

## Template Alignment: 2020-07-30\_D11\_ASPAS5SP1 (2020-07-30\_D11\_A...

aaatcccttaacgtgagttttcgttccactgagcgtcagaccccgtagaaaagatcaaaggatcttcttgagatccttttttctgcgcgtaatctgctg

10 20 30 40 50 60 70 80 90 100

rep (pMB1)

ColE1 origin

template sequence pAS0.5

aligned sequence 2020-07-30\_D11\_ASPAS5SP1 (2020-07-30\_D11\_ASPAS5SP1.ab1)

cttgcaaacaaaaaaccaccgctaccagcggtggtttgtttgccggatcaagagctaccaactctttttccgaaggtaactggcttcagcagagcgcag

110 120 130 140 150 160 170 180 190 200

rep (pMB1)

ColE1 origin

template sequence pAS0.5

aligned sequence 2020-07-30\_D11\_ASPAS5SP1 (2020-07-30\_D11\_ASPAS5SP1.ab1)

ataccaatactgtccttctagtgtagccgtagttaggccaccacttcaagaactctgtagcaccgcctacatacctcgctctgctaatacctgttaccag

210

220

230

240

250

260

270

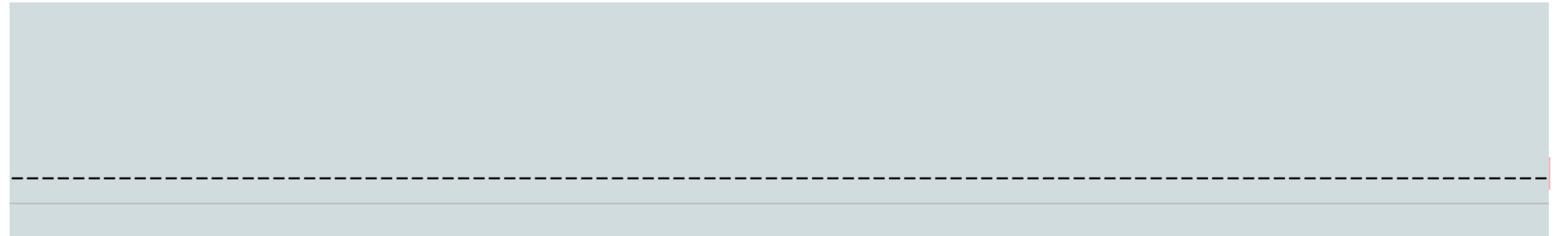
280

290

300

>> rep (pMB1) >>  
>> ColE1 origin >>

template sequence pAS0.5



aligned sequence 2020-07-30\_D11\_ASPAS5SP1 (2020-07-30\_D11\_ASPAS5SP1.ab1)

tggctgctgccagtggcgataagtcgtgtcttaccgggttggactcaagacgatagttaccggataaggcgcagcggctcgggctgaacgggggggttcgtg

310

320

330

340

350

360

370

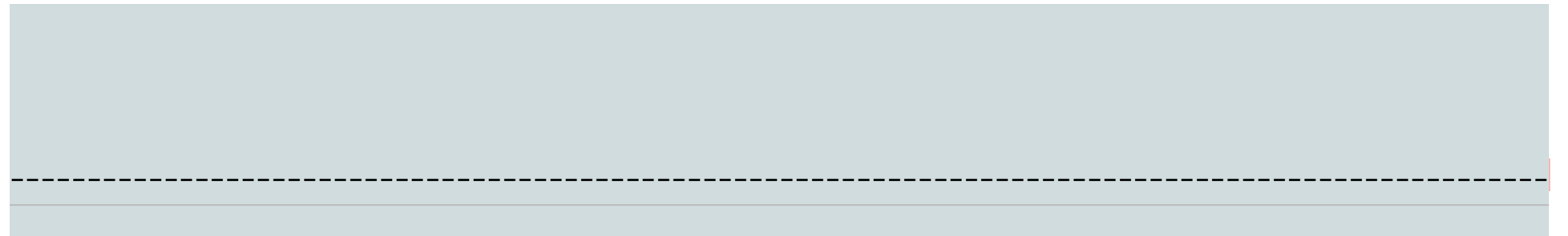
380

390

400

>> rep (pMB1) >>  
>> ColE1 origin >>

template sequence pAS0.5



aligned sequence 2020-07-30\_D11\_ASPAS5SP1 (2020-07-30\_D11\_ASPAS5SP1.ab1)

cacacagcccagcttggagcgaacgacctacaccgaactgagatacctacagcgtgagctatgagaaagcgccacgcttcccgaagggagaaaggcggac

410

420

430

440

450

460

470

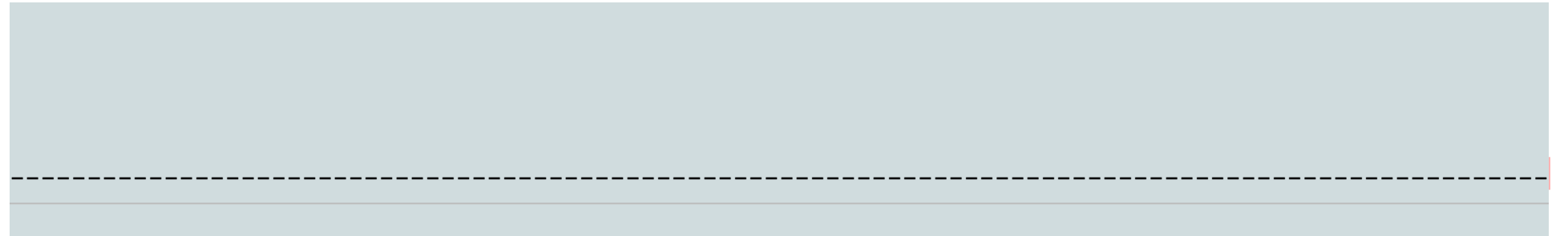
480

490

500

rep (pMB1)  
ColE1 origin

template sequence pAS0.5



aligned sequence 2020-07-30\_D11\_ASPAS5SP1 (2020-07-30\_D11\_ASPAS5SP1.ab1)

aggtatccggttaagcggcagggtcggaacaggagagcgcacgagggagcttccaggggaaacgcctggtatctttatagtcctgtcgggtttcgccacc

510

520

530

540

550

560

570

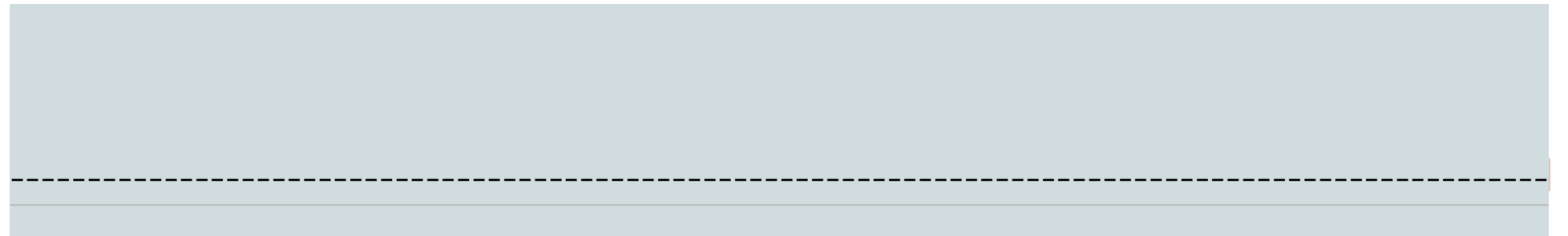
580

590

600

rep (pMB1)  
ColE1 origin

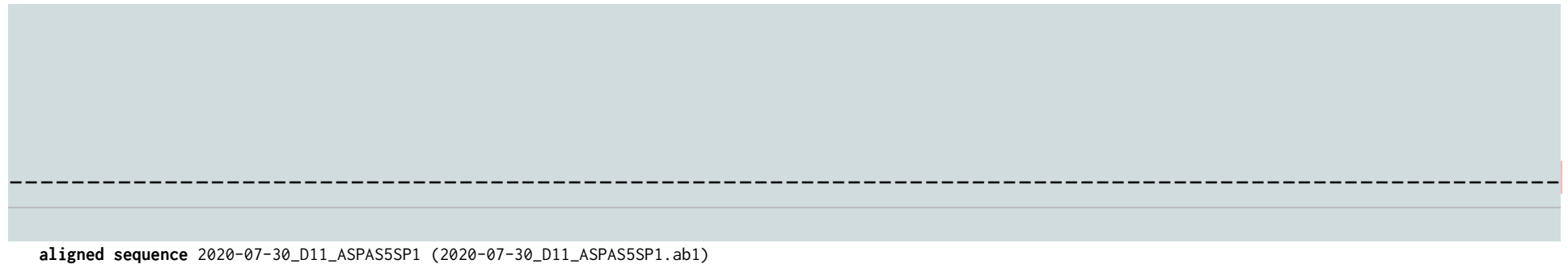
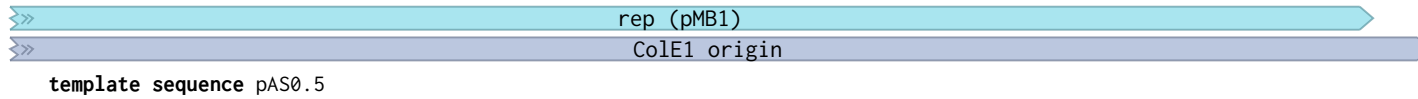
template sequence pAS0.5



aligned sequence 2020-07-30\_D11\_ASPAS5SP1 (2020-07-30\_D11\_ASPAS5SP1.ab1)

tctgacttgagcgtcgatttttgtgatgctcgtcagggggcgaggcctatggaaaaacgccagcaacgcggcctttttacggttcctggccttttgctg

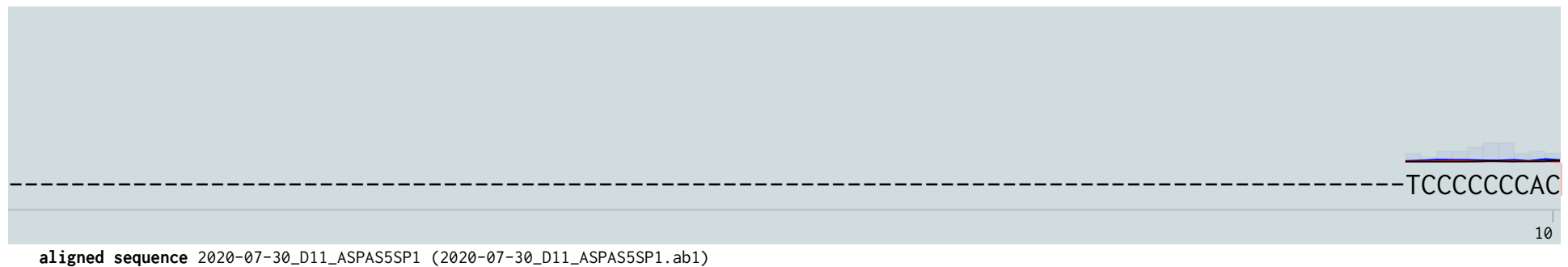
610 620 630 640 650 660 670 680 690 700

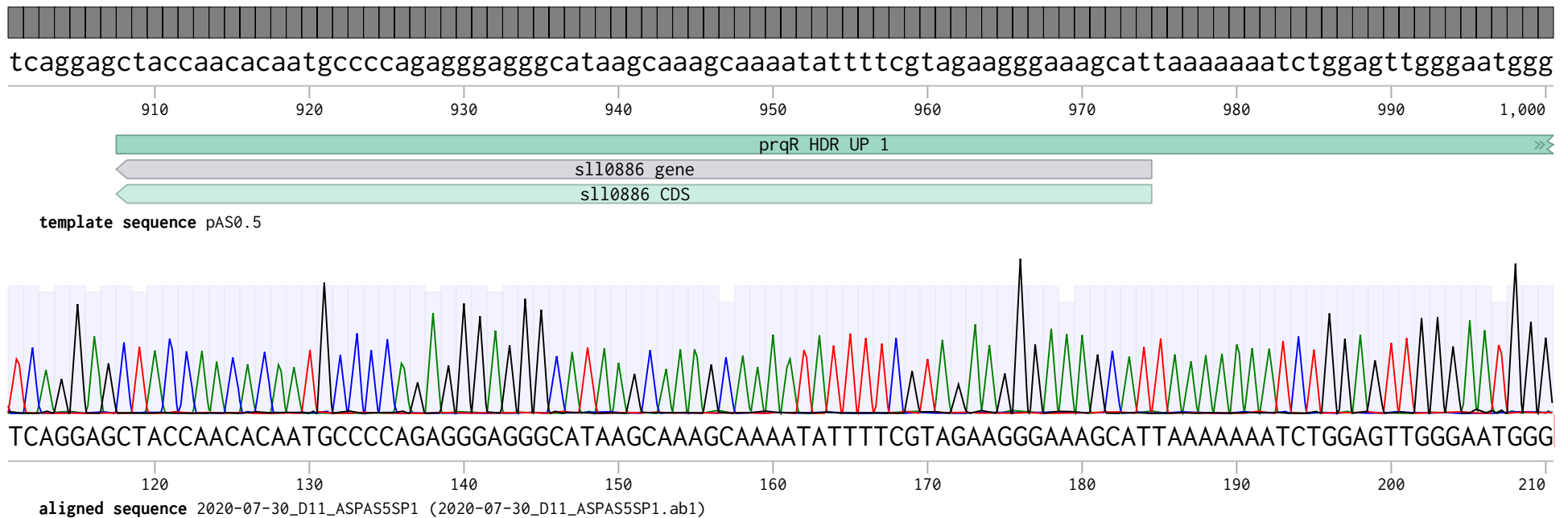
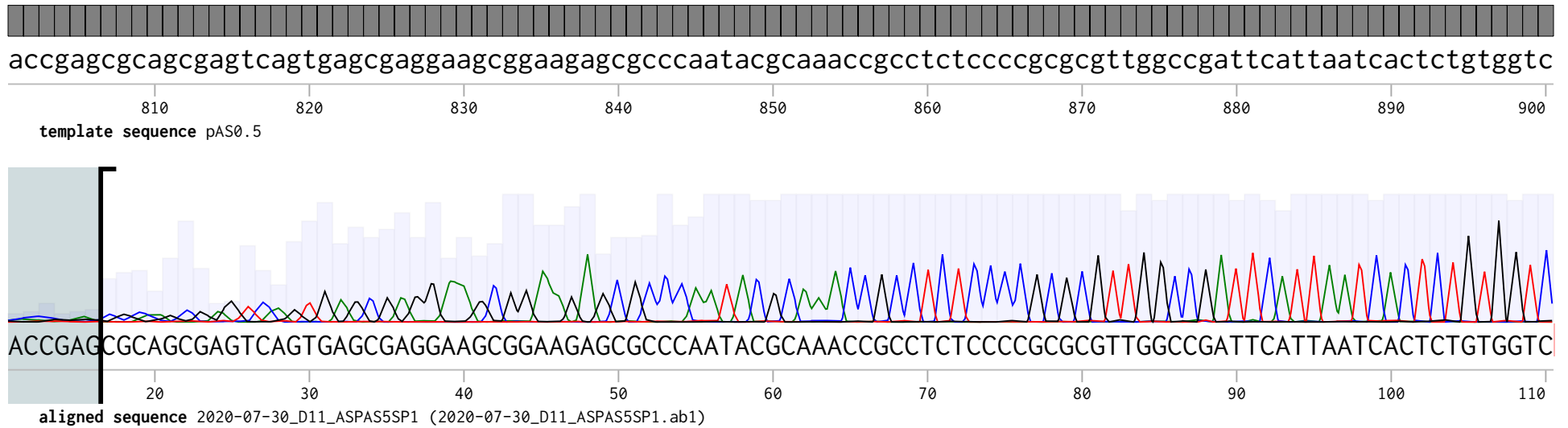


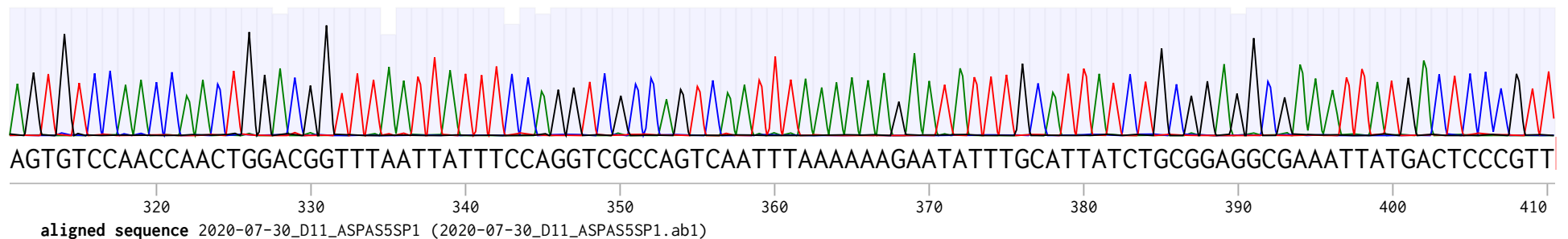
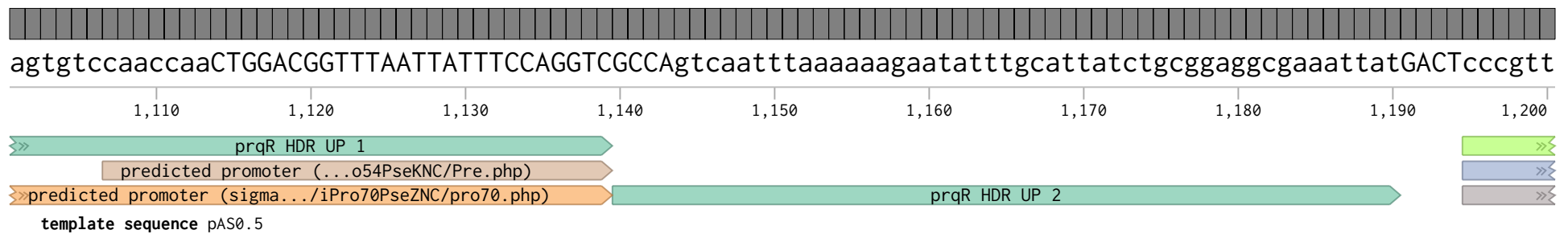
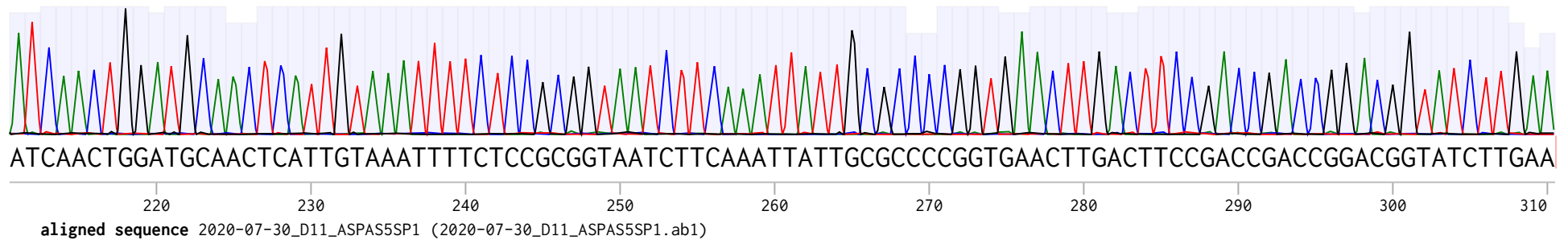
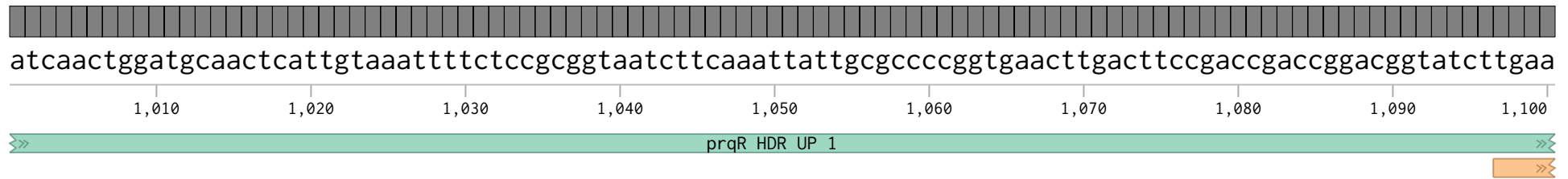
gccttttgctcacatgttctttcctgcgttatcccctgattctgtggataaccgtattaccgcctttgagtgagctgataccgctcgccgcagccgaacg

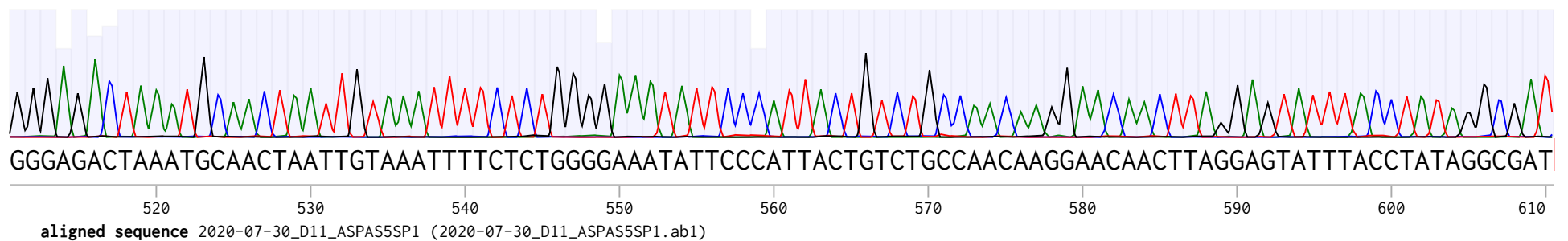
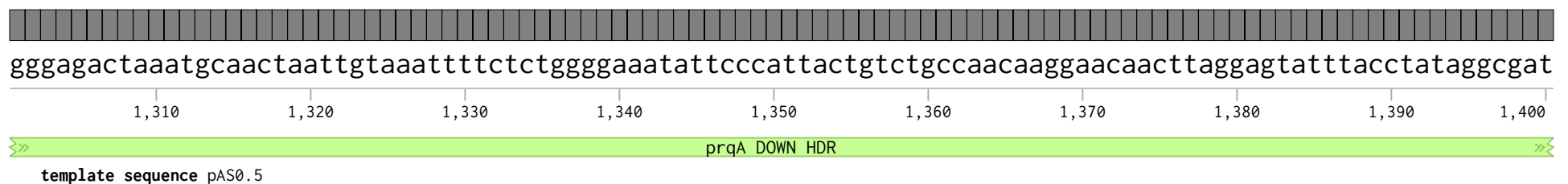
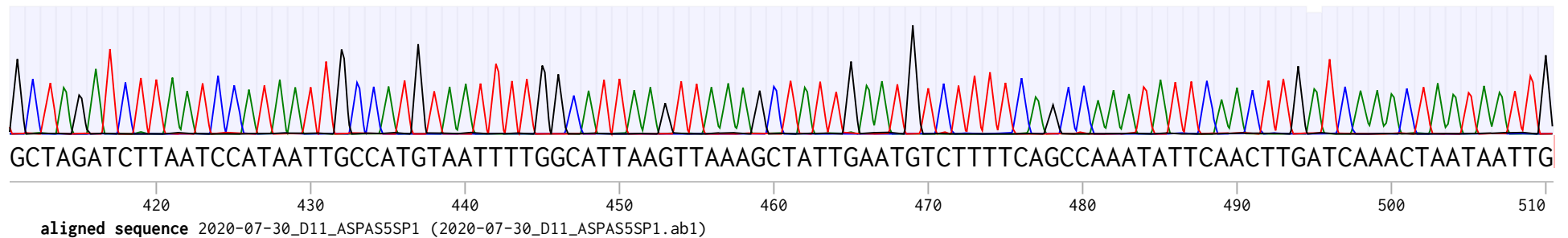
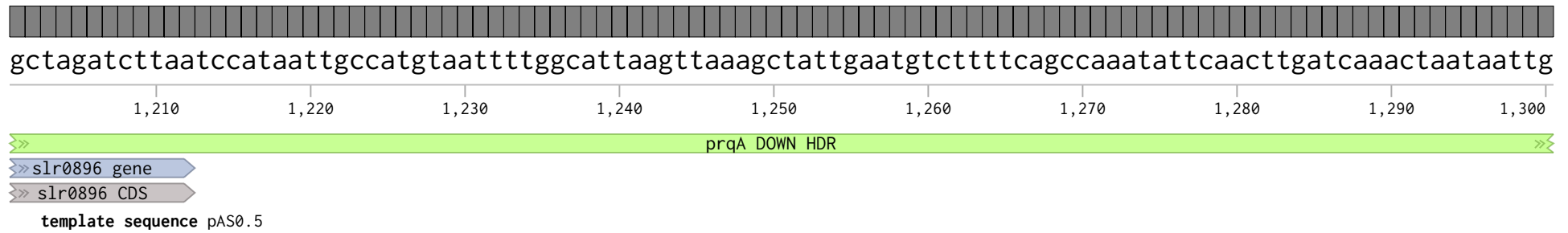
710 720 730 740 750 760 770 780 790 800

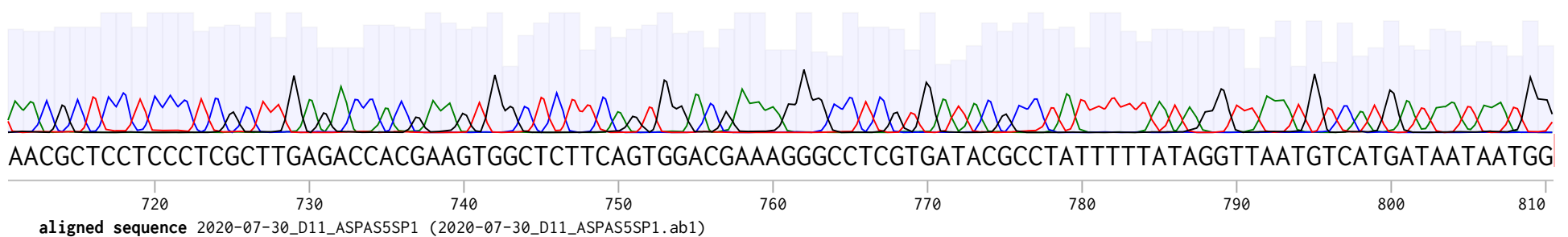
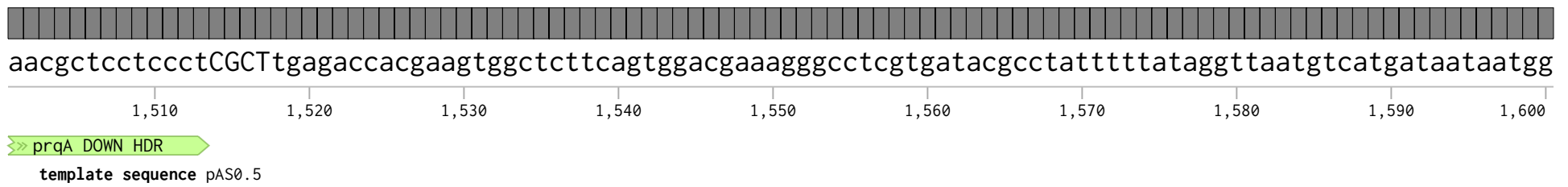
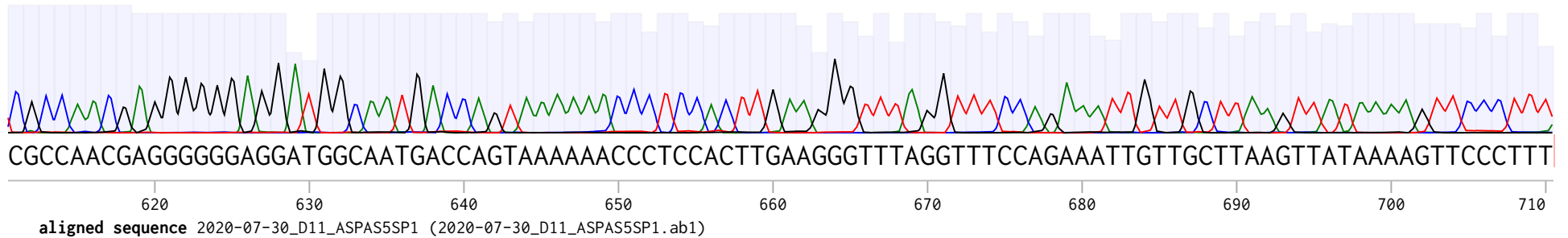
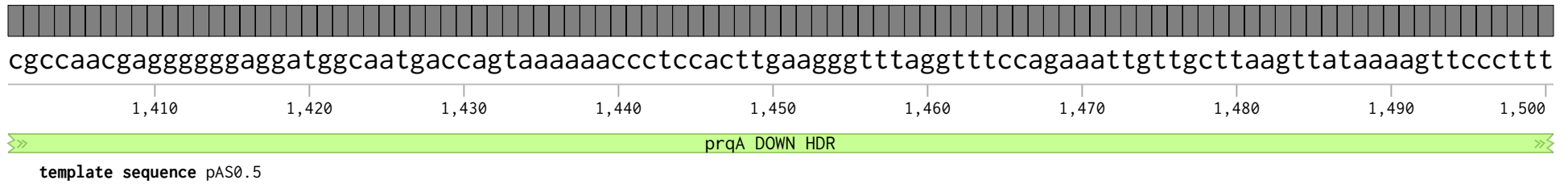
template sequence pAS0.5



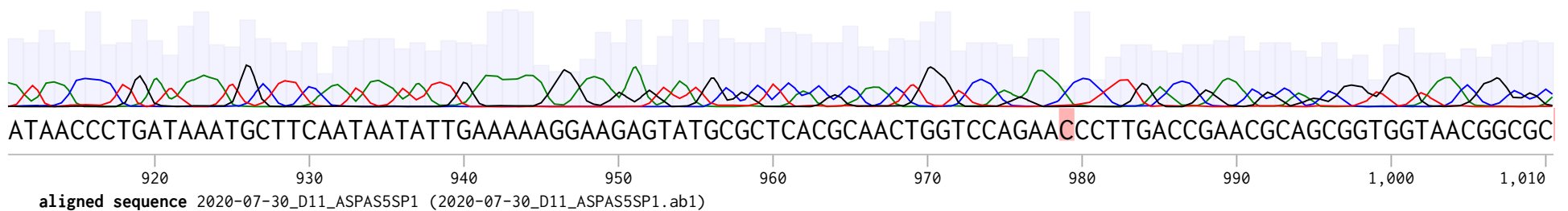
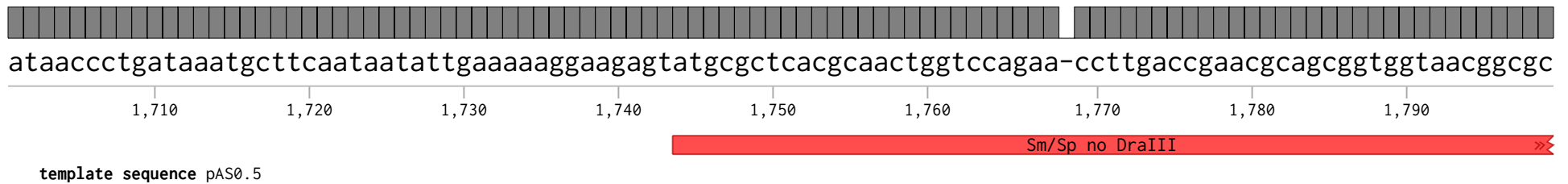
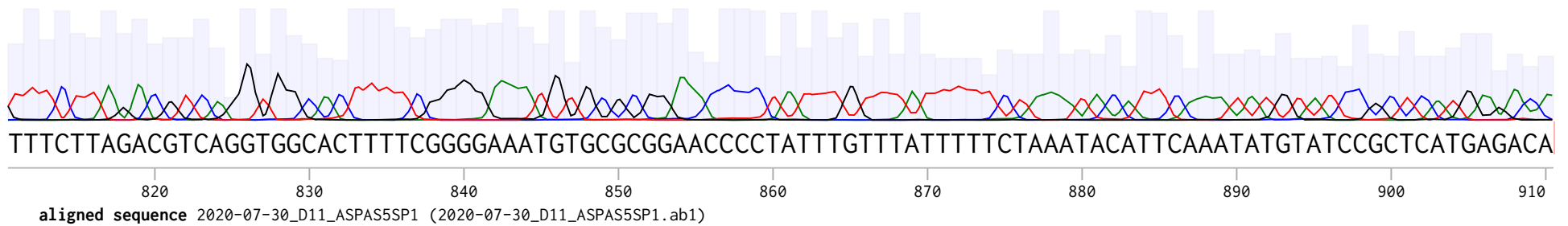
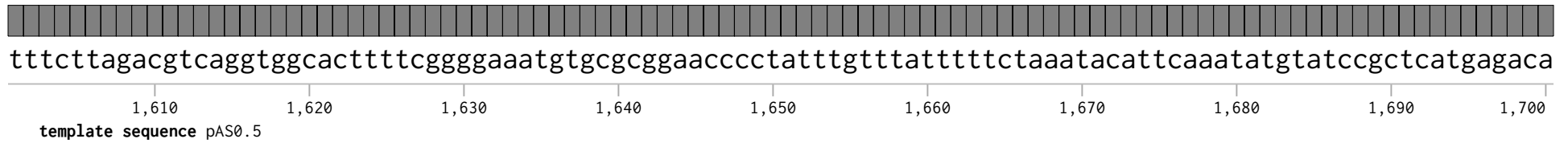


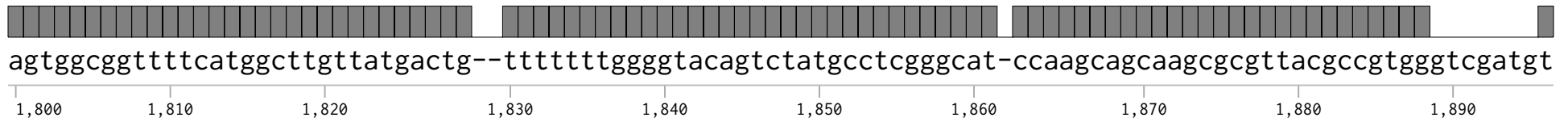






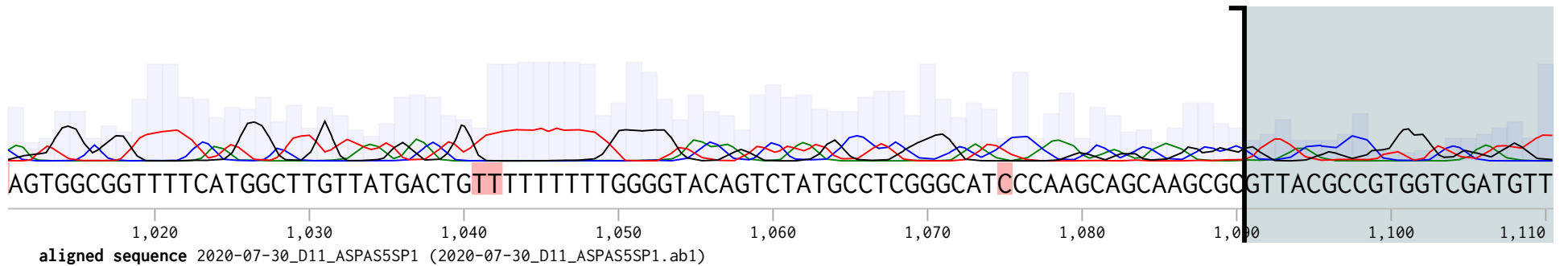




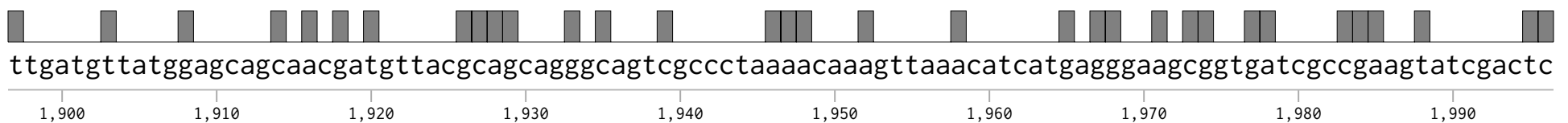


Sm/Sp no DraIII

template sequence pAS0.5

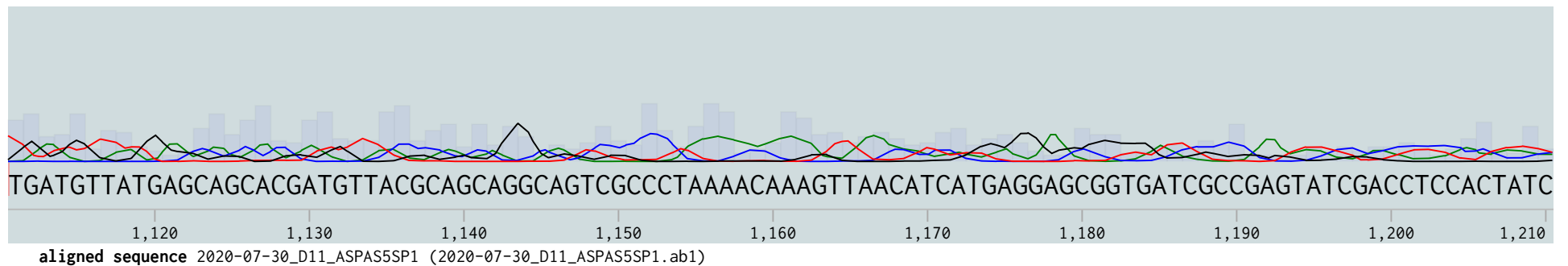


aligned sequence 2020-07-30\_D11\_ASPAS5SP1 (2020-07-30\_D11\_ASPAS5SP1.ab1)

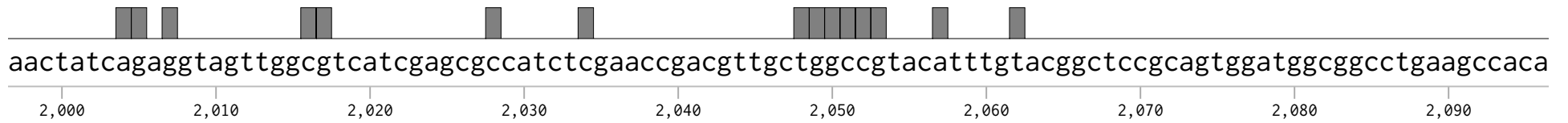


Sm/Sp no DraIII

template sequence pAS0.5

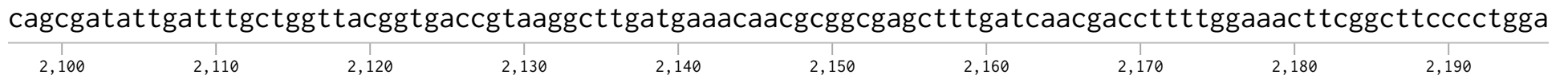
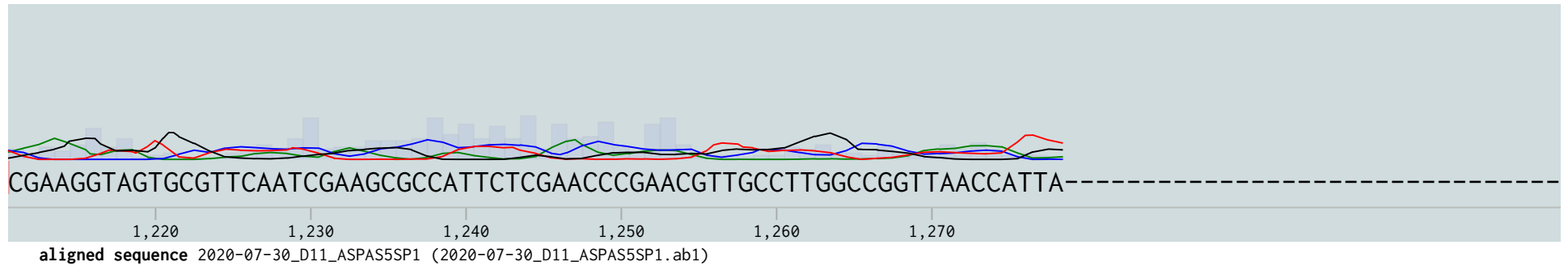


aligned sequence 2020-07-30\_D11\_ASPAS5SP1 (2020-07-30\_D11\_ASPAS5SP1.ab1)



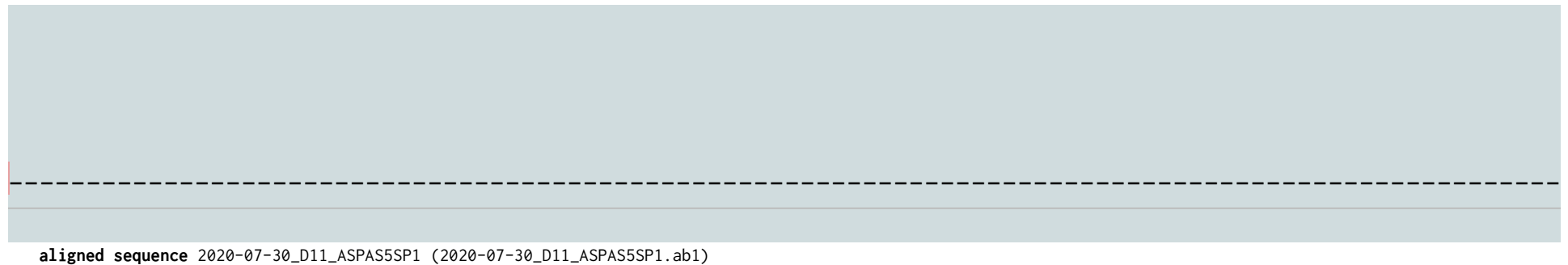
Sm/Sp no DraIII

template sequence pAS0.5



Sm/Sp no DraIII

template sequence pAS0.5



gagagcgagattctccgctgtagaagtcaccattgttgtgcacgacacatcattccgtggcgttatccagctaagcgcgaaactgcaatttggagaat

2,200 2,210 2,220 2,230 2,240 2,250 2,260 2,270 2,280 2,290

Sm/Sp no DraIII

template sequence pAS0.5

aligned sequence 2020-07-30\_D11\_ASPAS5SP1 (2020-07-30\_D11\_ASPAS5SP1.ab1)

ggcagcgcaatgacattcttgcaggtatcttcgagccagccacgatcgacattgatctggctatcttgctgacaaaagcaagagaacatagcgttgcctt

2,300 2,310 2,320 2,330 2,340 2,350 2,360 2,370 2,380 2,390

Sm/Sp no DraIII

template sequence pAS0.5

aligned sequence 2020-07-30\_D11\_ASPAS5SP1 (2020-07-30\_D11\_ASPAS5SP1.ab1)

ggtagggtccagcggcggaggaactctttgatccggttcctgaacaggatctatttgaggcgctaaatgaaaccttaacgctatggaactcgccgcccgcac

2,400 2,410 2,420 2,430 2,440 2,450 2,460 2,470 2,480 2,490

Sm/Sp no DraIII

template sequence pAS0.5

aligned sequence 2020-07-30\_D11\_ASPAS5SP1 (2020-07-30\_D11\_ASPAS5SP1.ab1)

tgggctggcgatgagcgaaatgtagtgcttacgttgtcccgcatTTTggtacagcgcagtaaccggcaaaatcgcgccgaaggatgtcgctgccgactggg

2,500 2,510 2,520 2,530 2,540 2,550 2,560 2,570 2,580 2,590

Sm/Sp no DraIII

template sequence pAS0.5

aligned sequence 2020-07-30\_D11\_ASPAS5SP1 (2020-07-30\_D11\_ASPAS5SP1.ab1)

caatggagcgcctgccggcccagtatcagcccgctcatacttgaagctagacaggcttatcttggacaagaagaagatcgcttggcctcgcgcgcagatca

2,600 2,610 2,620 2,630 2,640 2,650 2,660 2,670 2,680 2,690

Sm/Sp no DraIII

template sequence pAS0.5

aligned sequence 2020-07-30\_D11\_ASPAS5SP1 (2020-07-30\_D11\_ASPAS5SP1.ab1)

gttgaagaatttgtccattacgtaaaaggcgagatcaccaaggtagtcggcaaataactgtcagaccaagtttactcatatatacttttagattgattta

2,700 2,710 2,720 2,730 2,740 2,750 2,760 2,770 2,780 2,790

Sm/Sp no DraIII

template sequence pAS0.5

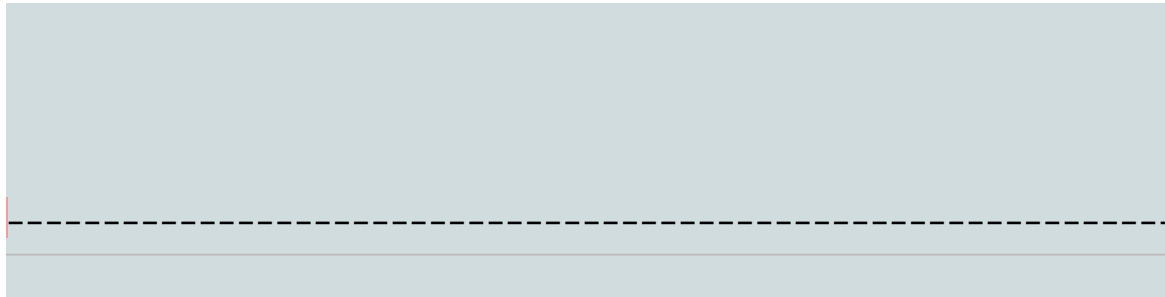
aligned sequence 2020-07-30\_D11\_ASPAS5SP1 (2020-07-30\_D11\_ASPAS5SP1.ab1)

aaacttcatttttaatttaaaggatctaggtgaagatccttttgataatctcatgacca

2,800 2,810 2,820 2,830 2,840 2,850

Col...in >>

template sequence pAS0.5



aligned sequence 2020-07-30\_D11\_ASPAS5SP1 (2020-07-30\_D11\_ASPAS5SP1.ab1)