



1 GGATCTGCATCGCTCCGGTGCCGTCAGTGGCAGAGCGCACATGCCACAGTCCCGAGAAGTTGGGGGAGGGTTCGGCAATTGAACGGGTGCCTA
101 GAGAAGGTGGCGCGGGGTAAACTGGGAAAGTGTGCTGTACTGGCTCCGCCTTTTCCCGAGGGTGGGGGAGAACCGTATATAAGTGCAGTAGTCGCC
201 GTGAACGTTCTTTTTCGAACGGGTTTGCCGCCAGAACACAGCTGAAGCTTCAGAGGGCTCGCATCTCTCTTACGCGCCCGCCCTACCTGAGGCC
301 GCCATCCACGCCGTTGAGTCGCGTTCTGCCGCTCCCGCTGTGGTGCCTCTGAAGCTGCGTCCGCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC
401 GGGCCTTTGTCGGCGCTCCCTTGAGCCTACCTAGACTCAGCCGGCTCTCCACGCTTGCCTGACCTGCTTGTCAACTCTACGCTTTGTTTCGTTT

AgeI (552)

501 TCTGTTCTGCGCCGTTACAGATCCAAGCTGTGACCGGCGCTACCTGAGATCACCGGTCAACATGTGGAAGCCCATGCCCTCACCTCCAACATGAAAGC
601 CTCTGCAGCACTTCTGTGCTGTGCTCACAGCAGTCTTTAGCCCCAGGGGCTTGTCTACGCAGTGGGATTAATACTTCAACTACCTGCTGTACT
3▶ S A A L L C L L L T A A A F S P Q G L A Q P V G I N T S T T C C Y
701 AGATTTATCAATAAGAAAATCCCTAAGCAGAGGCTGGAGAGCTACAGAAGGACCACAGTAGCCACTGTCCCCGGGAAGCTGTAATCTTCAAGACAAAC
37▶ R F I N K K I P K Q R L E S Y R R T T S S H C P R E A V I F K T K
801 TGGACAAGGAGATCTGTGCTGACCCACACAGAAGTGGGTCCAGGACTTTATGAAGCACTGGACAAGAAAACCCAACTCCAAGCTTTGAACATTCAT
70▶ L D K E I C A D P T Q K W V Q D F M K H L D K K T Q T P K L •

NheI (925)

901 GACTGAACTGAAAACAAGCCATGACGCTAGCTGGCCAGACATGATAAGATACATTGATGAGTTTGGACAAACCACAACCTAGAATGCAGTGAAAAAATGC
1001 TTTATTTGTGAAATTTGTGATGCTATTGCTTTATTTGTAACCATTATAAGCTGCAATAAACAAGTTAACAACAACAATTGCATTCATTTTATGTTTCAGG
1101 TTCAGGGGAGGTGTGGGAGGTTTTTAAAGCAAGTAAACCTCTACAAATGTGGTATGGAATTCTAAAATACAGCATAGCAAACTTAACTCCAAT
1201 CAAGCCTCACTTGAATCCTTTTCTGAGGGATGAATAAGGCATAGGCATCAGGGGCTGTTGCCAATGTGCATTAGCTGTTGCAGCCTCACCTCTTTCA
1301 TGGAGTTAAGATATAGTGTATTTCCCAAGTTTGAAGTCTCTCATTCTTTATGTTTTAAATGCACTGACCTCCACATTCCCTTTTAGTAAAA
1401 TATTCAGAATAATTTAATACATCATTGCAATGAAAATAAATGTTTTTATTAGGCAGAATCCAGATGCTCAAGGCCCTTCATAATATCCCCAGTTTA
1501 GTAGTTGGACTTAGGGAACAAAGGAACCTTTAATAGAAATTGGACAGCAAGAAAGCGAGCTTCTAGCTTTAGTTCCTGGTGTACTTGAGGGGGATGAGTT
1601 CCTCAATGGTGGTTTTGACCAGCTTGCATTCTCAATGAGCACAAAGCAGTCAGGAGCATAGTCAAGATGAGCTCTCTGCACATGCCACAGGGGCT
130▶ E I T T K V L K G N M E I L V F C D P A Y D S I L E R C M G C P S
1701 GACCACCTGATGGATCTGTCCACCTCATCAGAGTAGGGTGCCTGACAGCCACAATGGTGTCAAAGTCTTCTGCCGTTGCTCACAGCAGACCCAATG
97▶ V V R I S R D V E D S Y P H R V A V I T D F D K Q G N S V A S G I
1801 GCAATGGCTTCAGCACAGACAGTACCCTGCCAATGTAGGCCAATGTGGACAGCAGAGATGATCTCCCCAGTCTTGGTCTGATGGCCGCCCGACAT
63▶ A I A E A C V T V R G I Y A E I H V A S I I E G T K T R I A A G V H
1901 GGTGCTTGTGCTCATAGAGCATGGTGTCTTCTAGTGGCAGCTCCACAGCTCCAGATCCTGCTGAGAGATGTTGAAGGTCTTCATGGTGGCCCT
30▶ H K N D E Y L M T I K E T A V E V L E L D Q Q S I N F T K M
2001 CCTATAGTGAGTCGATTATACTATGCCGATATACTATGCCGATGATTAATTGTCAAACAGCGTGGATGGCGTCTCCAGCTTATCTGACGGTTCATAA
2101 ACGAGCTCTGCTTATATAGACCTCCACCGTACACGCCTACCGCCATTTGCGTCAATGGGGCGGAGTTGTTACGACATTTTGGAAAGTCCCGTTGATTT
2201 ACTAGTCAAAACAACTCCATTGACGTCAATGGGGTGGAGACTTGGAAATCCCCGTGAGTCAAACCGCTATCCACGCCATTGATGTAAGTCCAAAAC
2301 GCATCATCATGTAATAGCGATGACTAATACGTAGATGTACTGCCAAGTAGGAAAAGTCCATAAAGTCATGTACTGGGCATAATGCCAGGCGGGCCATTT
2401 ACCGTCATTGACGTCAATAGGGGCGTACTTGGCATATGATACACTTGTACTGCAAGTGGGCGAGTTTACCGTAAATACTCCACCCATTGACGTCAA
2501 TGGAAAGTCCCTATTGGCGTTACTATGGGAACATACGTCAATTATTGACGTCAATGGGGGGGGTCTTGGGCGGTGAGCCAGGCGGGCCATTTACCGTAA
2601 GTTATGTAACGCTGCAGGTTAAITAAAGAACATGTGAGCAAAAGGCCAGAAAAGGCCAGGAACCGTAAAAAGGCCGCTTGGTGGCGTTTTTCCATAGG
2701 CTCCGCCCCCTGACGAGCATCAAAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTCCCTGGAAGCT
2801 CCCTCGTGCCTCTCCTGTTCCGACCCTGCCGTTACCGGATACCTGTCCGCTTTCTCCCTCGGGAAGCGTGGCGCTTTTCATAGCTCACGCTGTAG
2901 GTATCTCAGTTCCGGTGTAGGTCGTTCCGCTCAAGCTGGGCTGTGTGCACGAACCCCCGTTGAGCCGACCGTGGCGCTTATCCGGTAACTATCGTCTT
3001 GAGTCAAACCCGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTCTTGA
3101 AGTGGTGGCCTAACTACGGTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGAAAAAGAGTTGGTAGCTCTTGATC

3201 CGGCAAACAACCACCGCTGGTAGCGGTGGTTTTTTTTGTTTGCAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTCT
3301 ACGGGGTCTGACGCTCAGTGAACGAAAACACGTTAAGGGATTTTGGTCATGGCTAGTTAATTAACATTTAAATCAGCGGCCCAATAAAATATCTTT
3401 ATTTTCATTACATCTGTGTGTTGGTTTTTTGTGTGAATCGTAACTAACATACGCTCTCCATCAAAACAAAACGAAACAAAACAACTAGCAAATAGGCT
3501 GTCCCAGTGAAGTGCAGGTGCCAGAACATTTCTCTATCGAA