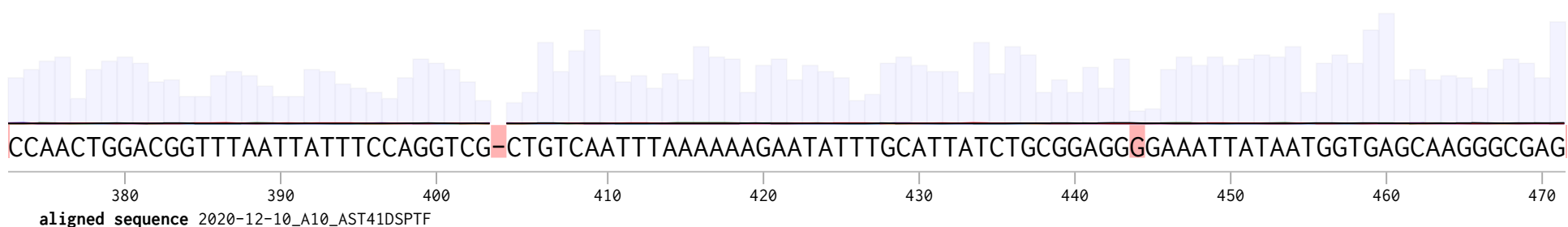
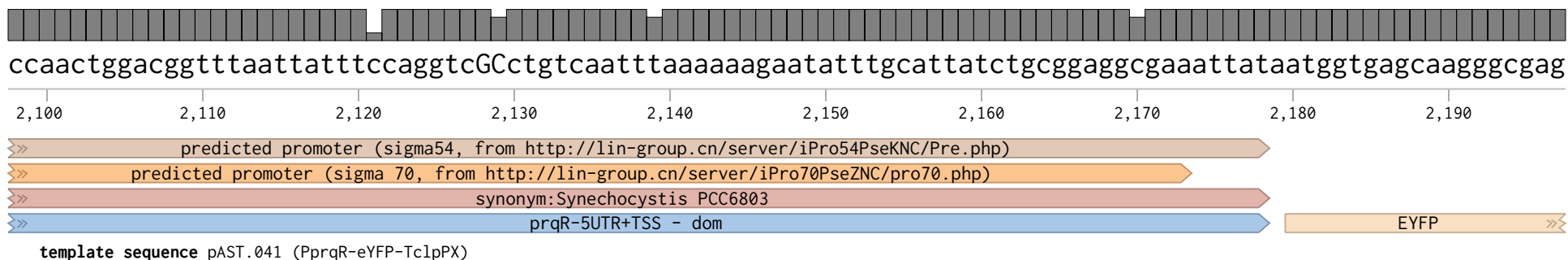
rrnB T1 terminator

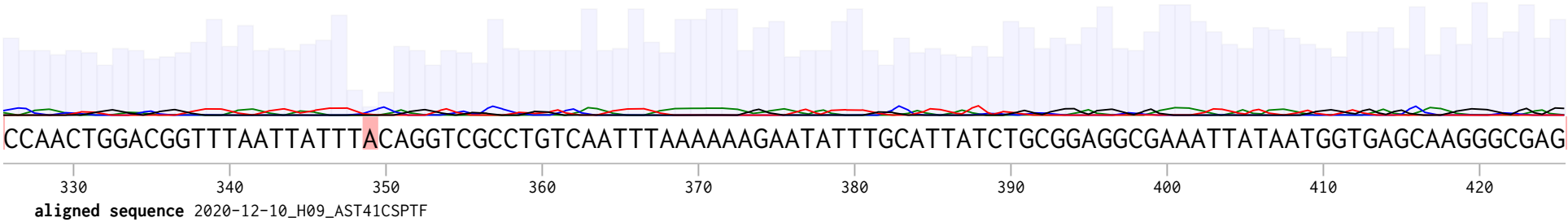
template sequence pAST.041 (PprqR-eYFP-TclpPX)

predic...php) >>  
 synonym: Sy...s PCC6803 >>  
 prqR-5UTR+TSS - dom >>



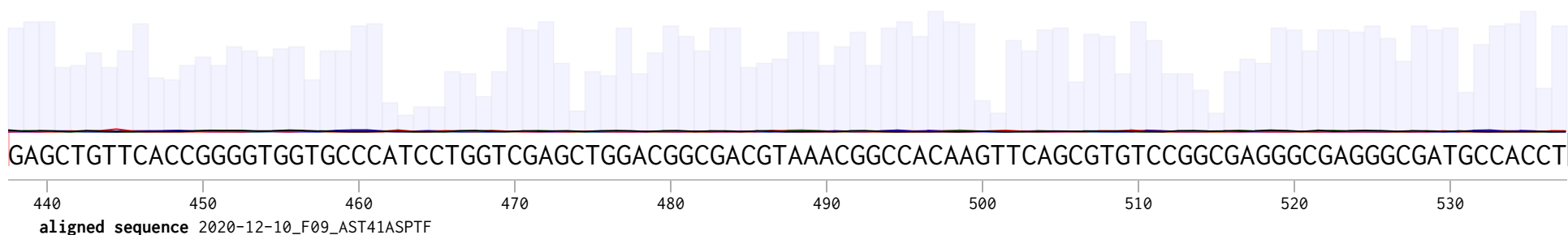
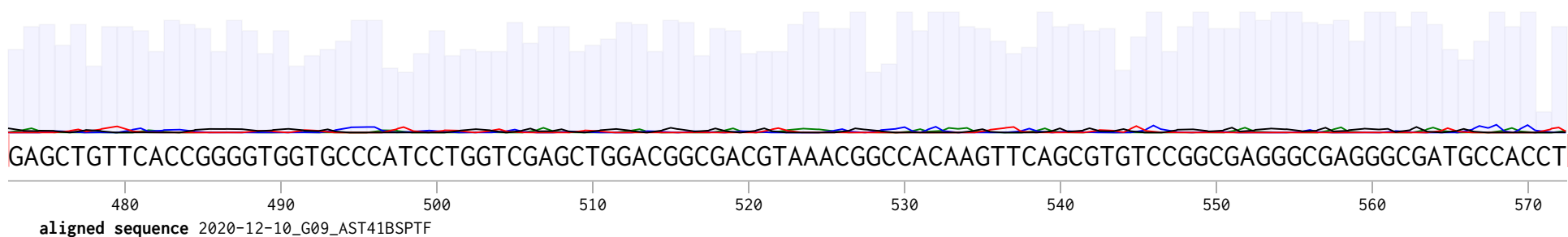
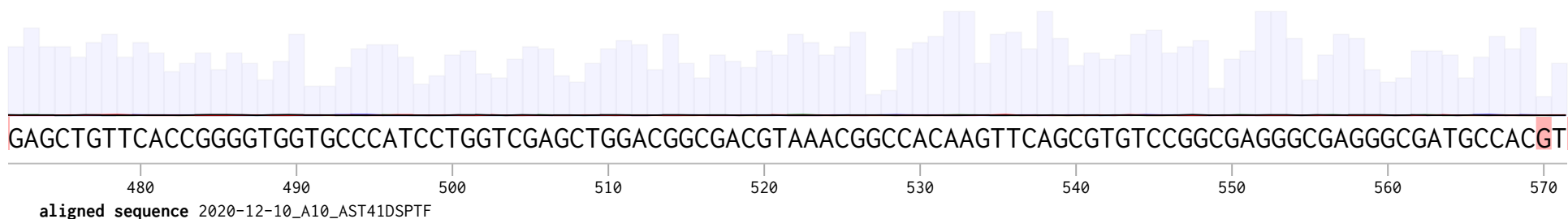


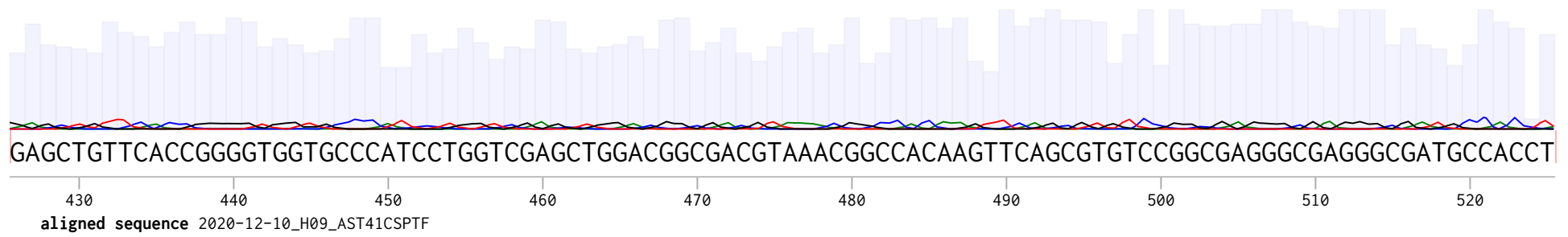


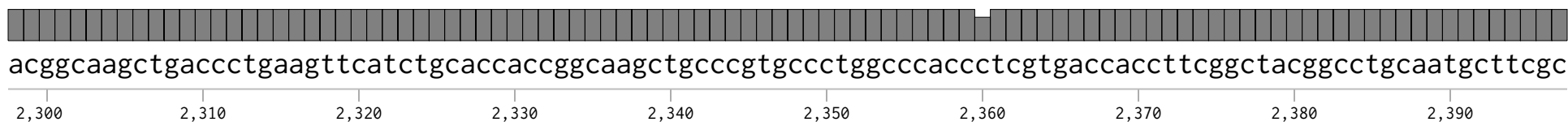




template sequence pAST.041 (PprqR-eYFP-TclpPX)

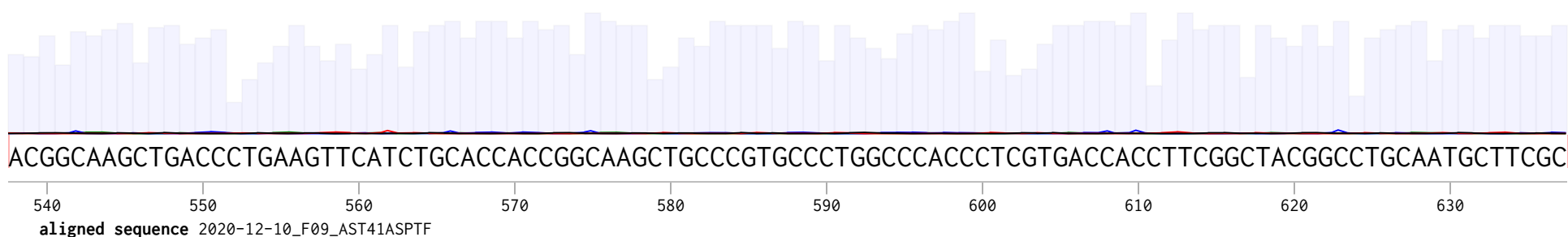
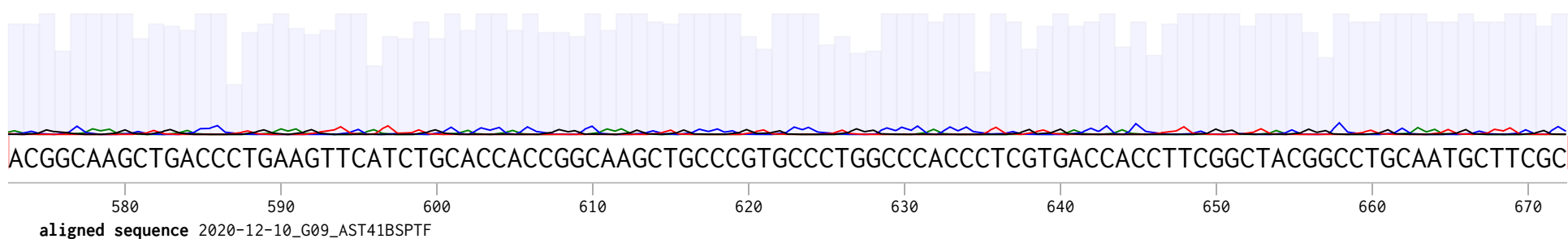
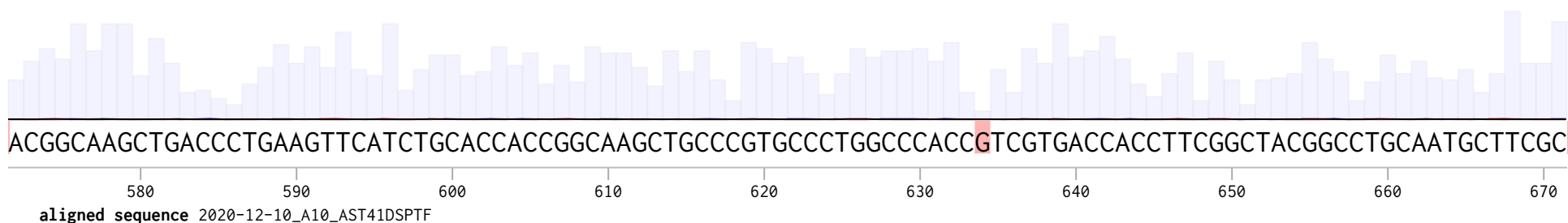


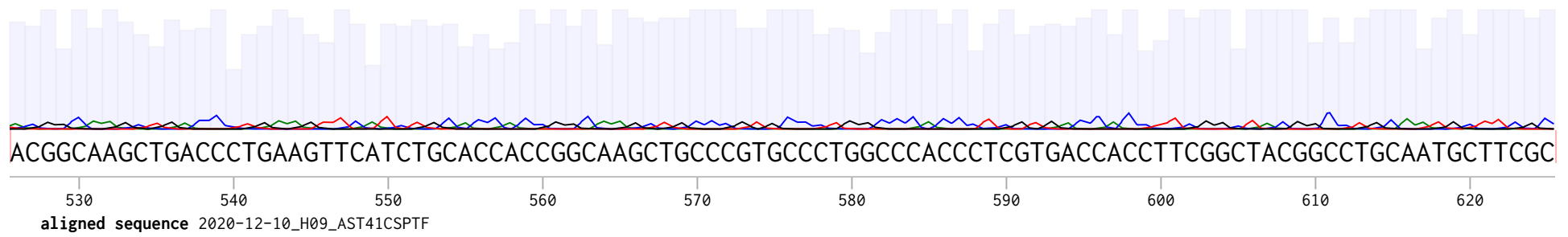




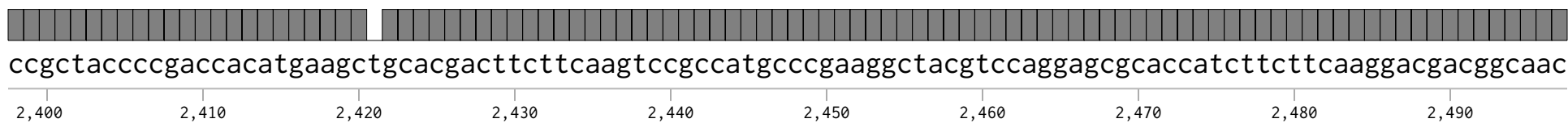
>> EYFP >>

template sequence pAST.041 (PprqR-eYFP-TclpPX)



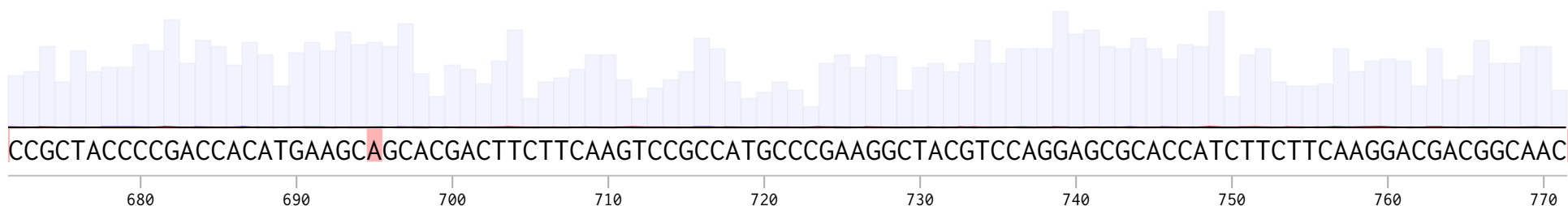




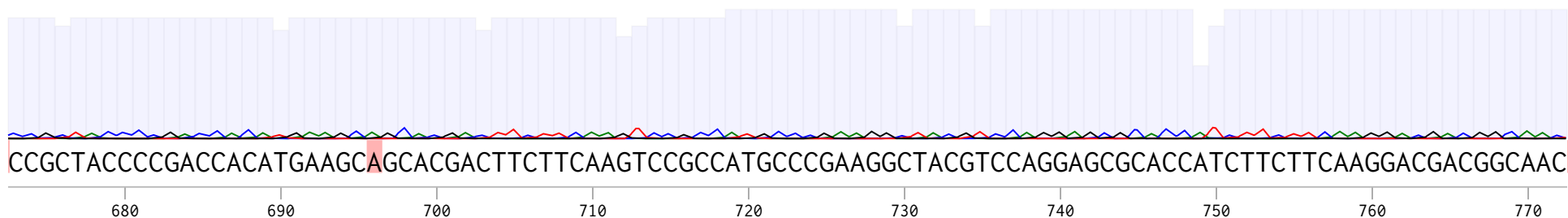


>> EYFP >>

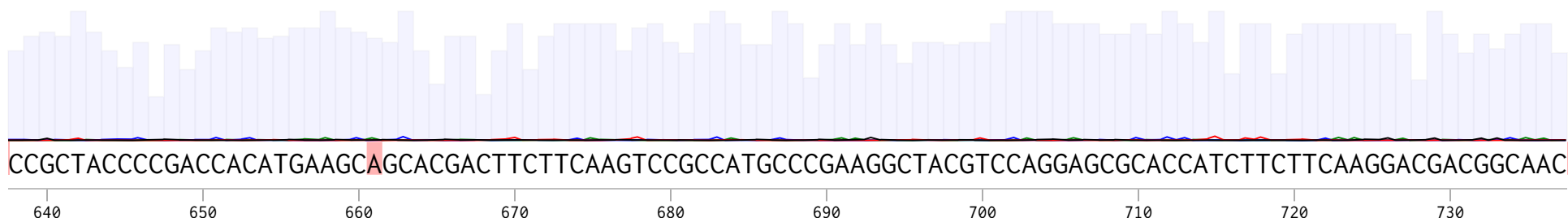
template sequence pAST.041 (PprqR-eYFP-TclpPX)



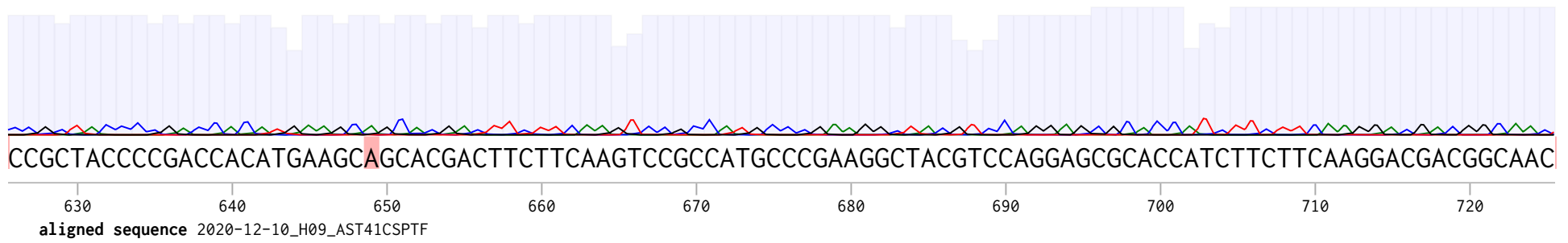
aligned sequence 2020-12-10\_A10\_AST41DSPTF

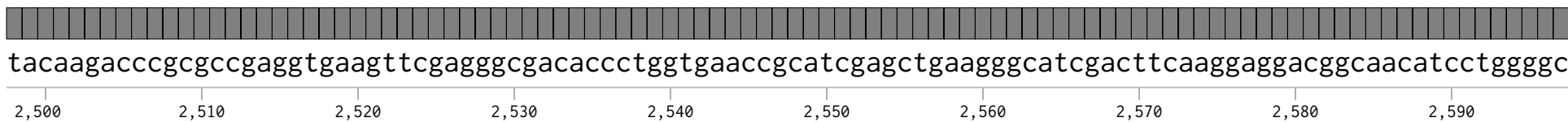


aligned sequence 2020-12-10\_G09\_AST41BSPTF



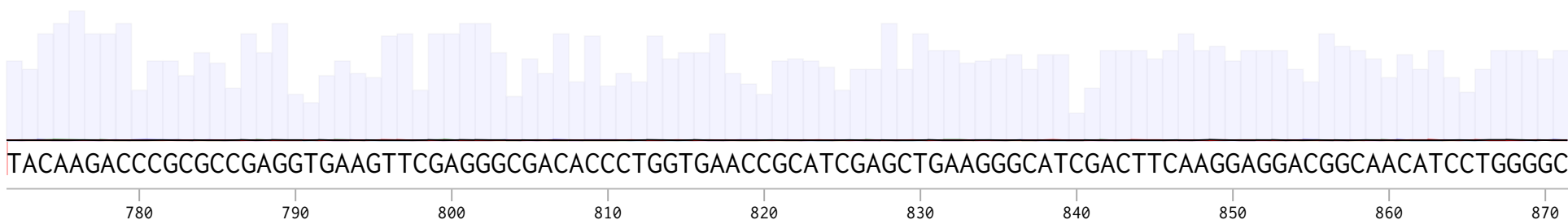
aligned sequence 2020-12-10\_F09\_AST41ASPTF



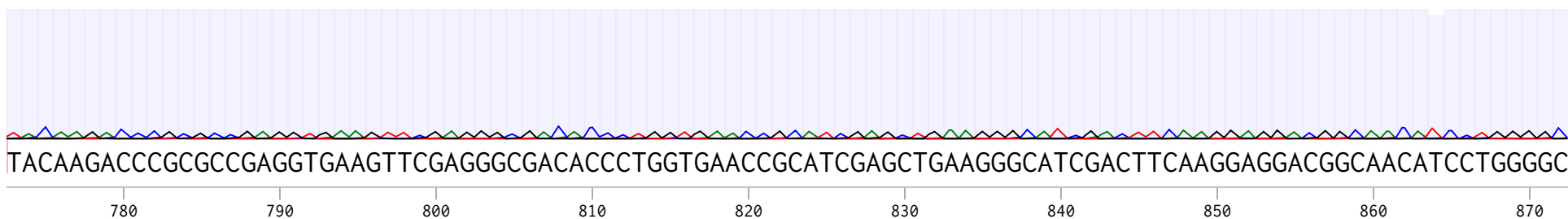


» EYFP »

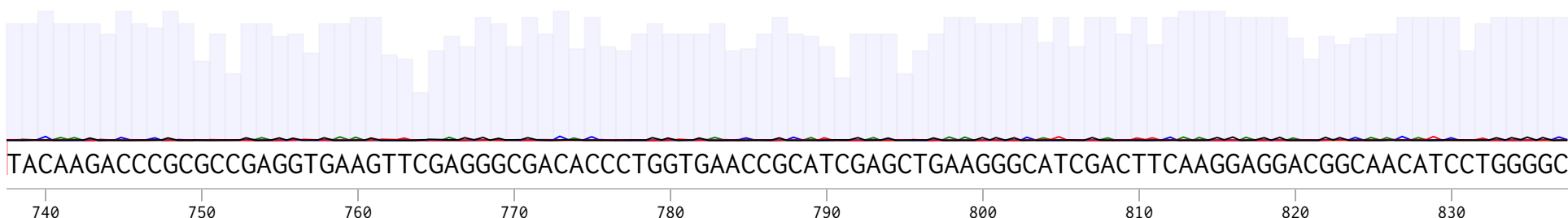
template sequence pAST.041 (PprqR-eYFP-TclpPX)



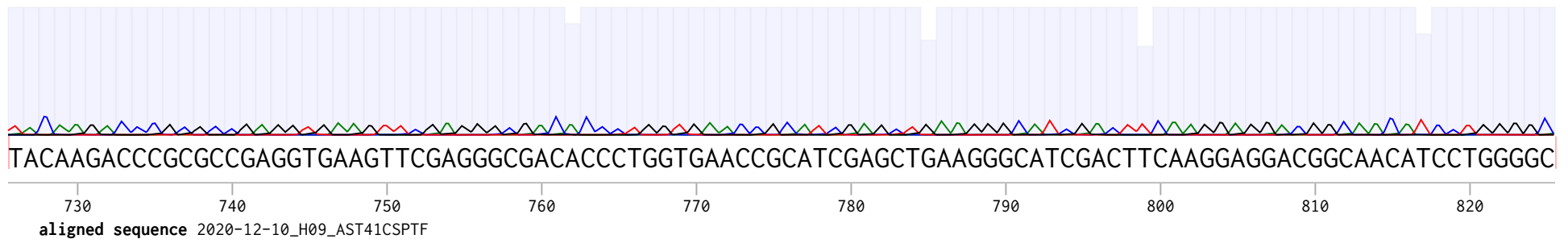
aligned sequence 2020-12-10\_A10\_AST41DSPTF

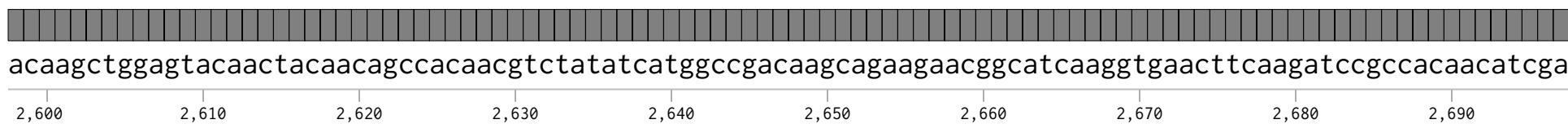


aligned sequence 2020-12-10\_G09\_AST41BSPTF

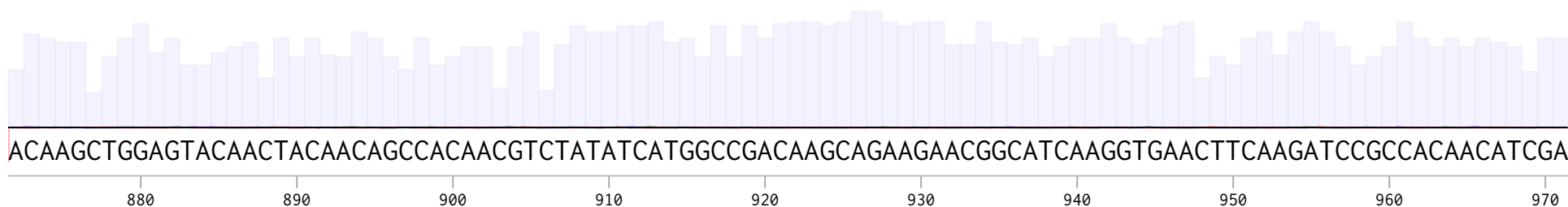


aligned sequence 2020-12-10\_F09\_AST41ASPTF

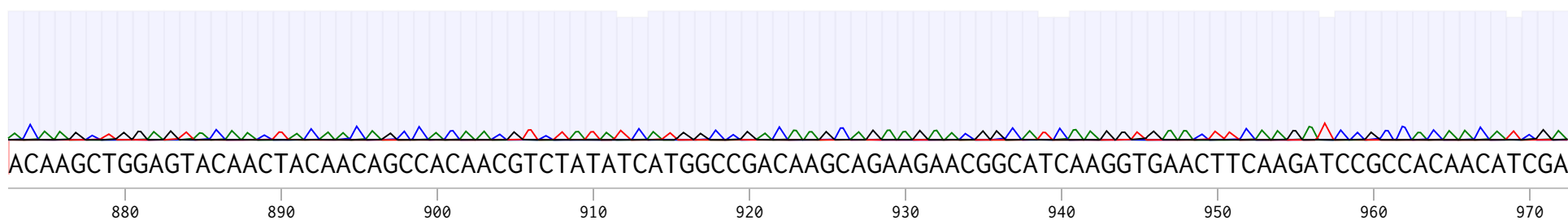




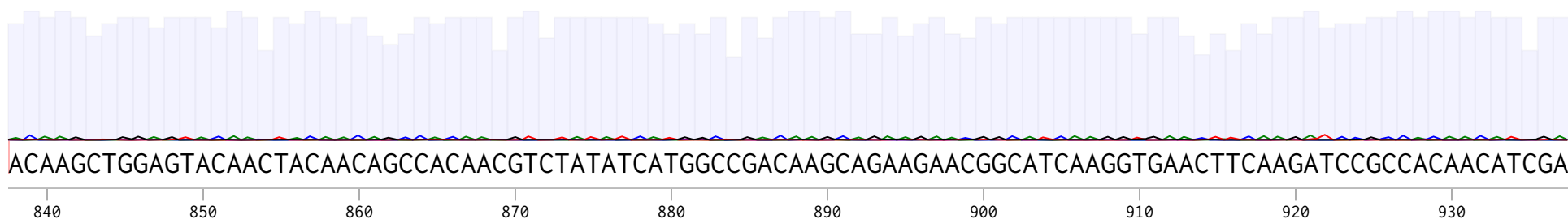
template sequence pAST.041 (PprqR-eYFP-TclpPX)



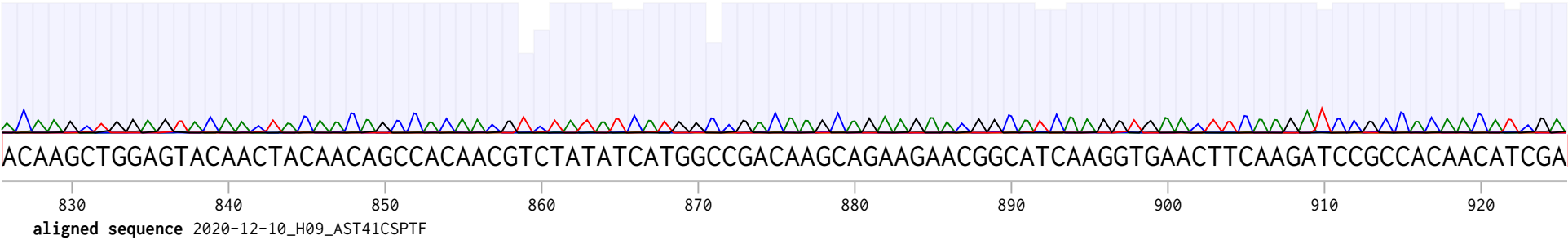
aligned sequence 2020-12-10\_A10\_AST41DSPTF

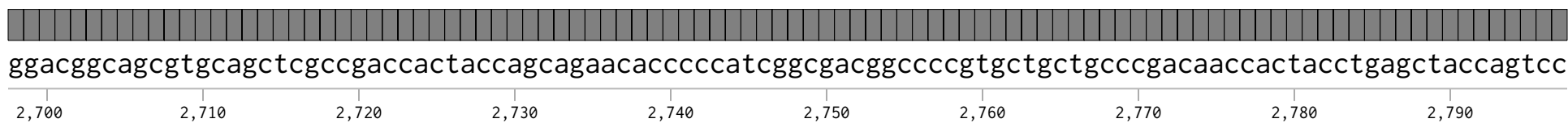


aligned sequence 2020-12-10\_G09\_AST41BSPTF



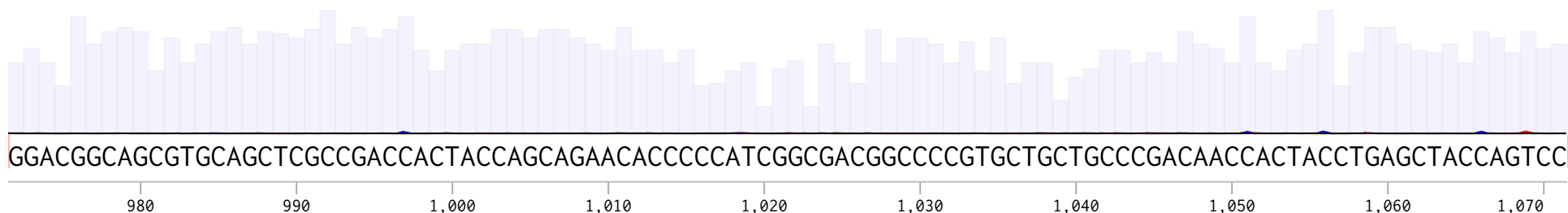
aligned sequence 2020-12-10\_F09\_AST41ASPTF



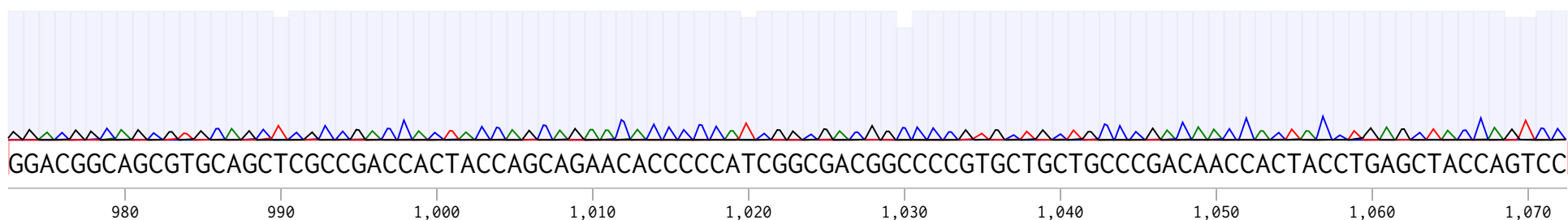


» EYFP »

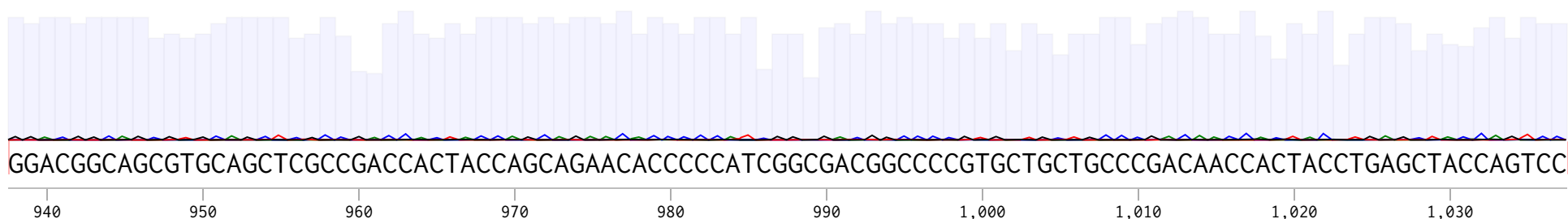
template sequence pAST.041 (PprqR-eYFP-TclpPX)



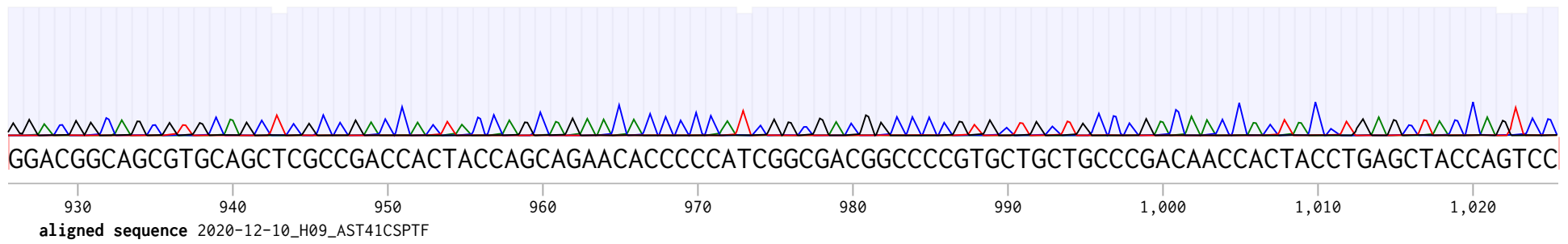
aligned sequence 2020-12-10\_A10\_AST41DSPTF



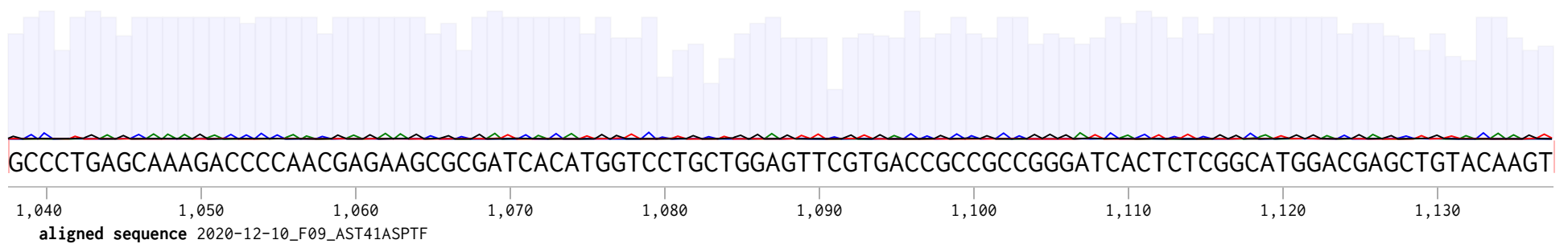
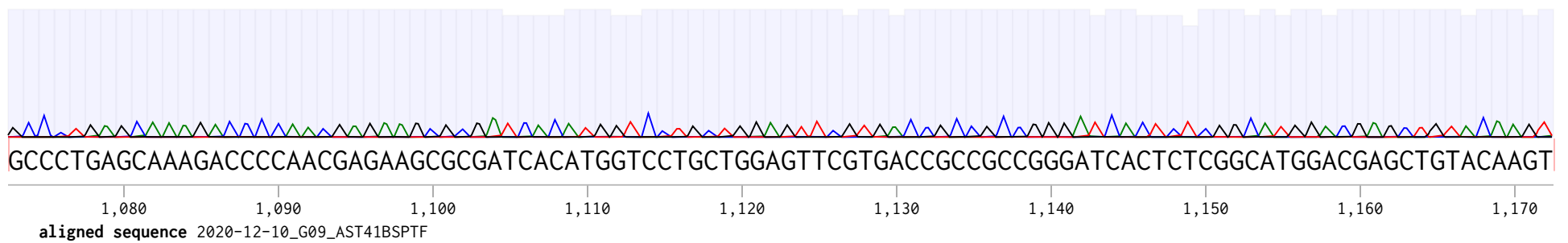
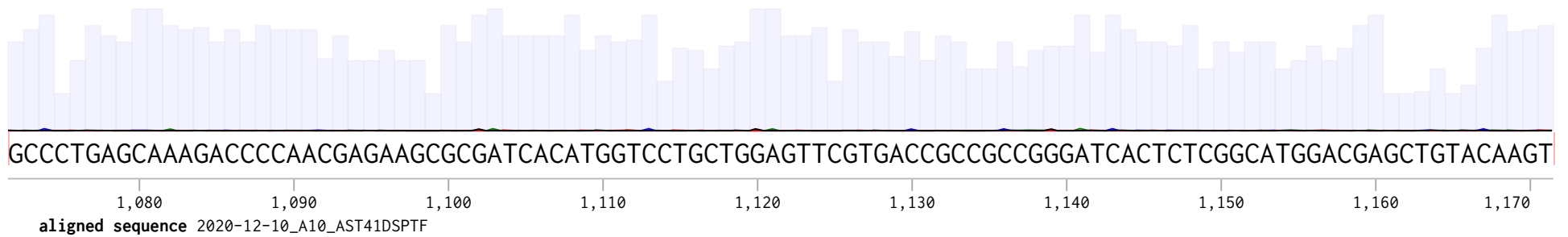
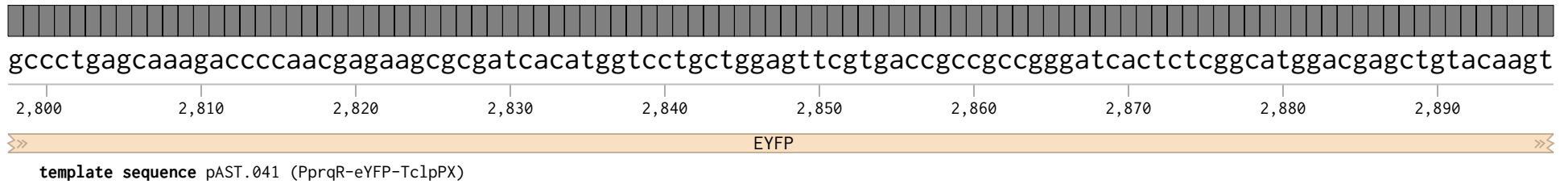
aligned sequence 2020-12-10\_G09\_AST41BSPTF

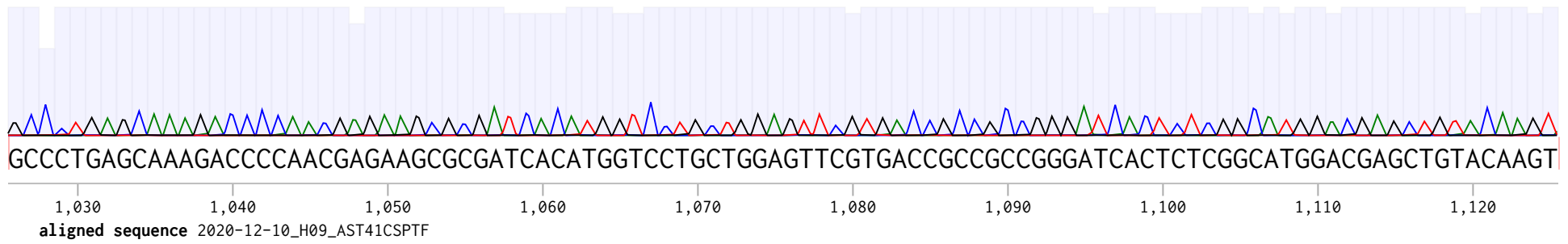


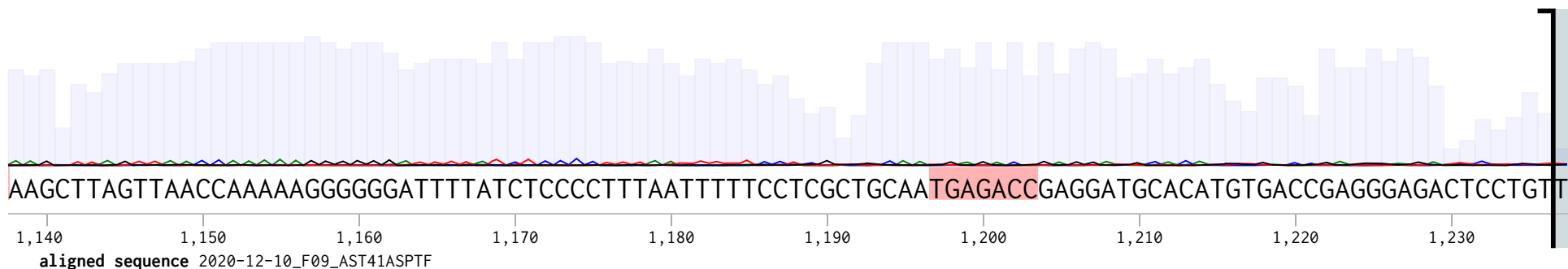
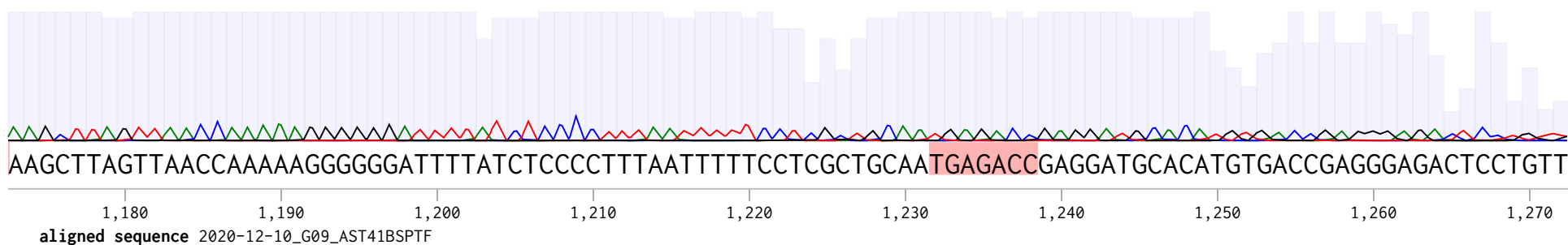
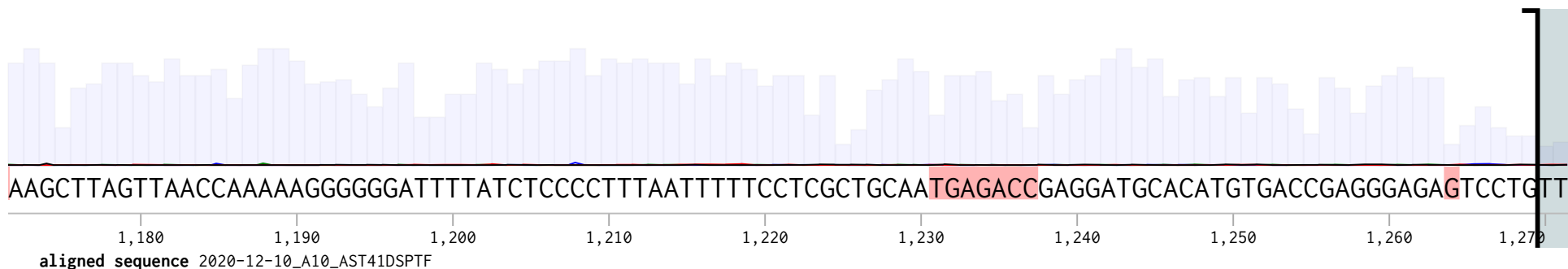
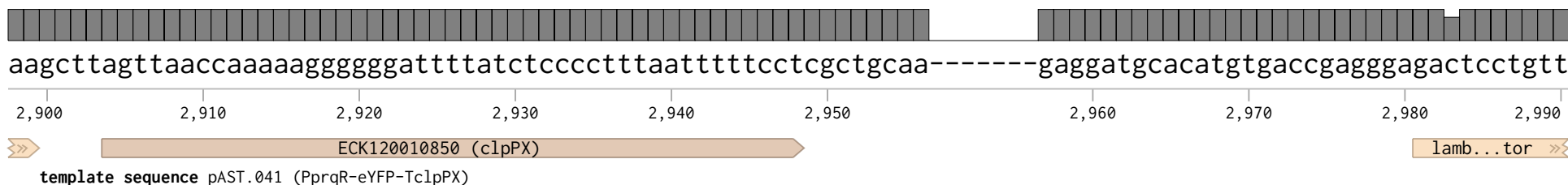
aligned sequence 2020-12-10\_F09\_AST41ASPTF

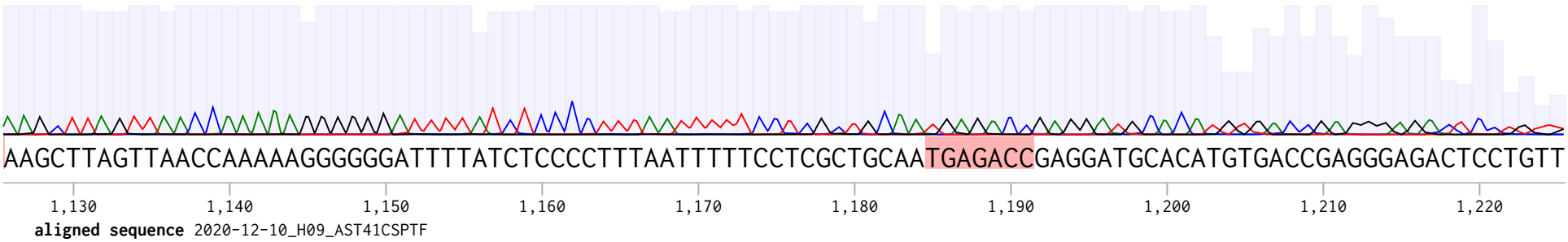


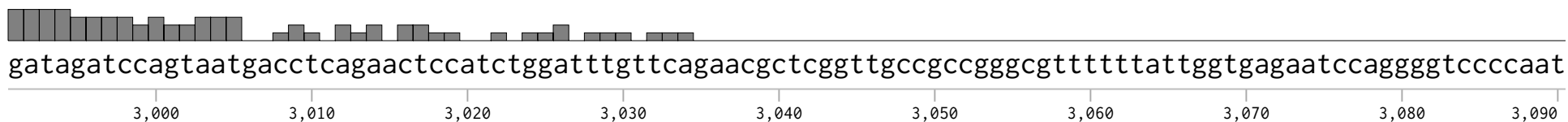




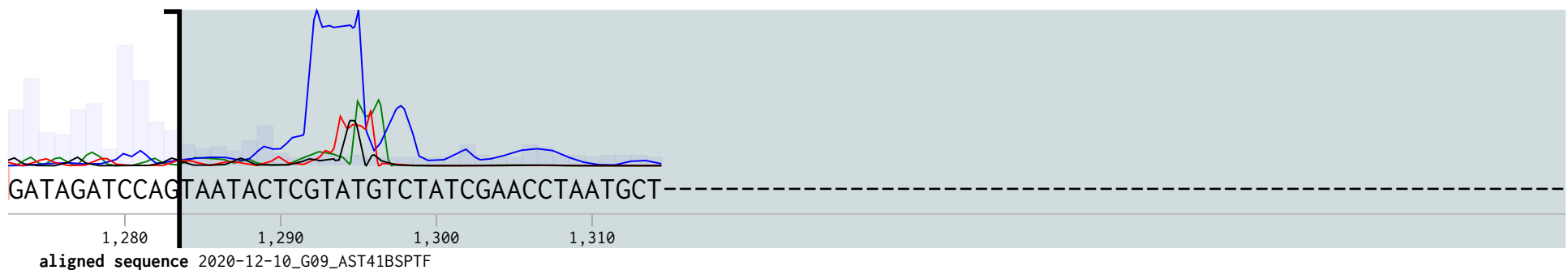
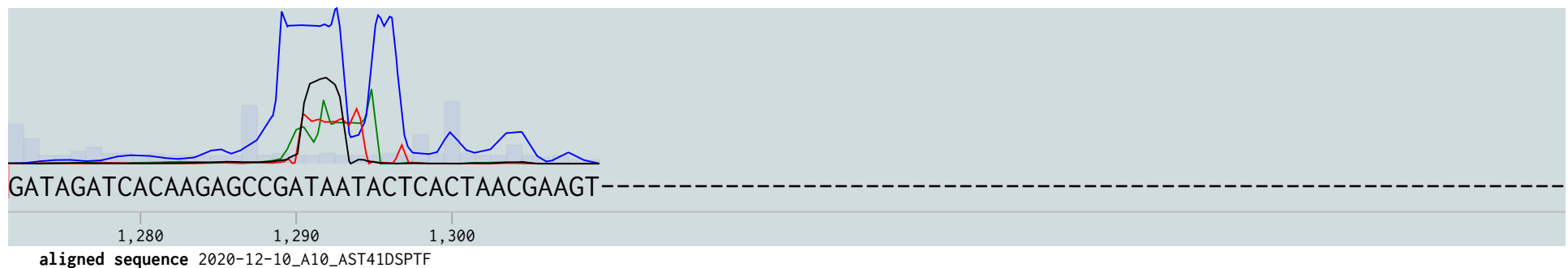


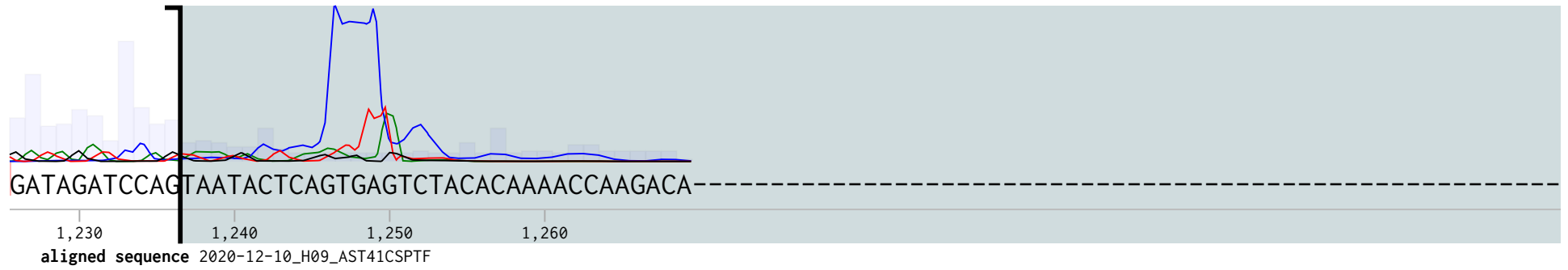






template sequence pAST.041 (PprqR-eYFP-TclpPX)





aattacgatttacgtattttaaatgaaccttgaccgaacgcagcggtggtaacggcgcagtggcggttttcatggcttgttatgactgtttttttggggta

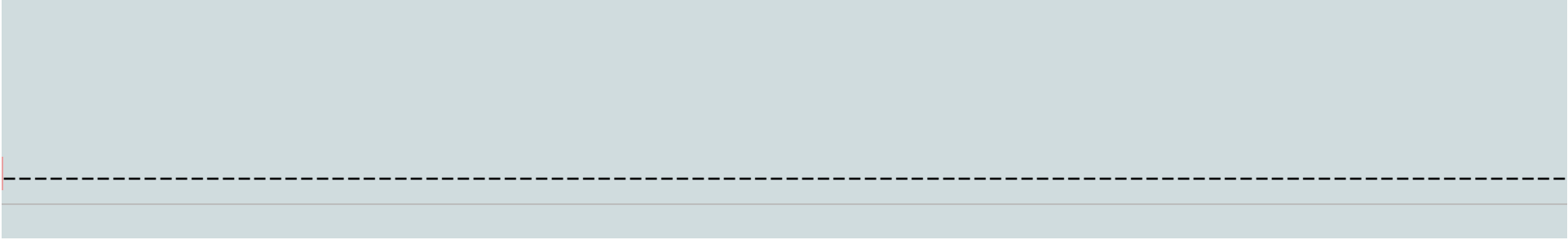
3,100 3,110 3,120 3,130 3,140 3,150 3,160 3,170 3,180 3,190  
template sequence pAST.041 (PprqR-eYFP-TclpPX)



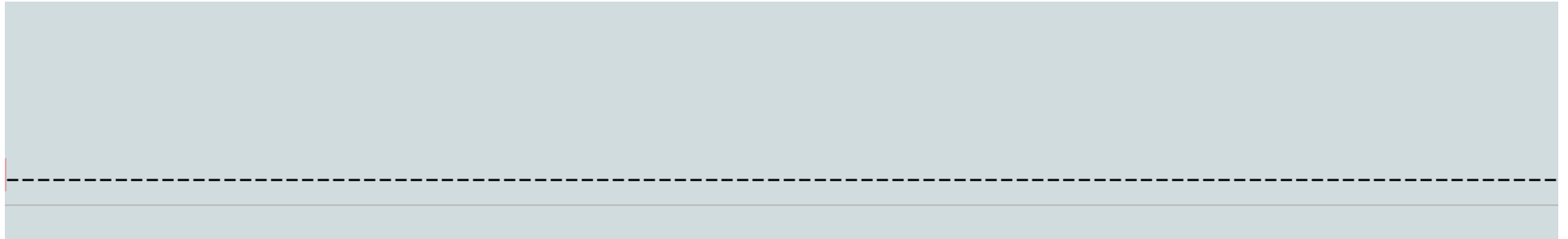
aligned sequence 2020-12-10\_A10\_AST41DSPTF



aligned sequence 2020-12-10\_G09\_AST41BSPTF



aligned sequence 2020-12-10\_F09\_AST41ASPTF



**aligned sequence** 2020-12-10\_H09\_AST41CSPTF



cagtctatgcctcgggcatccaagcagcaagcgcggttacgccgtgggtcgatgtttgatgttatggagcagcaacgatgttacgcagcagggcagtcgcc

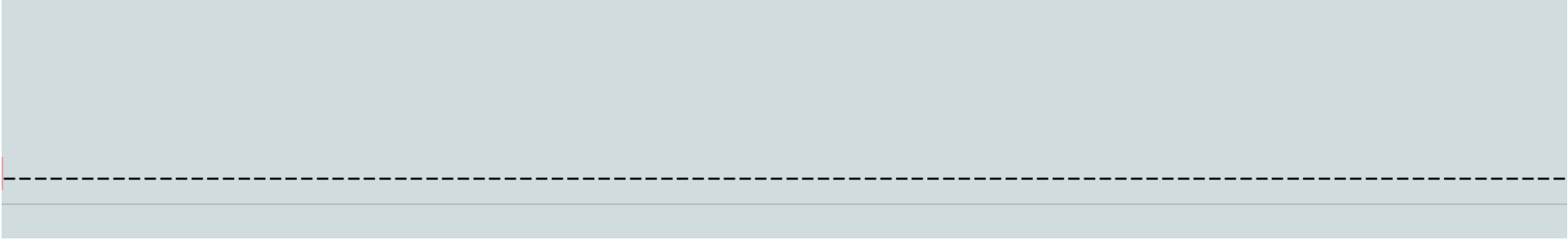
3,200 3,210 3,220 3,230 3,240 3,250 3,260 3,270 3,280 3,290  
template sequence pAST.041 (PprqR-eYFP-TclpPX)



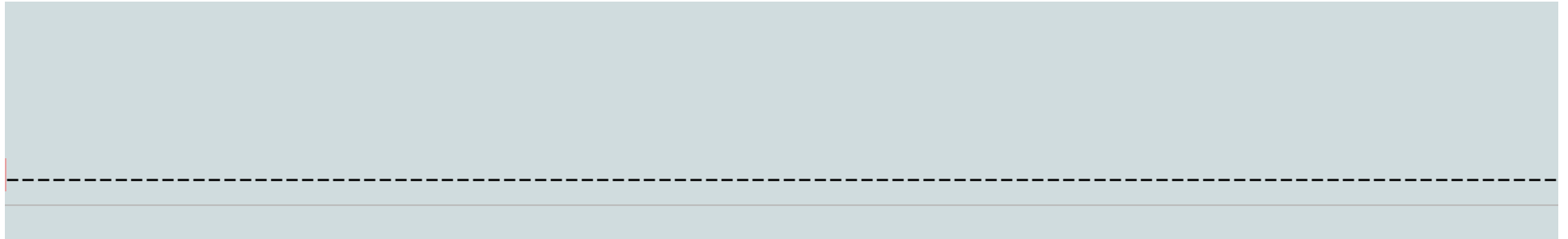
aligned sequence 2020-12-10\_A10\_AST41DSPTF



aligned sequence 2020-12-10\_G09\_AST41BSPTF



aligned sequence 2020-12-10\_F09\_AST41ASPTF



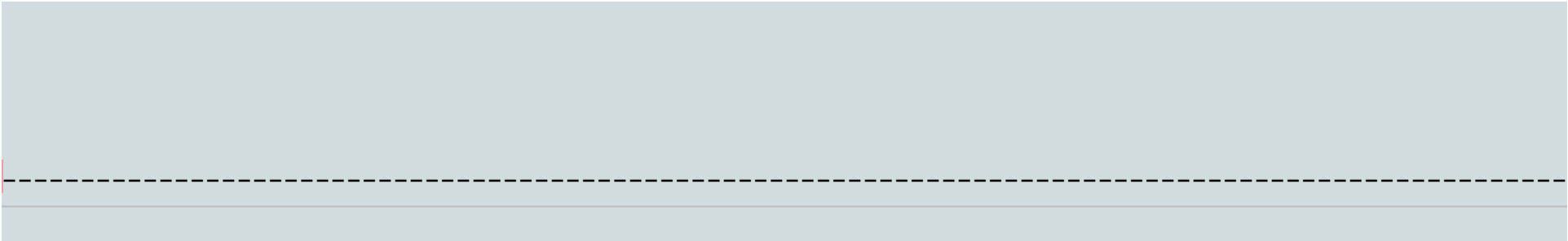
**aligned sequence** 2020-12-10\_H09\_AST41CSPTF

ctaaaacaaagttaaacatcatgaggggaagcggatgcccgaagtatcgactcaactatcagaggtagttggcgtcatcgagcgccatctcgaaccgac

3,300 3,310 3,320 3,330 3,340 3,350 3,360 3,370 3,380 3,390

SmR

template sequence pAST.041 (PprqR-eYFP-TclpPX)



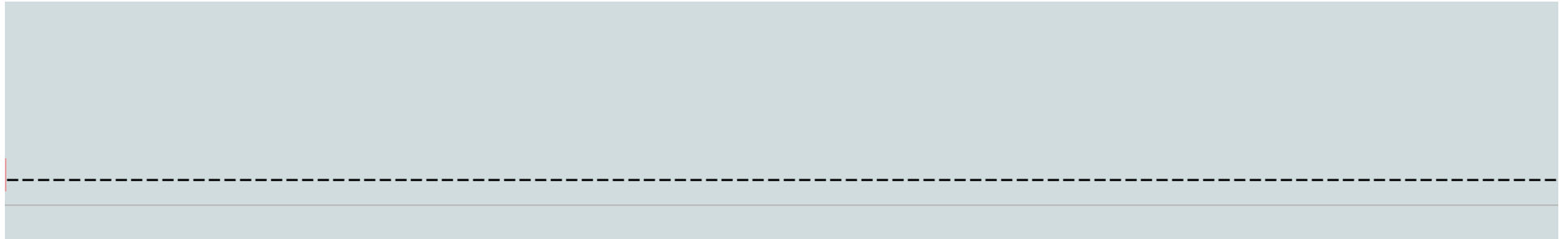
aligned sequence 2020-12-10\_A10\_AST41DSPTF



aligned sequence 2020-12-10\_G09\_AST41BSPTF



aligned sequence 2020-12-10\_F09\_AST41ASPTF



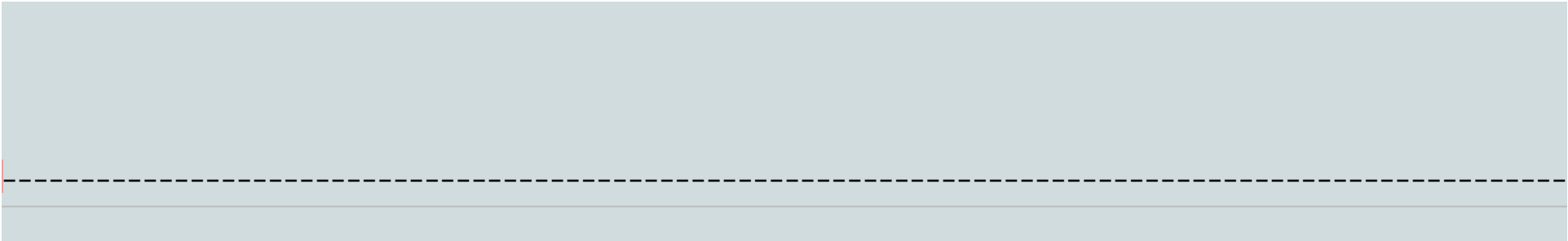
**aligned sequence** 2020-12-10\_H09\_AST41CSPTF

gttgctggccgtacatttgtacggctccgcagtggatggcggcctgaagccacacagtgatattgatttgctggttacggtgaccgtaaggcttgatgaa

3,400 3,410 3,420 3,430 3,440 3,450 3,460 3,470 3,480 3,490

>> SmR >>

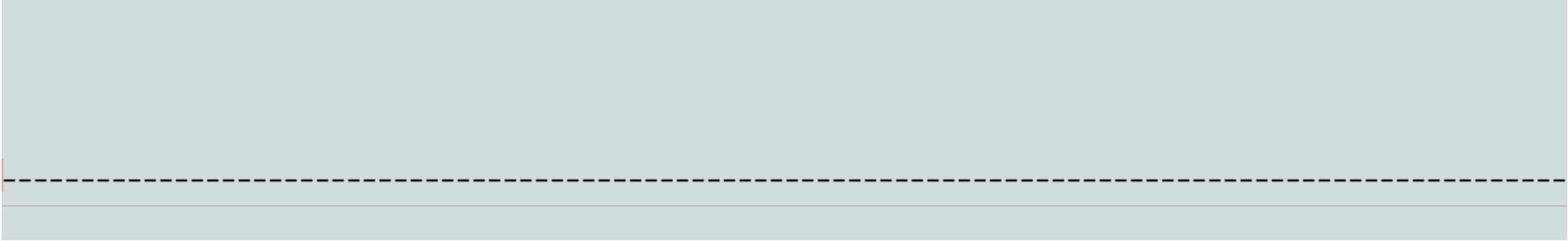
template sequence pAST.041 (PprqR-eYFP-TclpPX)



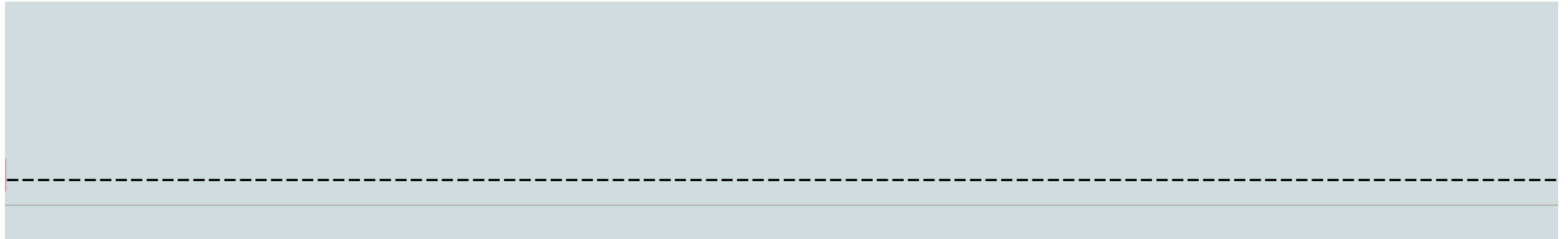
aligned sequence 2020-12-10\_A10\_AST41DSPTF



aligned sequence 2020-12-10\_G09\_AST41BSPTF



aligned sequence 2020-12-10\_F09\_AST41ASPTF



**aligned sequence** 2020-12-10\_H09\_AST41CSPTF

acaacgcggcgagctttgatcaacgaccttttggaaacttcggcttcccctggagagagcgagattctccgcgctgtagaagtcaccattgttgtgcacg

3,500 3,510 3,520 3,530 3,540 3,550 3,560 3,570 3,580 3,590

>> SmR >>

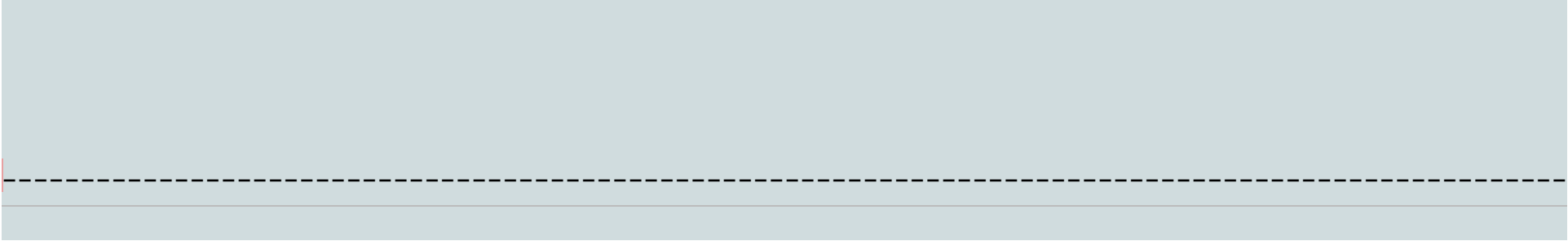
template sequence pAST.041 (PprqR-eYFP-TclpPX)



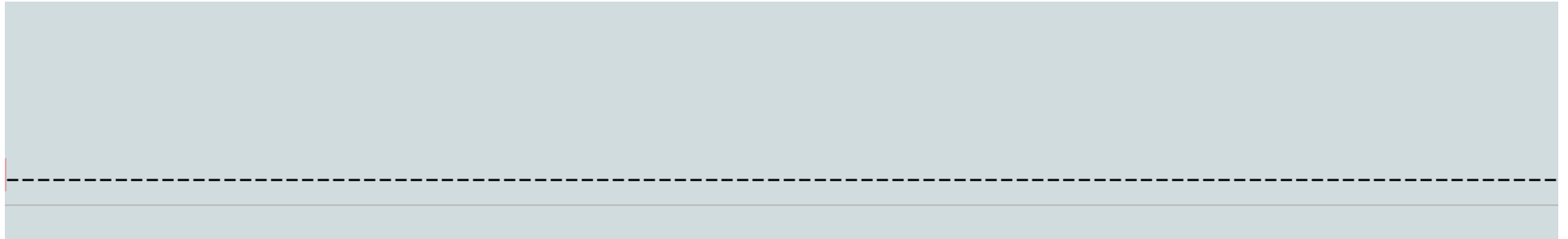
aligned sequence 2020-12-10\_A10\_AST41DSPTF



aligned sequence 2020-12-10\_G09\_AST41BSPTF



aligned sequence 2020-12-10\_F09\_AST41ASPTF



**aligned sequence** 2020-12-10\_H09\_AST41CSPTF

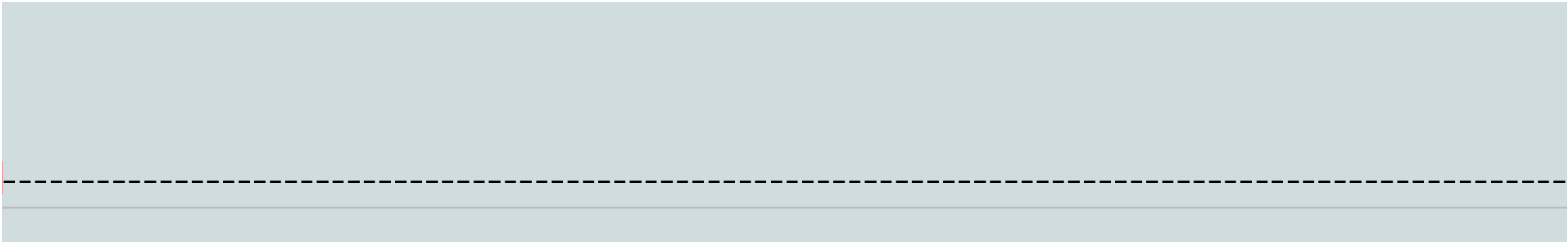


acgacatcattccgtggcgttatccagctaagcgcgaactgcaatttggagaatggcagcgcaatgacattcttgcaggtatcttcgagccagccacgat

3,600 3,610 3,620 3,630 3,640 3,650 3,660 3,670 3,680 3,690

>> SmR >>

template sequence pAST.041 (PprqR-eYFP-TclpPX)



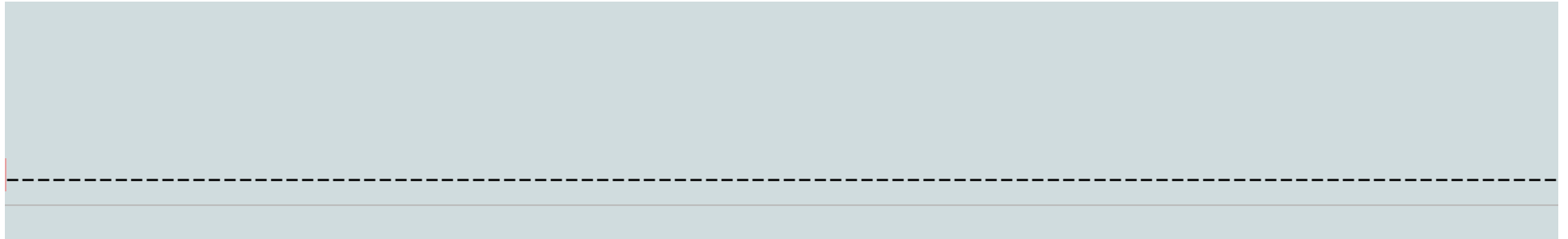
aligned sequence 2020-12-10\_A10\_AST41DSPTF



aligned sequence 2020-12-10\_G09\_AST41BSPTF



aligned sequence 2020-12-10\_F09\_AST41ASPTF



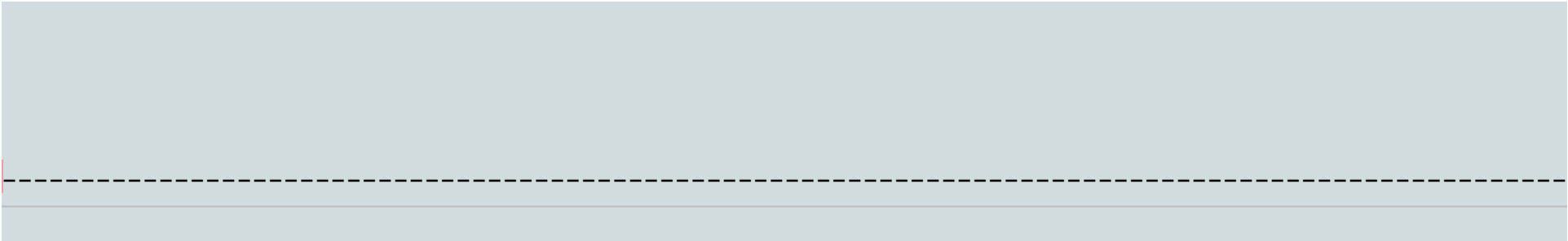
**aligned sequence** 2020-12-10\_H09\_AST41CSPTF

cgacattgatctggctatcttgctgacaaaagcaagagaacatagcgttgccttggttaggtccagcggcggaggaactctttgatccggttcctgaacag

3,700 3,710 3,720 3,730 3,740 3,750 3,760 3,770 3,780 3,790

>> SmR >>

template sequence pAST.041 (PprqR-eYFP-TclpPX)



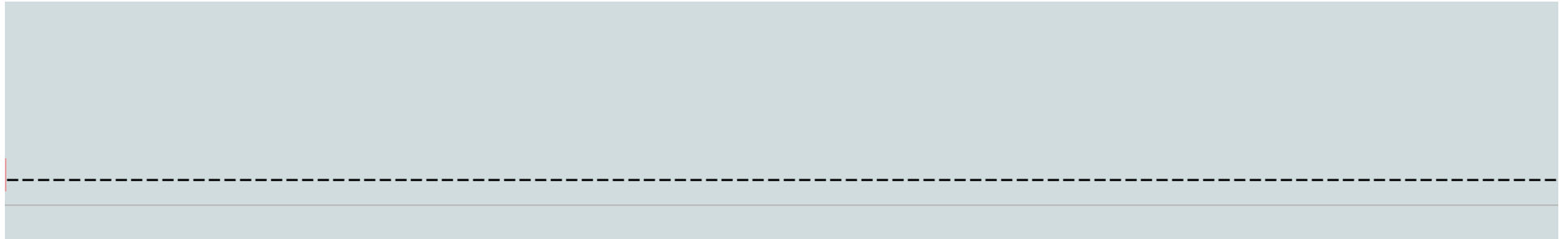
aligned sequence 2020-12-10\_A10\_AST41DSPTF



aligned sequence 2020-12-10\_G09\_AST41BSPTF



aligned sequence 2020-12-10\_F09\_AST41ASPTF



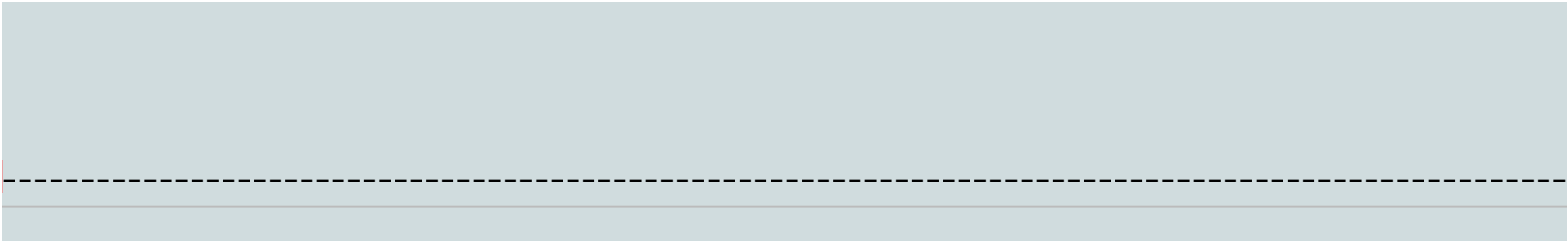
**aligned sequence** 2020-12-10\_H09\_AST41CSPTF

gatctat t t t g a g g c g c t a a a t g a a a c c t t a a c g c t a t g g a a c t c g c c g c c c g a c t g g g c t g g c g a t g a g c g a a a t g t a g t g c t t a c g t t g t c c c g c a t t t

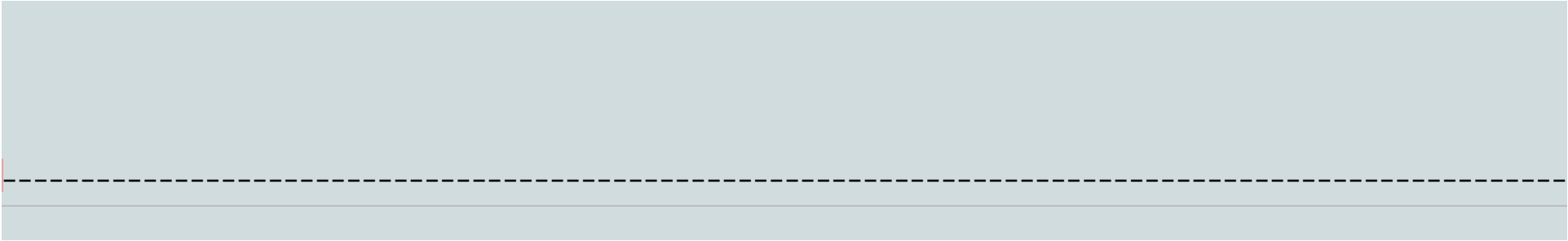
3,800 3,810 3,820 3,830 3,840 3,850 3,860 3,870 3,880 3,890

>> SmR >>

template sequence pAST.041 (PprqR-eYFP-TclpPX)



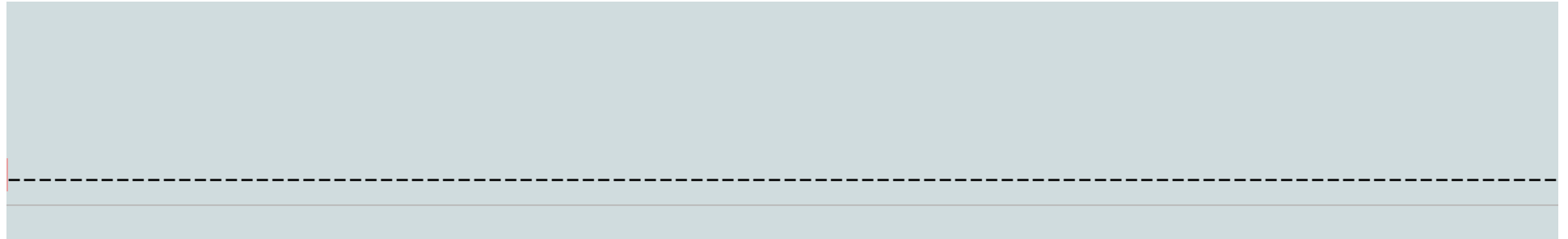
aligned sequence 2020-12-10\_A10\_AST41DSPTF



aligned sequence 2020-12-10\_G09\_AST41BSPTF



aligned sequence 2020-12-10\_F09\_AST41ASPTF



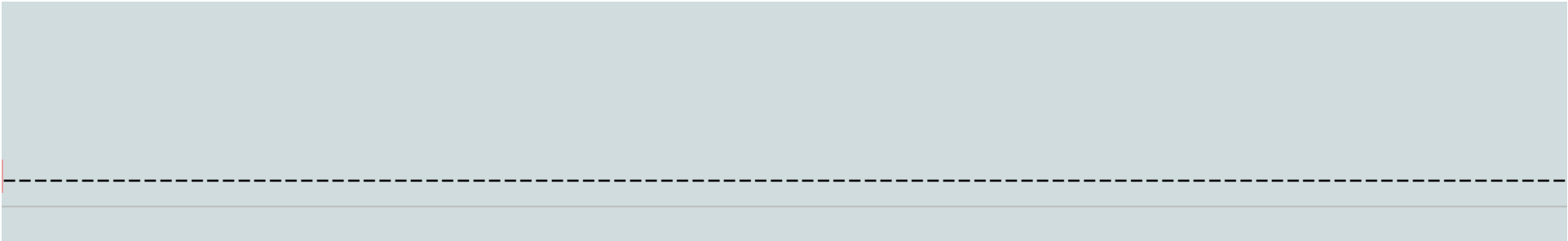
**aligned sequence** 2020-12-10\_H09\_AST41CSPTF

ggtacagcgcagtaaccggcaaaatcgcgccgaaggatgtcgctgccgactgggcaatggagcgcctgccggcccagtatcagcccgtcatacttgaagc

3,900 3,910 3,920 3,930 3,940 3,950 3,960 3,970 3,980 3,990

>> SmR >>

template sequence pAST.041 (PprqR-eYFP-TclpPX)



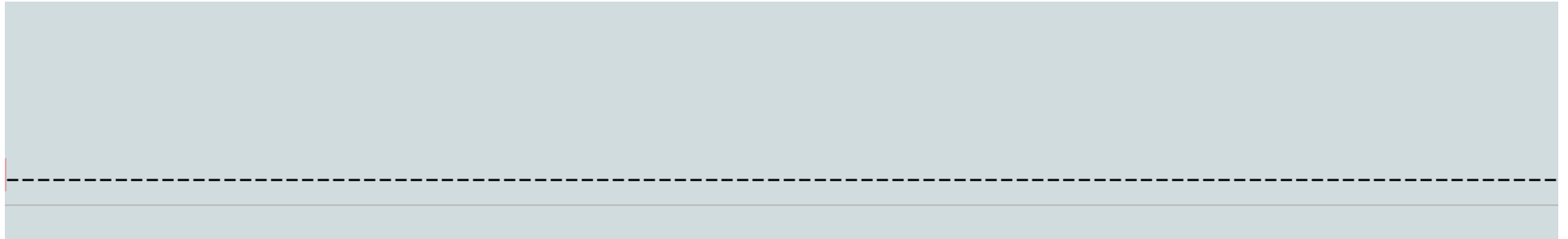
aligned sequence 2020-12-10\_A10\_AST41DSPTF



aligned sequence 2020-12-10\_G09\_AST41BSPTF



aligned sequence 2020-12-10\_F09\_AST41ASPTF



**aligned sequence** 2020-12-10\_H09\_AST41CSPTF

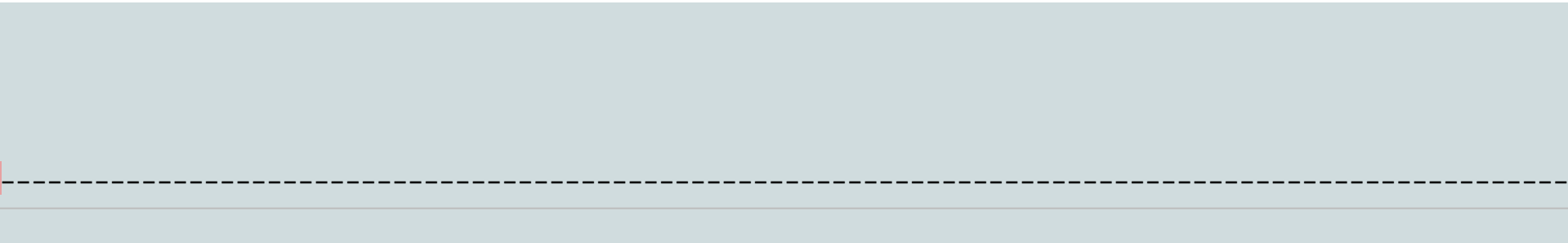


tagacaggcttatcttggacaagaagaagatcgcttggcctcgcgcgagatcagttggaagaatttgtccactacgtgaaaggcgagatcaccaaggta

4,000 4,010 4,020 4,030 4,040 4,050 4,060 4,070 4,080 4,090

>> SmR >>

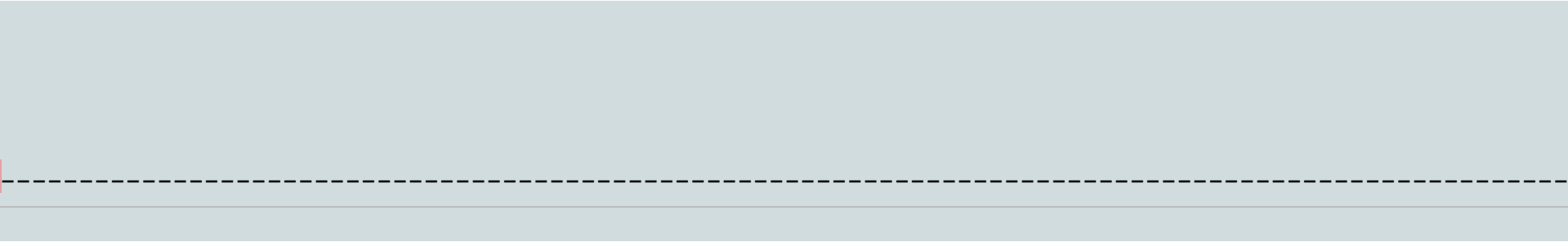
template sequence pAST.041 (PprqR-eYFP-TclpPX)



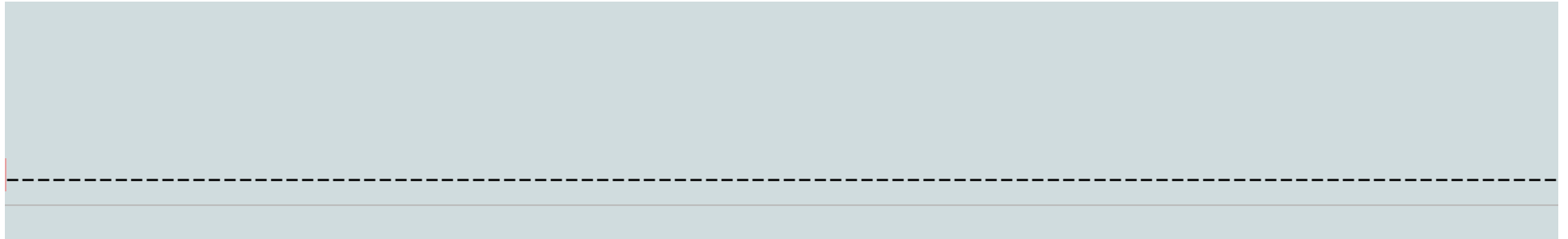
aligned sequence 2020-12-10\_A10\_AST41DSPTF



aligned sequence 2020-12-10\_G09\_AST41BSPTF



aligned sequence 2020-12-10\_F09\_AST41ASPTF



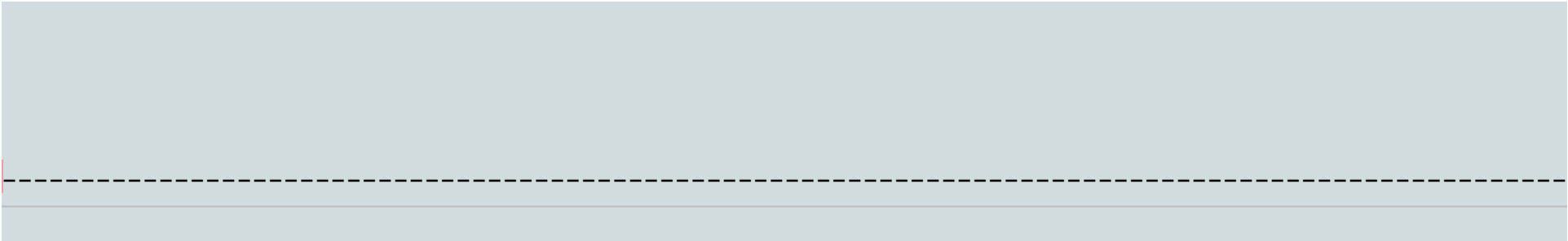
**aligned sequence** 2020-12-10\_H09\_AST41CSPTF

gtcggcaaataagacaattgtccttttccgctgcataaccctgcttcggggtcattatagcgattttttcgggtatatccatcctttttcgcacgatatac

4,100 4,110 4,120 4,130 4,140 4,150 4,160 4,170 4,180 4,190

>> SmR

template sequence pAST.041 (PprqR-eYFP-TclpPX)



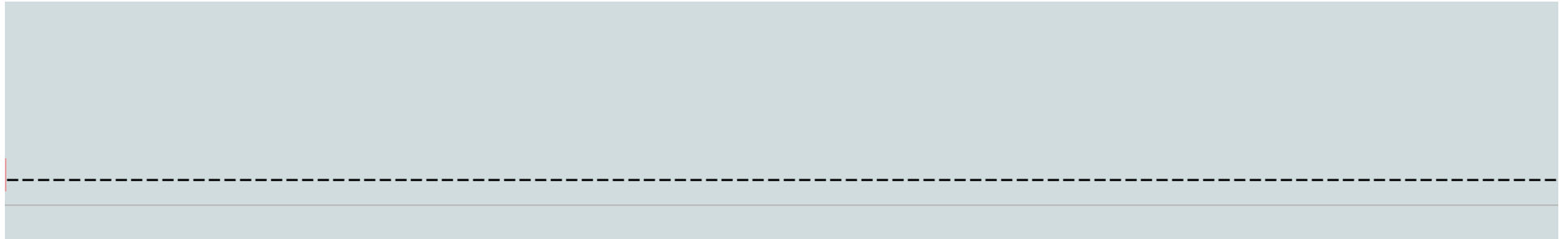
aligned sequence 2020-12-10\_A10\_AST41DSPTF



aligned sequence 2020-12-10\_G09\_AST41BSPTF



aligned sequence 2020-12-10\_F09\_AST41ASPTF



**aligned sequence** 2020-12-10\_H09\_AST41CSPTF

aggat t t t g c c a a g g g t t c g t g t a g a c t t t c c t t g g t g t a t c c a a c g g c g t c a g c c g g g c a g g a t a g g t g a a g t a g g c c c a c c c g c g a g c g g g t g t t c c

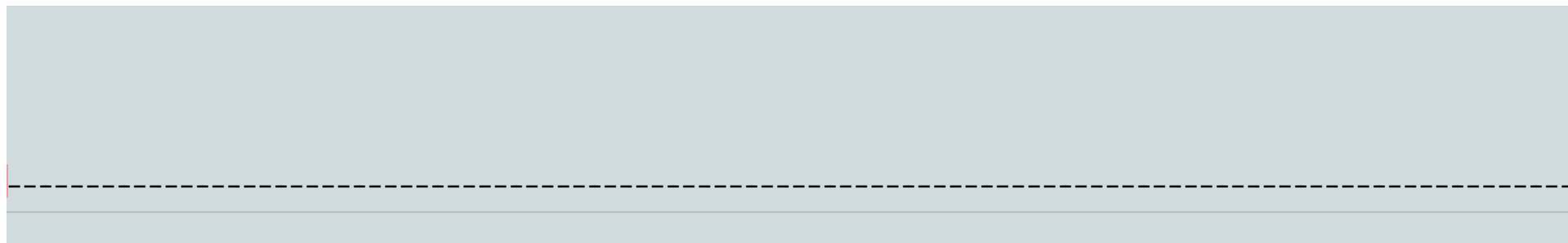
4,200                      4,210                      4,220                      4,230                      4,240                      4,250                      4,260                      4,270                      4,280                      4,290

template sequence pAST.041 (PprqR-eYFP-TclpPX) incP origin of transfer >>

aligned sequence 2020-12-10\_A10\_AST41DSPTF

aligned sequence 2020-12-10\_G09\_AST41BSPTF

aligned sequence 2020-12-10\_F09\_AST41ASPTF



**aligned sequence** 2020-12-10\_H09\_AST41CSPTF

ttcttcactgtcccttattcgcacctggcggtgctcaacgggaatcctgctctgcgaggctggccgtaggccggccgcgatgcaggtggctgctgaaccc

4,300 4,310 4,320 4,330 4,340 4,350 4,360 4,370 4,380 4,390

>> incP origin of transfer

template sequence pAST.041 (PprqR-eYFP-TclpPX)



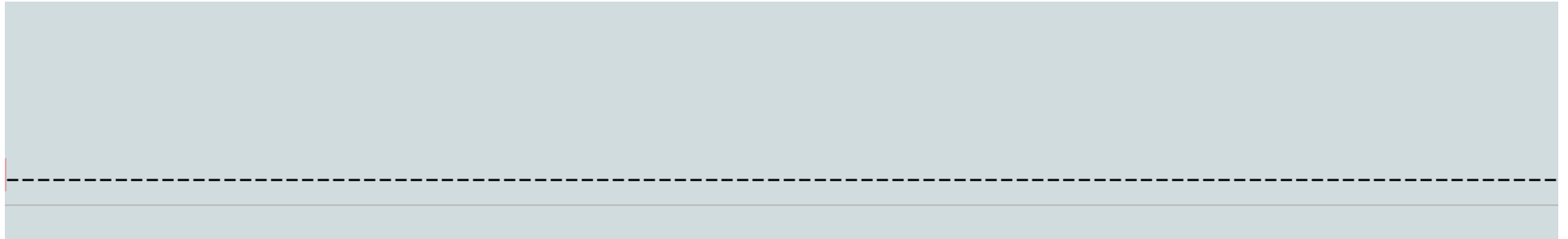
aligned sequence 2020-12-10\_A10\_AST41DSPTF



aligned sequence 2020-12-10\_G09\_AST41BSPTF



aligned sequence 2020-12-10\_F09\_AST41ASPTF



**aligned sequence** 2020-12-10\_H09\_AST41CSPTF



ccagccggaactgacccacaaggccctagcgtttgcaatgcaccaggatcatcattgacccaggcgtgttccaccaggccgctgcctcgcaactcttcgc

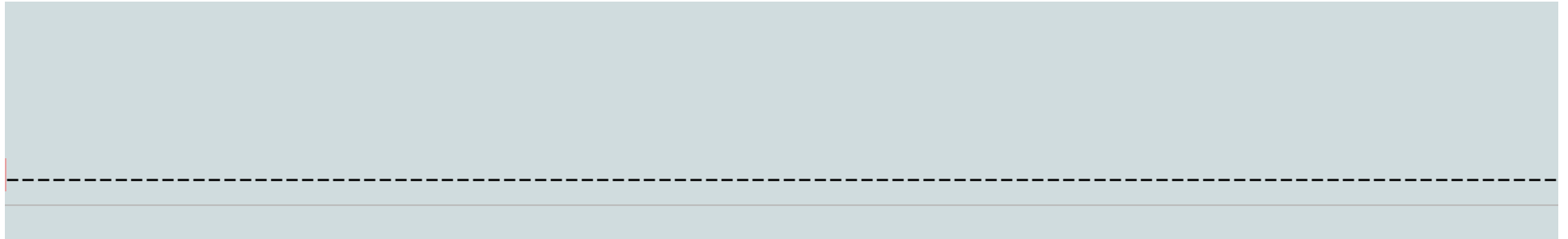
4,400 4,410 4,420 4,430 4,440 4,450 4,460 4,470 4,480 4,490

template sequence pAST.041 (PprqR-eYFP-TclpPX) trfA

aligned sequence 2020-12-10\_A10\_AST41DSPTF

aligned sequence 2020-12-10\_G09\_AST41BSPTF

aligned sequence 2020-12-10\_F09\_AST41ASPTF



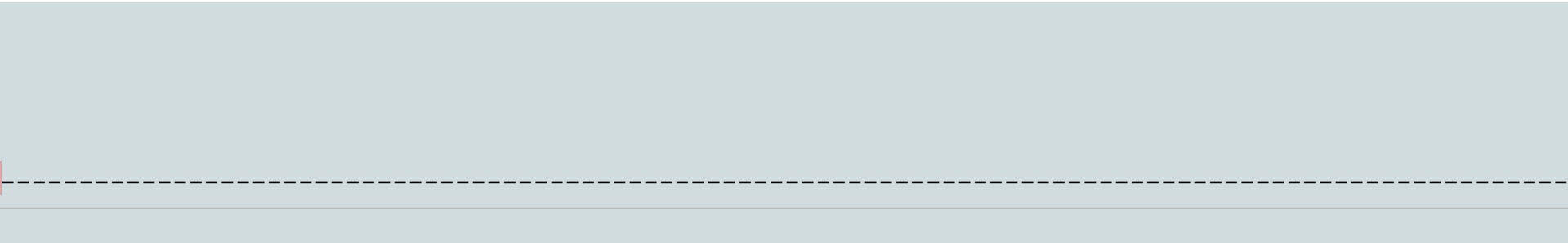
**aligned sequence** 2020-12-10\_H09\_AST41CSPTF

aggcttcgccgacctgctcgcgccacttcttcacgcgggtggaatccgatccgcacatgaggcgggaaggtttccagcttgagcgggtacggctcccggtg

4,500 4,510 4,520 4,530 4,540 4,550 4,560 4,570 4,580 4,590

<< trfA >>

template sequence pAST.041 (PprqR-eYFP-TclpPX)



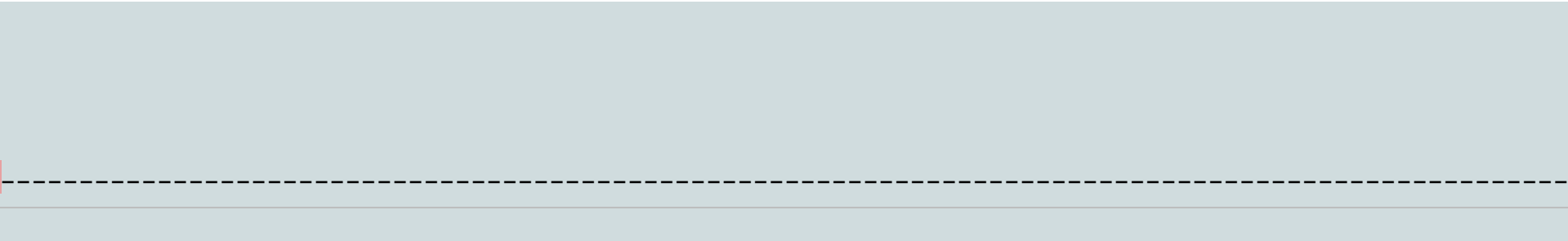
aligned sequence 2020-12-10\_A10\_AST41DSPTF



aligned sequence 2020-12-10\_G09\_AST41BSPTF



aligned sequence 2020-12-10\_F09\_AST41ASPTF



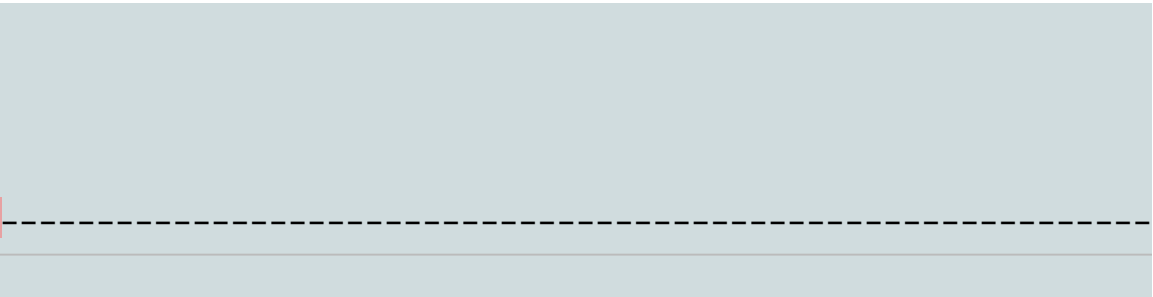
**aligned sequence** 2020-12-10\_H09\_AST41CSPTF

cgagctgaaatagtcgaacatccgtcgggccgtcggcgacagcttgcggtacttctccca

4,600 4,610 4,620 4,630 4,640 4,650

<< trfA >>

template sequence pAST.041 (PprqR-eYFP-TclpPX)



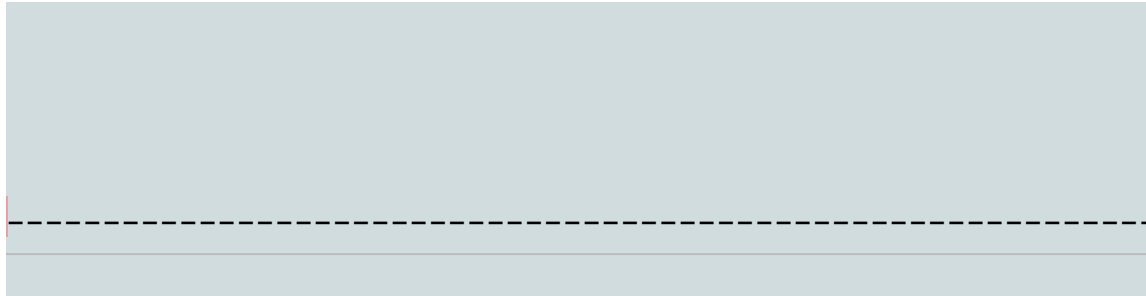
aligned sequence 2020-12-10\_A10\_AST41DSPTF



aligned sequence 2020-12-10\_G09\_AST41BSPTF



aligned sequence 2020-12-10\_F09\_AST41ASPTF



**aligned sequence** 2020-12-10\_H09\_AST41CSPTF