



100

1 GGATCTGCGATCGCTCCGGTGCCCGTCAGTGGGAGAGCGCACATGCCACAGTCCCCGAGAAGTTGGGGGAGGGGTGGCAATTGAACGGGTGCCTA
101 GAGAAGGTGGCGCGGGGTAAACTGGGAAAGTGATGTCGTGACTGGCTCCGCCTTTTTCCCGAGGGTGGGGGAGAACCGTATATAAGTGCAGTAGTCGCC
201 GTGAACGTTCTTTTTCGCAACGGGTTTGCCGCCAGAACACAGCTGAAGCTTCAGAGGGCTCGCATCTCTCTTCACGCGCCCGCCCTACCTGAGGCC
301 GCCATCCACGCCGTTGAGTCCGCTTCTGCCGCTCCCGCTGTGGTGCCTCTGAAGTGCCTCCGCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC
401 GGGCCTTTGTCCGGCGCTCCCTTGAGCCTACCTAGACTCAGCCGGCTCTCCACGCTTTCCTGACCTGCTTGTCTCAACTCTACGCTTTTGTTCGTTT

BspHI (560)

AgeI (552)

501 TCTGTTCTGCGCCGTTACAGATCCAAGCTGTGACCGGGCGCTACCTGAGATCACCGGTATCATGAAGTGTGTTGCCGCTGGTCTGGTGTGCTGAG
1 M N C V C R L V L V V L S
601 CCTGTGGCCAGATACAGTGTGCCCCCTGGGCCACCACCTGGCCCCCTCGAGTTTCCCAGACCCTCGGGCCGAGCTGGACAGCACCGTGTCTGACC
13 L W P D T A V A P G P P P G P P R V S P D P R A E L D S T V L L T
701 CGCTCTCTCCTGGCGACACGCGGCAGCTGGTGCACAGCTGAGGGACAAATCCCAGCTGACGGGACCACAACCTGGATTCCCTGCCACCCTGGCCA
47 R S L L A D T R Q L A A Q L R D K F P A D G D H N L D S L P T L A
801 TGAGTGCAGGGGCACTGGGAGCTCTACAGTCCCAGGTGTGCTGACAAGGCTGCGAGCGGACCTACTGCTCTACCTGCGGCACGTGCAGTGGCTGCGCCG
80 M S A G A L G A L Q L P G V L T R L R A D L L S Y L R H V Q W L R R
901 GGCAGGTGGCTCTCCCTGAAGACCCTGGAGCCCGAGCTGGGACCCCTGCAGGCCGACTGGACCCGCTGCTGCGCCGGCTGCAGTCTCTGATGTCCCGC
113 A G G S S L K T L E P E L G T L Q A R L D R L L R R L Q L L M S R
1001 CTGGCCCTGCCCCAGCCACCCCGGACCCGCGCGCCCGCTGGCGCCCCCTCTCAGCTGGGGGGCATCAGGGCCGCCACGCCATCTGGGGG
147 L A L P Q P P P D P P A P P L A P P S S A W G G I R A A H A I L G

NheI (1193)

1101 GGCTGCACCTGACACTTGACTGGGCCGTGAGGGGACTGCTGCTGCTGAAGACTCGGCTGTGACCCGGGGCCAAAGCCACCACCGTCTTCCAGCTAGCT
180 G L H L T L D W A V R G L L L L K T R L •
1201 GGGCAGACATGATAAGATACATTGATGAGTTTGACAAACCACAAC TAGAATGCAGTGAAAAAATGCTTTATTTGTGAAATTTGTGATGCTATTGCTTT
1301 ATTTGTAACCATTATAAGCTGCAATAAACAAGTTAACAACAACAATTGCATTCATTTATGTTTCAGGTTTCAGGGGAGGTGTGGAGGTTTTTAAAGC
1401 AAGTAAACCTCTACAAATGTGGTATGGAATTTCAAATACAGCATAGCAAACTTTAACCTCAAATCAAGCCTCTACTTGAATCCTTTTCTGAGGGAT
1501 GAATAAGGCATAGGCATCAGGGGCTGTTGCCAATGTGCATTAGCTGTTTGCAGCCTCACCTTCTTTCATGGAGTTTAAAGATATAGTGTATTTCCCAAGG
1601 TTTGAAGTACTCTTCTTTCTTTATGTTTTAAATGCACTGACCTCCACATTCCTTTTTAGTAAATATTCAGAAATAATTTAAATACATCATTGCAA
1701 TGAAAATAAATGTTTTTATTAGGCAGAATCCAGATGCTCAAGGCCCTTCATAATATCCCCAGTTTAGTAGTTGGACTTAGGGAACAAGGAACCTTTA
1801 ATAGAAATGGACAGCAAGAAAGCGAGTCTTAGCTTTAGTTCCTGGTGTACTTGAGGGGATGAGTTCCTCAATGGTGGTTTTGACCAGTTGCCATT
141 • N R T Y K L P I L E E I T T K V L K G N
1901 ATCTCAATGAGCACAAGCAGTCAGGAGCATAGTCAGAGATGAGTCTCTGCACATGCCACAGGGGCTGACCACCCTGATGGATCTGTCCACCTCATCAG
119 M E I L V 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
2001 AGTAGGGTGCCTGACAGCCACAATGGTGTCAAAGTCTTCTGCCGTTGCTCACAGCAGACCCAATGGCAATGGCTTCAGCACAGACAGTACCCTGCC
86 Y P H R V 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
2101 AATGTAGGCCTCAATGTGGACAGCAGAGATGATCTCCCAAGTCTTGGTCTGATGGCCGCCCGACATGGTGTCTGTTGCTCATAGAGCATGGTATC
53 I Y A E I 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
2201 TTCTCAGTGGCGACTCCACCAGCTCCAGATCTGCTGAGAGATGTTGAAGTCTTATGGTGGCCCTCTATAGTGAGTCGTATTATACTATGCCGATA
19 K E T A V E V L E L D Q Q S I N F T K M
2301 TACTATGCCGATGATTAATTGTCAAACAGCGTGGATGGCGTCTCCAGCTTATCTGACGGTTCCTAAACGAGCTCTGCTTATATAGACCTCCACCCTA
2401 CACGCCTACCGCCATTTGCGTCAATGGGGCGGAGTTGTTACGACATTTTGGAAAGTCCCGTTGATTTACTAGTCAAACAAACTCCCATTGACGTCAAT
2501 GGGGTGGAGACTTGAAATCCCCGTGAGTCAAACCGCTATCCACGCCATTGATGACTGCCAAAACCGCATCATCATGGTAATAGCGATGACTAATACG
2601 TAGATGTAAGTCCAAAGTAGGAAAGTCCATAAGGTGATGACTGGGCATAATGCCAGCGGGCCATTTACCGTATTGACGTCAATAGGGGGCTACTTG
2701 GCATATGATACACTTGATGACTGCCAAGTGGGAGTTTACCCTAAATACTCCACCATTGACGTCAATGGAAAGTCCCTATTGGCGTTACTATGGGAAC
2801 ATACGTCAATTATTGACGTCAATGGGCGGGGCTGTTGGGCGGTGAGCCAGCGGGCCATTTACCGTAAGTTATGTAACGCTGCAGGTTAATTAAGAACA
2901 TGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAGAGCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGCATCACAAAATCG
3001 ACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTTCCCTGGAAGCTCCCTCGTGGCTCTCCTGTTCCGACCCTGCCG
3101 CTTACCGGATACCTGTCCGCTTTCTCCCTTCGGGAAGCGTGGCGTTTTCTCATAGCTCAGCTGTAGGTATCTCAGTTCGGTGTAGGTCGTTCCGCTCA

3201 AGCTGGGCTGTGTGCACGAACCCCGTTAGCCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGGTAAGACACGACTTATCGCC
3301 ACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGCGGTGCTACAGAGTCTTGAAGTGGTGGCCTAACTACGGCTACACTAGAAGA
3401 ACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAACACCGCTGGTAGCGGTGGTT
3501 TTTTGTGGCAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTCTACGGGGTCTGACGCTCAGTGGAACGAAAACCTC
3601 ACGTTAAGGGATTTTGGTCATGGCTAGTTAATTAACATTTAATCAGCGGCCGCAATAAAATATCTTTATTTTCATTACATCTGTGTGTTGGTTTTTGT
3701 GTGAATCGTAACTAACATACGCTCTCCATCAAAACAAAACGAAACAAAACAACTAGCAAAATAGGCTGTCCCAGTGCAAGTGCAGGTGCCAGAACATT
3801 TCTCTATCGAA