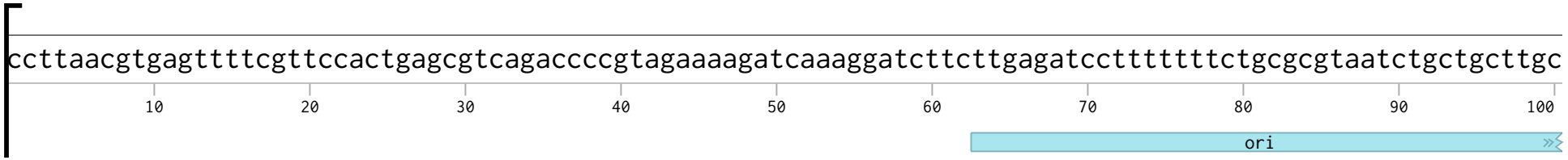
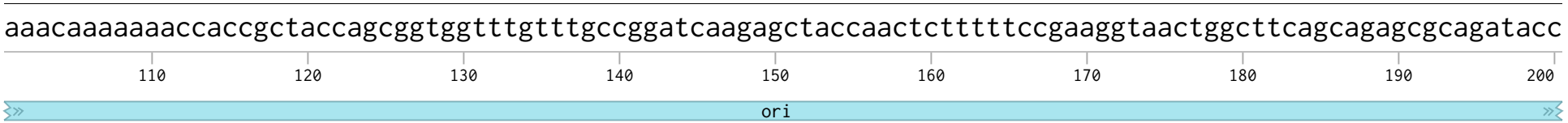
Template Alignment: 2020-10-29_E10_JLPAS02SP1



template sequence pAS0.2

aligned sequence 2020-10-29_E10_JLPAS02SP1



template sequence pAS0.2

aligned sequence 2020-10-29_E10_JLPAS02SP1

aaatactgtccttctagtgtagccgtagttaggccaccacttcaagaactctgtagcaccgcctacatacctcgctctgctaatcctgttaccagtggct

210 220 230 240 250 260 270 280 290 300

ori

template sequence pAS0.2

aligned sequence 2020-10-29_E10_JLPAS02SP1

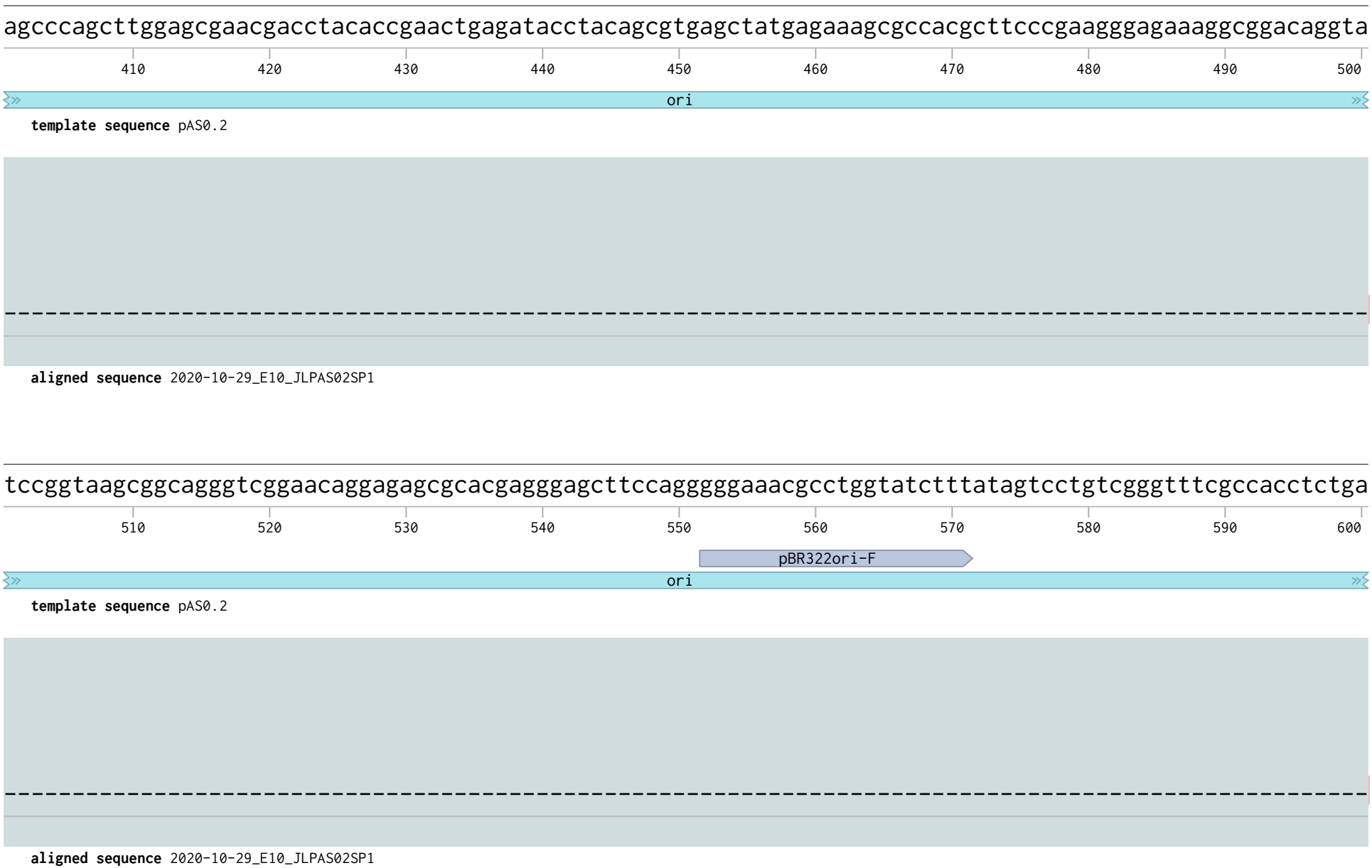
gctgccagtggcgataagtcgtgtcttaccgggttggactcaagacgatagttaccggataaggcgcagcggtcgggctgaacgggggttcgtgcacac

310 320 330 340 350 360 370 380 390 400

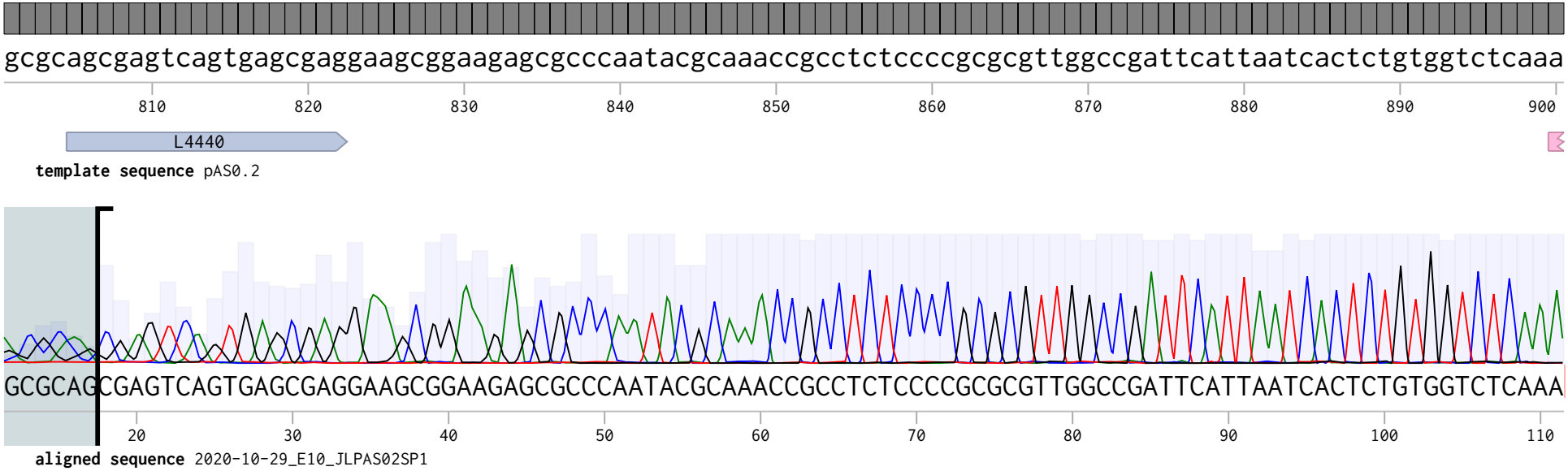
ori

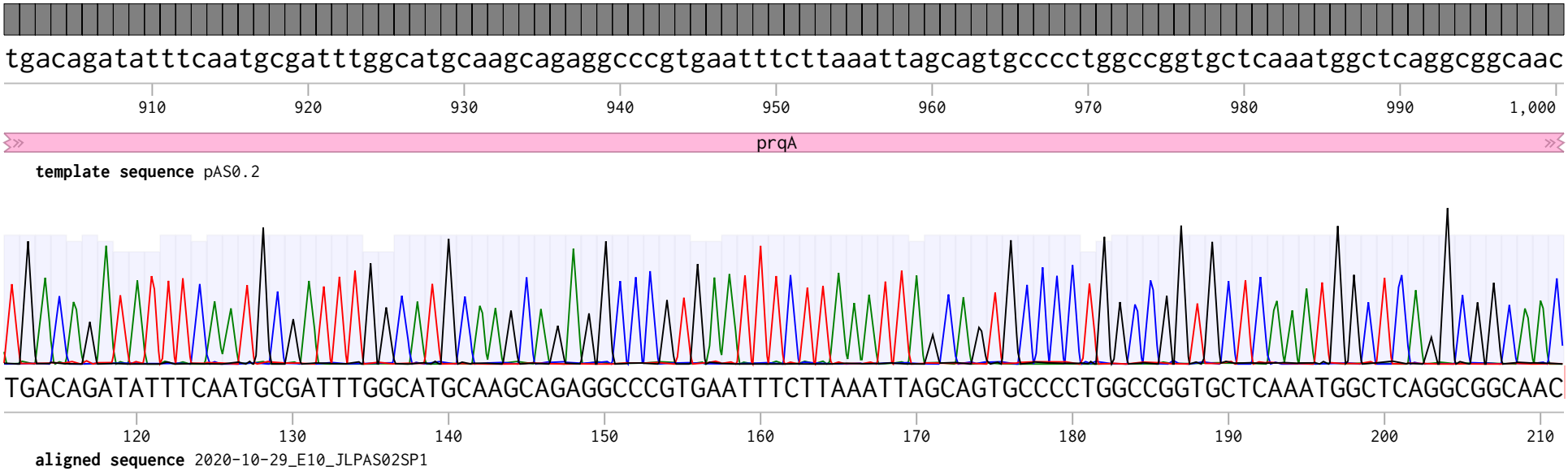
template sequence pAS0.2

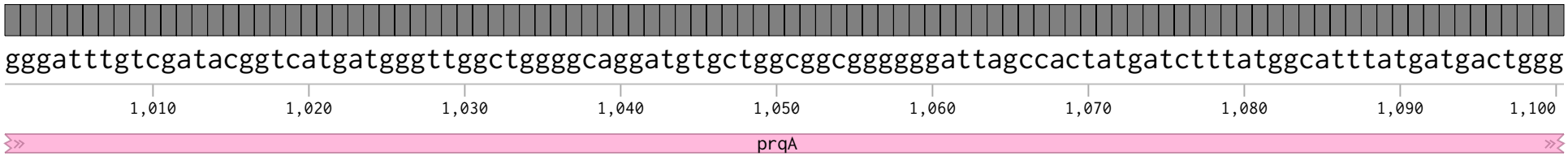
aligned sequence 2020-10-29_E10_JLPAS02SP1


agcccagcttggagcgaacgacctacaccgaactgagatacctacagcgtgagctatgagaaagcgccacgcttcccgaagggagaaaggcggacaggta
410
420
430
440
450
460
470
480
490
500
ori
template sequence pAS0.2
aligned sequence 2020-10-29_E10_JLPAS02SP1
tccggtaagcggcagggtcggaacaggagagcgcacgagggagcttccagggggaaacgcctggtatctttatagtcctgtcgggtttcgccacctctga
510
520
530
540
550
560
570
580
590
600
pBR322ori-F
ori
template sequence pAS0.2
aligned sequence 2020-10-29_E10_JLPAS02SP1

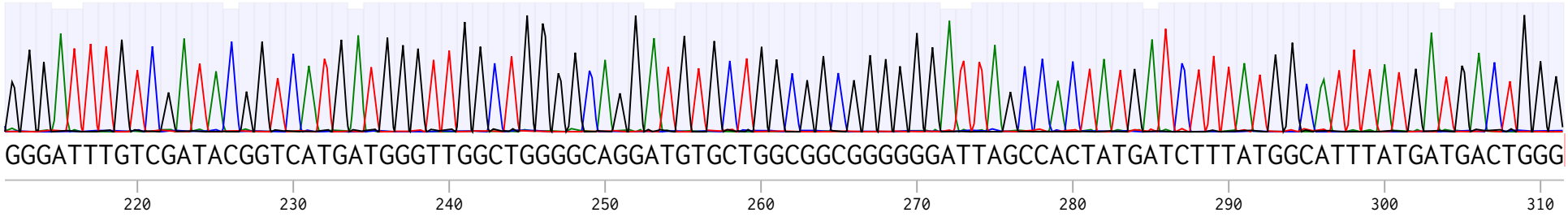
cttgagcgtcgatttttgtgatgctcgtcaggggggcggagcctatggaaaaacgccagcaacgcggccttttacggttcctggccttttgctggcctt
610
620
630
640
650
660
670
680
690
700
ori
template sequence pAS0.2
aligned sequence 2020-10-29_E10_JLPAS02SP1
ttgctcacatgttctttcctgcgttatcccctgattctgtggataaccgtattaccgcctttgagtgagctgataccgctcgccgcagccgaacgaccga
710
720
730
740
750
760
770
780
790
800
template sequence pAS0.2
GCCCGAGACGA
10
aligned sequence 2020-10-29_E10_JLPAS02SP1


gcgcagcgagtcagtgagcgaggaagcggaagagcgcccaatacgcaaaccgcctctccccgcgcgttggccgattcattaatcactctgtggtctcaaa
810
820
830
840
850
860
870
880
890
900
L4440
template sequence pAS0.2
GCGCAGCGAGTCAGTGAGCGAGGAAGCGGAAGAGCGCCCAATACGCAAACCGCCTCTCCCCGCGCGTTGGCCGATTCATTAATCACTCTGTGGTCTCAAA
20
30
40
50
60
70
80
90
100
110
aligned sequence 2020-10-29_E10_JLPAS02SP1

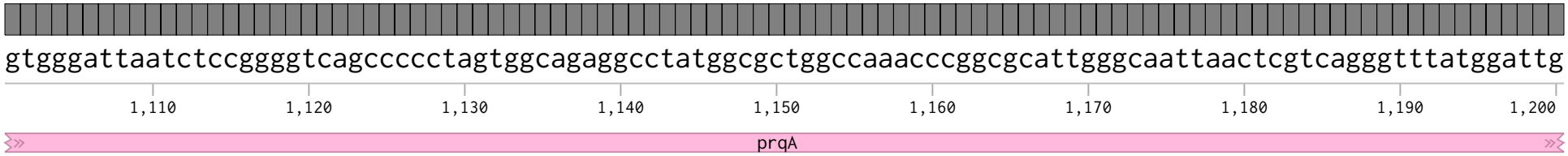

tgacagatatttcaatgcgatttggcatgcaagcagaggcccgtgaatttcttaaattagcagtgcccctggccggtgctcaaatggctcaggcggcaac
910
920
930
940
950
960
970
980
990
1,000
prqA
template sequence pAS0.2
TGACAGATATTTCAATGCGATTTGGCATGCAAGCAGAGGCCCGTGAATTTCTTAAATTAGCAGTGCCCCTGGCCGGTGCTCAAATGGCTCAGGCGGCAAC
120
130
140
150
160
170
180
190
200
210
aligned sequence 2020-10-29_E10_JLPAS02SP1



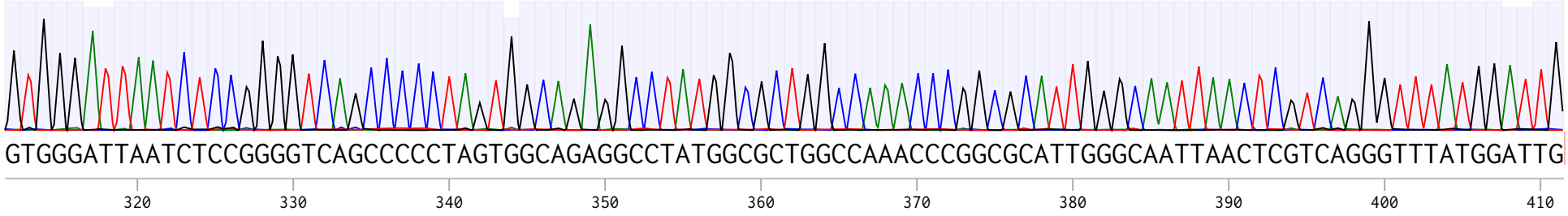
template sequence pAS0.2



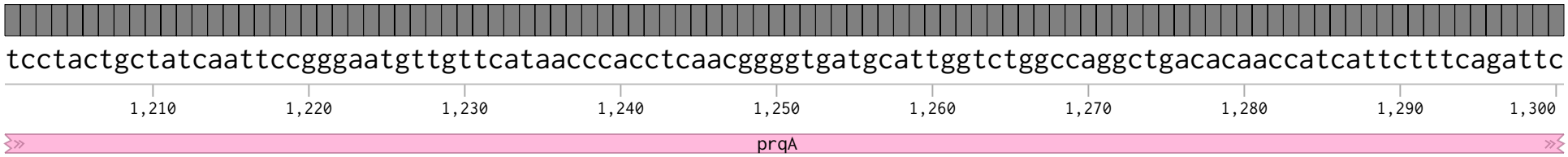
aligned sequence 2020-10-29_E10_JLPAS02SP1



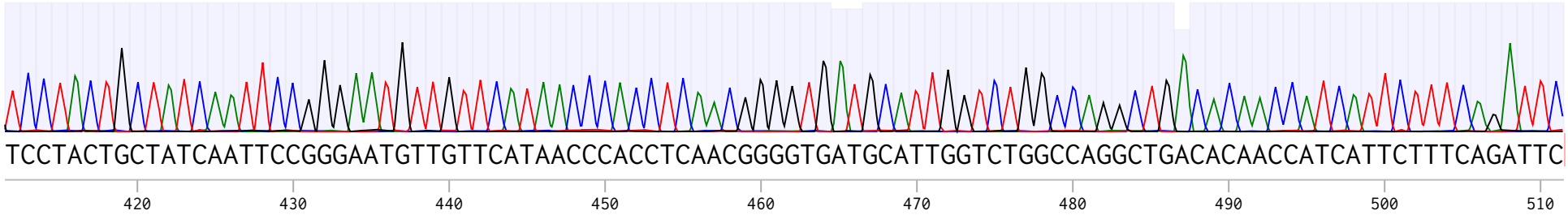
template sequence pAS0.2



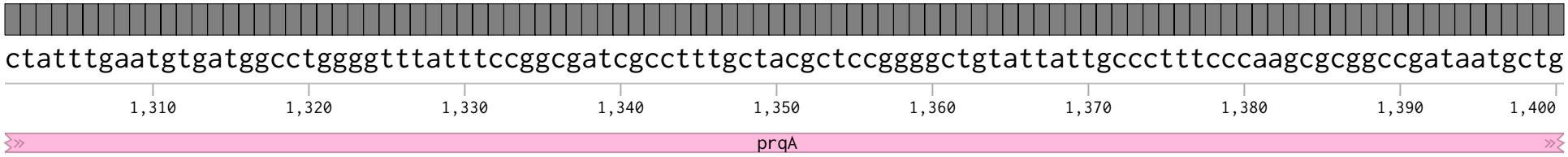
aligned sequence 2020-10-29_E10_JLPAS02SP1



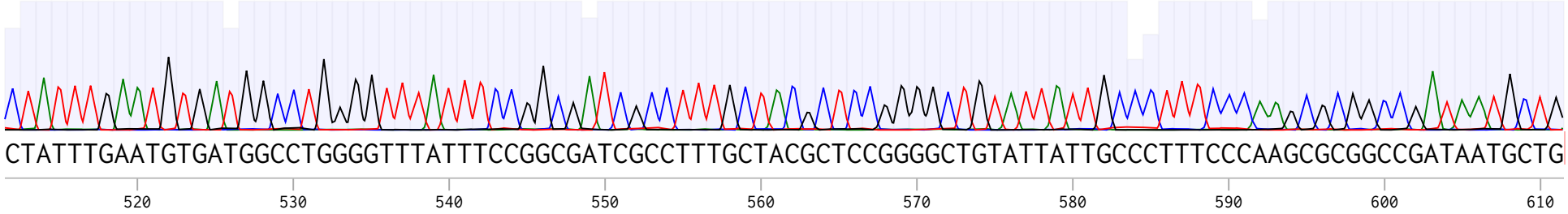
template sequence pAS0.2



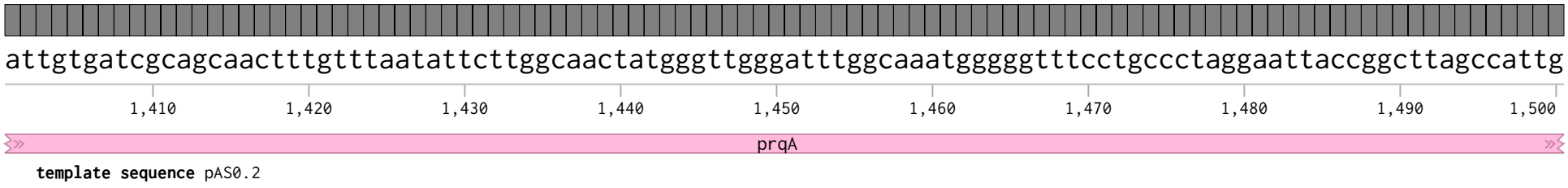
aligned sequence 2020-10-29_E10_JLPAS02SP1



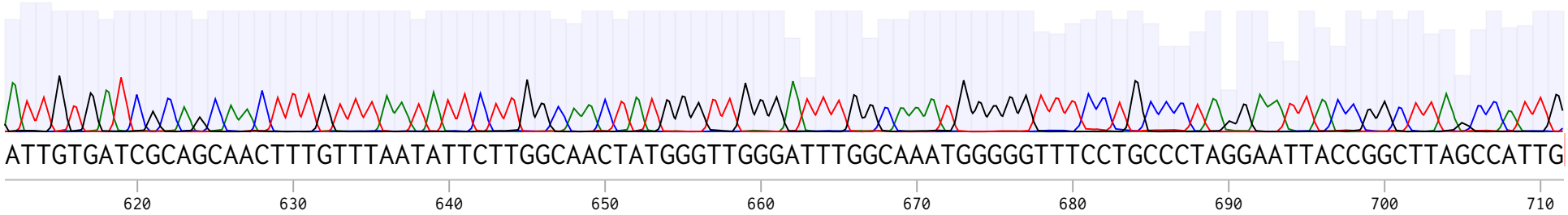
template sequence pAS0.2



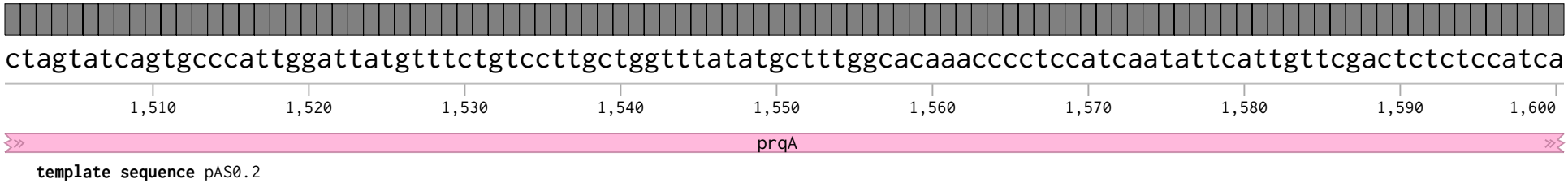
aligned sequence 2020-10-29_E10_JLPAS02SP1



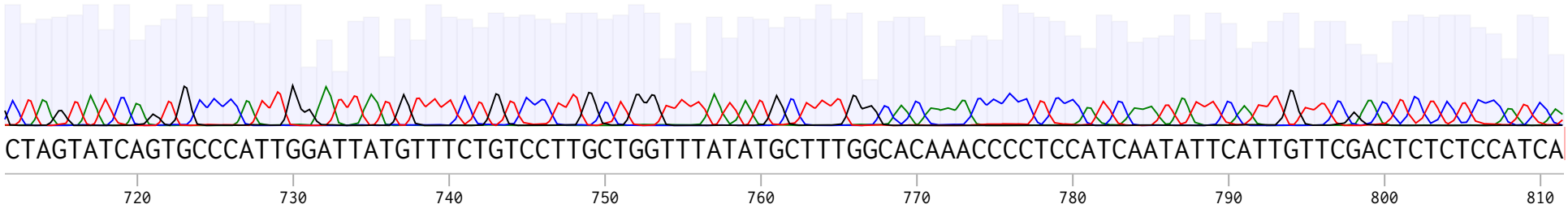
template sequence pAS0.2



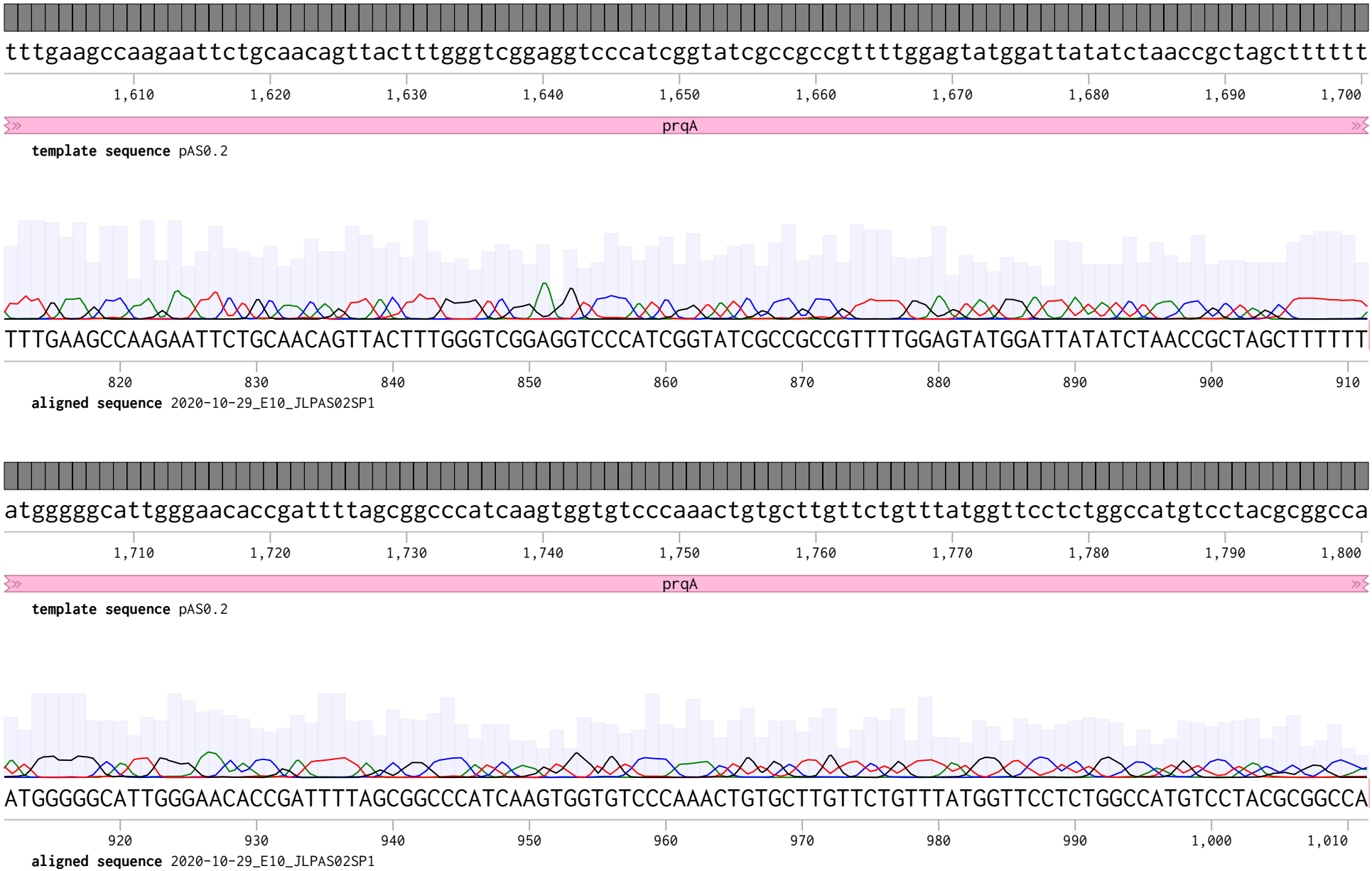
aligned sequence 2020-10-29_E10_JLPAS02SP1

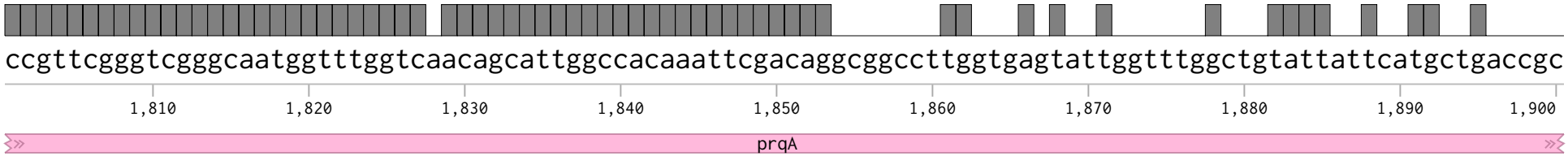


template sequence pAS0.2

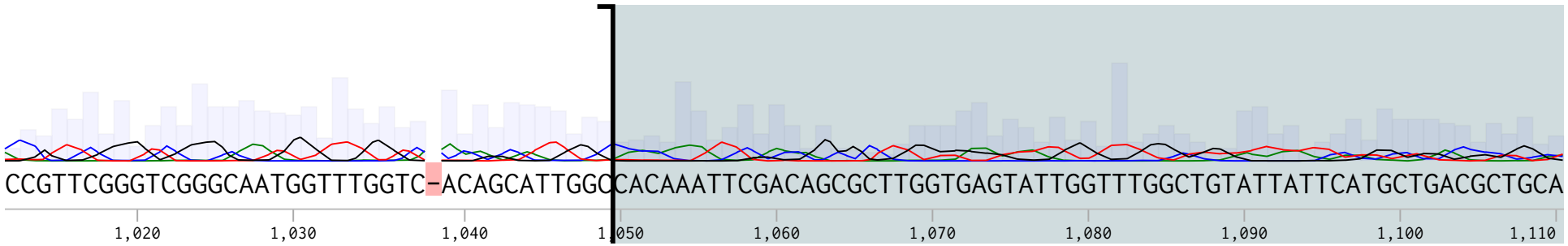


aligned sequence 2020-10-29_E10_JLPAS02SP1

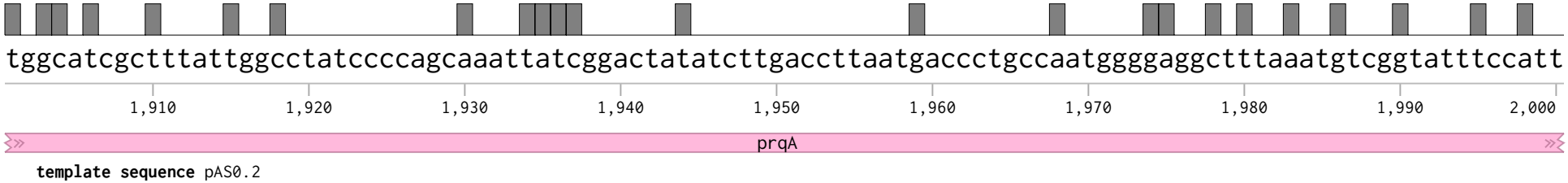

tttgaagccaagaattctgcaacagttactttgggtcggaggtcccatcggtatcgccgccgttttggagtatggattatatctaaccgctagcttttt
1,610
1,620
1,630
1,640
1,650
1,660
1,670
1,680
1,690
1,700
prqA
template sequence pAS0.2
TTTGAAGCCAAGAATTCTGCAACAGTTACTTTGGGTCGGAGGTCCCATCGGTATCGCCGCCGTTTTGGAGTATGGATTATATCTAACCGCTAGCTTTTTT
820
830
840
850
860
870
880
890
900
910
aligned sequence 2020-10-29_E10_JLPAS02SP1
atgggggcattgggaacaccgattttagcggcccatcaagtggtgtcccaaactgtgcttgttctgtttatggttcctctggccatgtcctacgcggcca
1,710
1,720
1,730
1,740
1,750
1,760
1,770
1,780
1,790
1,800
prqA
template sequence pAS0.2
ATGGGGGCATTGGGAACACCGATTTTAGCGGCCCATCAAGTGGTGTCCCAAACTGTGCTTGTTCTGTTTATGGTTCCTCTGGCCATGTCCTACGCGGCCA
920
930
940
950
960
970
980
990
1,000
1,010
aligned sequence 2020-10-29_E10_JLPAS02SP1



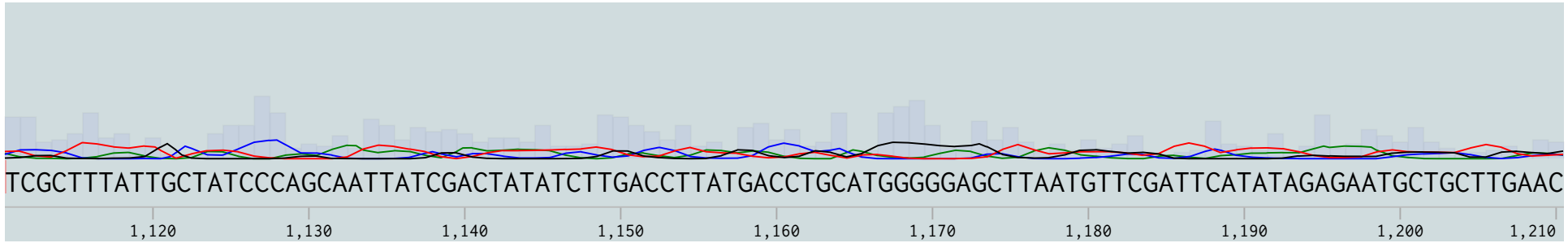
template sequence pAS0.2



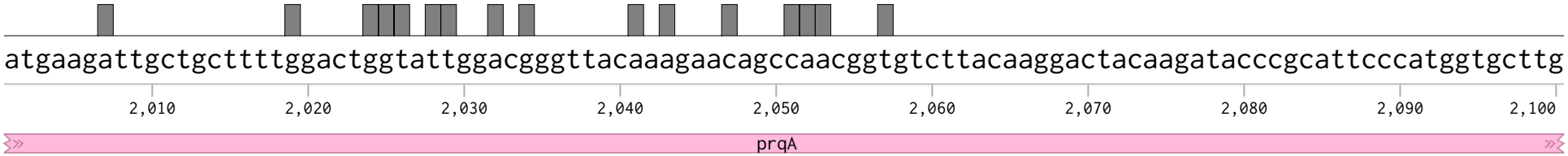
aligned sequence 2020-10-29_E10_JLPAS02SP1



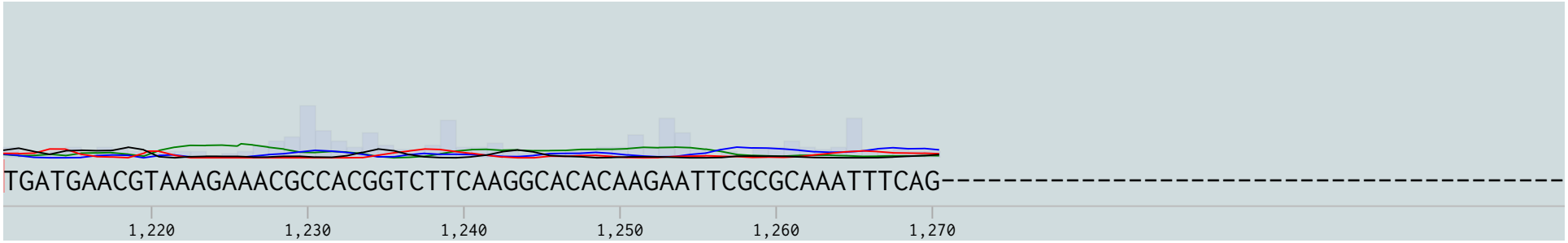
template sequence pAS0.2



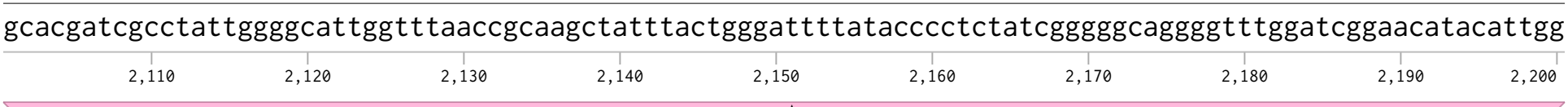
aligned sequence 2020-10-29_E10_JLPAS02SP1



template sequence pAS0.2



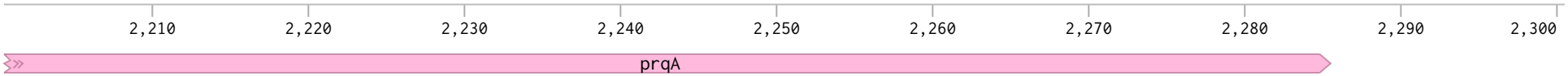
aligned sequence 2020-10-29_E10_JLPAS02SP1



template sequence pAS0.2

aligned sequence 2020-10-29_E10_JLPAS02SP1

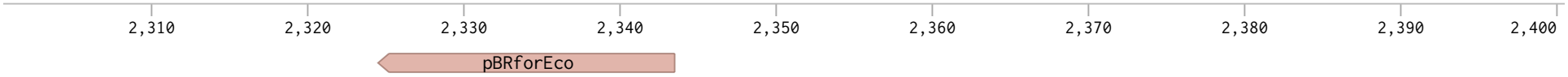
cctagcggcggcctctattgcctatttgtggcgattccagaaggttatggtgcggaaaaaatcccttcccgttgctagatcttaaGCTTtgagaccacga



template sequence pAS0.2

aligned sequence 2020-10-29_E10_JLPAS02SP1

agtggctcttcagtggacgaaagggcctcgtgatacgcctatttttataggttaatgtcatgataataatggtttcttagacgtcaggtggcacttttcg



template sequence pAS0.2

aligned sequence 2020-10-29_E10_JLPAS02SP1

gggaaatgtgcgcggaacccctatttgtttatttttctaaatacattcaaatatgtatccgctcatgagacaataaccctgataaatgcttcaataatat

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

AmpR promoter

template sequence pAS0.2

aligned sequence 2020-10-29_E10_JLPAS02SP1

tgaaaaaggaagagtatgcgctcacgcaactggtccagaaccttgaccgaacgcagcggtggtaacggcgcagtggcggttttcatggcttgttatgact

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

AmpR promoter

template sequence pAS0.2

aligned sequence 2020-10-29_E10_JLPAS02SP1

gttttttggggtacagtctatgcctcgggcatccaagcagcaagcgcgttacgccgtgggtcgatgtttgatgttatggagcagcaacgatgttacgca

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

template sequence pAS0.2

aligned sequence 2020-10-29_E10_JLPAS02SP1

gcagggcagtcgccctaaaacaaagttaaacatcatgagggaagcggtgatcgccgaagtatcgactcaactatcagaggtagttggcgtcatcgagcgc

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

SmR

template sequence pAS0.2

aligned sequence 2020-10-29_E10_JLPAS02SP1

catctcgaaccgacgttgctggccgtacatttgtacggctccgcagtggatggcggcctgaagccacacagcgatattgatttgctggttacggtgaccg

2,810 2,820 2,830 2,840 2,850 2,860 2,870 2,880 2,890 2,900

SmR

template sequence pAS0.2

aligned sequence 2020-10-29_E10_JLPAS02SP1

taaggcttgatgaaacaacgcggcgagctttgatcaacgacctttggaaacttcggcttcccctggagagagcgagattctccgcgctgtagaagtcac

2,910 2,920 2,930 2,940 2,950 2,960 2,970 2,980 2,990 3,000

SmR

template sequence pAS0.2

aligned sequence 2020-10-29_E10_JLPAS02SP1

cattgttgtgcacgacgacatcattccgtggcgttatccagctaagcgcgaactgcaatttggagaatggcagcgcaatgacattcttgcaggtatcttc

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

SmR

template sequence pAS0.2

aligned sequence 2020-10-29_E10_JLPAS02SP1

gagccagccacgatcgacattgatctggctatcttgctgacaaaagcaagagaacatagcgttgccttggtaggtccagcggcggaggaactctttgatc

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

SmR

template sequence pAS0.2

aligned sequence 2020-10-29_E10_JLPAS02SP1

cggttcctgaacaggatctatttgaggcgctaaatgaaaccttaacgctatggaactcgccgcccgactgggctggcgatgagcgaaatgtagtgcttac

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

SmR

template sequence pAS0.2

aligned sequence 2020-10-29_E10_JLPAS02SP1

gttgtcccgcatttggtacagcgcagtaaccggcaaaatcgcgccgaaggatgtcgctgccgactgggcaatggagcgcctgccggcccagtatcagccc

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

SmR

template sequence pAS0.2

aligned sequence 2020-10-29_E10_JLPAS02SP1

gtcatacttgaagctagacaggcttatcttggacaagaagaagatcgcttggcctcgcgcgcagatcagttggaagaatttgtccattacgtaaaaggcg

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

SmR

template sequence pAS0.2

aligned sequence 2020-10-29_E10_JLPAS02SP1

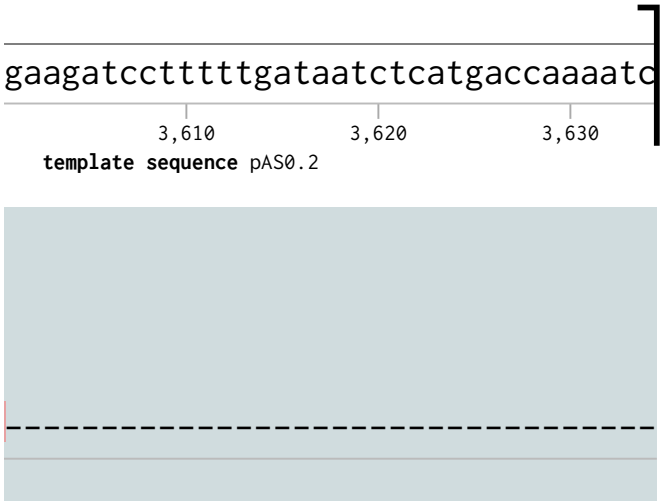
agatcaccaaggtagtcggcaaataactgtcagaccaagtttactcatatatactttagattgatttaaaacttcatttttaatttaaaaggatctaggt

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

SmR

template sequence pAS0.2

aligned sequence 2020-10-29_E10_JLPAS02SP1


gaagatccttttgataatctcatgaccaaaatc
3,610
3,620
3,630
template sequence pAS0.2
aligned sequence 2020-10-29_E10_JLPAS02SP1