



1 GGATCTGCATCGCTCCGGTGCCGTCAGTGGGAGAGCGCACATGCCACAGTCCCGAGAAGTTGGGGGAGGGTTCGGCAATTGAACGGGTGCCTA
101 GAGAAGGTGGCGCGGGTAAACTGGGAAAGTGATGTCGTGACTGGCTCCGCCTTTTTCCCGAGGGTGGGGGAGAACCCTATATAAGTGCAGTAGTCGCC
201 GTGAACGTTCTTTTTCGCAACGGGTTTGCCGCCAGAACACAGCTGAAGCTTCAGAGGGCTCGCATCTCTCTTCACGCGCCCGCCCTACCTGAGGCC
301 GCCATCCACGCGGTTGAGTCCGCTTTCGCCGCTCCCGCTGTGGTGCTCTGAAGTGCCTCCGCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC
401 GGGCCTTTGTCGGCGCTCCCTTGAGCCTACCTAGACTCAGCGGGCTCTCCACGCTTTGCCTGACCTGCTTGTCTCAACTCTACGCTTTTGTTCGTTT

Agel (552) NcoI (568)

501 TCTGTTCTGCGCCGTTACAGATCCAAGCTGTGACCGCGCTACCTGAGATCACCGGTAGGAGGGCCACCATGGAGCCGCTGGTACCTGGTGGTCCCC
1 M E P L V T W V V P
601 CTCCTTCTCTTCTCTCTGCTGTCCAGGAGGGCGCTGCTGAGAACCAGTGAAGTGTGTTTTTCAGGACCCGATATCCGGATGCAGACTCAGGCTCGG
11 L L F L F L L S R Q G A A C R T S E C C F Q D P P Y P D A D S G S
701 CCTCGGGCCCTAGGGACCTGAGATGCTATCGGATATCCAGTGTGTTACGAGTGTCTCTGGCAGTATGAGGGTCCCACAGCTGGGGTCCAGCCACTTCT
44 A S G P R D L R C Y R I S S D R Y E C S W Q Y E G P T A G V S H F L
801 GCGGTGTTGCCTTAGCTCCGGGCGCTGCTGCTACTTCCGCCCGGCTCAGCCACCAGGCTGCAGTTCTCCGACCAGGCTGGGGTGTCTGTGCTGTACT
77 R C C L S S G R C C Y F A A G S A T R L Q F S D Q A G V S V L Y T
901 GTCACACTGGGTGGAATCCTGGCCAGGAACCAGACAGAGAAGTCTCTGAGGTCAACCCTGCAGCTCTACAACCTAGTAAATATGAGCCTCCTCTGG
111 V T L W V E S W A R N Q T E K S S P V C V P P E N P P Q P Q V R F
1001 GAGACATCAAGGTGTCCAAGTTGGCCGGCAGCTGCGTATGGAGTGGGAGACCCCGGATAACAGGTTGGTGTGAGGTGCAGTTCGGGACCCGGACACC
144 G D I K V S K L A G Q L R M E W E T P D N Q V G A E V Q F R H R T P

NcoI (1107)

1101 CAGCAGTCCATGGAAGTTGGGCGACTGCGGACCTCAGGATGATGATACTGAGTCTGCCTCTGCCCTGGAGATGAATGTGGCCAGGAATTCCAGCTC
177 S S P W K L G D C G P Q D D D T E S C L C P L E M N V A Q E F Q L
1201 CGACGACGGCGGCTGGGAGCCAAGGAAGTTCTGGAGCAAGTGGAGCAGCCCTGTGTGCTTCCCCCTGAAAACCCCCACAGCCTCAGGTGAGATTCT
211 R R R R L G S Q G S S W S K W S S P V C V P P E N P P Q P Q V R F
1301 CGGTGGAGCAGCTGGCCAGGATGGGAGGAGCGGCTGACCTGAAAGAGCAGCAACCCAGCTGGAGCTTCCAGAAGGCTGTCAAGGGCTGGCGCTGG
244 S V E Q L G Q D G R R R L T L K E Q P T Q L E L P E G C Q G L A P G
1401 CACGGAGTCACTTACCGACTACAGCTCCACATGCTGTCTGCCGTAAGGCCAAGGCCACCAGGACCTGCACCTGGGGAAGATGCCCTATCTCTCG
277 T E V T Y R L Q L H M L S C P C K A K A T R T L H L G K M P Y L S
1501 GGTGCTGCCTACAACGTGGTGTCTCCTCGAACCAATTTGGTCTGGCCTGAACCAGACGTGGCACCATTCTGCCGACACCCACAGAACCAAGTGG
311 G A A Y N V A V I S S N Q F G P G L N Q T W H I P A D D H T H T E P V
1601 CTCTGAATATCAGCGTGGAAACCAACCGGACCACTGATTGGCCAGCCCGGCTCAGAGCAGCTATTGCATTGAATGGCAGCCTGTGGGCCAGGA
344 A L N I S V G T N G T T M Y W P A R A Q S T T Y C I E W Q P V G Q D
1701 CCGGGCCTTGGCACCTGCAGCCTGACTGCGCCGAAGACCCGGATCCGGCTGGAATGGCAACCTACAGCTGGAGTGCAGAGTCTGGGCAATGGGGCAG
377 R G L A T C S L T A P Q D P D P A G M A T Y S W S R E S G A M G Q
1801 GAAAAGTGTACTACATTACCATCTTTGCCTCTGCGCACCCCGAGAAGCTCACCTTGGTGTACGGTCTGTCCACCTACCACTTTGGGGGCAATGCCT
411 E K C Y Y I T I F A S A H P E K L T L W S T V L S T Y H F G G N A
1901 CAGCAGTGGGACACCGCACCACGTCTCGGTGAAGAATCATAGCTTGGACTGTGTCTGTGGACTGGGACCATCCTGTGAGCAGCTGTCCCGGCT
444 S A A G T P H V S V K N H S L D S V S V D W A P S L L S T K Y E P G V
2001 CCTAAAGGATGTTGTCGCTGCCGAGATGAAGACAGCAAAACAGGTGTGAGAGTCCCGTGCAGCCACAGAGACCAAGTTACCTCAGTGGCCTG
477 L K E Y V V R C R D E D S K Q V S E H P V Q P T E T Q V T L S G L
2101 CGGGTGGTGTAGCTACAGGTGCAGGTGCGAGCAGACAGCGTGGCTGAGGGGTGTCTGGAGCCAGCCAGCGCTTTCAGCATCGAAGTGCAGGTTT
511 R A G V A Y T V Q V R A D T A W L R G V W S Q P Q R F S I E V Q V
2201 CTGATTGGCTCATCTTCTCGCCTCCCTGGGGAGCTTCTGAGCATCCTTCTCGTGGGCGCTTGGCTACCTTGGCCTGAACAGGGCCGACGGCACCT
544 S D W L I F F A S L G S F L S I L L V G V L G Y L G L N R A A R H L
2301 GTGCCCGCTGCCACACCTGTGCCAGTCCGCCATTGAGTTCCTGGAGGGAAGGAGACTTGGCAGTGGATCAACCCAGTGGACTTCCAGGAAGAG
577 C P P L P T P C A S S A I E F P G G K E T W Q W I N P V D F Q E E
2401 GCATCCCTGCAGGAGCCCTGGTGGTAGAGATGCTCTGGGACAAAGCGAGAGGACTGAGCCTCTCGAGAAGACAGAGCTACCTGAGGGTGGCCCTGAGC
611 A S L Q E A L V V E M S W D K G E R T E P L E K T E L P E G A P E

NheI (2567)

2501 TGGCCTGGATACAGAGTTGTCCTTGGAGGATGGAGACAGGTGCAAGGCCAAGATGTGATCGTTGAGGCTAGTGGCCAGACATGATAAGATACATTGAT
644 L A L D T E L S L E D G D R C K A K M
2601 GAGTTTGGACAAACCACAACCTAGAATGCAGTGAATAAATGCTTTATTTGTGAAATTTGTGATGCTATTGCTTTATTTGTAACCATTATAAGCTGCAATA
2701 AACAAAGTTAAACAACAACAAATTGCATTATTATGTTTCAGGTTTCAGGGGAGGTGTGGGAGGTTTTTAAAGCAAGTAAACCTCTACAAATGTGGTAT
2801 GGAATTCTAAATACAGCATAGCAAACCTTAACTCCAAATCAAGCCTCTACTTGAATCCTTTTCTGAGGGATGAATAAGGCATAGGCATCAGGGGCTG
2901 TTGCCAATGTGCATTAGCTGTTTGCAGCCTCACCTTCTTCATGGAGTTAAGATATAGTGTATTTTCCCAAGTTTGAAGTACTCTTCAATTTCTTTAT
3001 GTTTTAAATGCACTGACCTCCACATTCCCTTTTTAGTAAATATTAGAAATAATTAATACATCATTGCAATGAAAATAAATGTTTTTATTAGGCA
3101 GAATCCAGATGCTCAAGGCCCTCATAATATCCCCAGTTTAGTAGTTGGACTTAGGGAACAAAGGAACCTTAAATAGAAATTTGGACAGCAAGAAAGCGA

