



1 GGATCTGCATCGCTCCGGTGCCCGTCAGTGGGAGAGCGCACATGCCACAGTCCCGGAGAAGTTGGGGGAGGGTGGCAATTGAACGGGTGCCTA  
101 GAGAAGGTGGCGCGGGTAAACTGGGAAAGTGATGTCGTGACTGGCTCCGCCTTTTTCCCGAGGGTGGGGGAGAACCGTATATAAGTGCAGTAGTCGCC  
201 GTGAACGTTCTTTTTCGCAACGGGTTTGCCGCCAGAACACAGCTGAAGCTTCGAGGGCTCGCATCTCTCTTCACGCGCCCGCCCTACCTGAGGCC  
301 GCCATCCACGCCGTTGAGTCGCGTTTCTGCCGCTCCCGCTGTGGTGCCTCTGAAGCTGCGTCCGCCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC  
401 GGGCCTTTGTCCGGCGCTCCCTTGAGCCTACCTAGACTCAGCGGGCTCTCCACGCTTTGCTGACCTGCTTGTCTCAACTCTACGCTTTTGTTCGTTT

**BspHI (560)**

**AgeI (552)**

501 TCTGTTCTGCGCCGTTACAGATCCAAGCTGTGACCGGGCCTACCTGAGATCACCGGTATCATGAGTGACCTTGTGGAACGAAGCCTGTCCAAGAATC  
1 M S D P C G T K P V Q E S  
601 CAACCCACCATGAGTCTGTGGAGTCTTGAGGACAGACACAGCAGCCAGGGTGCACCTCAGCCAGACCAGGATCCTGTGGTAAAGAGCCCTACTTCC  
13 N P T M S L W S L E D R H S S Q G R P Q P D Q D P V A K E A P T S  
701 GAGCTGCAGATGAAGGTGACATTTTTCCGTAACCTGGGTAAGTCTGCTCTGAGATCCACAGTGTCTGCAGAAGCTGGGAGTCCAAGCAGACACCAACA  
47 E L Q M K V D F F R K L G Y S S S E I H S V L Q K L G V Q A D T N  
801 CGGTGCTAGGGGAATTGGTGAAGCATGGCTCAGCTACTGAACGAGAATGCCAGGCCCTGACGGCCCCAGCCCCAGCCCCCTCTGGTGGCCCCGGGTGG  
80 T V L G E L V K H G S A T E R E C Q A L T A P S P Q P P L V P R G G  
901 AAGCACCCCAAGCCTTCCACTCTAGAACCCTCACTCCAGAGAGGACAGAGAGGGCAGCGACCTGAGACCTGTGGTATCGGGAAGCAATGTGGCC  
113 S T P K P S T L E P S L P E E D R E G S D L R P V V I D G S N V A  
1001 ATGAGCCATGGGAACAAGGAAGTCTTCTCTTCCGGGGCATTCTGCTGGTGTGAAGTGGTTCTGGAGCGAGGCCACACAGATATTACCGTGTGTGTC  
147 M S H G N K E V F S C R G I L L A V N W F L E R G H T D I T V F V  
1101 CATCTGGAGGAAGAACAGCCTCGACCAGATGTGCCTATCACAGACCAGCACATCCTTCGGGAAGTACAGAAAAAGAAAGATCTTGGTGTTCACGCCATC  
180 P S W R K E Q P R P D V P I T D Q H I L R E L E K K K I L V F T P S  
1201 CAGGCGGGTCCGCGGCAAGCGCGTGGTGTGCTATGATGACCGCTTATTGTGAAGCTGGCCTTCAATCCGACGGAGTGGTGGTCTCAATGACACGTAC  
213 R R V G G K R V V C Y D D R F I V K L A F E S D G V V S N D T Y  
1301 CGAGCTCCAAGGKAGAGGAGGAGTGAACGCTTCACTGAGGAGCGGCTGCTCATGTACTCCTTCGTAATGACAAGTTCATGCCCCCTGACGACC  
247 R D L Q G E R Q E W K R F I E E R L L M Y S F V N D K F M P P D D  
1401 CTTTAGGACGGCATGGGCTAGCCTGGACAACCTTCTTCTGTAAGAAACACTGCCTTCTGAGCACAGGAAGCAGCCATGCCCTATGGGAAGAAATGTAC  
280 P L G R H G P S L D N F L R K K P L P S E H R K Q P C P Y G K K C T  
1501 GTATGGAATCAAGTGCCGATTTTTCCACCCTGAGCGGCAAGCCGTCGCCAGCGCTGTGGCCGATGAGCTCCGTGCCAACGCTCTCTCTCACCTCCC  
313 Y G I K C R F F H P E R P S R P Q R S V A D E L R A N A L L S P P  
1601 AGGACTCCAGTCAAGGACAAAAGTAGCCAGAGGCCCTTCCCCTGCCTCAGTCCAGCTCTGTGTCCTAGAGGCTGAACAGGCAGCCTGGATGGGAAAA  
347 R T P V K D K S S Q R P S P A S Q S S V S L E A E P G S L D G K  
1701 AGCTGGTGCCAGGTCATCTCCGGTCCCACCGAGAAGGCTCACCGCAGACCTGTGCTCCAGCTGGCAGGAGCCTCCTGTAGTGGGGGCGCTTTGG  
380 K L G A R S S P G P H R E G S P Q T C A P A G R S L P V S G G S F G  
1801 GCCACAGAGTGGCTGCACACACCCAGGACTCACTCCATACACCTCCAGGAGTGCCTTGATTGAGGATTGGTCCCTGGAGAGCCAGATGTCAGAA  
413 P T E W L A H T Q D S L P Y T S Q E C L D S G I G S L E S Q M S E  
1901 TTATGGGCGTGCAGGAGGAGCCCTGGGAGTGGGCCCCACTCGGGGCCCTATGCAAGTTATACAGCTATGGATCCAAGTCCAGCAGCACCTT  
447 L W G V R G G S P G E S G P T R G P Y A G Y H S Y G S K V P A A P  
2001 CCTTTTCTCTTTAGACCAGCCATGGTGTGGCACTTCACTGTCCTCAGTGTCCCAAGCAGTATGTGCCCCCGCCACCCACTACCCATCCAGAGACTGGTC  
480 S F S P F R P A M G A G H F S V P T D Y V P P P P T Y P S R E Y W S  
2101 TGAGCCGTACCCATTACCCACCCACTCTGTCTTCAAGAGCCCCAGAGACCCAGCCCCGGGGCTGGTGGGGGCCCTGGGCAGGGTGGGTGACCTG  
513 E P Y P L P P P T P V L Q E P Q R P S P G A G G G P W G R V G D L  
2201 GCCAAAGAAAGGGCTGGTGTATATACCAAGCTGTGTGGTGTCTTCCCCCACACCTGGTAGAAGCTGTAATGAGACGCTTCCACAGCTGCTGGATCCGC  
547 A K E R A G V Y T K L C G V F P P H L V E A V M R R F P Q L L D P

**NheI (2360)**

2301 AGCAGCTGGCCGAGAGATCCTGTCTTACAAGTCCCAGCACCTCAGTGAAGCCAGAAGCTAGTGGCCAGACATGATAAGATACATTGATGAGTTTG  
580 Q Q L A A E I L S Y K S Q H L S E •  
2401 GACAAACCACAACCTAGAATGCAGTGAATAAATGCTTTATTTGTGAAATTTGTGATGCTATTGCTTTATTTGTAACCATTATAAGCTGCAATAACAAGT  
2501 TAAACAACAACATTGCATTATTTTATGTTTCAGGTTCAAGGGGAGGTGTGGGAGGTTTTTTAAAGCAAGTAAAACCTCTACAAATGTGGTATGGAATTC  
2601 TAAATACAGCATAGCAAACTTAACTCCAATCAAGCCTCACTTGAATCCTTTTCTGAGGGATGAATAAGGCATAGGCATCAGGGGCTGTTGCCAA  
2701 TGTGATTAGCTGTTTGCAGCCTCACCTTCTTTCATGGAGTTAAGATATAGTGATTTTTCCCAAGGTTTGAAGTACTGCTTTCATTTCTTTATGTTTTAA  
2801 ATGCACTGACCTCCACATTCCCTTTTTAGTAAATATTCAGAAATAATTTAAATACATCATTGCAATGAAAATAAATGTTTTTATTAGGCAGAATCCA  
2901 GATGCTCAAGGCCCTTCATAATATCCCCAGTTTGTAGTGGACTTAGGGAACAAAGGAACCTTTAATAGAAATTGGACAGCAAGAAAGCGAGCTTCTA  
3001 GCTTTAGTTCCTGGTGTACTTGAGGGGATGAGTTCCTCAATGGTGGTTTTGACCAGCTTGCATTCACTCAATGAGCACAAAGCAGTCAGGAGCATAG  
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  
3101 TCAGAGATGAGCTCTCTGCACATGCCACAGGGGCTGACCACCTGATGGATCTGTCCACCTCATCAGAGTAGGGGTGCTGACAGCCACAATGGTGTCAA  
108 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 A V I T D F

