

BGT10_T01b1-pET16-DEST

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 0 ++++++
 3' aagaacttctgctttcccgggagcactatgcgataaaaaatatccaattacagtactattattaccaaga

70

Zral
AatII

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 0 ++++++
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140

Sspl

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210

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280

Ap

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350

Ap

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420

Ap

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490

Ap

Scal

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560

Ap

PvuII

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630

Ap

BGT10_T01b1-pET16-DEST

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 0
 0
 0

700

Ap

PstI

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770

Ap

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840

Ap

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910

Ap

Bsal

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980

Ap

AhdI

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1050

Ap

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1120

Ap

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1190

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1260

Ori

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o
Lac I

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Lac I

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Lac I

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Lac I

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Lac I

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EcoNI

SphI

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BglII

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← T7 Promoter →

XbaI

BamI

NcoI

o
 5' aattgtgagcggataacaattcccctctagaataaattttgtttaactttaagaaggagatataccatgg 5320
 o
 3' ttaacactcgcctattgttaaggggagatctttattaaacaaattgaaattcttcctctatatgggtacc

— Lac O —

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1

BamI'

NdeI

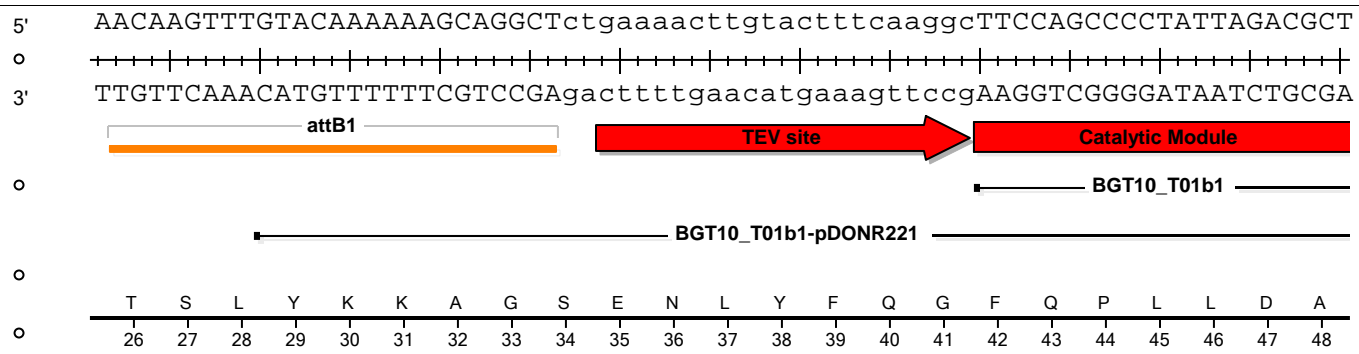
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His10-tag

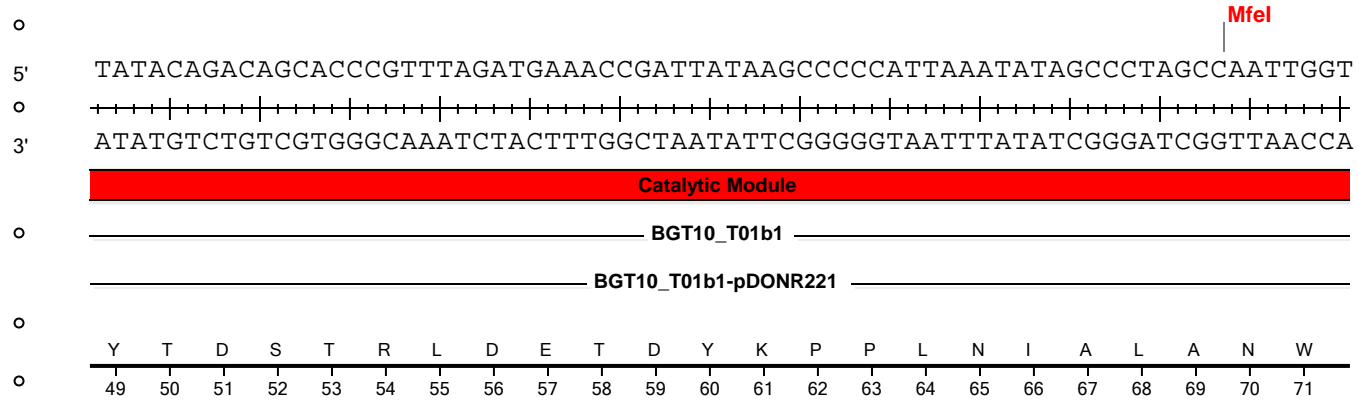
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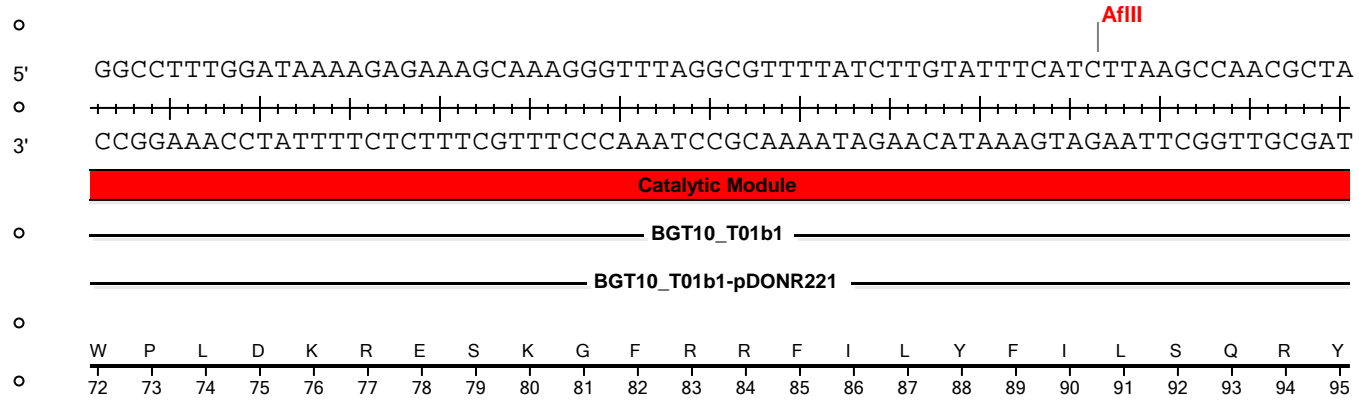
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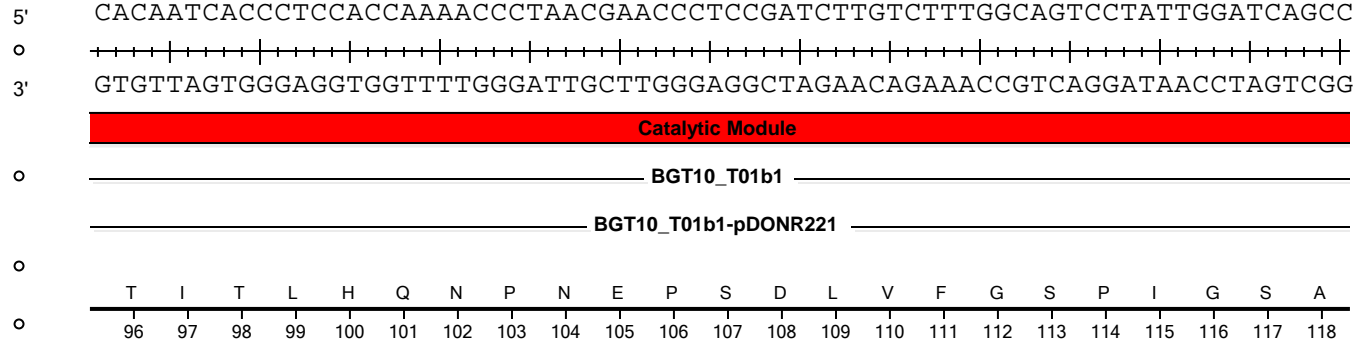
5460



5530



5600



5670

BGT10_T01b1-pET16-DEST

Agel

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 3' TCTTTT TAGGATAGGATAGTTTGTGATTTCCACAAAATGTGGCCACTTTTACTTCAGGGATTAAAGT

5740

Catalytic Module

BGT10_T01b1

BGT10_T01b1-pDONR221

R K I L S Y Q N T K R V F Y T G E N E V P N F
 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141

5' ATCTCTTTGATTACGCCATAGGCTTTGATGAATTGGACTTTAGAGATCGTTATTTGAGAATGCCTTTATA
 3' TAGAGAAACTAATGCGGTATCCGAACTACTTAACCTGAAATCTCTAGCAATAAACTCTTACGGAAATAT

5810

Catalytic Module

BGT10_T01b1

BGT10_T01b1-pDONR221

N L F D Y A I G F D E L D F R D R Y L R M P L Y
 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165

NheI

BmtI

5' TTACGCTAGCTTGCATTATAAAGCCGAGAGCGTGAATGACACCACCGCGCCCTACAAACTCAAAGACAAC
 3' AATGCGATCGAACGTAATATTTTCGGCTCTCGCACTTACTGTGGTGGCGGGATGTTTGAGTTTCTGTTG

5880

Catalytic Module

BGT10_T01b1

BGT10_T01b1-pDONR221

Y A S L H Y K A E S V N D T T A P Y K L K D N
 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188

5' AGCCTTTATGCTTTAAAAAGCCCTCCCATCATTTTAAAGAAAACCACCCTAATTTATGCGCAGTAGTGA
 3' TCGGAAATACGAAATTTTTTCGGGAGGGTAGTAAATTTCTTTTGGTGGGATTAAATACGCGTCATCACT

5950

Catalytic Module

BGT10_T01b1

BGT10_T01b1-pDONR221

S L Y A L K K P S H H F K E N H P N L C A V V
 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211

BGT10_T01b1-pET16-DEST

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6020

Catalytic Module

————— BGT10_T01b1 —————

————— BGT10_T01b1-pDONR221 —————

N D E S D P L K R G F A S F V A S N P N A P I R
 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235

5' GAACGCTTTCTATGACGCTTTAAATTCTATTGAGCCAGTTACTGGGGGAGGGAGCGTGAAAAACACTTTA
 0
 3' CTTGCGAAAGATACTGCGAAATTTAAGATAACTCGGTCAATGACCCCCTCCCTCGCACTTTTGTGAAAT

6090

Catalytic Module

————— BGT10_T01b1 —————

————— BGT10_T01b1-pDONR221 —————

N A F Y D A L N S I E P V T G G G S V K N T L
 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258

5' GGCTATAACGTCAAAAACAAGAGCGAGTTTTTAAGCCAATACAAATTCATCTGTGTTTTGAAAACACTC
 0
 3' CCGATATTGCAGTTTTTGTCTCGCTCAAAAATTCGGTTATGTTTAAGTTAGACACAAAACTTTTGTGAG

6160

Catalytic Module

————— BGT10_T01b1 —————

————— BGT10_T01b1-pDONR221 —————

G Y N V K N K S E F L S Q Y K F N L C F E N T
 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281

5' AAGGCTATGGCTATGTAACGTAAGAAAATCATTGACGCTTATTTTCAGCCACACCATTCCCATTTATTGGGG
 0
 3' TTCCGATACCGATAACATTGACTTTTTTAGTAACTGCGAATAAAGTCGGTGTGGTAAGGGTAAATAACCCC

6230

Catalytic Module

————— BGT10_T01b1 —————

————— BGT10_T01b1-pDONR221 —————

Q G Y G Y V T E K I I D A Y F S H T I P I Y W G
 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305

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6300

Catalytic Module

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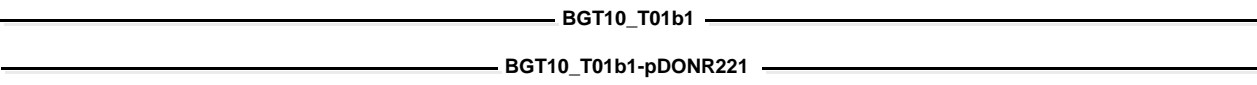
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BGT10_T01b1-pET16-DEST

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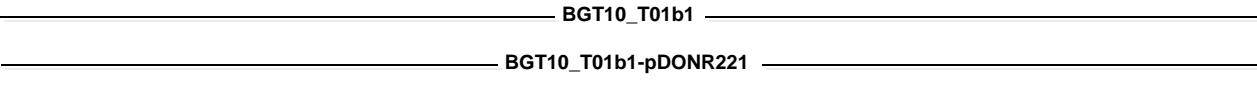
6370



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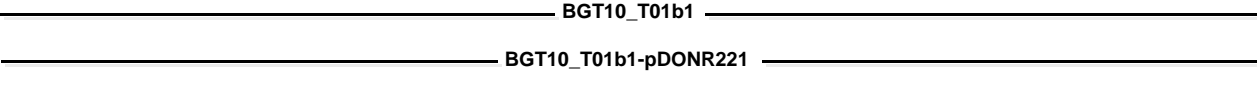
6440



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 3' ATTTTGCTAAAATCTTTTGCTGTGCTAGATAGTGCTATTGGGAAAGTAAAAGATAGCGCTAACTTACTC

6510



K T I L E N D T I Y H D N P F I F Y R D L N E
 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398

5' CCTTTAGTAGCTATTGATGATTGAGGGTTAATTATGATGATTTGAGGGTTAATTATGATGATTTGAGGG
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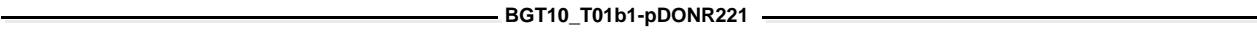
6580



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 3' AATTAATACTACTAACTCCCAATTAATACTACTAACTCCCAATTAATACTACTAACTCCCAATTAAT

6650



V N Y D D L R V N Y D D L R V N Y D D L R V N Y
 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445

