



1 GGATCTGCGATCGCTCCGGTGCCCGTCAGTGGGCGAGCGCACATGCCACAGTCCCGGAGAAGTTGGGGGAGGGGTCGGCAATTGAACGGGTGCCTA
101 GAGAAGGTGGCGCGGGGTAAACTGGGAAAGTGATGTCGTGACTGGCTCCGCCTTTTTCCCGAGGGTGGGGGAGAACCGTATATAAGTGCAGTAGTCGCC
201 GTGAACGTTCTTTTTCGCAACGGGTTTGCCGCCAGAACACAGCTGAAGCTTCGAGGGCTCGCATCTCTCTTCACGCGCCCGCCCTACCTGAGGCC
301 GCCATCCACGCCGGTTGAGTCGCGTTCTGCCGCTCCCGCTGTGGTGCCTCCTGAAGCTGCGTCCGCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC
401 GGGCCTTTGTCCGGCGCTCCCTTGAGCGCTACCTAGACTCAGCCGGCTCTCCACGCTTTGCCTGACCTGCTTGTCTCAACTCTACGCTTTGTTTCGTTT

BspHI (560)
AgeI (552)

501 TCTGTTCTGCGCCGTTACAGATCCAAGCTGTGACCGGGCCTACCTGAGATCACCGGTCATCATGAAGGTCTCCACCACTGCCCTTGCTGTTCTTCTCTG
1▶ M K V S T T A L A V L L C
601 TACCATGACACTCTGCAACCAAGTCTTCTCAGCGCCATATGGAGCTGACACCCGACTGCCTGCTGTTCTCTACAGCCGGAAGATTCCACGCCAATTC
13▶ T M T L C N Q V F S A P Y G A D T P T A C C F S Y S R K I P R Q F
701 ATCGTTGACTATTTGAAACCAGCAGCCTTTGCTCCAGCCAGGTGTCATTTTCTGACTAAGAGAAACCGGACAGATCTGCGCTGACTCCAAGAGACCT
47▶ I V D Y F E T S S L C S Q P G V I F L T K R N R Q I C A D S K E T

NheI (859)

801 GGGTCCAAGAATACATCACTGACCTGGAAGTGAATGCCTGAGAGTCTTGAGGCAGCGAGCTAGTGGCCAGACATGATAAGATACATTGATGAGTTTGG
80▶ W V Q E Y I T D L E L N A •
901 ACAAACCAACTAGAATGCAGTGAAAAAATGCTTTATTTGTGAAATTTGTGATGCTATTGCTTTATTTGTAACCATTATAAGTGAATAAACAAGTT

1001 AACAAACA AATTGCATTCA TTTTATGTTTCAGGTT CAGGGGAGGTGTGGGAGGTTTTTAAAGCAAGTAAACCTCTACA AATGTGGTATGGAATTCT
1101 AAAATACAGCATAGCAAACTTAACTCCAATCAAGCCTCTACTGAATCCTTTTCTGAGGGATGAATAAGGCATAGGCATCAGGGGCTGTGCCAAT
1201 GTGCATTAGCTGTTTGCAGCCTCACCTTCTTCATGGAGTTAAGATATAGTGTATTTCCCAAGGTTTGAAGTACTGCTTTCATTTCTTTATGTTTAAA
1301 TGCACTGACCTCCACATTCCCTTTTAGTAAATATTCAGAAATAATTTAAATACATCATTGCAATGAAAATAAATGTTTTTTATTAGGCAGAATCCAG
1401 ATGCTCAAGGCCCTTCATAATATCCCCAGTTAGTAGTTGGACTTAGGGAACAAAGGAACCTTTAATAGAAATTGGACAGCAAGAAAGCGAGCTTCTAG
1501 CTTAGTTCCTGGTGTACTTGAGGGGATGAGTTCCTCAATGGTGGTTTTGACCAGCTTGCCATTCATCTCAATGAGCACAAAGCAGTCAGGAGCATAGT
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 F C D P A Y D
1601 CAGAGTAGCTCTCGCACATGCCACAGGGGCTGACCACCCTGATGGATCTGTCCACCTCATCAGAGTAGGGTGCCTGACAGCCACAATGGTGTCAA
108▶ 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 A V I T D F
1701 GTCCTTCTGCCGTTGCTCACAGCAGACCCAATGGCAATGGCTTCAGCACAGACAGTACCCTGCCAATGTAGGCCTCAATGTGGACAGCAGAGATGATC
75▶ 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 H V A S I I
1801 TCCCCAGTCTTGGTCTGATGGCCGCCCGACATGGTCTTGTGTCCTCATAGAGCATGGTATCTTCTCAGTGGCGACCTCCACAGCTCCAGATCCT
41▶ 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 E V L E L D Q
1901 GCTGAGAGATGTTGAAGTCTTCATGCTGGCCCTCCTATAGTGAAGTCTTACTATGCGGATATACTATGCCGATGATTAATTGTCAAACAGCGTG
8▶ Q S I N F T K M
2001 GATGGCGTCTCCAGCTTATCTGACGGTTCACATAACGAGCTCTGCTTATATAGACCTCCACCGTACACGCCTACCGCCATTTGCGTCAATGGGGCGGA
2101 GTTGTACGACATTTTGGAAAGTCCCGTTGATTTACTAGTCAAACAAACTCCATTGACGTCAATGGGGTGGAGACTTGAAATCCCGTGAGTCAAAC
2201 CGCTATCCAGCCATTGATGACTGCCAAAACCGCATCATGGAATAGCGATGACTAATACGTAGATGACTGCCAAGTAGGAAAGTCCATAAGG
2301 TCATGACTGGGCATAATGCCAGGCGGGCATTACCCTGATTGACGTCAATAGGGGGGCTACTTGGCATATGATACACTTGTACTGCAAGTGGGC
2401 AGTTTACCGTAAATACTCCACCCATTGACGTCAATGGAAAGTCCCTATTGGCGTACTATGGGAACATACGTCAATTATTGACGTCAATGGCGGGGGTCCG
2501 TTGGGCGGTGAGCCAGGCGGGCATTACCCTGAAGTTATGTAACCGCTGAGGTTAATAAGAACATGTGAGCAAAGGCCAGCAAAGGCCAGGAACCG
2601 TAAAAGCGCCGTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGCATCAGAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGA
2701 CTATAAAGATACCAGGCGTTTTCCCTGGAAGCTCCCTCGTGCCTCTCTGTTCCGACCCTGCCGCTTACCGGATACCTGTCCGCTTTCTCCCTCCG
2801 GAAGCGTGGCGCTTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTCGTTCCGCTCAAGCTGGGCTGTGTGCACGAACCCCGTTAGCC
2901 CGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAAGTCCACCCGGTAAGACACGACTTATCGCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGA
3001 GCGAGGTATGTAGGCGGTGCTACAGAGTCTTGAAGTGGTGGCCTAACTACGGCTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAG
3101 TTACCTTCGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCCGCTGGTAGCGGTGTTTTTTGTTTGAAGCAGCAGATTACGCGAGAAA

3201 AAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGGTCTGACGCTCAGTGGAACGAAACTCACGTTAAGGGATTTTGGTCATGGCTAGTTAATTA

3301 ACATTTAAATCAGCGGCCGCAATAAAATATCTTTATTTTCATTACATCTGTGTGTTGGTTTTTGTGTGAATCGTAACTAACATACGCTCTCCATCAAAA

3401 CAAAACGAAACAAAACAACTAGCAAAATAGGCTGTCCCAGTGCAAGTGCAAGTGCCAGAACATTTCTCTATCGAA