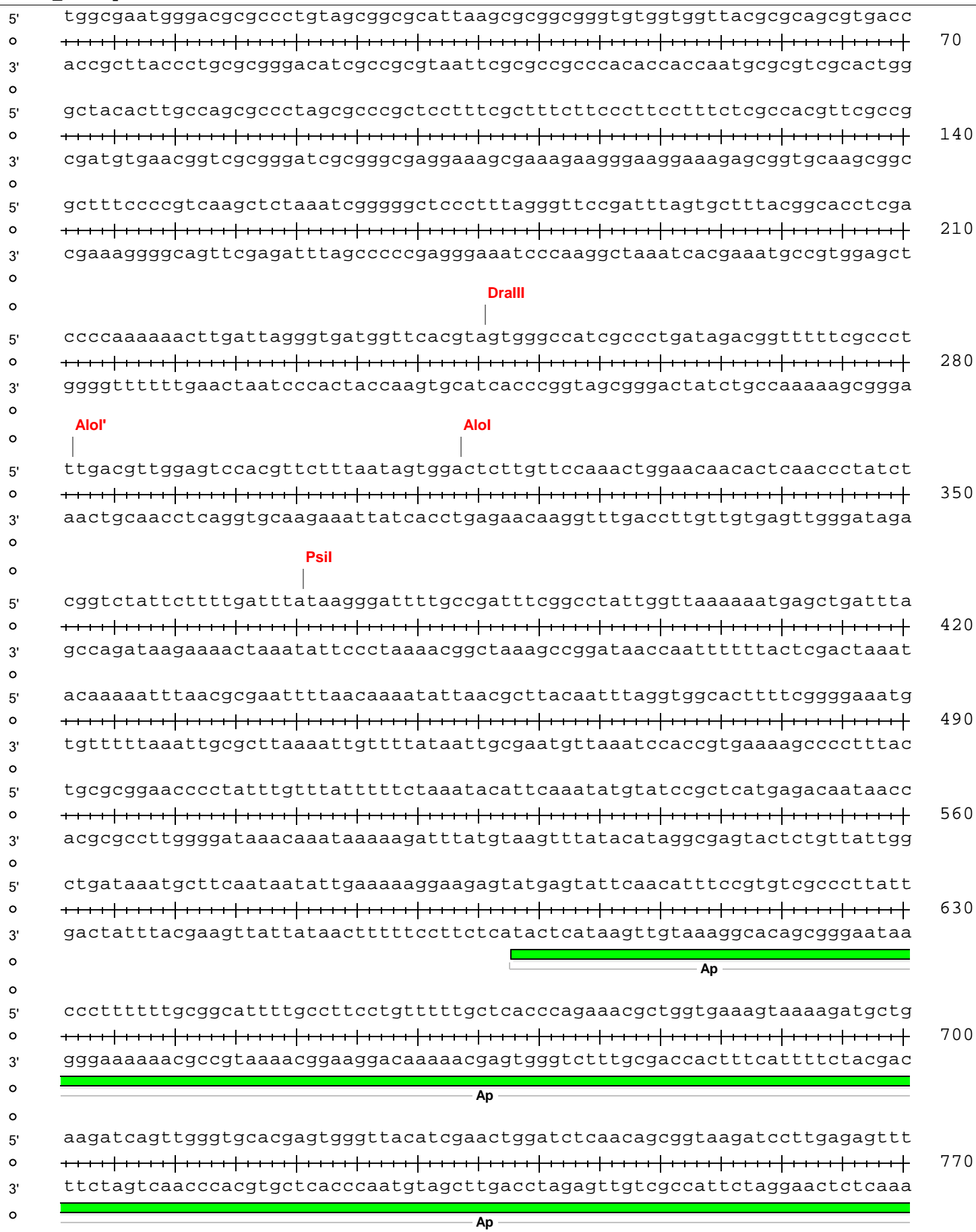


BGT07\_T02a-pET32-DEST



BGT07\_T02a-pET32-DEST

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840

Ap

Scal

5' attgacgccgggcaagagcaactcggctgccgcatacactattctcagaatgacttgggtgagtactcac  
 0  
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910

Ap

5' cagtacagaaaagcatcttacggatggcatgacagtaagagaattatgcagtgctgccataaccatgag  
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980

Ap

PvuI

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1050

Ap

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1120

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PstI

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1190

Ap

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1260

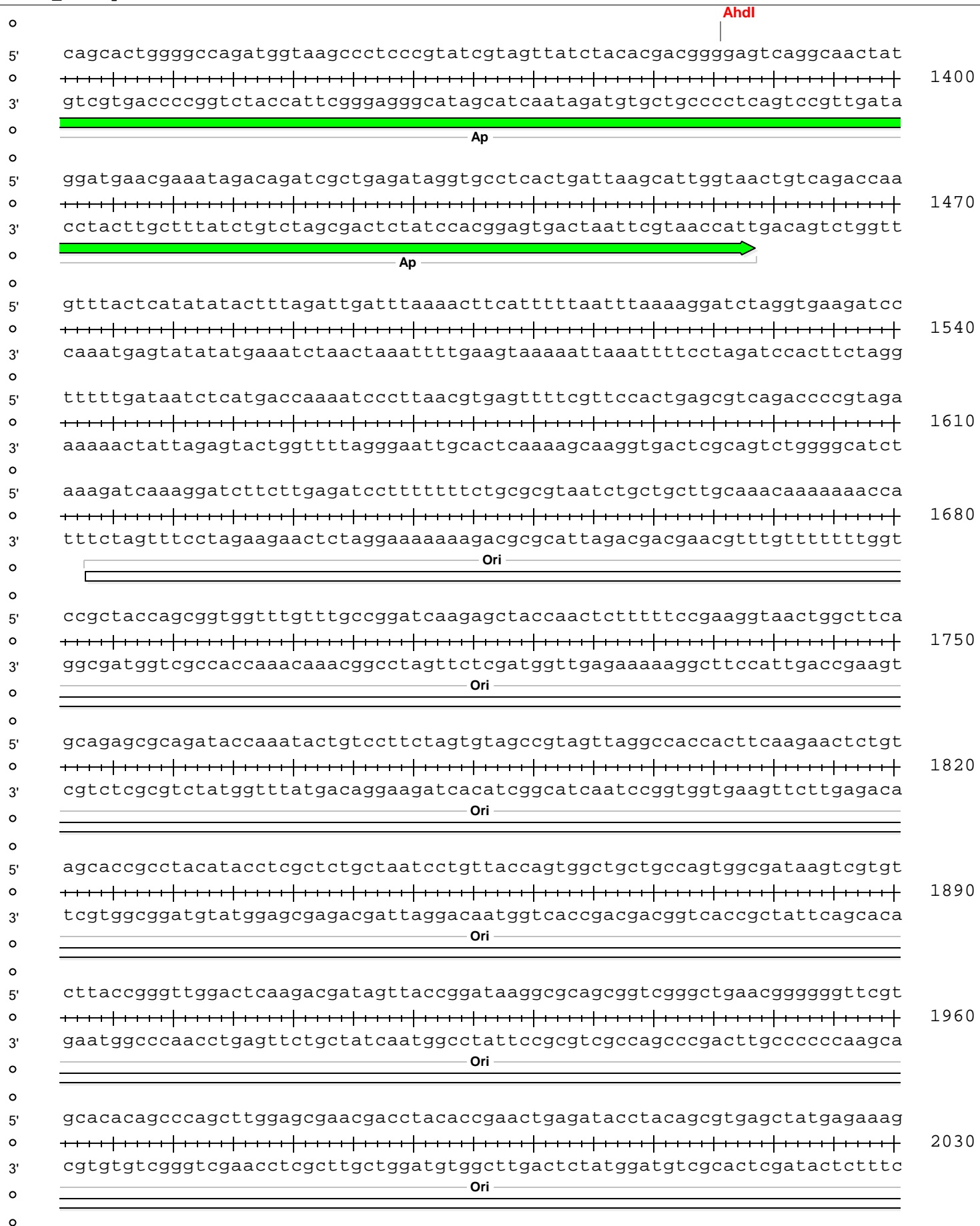
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1330

Ap



BGT07\_T02a-pET32-DEST

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3'  gcggtgcaagggcttccctctttccgcctgtccataggccattcgccgtcccagccttgtcctctcgcg
o
o
o
5'  acgaggagcttccaggggaaacgcctggtatctttatagtcctgtcgggttctgccacctctgacttg
o  +-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
3'  tgctccctcgaaggtccccctttgcgacatagaaatatcaggacagccaaagcgggtggagactgaac
o
o
o
5'  agcgtcgatTTTTGTGATGCTCGTCAGGGGGCGGAGCCTATGGAAAAAGCCAGCAACCGGCTTTTT
o  +-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
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o
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5'  aaccgtattaccgctttgagtgagctgataccgctcgccgcagccgaacgaccgagcgcagcagtcag
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o  +-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
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o
o
o
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o  +-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
3'  gcagtagtggtcttgccgcgtccgtcgcgcgcaatttcgagtagtcgcaccagcacttcgctaagtgtcta
o
o
o
5'  gtctgctgttcacccgcgtccagctcgttgagtttctccagaagcgtaaagtctgctggcttctgataaag
o  +-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
3'  cagacggacaagtaggcgcaggtcgcagcaactcaagaggctcttcgcaattacagaccgaagactatTtc
o
o
o

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Ori

Ori

Ori

PciI

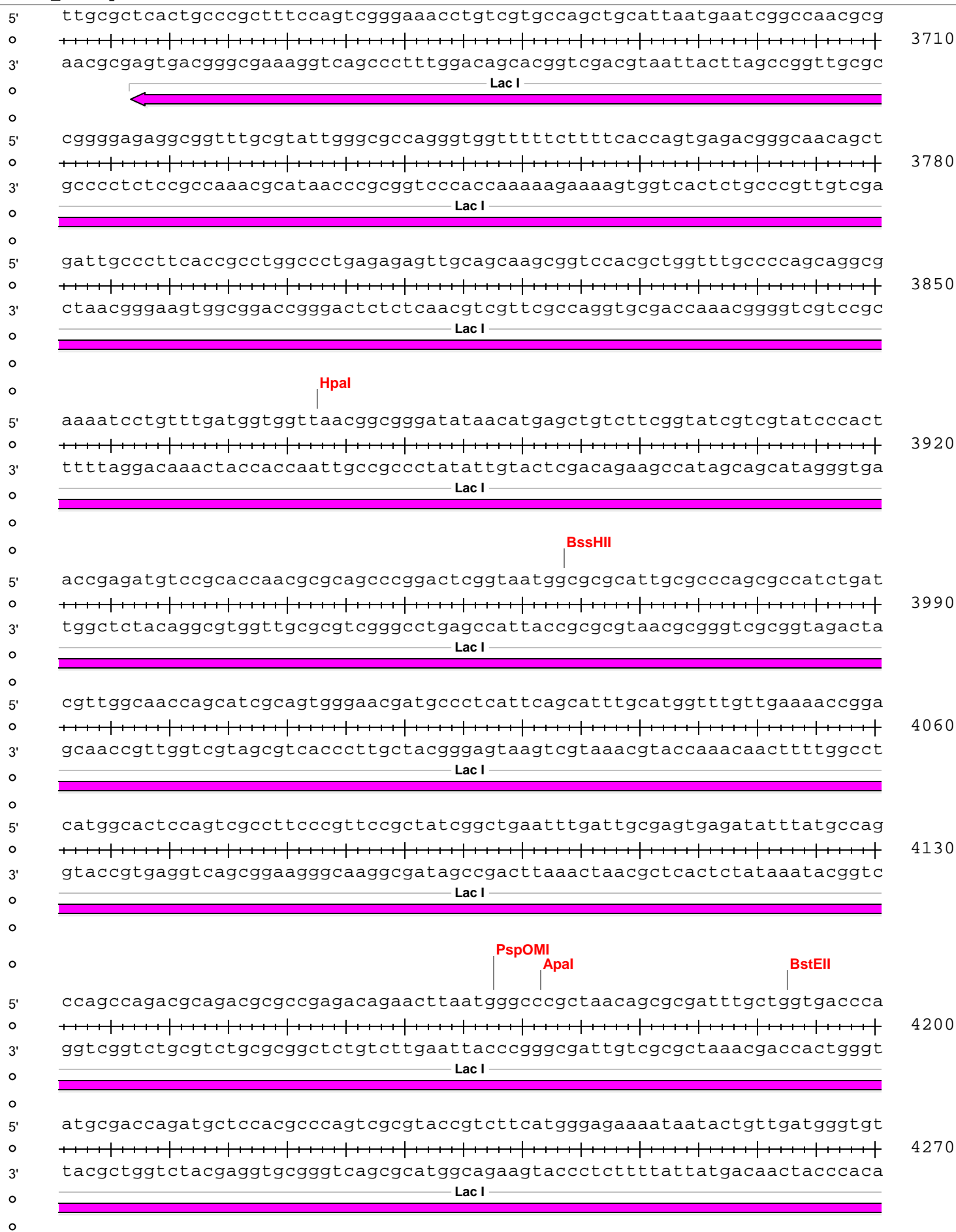
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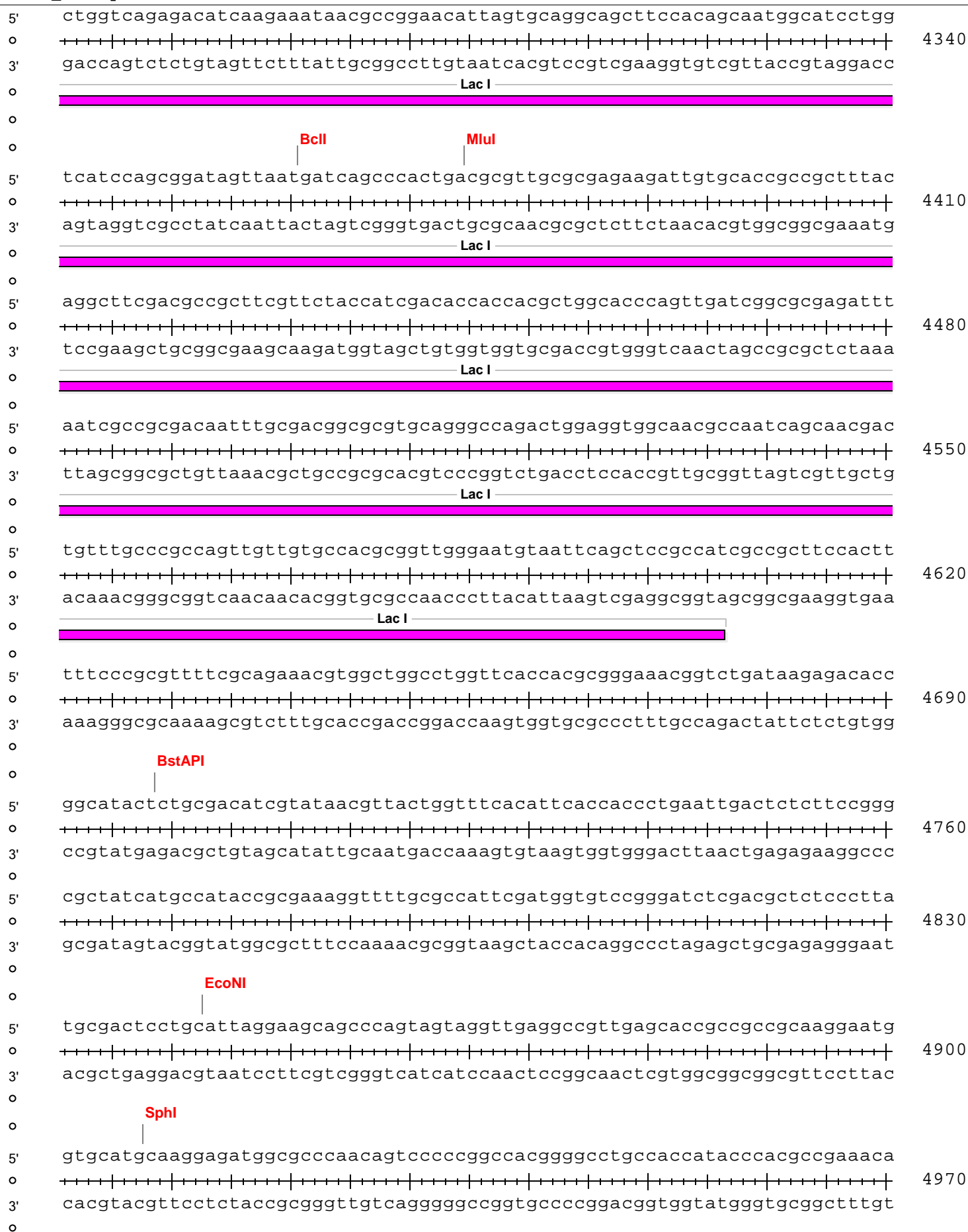
BGT07\_T02a-pET32-DEST

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o	++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++	2870
3'	gccccgtacaattcccgcbaaaaaggacaaaccagtgactacggaggcacattccccctaagacaagt	
o		
5'	tgggggtaatgataccgatgaaacgagagaggatgctcacgatacgggttactgatgatgaacatgccccg	
o	++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++	2940
3'	acccccattactatggctactttgctctctcctacgagtgctatgcccaatgactactacttgtacgggc	
o		
5'	gttactggaacgttgtgagggtaaacaactggcgggatggatgcggcgggaccagagaaaaatcactcag	
o	++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++	3010
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o		
5'	ggTcaatgccagcgttctgTtaatacacagatgtaggtgtccacagggtagccagcagcatcctgcgatgc	
o	++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++	3080
3'	ccagttacggTcgcgaaagcaattatgTctacatccacaaggTgtcccatcggtcgTcgtaggacgctacg	
o		
5'	agatccggaacataatggTgcagggcgctgacttccgcgTttccagactttacgaaacacggaaaccgaa	
o	++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++	3150
3'	tctaggccttgTattaccagTcccgcgactgaaaggcgcaaggTctgaaatgctttgtgcctttggctt	
o		
o		
	<b>Bpu10I</b>	
5'	gaccattcatgttgttgcTcaggtcgcagacgTtttgCagcagcagTcgcttcacgttcgctcgcgTatc	
o	++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++	3220
3'	ctggtaagtacaacaacgagTccagcgtctgcaaaacgTcgTcgTcagcgaagtgcaagcagcgcTatag	
o		
5'	ggTgattcattctgctaaccagtaaggcaaccccgcagcctagccgggtcctcaacgacagggacgca	
o	++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++	3290
3'	ccactaagtaagacgattggTcattccgTtggggcggtcggatcggcccaggagttgctgtcctcgtgct	
o		
o		
	<b>FspAI</b>	
5'	tcatgCgCacccgTggggccgcTatgcccggcGataatggcctgcttctcgccGaaacgTttggTggcggg	
o	++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++	3360
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o		
5'	accagTgacgaaggcttgagcgagggcgTgcaagattccgaataccgcaagcgaaggccgatcatcgTc	
o	++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++	3430
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o		
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o	++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++	3500
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o		
o		
	<b>PshAI</b>	
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o	++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++	3570
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o		
5'	gttgaaggctctcaagggcTcggTcgagatcccggTgcctaatgagTgagctaacTtacattaattgcg	
o	++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++	3640
3'	caacttccgagagTtcccgtagccagctctagggccacggattactcactcgattgaaTgtaattaacgc	
o		
o		

BGT07\_T02a-pET32-DEST



BGT07\_T02a-pET32-DEST









BGT07\_T02a-pET32-DEST

BseRI

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 3' TTTTATAAAGAGTGTCTCAAGGGTCTCTTCTAAGTTTTTTATAGAGGAGTACAAGTTATATGATAAAAAAT

5880

BGT07\_T02a

BGT07\_T02a-pDONR221

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5' TCATTGAGCAAGCGGAGGGCAAACCTTTTAAATCGAGGTAACCTTTTAAATGTTGGATATACATTAACACA  
 3' AGTAACTCGTTCCGCTCCCGTTTGA AAAAATTAGCTCCATTTGAAAATTTACAACCTATATGTAATTGTGT

5950

BGT07\_T02a

BGT07\_T02a-pDONR221

I I E Q A E G K L F N R G K L L N V G Y T L T Q  
 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248

MfeI

5' AGAAACTTTTGATTATTTCTGCTTTCATGATGTAGATATGTTACCAACTACCTCAGACTATTCTTATCCA  
 3' TCTTTGAAAAC TAATAAAGACGAAAGTACTACATCTATAACAATGGTTGATGGAGTCTGATAAGAATAGGT

6020

BGT07\_T02a

BGT07\_T02a-pDONR221

E T F D Y F C F H D V D M L P T T S D Y S Y P  
 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271

BmgBI

5' ATTGTTCTACTCATCTTGCAGCTGACGTGAGCCAGTTTCGAGAATGGATGGGTAATGGACTTGCCTATA  
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6090

BGT07\_T02a

BGT07\_T02a-pDONR221

I V P T H L A A D V S Q F R E W M G N G L A Y  
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5' AAAATTATTTTGGCGGAGTTGTTTTATTCAACAAAGCAGATTTTGTTAAAGTTAATGGGTATTCTAATCG  
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6160

BGT07\_T02a

BGT07\_T02a-pDONR221

K N Y F G G V V L F N K A D F V K V N G Y S N R  
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BGT07\_T02a-pET32-DEST

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 3' AATAACCCCTATACCTCAACTTCTGCTACTAAATTATCAAGCACACCAACTTTTATTGAATTTAACCCAA

----- BGT07\_T02a -----  
 ----- BGT07\_T02a-pDONR221 -----

Y W G Y G V E D D D L I V R V V E N N L N W V  
 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341

**SexAI**

5' CGTAAACCAGGTGTGTATGAAAGCCTCACTCACGCTTATTCAGGAGTACTCCAGAACATCAAGCAAATA 6300  
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 3' GCATTTGGTCCACACATACTTTCGGAGTGAGTGCGAATAAGTCCTCCATGAGGTCTTGTAGTTCGTTTAT

----- BGT07\_T02a -----  
 ----- BGT07\_T02a-pDONR221 -----

R K P G V Y E S L T H A Y S G G T P E H Q A N  
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5' AAACTCGCTTCATCAATCTTTTAAAAAATTTAGAAGAAGATTTGTCAGGTTTATCTGATCTCAATTATCA 6370  
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----- BGT07\_T02a -----  
 ----- BGT07\_T02a-pDONR221 -----

K T R F I N L L K N L E E D L S G L S D L N Y Q  
 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388

5' GGTTTTAAACAGCAAATATTTTCTAATTATAACCAATATTTAGTAGATATTTAGGACCCAGCTTTCTTG 6440  
 +-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+  
 3' CCAAAATTTGTCGTTTTATAAAAGATTAATATGGGTTATAAATCATCTATAAATCCTGGGTCGAAAGAAC

----- BGT07\_T02a ----- attB2  
 ----- BGT07\_T02a-pDONR221 -----

V L N S K I F S N Y T Q Y L V D I  
 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406

**BamHI** **EcoRI** **EcoCR1** **SacI** **Sall** **HindIII** **NotI** **EagI** **PspXI** **XhoI** **AvaI** **BmeT110I**

5' TACAAAGTGGTTGATatcggatccgaattcgagctccgctcgacaagcttgcggccgcactcgagcaccac 6510  
 +-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+  
 3' ATGTTTCACCAACTatagcctaggcttaagctcgaggcagctggtcgaacgcggcgctgagctcgtggtg

----- attB2 -----

5' caccaccaccactgagatccggctgctaacaagcccgaaaggaagctgagttggctgctgccaccgctg 6580  
 +-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+  
 3' gtggtgggtgactctaggccgacgattgtttcgggctttccttcgactcaaccgacgacggtggcgac

----- T7...r -----

**B1pl**

BGT07\_T02a-pET32-DEST

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5' agcaataactagcataacccttggggcctctaaacgggtcttgaggggttttttgctgaaaggaggaac
o  ++++++|+++++|+++++|+++++|+++++|+++++|+++++|+++++|+++++|+++++|+++++|
3' tcgttattgatcgtattggggaaccccgagatttgcccagaactccccaaaaaacgactttcctccttg
o  _____ T7 Terminator _____
o
5' tataatccggat
o  ++++++|+++++|+
3' atataggccta
o

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6650

6661