



1 GGATCTGCATCGCTCCGGTGCCCGTCAGTGGGAGAGCGCACATGCCACAGTCCCGAGAAGTTGGGGGAGGGGTCGGCAATTGAACGGGTGCCTA
101 GAGAAGGTGGCGCGGGGTAAACTGGGAAAGTGTGCTGTACTGGCTCCGCCTTTTTCCCGAGGGTGGGGGAGAACCGTATATAAGTGCAGTAGTCGCC
201 GTGAACGTTCTTTTTCGCAACGGGTTTGCCGCCAGAACACAGCTGAAGCTTCAGAGGGCTCGCATCTCTCTTCACGCGCCCGCCCTACCTGAGGCC
301 GCCATCCACGCCGGTTGAGTCGCGTTCTGCCGCTCCCGCTGTGGTGCTCCTGAAGTGCCTCCGCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC
401 GGGCCTTTGTCCGGCGCTCCCTTGAGCCTACCTAGACTCAGCCGGCTCTCCACGCTTTGCTGACCTGCTTGTCTCAACTCTACGCTTTTGTTCGTTT

BspLU111 (560)

Agel (552)

501 TCTGTTCTGCGCCGTTACAGATCCAAGCTGTGACCGCGCCTACCTGAGATCACCGGTCAACATGTTCAAGACCAAACGATCTGCGCTCGTCCGGCGTCT
1 M F R T K R S A L V R R L
601 CTGGAGGAGCCGTGCGCCCGCGGGCAGGACGAGGAGGAGGGCGAGGGGAGGTGGAGGAGGAGGCGAGCTGCGGGGAGAAGGGGCGACGGACAGCCGA
13 W R S R A P G G E D E E E G A G G G G G G G E L R G E G A T D S R
701 GCGCATGGGGCCGGTGGCGGGCGCCCGGCGAGGCTGGATGCTGCCTGGGCAAGGCGGTGCGAGGTGCCAAAGGTCAACACCATCCCCACCCGCCAGCCG
47 A H G A G G G G P G R A G C C L G K A V R G A K G H H H P H P P A
801 CGGCGCGCGCGCGGGGGCGCCGAGGCGGATCTGAAGGCGCTCAGCACTCGGTGCTCAAGAACTGAAGGAGGCGCAGCTGGAGCTGCTGTCTCA
80 A G A G A A G G A E A D L K A L T H S V L K K L K E R Q L E L L L Q
901 GGCCGTGGAGTCCCGCGCGGGACGCGCACCGCGTGCCTCCTGCTGCCGGCGCGCTGGACTGCAAGCTGGGCGCGGGGCGCCCGCGGCGCGCAGCCT
113 A V E S R G G T R T A C L L L P G R L D C R L G P G A P A G A Q P
1001 GCGCAGCCGCCCTCGTCTACTCGTCCCTCCTGCTGTGCAAAGTGTTCAGGTGGCCGGATCTCAGGCATTCTCGGAAGTCAAGAGGCTGTGTTGCT
147 A Q P P S S Y S L P L L L C K V F R W P D L R H S S E V K R L C C
1101 GTGAATCTTACGGGAAGATCAACCCCGAGCTGGTGTGCTGCAACCCCATCACCTTAGCCGACTCTGCGAACTAGAGTCTCCCCCTCCTTACTCCAG
180 C E S Y G K I N P E L V C C N P H H L S R L C E L E S P P P P Y S R
1201 ATACCCGATGGATTTTCTCAAACCAACTGCAGACTGTCAGATGCTGTGCCTTCTCCGCTGAAACAGGGGGAACGAATTATCTGGCCCTGGGGGCTT
213 Y P M D F L K P T A D C P D A V P S S A E T G G T N Y L A P G G L
1301 TCAGATCCCAACTTCTTCTGGAGCCTGGGATCGGTACACTGCTGCGTGGTGGCATACTGGGAGGAGAAGACGAGAGTGGGAGGCTTACTGTGTCC
247 S D S Q L L L E P G D R S H W C V V A Y W E E K T R V G R L Y C V
1401 AGGAGCCCTCTGGATATCTTCTATGATCTACCTCAGGGGAATGGCTTTGCTCGGACAGCTCAATTTCGGACAACAAGAGTCAAGTGGTGCAGAAGGT
280 Q E P S L D I F Y D L P Q G N G F C L G Q L N S D N K S Q L V Q K V
1501 GCGGAGCAAAATCGGCTGCGGCATCCAGCTGACGCGGGAGGTGGATGGTGTGGGTGTAACAACCGCAGCAGTTACCCCATCTTATCAAGTCCGCCACA
313 R S K I G C G I Q L T R E V D G G V W Y N R S S Y P I F I K S A T
1601 CTGGACAACCCGGACTCCAGGACGCTGTTGGTACACAAGGTGTTCCCGGTTTCTCCATCAAGGCTTTCGACTACGAGAAGGCGTACAGCCTGCAGCGGC
347 L D N P D S R T L L V H K V F P G F S I K A F D Y E K A Y S L Q R
1701 CCAATGACCACGAGTTTATGACGACGCGTGGACGGGCTTACCGTGCAGATCAGCTTTGTGAAGGGTGGGGCCAGTGTACACCCGCCAGTTCATCAG
380 P N D H E F M Q Q P W T G F T V Q I S F V K G W G Q C Y T R Q F I S

NheI (1878)

1801 CAGCTGCCCGTGTGGTGTAGAGTTCATCTTCAACAGCCGGTAGCCGCTGCGGAGGGGACAGAGCGTGAGCTGAGCAGGCTAGCTGGCCAGACATGATAA
413 S C P C W L E V I F N S R •
1901 GATACATTGATGATTTGGACAAACCACAAC TAGAATGCAGTGAAAAAATGCTTTATTTGTGAAATTTGTGATGCTATTGCTTTATTTGTAACCATTAT
2001 AAGCTGCAATAAACAAGTTAACAACAACAATTGCATTCATTTTATGTTTCAGGTTTCAGGGGAGGTGTGGGAGTTTTTTAAAGCAAGTAAACCTCTAC
2101 AAATGTGGTATGGAATTCTAAAATACAGCATAGCAAACTTTAACCTCAAATCAAGCCTCTACTTGAATCCTTTTCTGAGGGATGAATAAGGCATAGGC
2201 ATCAGGGGCTGTTGCCAATGTGCATTAGCTGTTTGACGCTCACCTTCTTTCATGGAGTTAAGATATAGTGTATTTCCCAAGGTTTGAAGTACTCTT
2301 CATTCTTTATGTTTTAAATGCACTGACCTCCACATTCCTTTTTAGTAAAAATTCAGAAATAATTTAAATACATCATTGCAATGAAAATAAATGTTT
2401 TTTATTAGGCAGAATCCAGATGCTCAAGGCCCTTCATAATATCCCCAGTTTAGTAGTTGGACTTAGGGAACAAGGAACCTTTAATAGAATTTGGACAG
2501 CAAGAAAGCGAGCTTCTAGCTTTAGTTCCTGGTGTACTTGAGGGGATGAGTTCCTCAATGGTGGTTTTGACCAGCTTGCCATTCTCATCTCAATGAGCACA
141 • N R T Y K L P I L E E I T T K V L K G N M E I L V
2601 AAGCAGTCAGGAGCATAGTCAGAGATGAGCTCTCTGCACATGCCACAGGGGCTGACCACCTGATGGATCTGTCCACCTCATCAGAGTAGGGGTGCCTGA
114 F C D P A Y D S I L E R C M G C P S V V R I S R D V E D S Y P H R V
2701 CAGCCACAATGTTGCTCAAGCTTCTGCCGTTGCTCACAGCAGACCAATGGCAATGGCTTCAGCAGACAGCAGTACCCTGCCAATGTAGGCCTCAAT
81 A V I T D F D K Q G N S V A S G I A I A E A C V T V R G I Y A E I
2801 GTGGACAGCAGAGATGATCTCCCGAGTCTGGTCTGATGGCCGCCCGACATGGTGTGTTGTCTCATAGAGCATGGTGTCTCTCAGTGGCGACC
48 H V A S I I E G T K T R I A A G V H H K N D E Y L M T I K E T A V
2901 TCCACGACTCCAGATCTGCTGAGAGATGTTGAAGGTCTTCAATGGTGGCCCTCTATAGTGAAGTCTATTATACTATGCCGATATACTATGCCGATGAT
14 E V L E L D Q Q S I N F T K M
3001 TAATTGTCAAACAGCGTGGATGGCGTCTCCAGCTTATCTGACGGTCTACTAAACGAGCTCTGCTTATATAGACCTCCACCGTACACGCCTACCGCCCA
3101 TTTGCTCAATGGGGCGGAGTTGTTACGACATTTGGAAAGTCCCGTTGATTTACTAGTCAAAAACAACTCCCATGACGCTCAATGGGGTGGAGACTTGG

3201 AAATCCCCGTGAGTCAAACCGCTATCCACGCCATTGATGTACTGCCAAAACCGCATCATCATGGTAATAGCGATGACTAATACGTAGATGTACTGCCAA
3301 GTAGGAAAGTCCATAAGGTCATGTACTGGGCATAATGCCAGGCGGGCCATTTACCGTCATTGACGTCAATAGGGGGCGTACTTGGCATATGATACACTT
3401 GATGTACTGCCAAGTGGGCAGTTTACCGTAAATACTCCACCCATTGACGTCAATGGAAAGTCCCTATTGGCGTTACTATGGGAACATACGTCAATTATTGA
3501 CGTCAATGGGCGGGGTCGTTGGGCGGTCAGCCAGGCGGGCCATTTACCGTAAGTTATGTAACGCCTGCAGGTTAATTAAGAACATGTGAGCAAAAGGCC
3601 AGCAAAAGGCCAGGAACCGTAAAAAGCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGCATCACAAAATCGACGCTCAAGTCAGAG
3701 GTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTCCCCTGGAAGCTCCCTCGTGCCTCTCCTGTTCCGACCCTGCCGTTACCGGATACCTG
3801 TCCGCTTTCTCCCTTCGGAAGCGTGGCGTTTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTGTTGCTCCAAGCTGGGCTGTGTGC
3901 ACGAACCCCGTTCAGCCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGGTAAGACACGACTTATGCCACTGGCAGCAGCCAC
4001 TGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTCTTGAAGTGGTGGCCTAACTACGGCTACACTAGAAGAACAGTATTTGGTATC
4101 TCGCTCTGCTGAAGCCAGTTACCTTCGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCACCGCTGGTAGCGGTGGTTTTTTTGTGTTGCAAGC
4201 AGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTACGGGGTCTGACGCTCAGTGAACGAAAACCTCACGTTAAGGGATTTT
4301 GGTGCTAGTAAATTAACATTTAAATCAGCGGCCCAATAAAATATCTTTATTTTATTACATCTGTGTGTTGGTTTTTTGTGTGAATCGTAACTAA
4401 CATACGCTCTCCATCAAACAAAACGAAACAAAACAACTAGCAAATAGGCTGTCCCAGTGAAGTGCAGGTGCCAGAACATTTCTCTATCGAA

BspLU11I (3582)

