

# Primer3 Output

PRIMER PICKING RESULTS FOR pbota\_xformtest\_p

Template masking not selected  
Using mispriming library humrep\_and\_simple.txt  
Using 1-based sequence positions  
OLIGO                [start](#) [len](#)        [tm](#)        [gc%](#) [any\\_th](#) [3' th](#) [hairpin](#) [rep](#) [seg](#)  
LEFT PRIMER        1275    20    59.05    55.00    1.25    0.00    0.00 11.00 CTGGACAGACTGCACAAACC  
RIGHT PRIMER       1869    20    59.61    55.00    10.83    0.00    0.00 12.00 TGGCGCAGGTGATATGTAGG  
SEQUENCE SIZE: 3851  
INCLUDED REGION SIZE: 3851  
  
PRODUCT SIZE: 595, PAIR ANY\_TH COMPL: 0.00, PAIR 3'\_TH COMPL: 0.00  
TARGETS ([start](#) [len](#)  
EXCLUDED REGIONS ([start](#) [len](#)

1 AGCCAGGCGATGCTGGAAAACTGATGCAGACTCGCGTGCCTAACCTGCTGGCACAAACCG

61 GCAGCGGGGGCAACGGAAGCTAAACCTGCACCTGCACCTGCACCTGCACCTGCA

121 CCGCAAGCTGATACTCCGGCAGCCGCGCCGCAAGGAGAATAACCATGCTAAAAGTGTAT

181 TGCTCTTTGTTTTGCTGATTGCGGGGATCGTGGTTGGCCCGATGATTGCCGGTCATCAGG

241 GGTACGTATTGATTGAGACCGACAACCTACAATATCGAAACCAGCGTCACTGGCCTGGCGA

301 TTATTTTGATTCTGGCGATGGTAGTGCTGTTTGCCATTGAGTGGCTACTGCGGCGGATCT

361 TCCGCACAGGCGCACACACCCGTGGGTGGTTTGTCTGGACGTAAGCGTCGCCGTGCCCGTA

421 AGCAGACCGAACAGGCGCTGCTGAAACTAGCGGAAGGCGATTATCAGCAAGTTGAAAAGC

481 TGATGGCGAAAAATGCCGATCACGCTGAACAACCGGTGGTGAAGTATCTGCTGGCTGCCG

541 AAGCCGCGCAACAACGCGGTGATGAAGCACGCGCCAACCAACATCTGGAACGCGCAGCGG

601 AGCTGGCCGGCAACGACACAATTCCGGTAGAAATCACCCGTGTACGTCTGCAACTGGCCC

661 GTAATGAAAACCATGCTGCACGCCACGGCGTGGATAAGCTGCTGGAAGTTACGCCACGCC

721 ATCCGGAAGTATTACGTCTGGCGGAACAGGCGTATATCCGCACTGGTGCATGGAGTTCGC

781 TGCTGGATATCATCCCATCAATGGCGAAAGCCACGTTGGCGATGAAGAACATCGTGCAA

841 TGCTGGAACAACAGGCATGGATTGGCCTGATGGATCAGGCGCGTGCCGATAACGGTAGCG

901 AAGGCTTGCGTAACTGGTGGAAAAACAAAGCCGGAACGCGTCATCAGGTAGCGTTGC

961 AGGTGGCAATGGCGGAACATCTTATTGAATGTGACGATCATGATACTGCCCAGCAAATTA

1021 TCATCGACGGCTGAAACGCCAGTATGACGATCGCCTACTGCTGCCGATCCCGCGTCTGA

1081 AACCAATAACCCGGAGCAGCTGGA AAAAAGTGTGCGCCAACAGATCAA AAACGTGGGC

1141 ATCGCCCGTTGTTGTGGAGCACACTGGGT CAGTCGTGATGAAGCACGGCGAATGGCAGG

1201 AAGCATCGCTCGCCTTCCGCGCGGCGCT GAAACAACGTCCGGACGCC TACGATTACGCAT

1261 GGCTTGCCGACGCGCTGGACAGACTGCACA AACAGAAGAAGCTGCAGCGATGCGCCGCG  
 >>>>>>>>>>>>XXXXXXXXXXXXXXX

1321 ACGGTTTGATGTTAACGTTGCAGAACACC GCCACAGTAGTTCTTTCTACCCGGAGGC  
 XXXXXXXXXXXXXXXXXXXXXXXXXXXX\*\*\*\*\*

1381 AAGCACCTCCGGGACCTTTCTGATACATAAAAA ACGCCTGCTCTTATTACGGAGCAGGC  
 \*\*\*\*\*

1441 GTTA AACAGGTCTGTATGACAACAAGTGGTGCTT CAACGTTGTGTCCATGGTGT  
 \*\*\*\*\*

1501 CTGATGAGGCATAAGCGCATCTGT CAGTGGACGATAAGCACCGTAAACGGCTCTGCGTC  
 \*\*\*\*\*

1561 ATTCCGGAGTTTATGAGGCACTAAGGCGAACATA AGAGATAGAATGAGCATCTACTCGTT  
 \*\*\*\*\*

1621 TATTATGCCACAGAGAACTGGGAAAATAACATCCC TTAACTTGTATGAGATAATTCTG  
 \*\*\*\*\*

1681 TAATCCTCTTTGCTTCTCTGAGTAATAACTT CCTGAGTGAATATTTCTCTGCGCACGATT  
 \*\*\*\*\*

1741 CTACACATATATATAATGAATAATAAAATT CATTAATTAATACATATATATTAATTGC  
 \*\*\*\*\*XX

1801 CGTTAAA ACTAAAAACAGCATCAATAATCAACGCGATATAACATACCCGCTACATATCA  
 XXXXXXXXXXXXXXXXXXXXXXXXXXXX<<<<<<<<

1861 CCTGCGCCAGAGGTAGGATTGAAAACGCTCTCTCTGATTTTCCAATTCATTTTCTGGATAA  
 <<<<<<<<

1921 ATAATAATTTATTTTCATCACTATTATTTATGCAATCATCTGT CAGGGAGAGGGATCT

1981 CAATTATCAATTATCAATGCTTAATTACGTCAACATTTTGACGACATGAAACCGGAGCAT

2041 TTTGCATGGAATTTTCGTTTTACCCAAACTTCTTGTTGTAGCTGT CGCCGCCGCTCTTC

2101 CACTCATGGCCAACGCAGCAGATACCCCGTCAACCGCC ACCGCACGCAAAGGCTTTGCCG

2161 GATACGATCACCCAAACAGTATCTGGTTAAACCGGCGACCACTATTGCCGACAACATGA

2221 TGCCGGTGATGCAGCATCTGCACAAGACAAAGAAAC CCAGCAGAAGCTGGCAGAACTTG

2281 AGAAAAAAACCGGTAAGAAACCGAACGTGGTTGTTTTCTTGCTGGATGATGTGGGCTGGA

2341 TGGATGTTGGCTTTAACGGCGGCGGCGTGGCGGTGGGTAACCTACACCAGATATCGACG

2401 CCGTTGCCAGCCAGGGGCTGATTTTAAC TTCGCGTATTCTCAACCGAGTTCTTCCCCAA

2461 CCCGCGCCACGATTCTTACCGGACAATACTCCATCCACCACGGCATTCTGATGCCGCCAA

2521 TGTACGGGCAACCGGGCGGTCTGCAAGGGTTAACCACTCTGCCGCAGTTGCTGCACGATC

2581 AGGGCTACGTCACTCAGGCCATCGGGAAATGGCATATGGGGGAAAACAAAGAGTCGCAGC

2641 CGCAGAACGTTGGCTTTGATGATTTCCGCGGCTTTAACTCGGTATCCGATATGTATACCG

2701 AATGGCGTGATGTTACGTCAACCCGGAAGTCGCCCTGAGCCCGGATCGTTCTGAATACA

2761 TCCAAAACTGCCGTTCAAGCAAGATGACGTTTCATGCCGTGCGCGGCGGTGAACAGGAAG

2821 CCATTGCCGACATTACGCCGAAATATATGGAAGACCTGGATCAACGCTGGATGGAATATG

2881 GCGTTAAGTTCCTCGACAAGATGGCGAAGAGCGATAAGCCTTTCTTCTCTACTACGGCA

2941 CTCGCGGCTGTCACTTCGATAACTACCCAAATGCGAAATATGCGGGTAGCTCTCCGGCGC

3001 GCACCTCTTACGGCGACTGCATGGTGGAGATGAACGATATCTTCGCCAATCTGTATAAAG

3061 CACTGGAGAAAAACGGTCAGCTTGATAACACGCTGATTGTGTTACCTCTGATAACGGTC

3121 CGGAAGCCGAAGTTCGCGCCACGGTCGCACGCCGTTCCGCGGTGCGAAAGTTCTACAT

3181 GGGAAAGCGGCGTTCTGTGTGCCAACCTTCGTTTACTGGAAAGGCATGATCCAACCGCGTA

3241 AATCTGACGGCATTGTGATCTGGCGGATCTCTTCCCTACGGCGCTGGATCTGGCGGGGC

3301 ATCCTGGGGCGAAAGTAGCGAATTTAGTACCGAAAACCACCTTTATCGATGGTGTGGACC

3361 AGACATCTTTCTTCTGGGAACAAATGGTCAGTCTAACCGTAAGGCCGAGCACTACTTCC

3421 TCAACGGTAACTTTCTGCTGTGCGTATGGATGAGTTCAAGTATCACGTCCTGATCCAGC

3481 AACCGTACGCGTATACCCAGAGCGGGTATCAGGGTGGATTACCGGCACAGTAATGCAAA

3541 CGGCGGGATCGTCGGTGTTTAACCTGTACACCGATCCGCAGGAAAGCGACTCCATCGGCG

3601 TGCGCCATATTCCGATGGGTGTACCGCTACAGACCGAAATGCACGCGTATATGGAGATCC

3661 TGAAAAAATATCCACCACGCGCGCAGATTAAATCTGACTAAGCCGGCGCTATCGCTGAGA

3721 TCTGCCTTTGCCGGATGCGATGCTGACGCATCTTATCCAGCCTACAGAACGCTGCAATTT

3781 ATTGAATTTGCAAGGATTGTAGGCCGATAAGGCGTTCACGCCGCATCCGGCAATCAACC

3841 GCAGGCGGCCG

KEYS (in order of precedence):

XXXXXX excluded region

\*\*\*\*\* target

>>>>> left primer

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7/22/23, 10:59 AM
Primer3 Output (primer3_results.cgi release 4.1.0)

<<<<<< right primer

ADDITIONAL OLIGOS
    start len tm gc% any_th 3' th hairpin rep seq
1 LEFT PRIMER 1176 20 59.97 55.00 16.62 2.80 0.00 9.00 CTGATGAAGCACGGCGAATG
  RIGHT PRIMER 1864 20 57.85 55.00 0.00 0.00 0.00 10.00 CAGGTGATATGTAGGCGGTG
  PRODUCT SIZE: 689, PAIR ANY_TH COMPL: 0.00, PAIR 3'_TH COMPL: 0.00
2 LEFT PRIMER 1226 19 59.43 57.89 25.28 25.28 0.00 9.00 GCTGAAACAACGTCCGGAC
  RIGHT PRIMER 1883 20 59.82 55.00 0.00 0.00 0.00 10.00 TTCAATCCTACCTCTGGCGC
  PRODUCT SIZE: 658, PAIR ANY_TH COMPL: 0.00, PAIR 3'_TH COMPL: 0.00
3 LEFT PRIMER 1223 18 59.75 61.11 7.64 0.00 0.00 11.00 GGCGCTGAAACAACGTCC
  RIGHT PRIMER 1862 21 58.31 52.38 0.00 0.00 0.00 10.00 GGTGATATGTAGGCGGTGATG
  PRODUCT SIZE: 640, PAIR ANY_TH COMPL: 0.00, PAIR 3'_TH COMPL: 0.00

Statistics
      con too in in not no tm tm high high high high high high
      sid many tar excl ok bad GC too too any_th 3'_th hair- lib poly end
      ered Ns get reg reg GC% clamp low high compl compl pin sim X stab ok
Left 4792 0 0 56 0 554 551 648 1753 4 0 64 1 59 0 1102
Right 7438 0 0 38 0 1132 903 1533 1832 0 0 1 0 42 0 1957
Pair Stats:
considered 2111881, unacceptable product size 2111877, primer in pair overlaps a primer in a better pair 37215, ok 4
libprimer3 release 2.4.0
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(primer3\_results.cgi release 4.1.0)