



EcoRI (23) SdaI (38) SpeI (45)
NotI (2) Sall (9) XbaI (19) BamHI (29) Bsp120I (39) HindIII (55)

1 CGGGCCGCGTCGACGATATCTAGAAATTCGGATCCTGCAAGGCCACTAGTGCCCAAGCTTAGAAACATGACAAGTCCCTGTGGGCGAGCAGACAGGGGA
101 GAATTGGGTTTCAGCTGCTGGCAGTGGCTTCGGTGCCTTTCTGTGGCTTGTGCAAGTCAGACAGTGACCTGGCTCTCCCTCCACCCCCTAC
201 TGCCCAAGCTGTCTAGCTCCACAATGGCACTTGCCCAAATAGCTGCCATGTGAGGGCCAGAGAAAGGCAGAGATTAGACCCCTGGAGGGTTGAG
301 CACGGTAGCAGGAAGGGCATGTGGCACCCAGTGATCCTGGCCAGACTAGCATCTGGGAAGGTATAAAAGCCCTTCAGGACCAGGTGGCTCAAATCTCAG

NcoI (447)

401 CTGACAGCCAGCCACACTCTCTCTTTTGCCTCTTTAGAAGCCACCATGGAAATCAAGGTGCTGTTTGCCTCATCTGTATTGCTGTTGCTGAGGCCAA
501 AACCCACTGAAATCAATGAAGACCTCAATATAGCTGCTGTGGCCTCCAACCTTTGCCACCACAGATCTTGAGACTGACCTGTTCAACCACTGGGAGACCAT
18▶ K P T E I N E D L N I A A V A S N F A T T D L E T D L F T N W E T M
601 GAATGTGATTAGCACTGACACAGAGCAGGTGAACACAGATGCTGACAGGGGCAAGCTGCTGGCAAAAACTCCCCAGATGCTCTGAGGGAGCTGGAG
51▶ N V I S T D T E Q V N T D A D R G K L P G K K L P P D V L R E L E
701 GCCAATGCCAGAAGGGCTGGTTGCACAAGAGGCTGCCTCATTGCTCTCCACATTAAGTGCACCCCTAAGATGAAGAAATTTATCCTGGCAGGTGCC
85▶ A N A R R A G C T R G C L I C L S H I K C T P K M K K F I P G R C
801 ACATTTATGAAGTGAAGAGGAGTCTGCTCAGGAGGGATTGGAGAGCAATTGTTGATATCCAGAGATTCTGGCTCAAGGATAAGGAGCCACTGGA
118▶ H T Y E G E K E S A Q G G I G E A I V D I P E I P G F K D K E P L D
901 CCAGTTTATTGCTCAAGTGGACCTCTGTGCTGATTGCACCACTGGCTGTGAAGGGCCTTGCCAATGTCCAGTGTCTGACCTCTGAAGAAGTGGCTT
151▶ Q F I A Q V D L C A D C T T G C L K G L A N V Q C S D L L K K W L

NheI (1081)

1001 CCCAGAGGTGTACCACTTTTGCAGCAAGATTCAGGGTAGGGTGGACAAAATCAAGGGTCTGGCTGGGGACAGATGATAGCTAGTGGCCAGACATGAT
185▶ P Q R C T T F A S K I Q G R V D K I K G L A G D R •
1101 AAGATACATTGATGAGTTTGGACAAACCACAACCTAGAATGCAGTGAAAAAATGCTTTATTGTGAAATTTGTGATGCTATTGCTTTATTTGTAACCAT

HpaI (1221)

1201 ATAAGCTGCAATAAACAAGTTAAACAACAACATTCATTCTTTATGTTTCAGGTTCAAGGGGAGGTGTGGGAGGTTTTTAAAGCAAGTAAACCTCT
1301 ACAAATGTGGTATGGAATTAATTCTAAAATACAGCATAGCAAACTTTAACCTCCAATCAAGCCTCTACTTGAATCCTTTTCTGAGGGATGAATAAGGC
1401 ATAGGCATCAGGGGCTGTTGCCAATGTGCATTAGCTGTTTGCAGCCTCACCTCTTTTATGAGTAAAGATATAGTGTATTTTCCCAAGTTTGAACCTA
1501 GCTCTTCATTTCTTATGTTTTAAATGCACTGACCTCCACATTCCTTTTTAGTAAAATATTCAGAAATAATTTAAATACATCATTGCAATGAAATAA
1601 ATGTTTTTATTAGGCAGAATCCAGATGCTCAAGGCCCTTCATAATATCCCCAGTTTAGTAGTTGGACTTAGGGAACAAAGGAACCTTTAATAGAAATT
1701 GGACAGCAAGAAAGCGAGCTTCTAGCTTATCCTCAGTCTGCTCCTCTGCCACAAAGTGCACGAGTTGCCGGCCGGTCCGCGAGGGCGAACTCCCGCC
125◀ • D Q E E A V F H V C N G A P D R L A F E R G
1801 CCCACGGTGTCTCGCATGCGGTATGGCCGGCCGGAGGCGTCCCGAAGTTCGTGGACACGACCTCCGACCCTCGCGTACAGCTCGTCCAGGCC
102◀ W P Q E G I E T M A P G S A D R F N T S V V E S W E A Y L E D L G

SgrAI (1988)

1901 GCGACCCACACCAGGCCAGGGTGTGTCGGCACCACTGGTCTGGACCGCTGATGAACAGGGTCCAGTCCGCGGACACCGCGCAAGTCG
69◀ R V W V W A L T N D P V V Q D Q V A S I F L T V D D R V V G A F D
2001 TCCTCCACGAAGTCCCGGAGAACCAGCGGTCGGTCCAGAAGTCCGCGGACGTCGCGCGGGTGGAGCACCAGGAAACGGCACTGGTCAACT
35◀ D E V F D R S F G L R D T W F E V A G A V D R A T L V P V A S T L K
2101 TGGCATGATGGCTCTCTGTGAGGAGGAAAGAGAAGAAGTTAGTACAATTGCTATAGTGTGATTATACTATGCAGATATACTATGCCAATG
2◀ A M ◀
2201 ATTAATTGTCAAAGTGGCTGACAGGTTAATTAAGAACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAAGGCCGCTTGTGGCGTTTTT
2301 CCATAGGCTCCGCCCCCTGACGAGCATCACAATAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAGATACCAGGCGTTTCCCCCT
2401 GGAAGCTCCCTCGTGCCTCTCTGTTCCGACCTGCCGTTACCGGATACCTGTCCGCTTTCTCCCTCGGAAGCGTGGCGCTTCTCATAGCTCAC
2501 GCTGTAGGTATCTCAGTTCGGTGTAGGTGCTGCTCCAAGCTGGGCTGTGTGCACGAACCCCGTTCAGCCGACCGCTGCGCCTTATCCGGTAACTA
2601 TCGTCTTGAGTCCAACCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAG
2701 TTCTTGAAGTGGTGCCTAACTACGGCTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGAAAAAGAGTTGGTAGCT
2801 CTTGATCCGGCAAAACACCACCGTGGTAGCGGTGGTTTTTTTTGTTTGAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGAT
2901 CTTTTCTACGGGTCTGACGCTCAGTGAACGAAAACCTCACGTTAAGGGATTTTGGTCATGGCTAGTTAATTAACATTTAAATCA