



EcoRI (19)

NotI (2) XbaI (15) SdaI (29) SpeI (36) Acc65I (45)

1 CGCGCCGCTATGCATCTAGAATTCCTGCAGGGCCCACTAGTTGAGGTACCTGGTGTAGTTTTATTTTCAGGTTTTATGCTGTCATTTTCTGTAATGCTAA
101 GGACTTAGGACATAACTGAATTTTCTATTTTCCACTTCTTTTCTGGTGTGTGTATATATATATATATATATATACACACACACATGTACATATATATATT
201 TTTTAGTATCTCACCTCACATGCTCCTCCTGAGCACTACCCATGATAGATGTTAAACAAAAGCAAAGATGAAATTCCAACGTCAAAATCTCCCTTCC
301 ATCTAATTAATTCCTCATCAACTATGTTCCAAAACGAGAATAGAAAATTAGCCCAATAAGCCCAGGCAACTGAAAAGTAAATGCTATGTTGTACTTTG
NcoI (403)
401 ATCCATGGTCACAACCTATAATCTTGAAAAGTGGACAGAAAAGACAAAAGAGTGAACCTTAAAACCTCGAATTTATTTTACCAGTATCTCCTATGAAGGG
501 CTAGTAACCAAATAATCCACGCATCAGGGAGAGAAAATGCCTTAAGGCATACGTTTTGGACATTTAGCGTCCCTGCAAATTTCTGGCCATCGCCGCTTCT
601 TTGTCATCAGAAGGCGAGAACTTTATATTGGTGACCCGTGGAGCTCACATTAACCTATTACAGGGTAACTGCTTAGGACCACTATTATGAGGAGAATT
701 TACCTTTCCCTCCTCTTTTCAAGAAACAAGGAGGGGTGAAGGTACGGAGAACAGTATTTCTTCTGTTGAAAGCAACTTAGCTACAAAGATAAATTAC
801 AGCTATGTACTGAAGGTAGCTATTTTATTCCACAAAATAAGAGTTTTTAAAAAGCTATGTATGTATGTGCTGCATATAGAGCAGATATACAGCCTAT
901 TAAGCGTCTGCTACTAAAACATAAAACATGTCAGCCTTTCTAACCTTACTCGCCCACTGCTGCCGACGTGACTTCTCGACCCTTAAAGACGTACAG
1001 ACCAGACACGGCGGGCGGGGAGAGGGGATTCCCTGCGCCCCCGACCTCAGGGCCGCTCAGATTCTGGAGAGGAAGCCAAGTGTCTTCTGCCCT
1101 CCCCCGGTATCCCATCAAGGCGATCAGTCCAGAAGTGGCTCTCGGAAGCGCTCGGGCAAAGACTGCGAAGAAGAAAAGACATCTGGCGAAACCTGTGC
1201 GCCTGGGGCGGTGGAACCTGGGGAGGAGAGGGAGGATCAGACAGGAGAGTGGGGACTACCCCTCTGCTCCCAAATTTGGGCGAGCTTCTGGGTTCCG
1301 ATTTTCTCATTTCGGTGGGTAAAAAACCTGCCCCACCGGGCTTACGCAATTTTTTAAAGGGAGAGGAGGAAAAATTTGTGGGGGTACGAAAAGGC
1401 GGAAAGAACAGTCATTTTCGTCACATGGGCTTGGTTTTTTCAGTCTTATAAAAAGGAAGTTCTCTCGGTTAGCGACCAATTGTCATACGACTTGCAAGTGA
1501 CGTCAGGAGCACGTCAGGAACCTCCTCAGCAGCGCTCCTCAGTCCACAGCCAGACGCCCTCAGACAGCAAAGCCTACCCCGCGCCGCGCCCTGCC

BspHI (1608)

1601 GCGCTGTATGATTCTGGGGCCCTGCATGCTGCTGCTGCTGCTGCTGCTGGGCTGAGGCTACAGCTCTCCCTGGGCATCATCCAGTTGAGGAGGAGA
M I L G P C M L L L L L L L L G L R L Q L S L G I I P V E E E
1701 ACCCGGACTTCTGGAACCGCGAGGCGAGCCGAGGCCCTGGGTGCCGCAAGAAGCTGCAGCCTGCACAGACAGCCGCAAGAACCTCATCATTTCTGGG
31 N P D F W N R E A A E A L G A A K K L Q P A Q T A A K N L I I F L G
1801 CGATGGGATGGGGTGTCTACGGTACAGCTGCCAGGATCCTAAAAGGGCAGAAGAAGGACAAACTGGGGCTGAGATACCCCTGGCTATGGACCGCTC
64 D G M G V S T V T A A R I L K G Q K K D K L G P E I P L A M D R F

NdeI (1903)

1901 CCATATGTGGCTCTGTCCAAGACATAACAATGTAGACAAAACATGTGCCAGACAGTGGAGCCACAGCCACGGCTACCTGTGCGGGGTCAAGGGCAACTTCC
98 P Y V A L S K T Y N V D K H V P D S G A T A T A Y L C G V K G N F
2001 AGACCATTGGCTTGAAGTGCAGCCGCCCGCTTAAACAGTGAACACGACACGCGGCAACGAGGTCATCTCCGTGATGAATCGGGCAAGAAGCAGGGAA
131 Q T I G L S A A A R F N Q C N T T R G N E V I S V M N R A K K A G K
2101 GTCAGTGGGAGTGGTAACCACACAGTGCAGCAGCCTCGCCAGCCGGCACCTACGCCACACGGTGAACCGCAACTGGTACTCGGACGCCGACGTV
164 S V G V V T T T R V Q H A S P A G T Y A H T V N R N W Y S D A D V
2201 CCTGCCTCGGCCCGCAGGAGGGGTGCCAGGACATCGCTACGAGCTCATCTCCAACATGGACATTGATGTGATCCTGGGTGGAGGCCGAAAGTACATGT
198 P A S A R Q E G C Q D I A T Q L I S N M D I D V I L G G G R K Y M
2301 TTCGCATGGGAACCCAGACCTTGAAGTACCCAGATGACTACAGCAAGGTGGGACCAGGCTGGACGGGAAGAACTGGTGCAGGAATGGCTGGCGAAGCG
231 F R M G T P D P E Y P D D Y S Q G G T R L D G K N L V Q E W L A K R
2401 CCAGGGTGCCTGGTGTGTGGAACCGCACTGAGCTCATGAGGCTTCCCTGGACCCGCTGTGACCCATCTCATGGGTCTCTTTGAGCCTGGAGACATG
264 Q G A R Y V W N R T E L M Q A S L D P S V T H L M G L F E P G D M

SacII (2590)

2501 AAATACGAGATCCACCGAGACTCCACACTGGACCCTCCCTGATGGAGATGACAGAGGCTGCCCTGCGCCTGCTGAGCAGGAACCCCGCGGCTTCTTCC
298 K Y E I H R D S T L D P S L M E M T E A A L R L L S R N P R G F F
2601 TCTTCGTGGAGGGTGGTGCATCGACCAGGTCATCACGAAAGCAGGGCTTACCGGGCACTGACTGAGACGATCATGTTTCGACGACGCCATTGAGAGGGC
331 L F V E G G R I D H G H H E S R A Y R A L T E T I M F D D A I E R A
2701 GGGCAGCTCACCAGCGAGGAGGACACGCTGAGCCTCGTCACTGCCGACCACTCCACGTTCTCTCTTCGGAGGCTACCCCTGCGAGGGAGCTCCATC
364 G Q L T S E E D T L S L V T A D H S H V F S F G G Y P L R G S S I
2801 TTCGGGCTGGCCCTGGCAAGGCCCGGGACAGGAAGCCATACCGTCTCTATACGAAAACGGTCCAGGCTATGTCTCAAGGACGGCCGCGCCGCGG
398 F G L A P G K A R D R K A Y T V L L Y G N G P G Y V L K D G A R P
2901 ATGTTACCAGAGCGAGAGCGGGAGCCCGAGTATCGGCAGCAGTCAAGTGGCCCTGGACGAAGAGACCCACGAGGCGAGGACGTGGCGGTGTTCCG
431 D V T E S E S G S P E Y R Q Q S A V P L D E E T H A G E D V A V F A
3001 GCGCGCCCGCAGGCGCACCTGTTTACGGCGTGCAGGAGCAGACCTTATAGCGCACGTCATGGCCTTCCGCGCCTGCCTGGAGCCCTACACCGCCTGC
464 R G P Q A H L V H G V Q E Q T F I A H V M A F A A C L E P Y T A C

NheI (3174)

3101 GACCTGGCGCCCCCGCGGCACCACCGACCGCGCACCCGGGGCGGTCCCGGTCCAAGCGTCTGGATTGAAGCTAGCTGGCCAGACATGATAAGATAC
498 D L A P P A G T T D A A H P G R S R S K R L D
3201 ATTGATGAGTTTGGACAAACCACAACCTAGAATGCAGTGAATAAATGCTTTATTTGTGAAATTTGTGATGCTATTGCTTTATTTGTAACCATTATAAGCT
3301 GCAATAAACAAAGTTAACAAACAATTGCATTCATTTTATGTTTTCAGTTTTCAGGGGAGGTGGGGAGGTTTTTAAAGCAAGTAAAACCTCTACAAATG
3401 TGGTATGGAATTAATTCTAAATACAGCATAGCAAACCTTAACTCCAAATCAAGCCTCTACTTGAATCCTTTTCTGAGGGATGAATAAGGCATAGGCA

3501 TCAGGGGCTGTTGCCAATGTCATTAGCTGTTTGCAGCCTCACCTTCTTTCATGGAGTTTAAGATATAGTGTATTTTCCAAGGTTTGAAGTCTCTTC
3601 ATTTCTTTATGTTTTAAATGCACTGACCTCCACATTCCCTTTTTAGTAAATATTCAGAAATAATTTAAATACATCATTGCAATGAAAATAAATGTTTT
3701 TTATTAGGCAGAAATCCAGATGCTCAAGGCCCTTCATAATATCCCCAGTTTAGTAGTTGGACTTAGGGAACAAGGAACCTTTAATAGAAATTGGACAGC
3801 AAGAAAGCGAGCTTCTAGCTTATCCTCAGTCCTGCTCCTTGCCACAAAGTGCACGCAAGTTGCCGGCCGGGTCGCGCAGGGCGAACTCCCGCCCCACGG
125 • D Q E E A V F H V C N G A P D R L A F E R G W P
3901 CTGCTCGCCGATCTCGGTATGGCCGGCCGGAGGCGTCCCGGAAGTTCTGTGGACACGACCTCCGACCACTCGGCGTACAGCTCGTCCAGGCCGCGCACC
100 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 R V
SgrAI (4081)
4001 CACACCCAGGCCAGGGTGTGTCCGGCACCACTGGTCTGGACCGCGTGTATGAACAGGGTCACGTCGTCCCGGACCACCCGGCGAAGTCGTCTCCA
66 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 D E V
4101 CGAAGTCCCGGGAGAACCAGCCGGTCCGAGTCCAGAACTGACCGCTCCGGCGACGTCGCGCGCGGTGAGCACCGGAACGGCACTGGTCAACTTGGCCAT
33 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 A M
4201 GATGGTCTCTCTGTCAGGAGAGGAAAGAGAAGAAGGTTAGTACAATTGCTATAGTGAGTTGATTATACTATGCAGATATACTATGCCAATGATTAATT
←
4301 GTCAA ACTAGGGCTGCAGGTTAATTAAGAACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAAGGCCGCTTGTGCGTTTTTCCATAGG
←
4401 CTCCGCCCCCTGACGAGCATCACAAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTCCCTTGGAAGCT
4501 CCCTCGTGCCTCTCCTGTTCCGACCCTGCCGTTACCGGATACCTGTCCGCCTTCTCCCTTCGGGAAGCGTGCGCTTCTCATAGCTCACGCTGTAG
4601 GTATCTCAGTTTCGGTGTAGGTCGTTCCGCTCAAGCTGGGCTGTGTGCACGAACCCCGTTCAGCCCGACCGCTGCGCTTATCCGGTAACTATCGTCTT
4701 GAGTCAACCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTTCTTGA
4801 AGTGGTGGCCTAACTACGGTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTGATC
4901 CGGCAAAACAACCCGCTGGTAGCGGTGTTTTTTTTGTTTGAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCT
5001 ACGGGTCTGACGCTCAGTGAACGAAACTCACGTTAAGGGATTTTGGTATGGCTAGTTAATTAACATTTAAATCA