



EcoRI (19)
NotI (2) XbaI (15) SdaI (29) NcoI (89)
1 GCGGCCGCTATGCATCTAGAATTCCTGCAGGGCCACTAGGTCGTTGCATGTATCCGATTCAGACTGCACACTGCTATTGGATAACCATGGGGCTC
101 TCAGCATTCTCAGCTCTTTGTCTCTCCATGTCACGTGGCTCCTGTTACCCAGTTCCTTTCCGTCCTCTGTTCTTAAAACTGTTTCCTTTCTCGG
202 ACCTGTCTCTCTCCATGTATATGCTTATATAAAAAGCTGCATAGGATAGAAAACACATGGTATTGCTTTCTGAGTTACTTCACATAATATAGTAAC
EcoRV (334)
302 TTCCAGAGGTGCTTTGGCCAGTCACTCTGGATATCTGCCAGTGAGAGAGGTGGAAAAGAAAAACCAGGAGAGTGAACAAGGGCTTCCATTTCTCATGTG
401 CCCTTCAATTTCTAACTAGTTGCTCTCAGACCGTCAGGCAAGCACTTTACCCTGAGCACCCTCTAGCCAAATGAGTGTCAGTAGAGATTTA
501 AAGTTTTGTTTTGTTTTTAAACAGTCTGGA GAT T G G A T C C A C G G C C T C T G G C C C G C A T T T T A C C A C T G A G T A C A C T C C C A A A G C A G T C G A A A T C
598 ACAGTGGCCAGGATTGAAATGATCACTTAGATGCTTTGACGTCTTGATAAGACACTAAATCTTTGTCTATCAGTTACTTCATCTTTAATAACAGAACGT
698 ACTTAGGAATTTATGAGCATTGTTAGTTAGCATGACACATGCTATATGTATTCGTCATTATGAATAATGTAACCACAGCAATTACATTGTACTTTTTAT
798 TATAAAAAGGGGGAGGGGAAGCCCTGTCCTTTTTAACTTCTGAGAGTTCGATTACTAAGTAAGACCTTATGTAGACTTCATTTGGGAGCTGAGAAA
XbaI (935) EcoRI (953) SphI (1002)
899 GCAGAGGATCCAAAAGGGGATGACATTTGCAAAGGCTAGAAAAGGCGCTGGGAATTCTACCGGTAGGGGAGGGCCTTTTCCAAAGGCAGTCTGGAGC
AgeI (1073)
1000 ATGCGCTTTAGCAGCCCCGCTGGCAGTCTGGCGCTACACAAGTGGCCTCTGGCCTCGCACACATCCACATCCACCGGTAGCGCCAACCGGCTCCGTTCC
1100 TTTGGTGGCCCTTCGCGCCACTTCTACTCTCCCTAGTCAGGAAGTTC C C C C C G C C C G C A G C T C G C G T C G T G C A G G A C G T G A C A A A T G G A A G T A
1199 GCACGTCTCACTAGTCTCGTGACATGGACAGCACCCTGAGCAATGGAAGCGGTAGGCCTTTGGGCGAGCGCCAAATAGCAGCTTTGCTCTTCCTGCTT
BspEI (1381)
1299 TCTGGGCTCAGAGGCTGGGAAGGGTGGTCCGGGGGGGCTCAGGGGGGCTCAGGGGGGGGCGCCGAAGGCTCCCGGAGGCCCGGCATT
BspHI (1480) SphI (1502)
1399 CTGCACGCTTCAAAGCGCACGTCTGTCGCGCTGTTCTCTCTCTCATCTCCGGGCTTTGACCTCACGGTGTGCCATCATGATTCTGGGGCCCTG
1499 CATGCTGCTGCTGCTGCTGCTGGGCTGAGGCTACAGCTCTCCCTGGGCATCATCCAGTTGAGGAGGAGAACCCTGGAACCGCGAGGCGAG
6 M L L L L L L L L L G L R L Q L S L G I I P V E E E N P D F W N R E A
1600 CCGAGGCCCTGGGTGCCGCAAGAAGCTGCAGCTGCACAGACAGCCGCAAGAACCCTCATCATCTCTGGGCGATGGGATGGGGGTCTACGGTGACA
40 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 D G M G V S T V T
1701 GCTGCCAGGATCCTAAAAGGGCAGAAGAAGGACAACTGGGCTGAGATACCCCTGGCTATGGACCCTTCCCATATGGCTCTGTCAAAGACATACAA
74 A A R I L K G Q K K D K L G P E I P L A M D R F P Y V A L S K T Y N
1802 TGTAGACAAACATGTGCCAGACAGTGGAGCCACAGCCAGCCCTACCTGTGCGGGGTCAAGGGCAACTCCAGACATTGGCTTGAGTGACGCCCGCCGCT
107 V D K H V P D S G A T A T A Y L C G V K G N F Q T I G L S A A A R
1903 TTAACCAAGTGAACACACGACACGCGGCAACGAGGTCTCCGTGATGAATCGGGCAAGAAGCAGGGAAGTCAGTGGGAGTGGTAACCCACACAGAGTG
141 F N Q C N T T R G N E V I S V M N R A K K A G K S V G V V T T T R V
2004 CAGCAGCCTCGCCAGCCGACCTACGCCACACCGGTGAACCGCACTGGTACTCGGACGCCGACGTGCCTGCCTCGGCCCGCAGGAGGGGTGCCAGGA
175 Q H A S P A G T Y A H T V N R N W Y S D A D V P A S A R Q E G C Q D
2105 CATCGCTACGAGCTCATCTCAAACATGGACATTGATGTATCTGGTGGAGCCGAAAGTACATGTTTCGCATGGGAACCCAGACCTGAGTACCCAG
208 I A T Q L I S N M D I D V I L G G G R K Y M F R M G T P D P E Y P
2206 ATGACTACAGCAAGGTGGACAGGCTGGACGGGAAGAATCTGGTGGAGAAATGGCTGGCGAAGCGCCAGGTCGCCGGTATGTGTCCAGCCAGCTGAG
242 D D Y S Q G G T R L D G K N L V Q E W L A K R Q G A R Y V W N R T E
2307 CTATGCAAGGCTTCCCTGGACCGCTGTGACCCATCTCATGGTCTCTTTGAGCTGGAGACATGAAATACGAGATCCACCGAGACTCCACACTGGACCC
276 L M Q A S L D P S V T H L M G L F E P G D M K Y E I H R D S T L D P
SacII (2462)
2408 CTCCTGATGGAGATGACAGAGGCTGCCCTGCGCTGCTGAGCAGGAACCCCGCGCTTCTCTCTCTCGTGGAGGGTGGTGCATCGACACCGGTGCATC
309 S L M E M T E A A L R L L S R N P R G F F L F V E G R I D H G H
2509 ACGAAAGCAGGGCTTACCGGGCACTGACTGAGACGATCATGTTTCGACGACCCATTGAGAGGGGGCCAGCTCACCGAGGAGGACACGCTGAGCCTC
343 H E S R A Y R A L T E T I M F D D A I E R A G Q L T S E E D T L S L
2610 GTCACGTCGCGACCTCCACGCTCTCTCTCGGAGGCTACCCCTGCGAGGGAGCTCCATCTTCCGGGCTGGCCCTGGCAAGGCCCGGACAGGAAGGC
377 V T A D H S H V F S F G Y P L R G S S I F G L A P G K A R D R K A
2711 CTACACGGTCTCTATACGGAACCGTCCAGGCTATGTGCTCAAGGACGGCCCGCCGGATGTTACCGAGAGCGAGAGCGGGAGCCCGAGTATCGGC
410 Y T V L L Y G N G P G Y V L K D G A R P D V T E S E S G S P E Y R
2812 AGCAGTCAGCAGTCCCTGGACGAAAGACCCAGCGAGGACGCTGGTGGAGGCTGTCGCGCGCGCCGACAGGCGCACCTGGTTCAGCGCGCAGGAG
444 Q Q S A V P L D E E T H A G E D V A V F A R G P Q A H L V H G V Q E
2913 CAGACCTTATAGCGCACGTGATGCCCTTCGCGCCTGCTGGAGCCCTACACCGCTGCGACCTGGCGCCCGCCGCGGACACCCAGCGCGCCGACCC
478 Q T F I A H V M A F A A C L E P Y T A C D L A P P A G T T D A A H P
NheI (3046)
3014 GGGGCGGTCCCGTCCAAGCGTCTGGATTGAAGCTAGCTGGCCAGACATGATAAGATACATTGATGAGTTGGACAAACCACAAC TAGAATGCAGTGA AAA
511 G R S R S K R L D
3115 AAATGCTTATTTGTGAAATTTGTGATGCTATTGCTTTATTTGTAACCATTAAGAAGCTGCAATAAACAAGTTAACAACAACAATTGCATTTATTTATGTT
3216 TCAGGTTTCAGGGGAGGTTGGGAGGTTTTTAAAGCAAGTAAACCTCTACAATGTGGTATGGAATTAATTCTAAAATACAGCATAGCAAACCTTTAAC
3317 CTCAAATCAAGCCTCTACTTGAATCCTTTCTGAGGGATGAATAAGGCATAGGCATCAGGGGCTGTTGCCAATGTGCATTAGCTGTTTGCAGCCTCACCT
3418 TCTTTCATGGAGTTAAGATATAGTGTATTTTCCCAAGGTTTGAAGTCTTCTATTCTTTATGTTTAAATGCACCTGACCTCCACATTCCTTTTAA
SspI (3525)
3519 GTAAAATATTCAGAAATAATTTAAATACATCATTGCAATGAAAATAAATGTTTTTATTAGGCAGAATCCAGATGCTCAAGGCCCTTCATAATATCCCCCA
3620 GTTTAGTAGTTGACTTAGGGAACAAAGGAACCTTAAATAGAAATTGGACAGCAAGAAGCGAGCTTCTAGCTTATCTCAGTCTGCTCTGCGCCACAA
1254 D Q E E A V F
3721 AGTGACGCAAGTTGCGCGCCGGTGCAGCAGGGCGAACTCCCGCCCCACGGCTGCTCGCCGATCTCGGTGATGGCCGCGCCGAGGCGTCCCGGAAGTTC
1174 H V C N G A P D R L A F E R G W P Q E G I E T M A P G S A D R F N
3822 GTGGACAGCACTCCGACCTCGGCTACAGCTGCTCAGGGCCGCGCACCCACCCAGGCCAGGGTGTGTCGCGCACCACTGGTCTGACCGCGCT
834 T S V V E S W E A Y L E D L G R V W V W A L T N D P V V Q D Q V A S
SgrAI (3953)
3923 GATGAACAGGGTACGCTGCTCCGGACACACCGGCGAAGTCTGCTCCACGAAGTCCCGGGAGAACCCGAGCGGGTCCGAGAACTCGACCGCTCCGG
504 I F L T V D D R V V G A F D D E V F D R S F G L R D T W F E V A G A

AatII (4029)

4024 CGACGTCGCGCGCGGTGAGCACGGAAACGGCACTGGTCAACTTGGCCATGATGGCTCCTCCTGTCAGGAGAGGAAAGAGAAGAAGGTTAGTACAATTGCTA
16 V D R A T L V P V A S T L K A M
4125 TAGTGAGTTGTATTATACTATGCAGATATACTATGCCAATGATTAATTGTCAAAGCTAGGGCTGCAGGTTAATTAAGAACATGTGAGCAAAAGGCCAGCAA
4226 AGGCCAGGAACCGTAAAAAGGCCGCTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGCATCACAAAATCGACGCTCAAGTCAGAGGTGGCGA
4327 AACCCGACAGGACTATAAAGATACCAGGCGTTTCCCCCTGGAAGCTCCCTCGTGCCTCCTGTTCCGACCTGCCGTTACCGGATACCTGTCCGCCTT
4428 TCTCCCTTCGGGAAGCGTGGCGCTTTCATAGCTCACGCTGTAGGTATCTCAGTTCGGGTAGGTGTTCCGCTCCAAGCTGGGCTGTGTGCACGAACCCC
4529 CCGTTCAGCCCGACCGCTGCGCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGG
4630 ATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTTCCTGAAGTGGTGGCCTAACTACGGCTACACTAGAAGAACAGTATTGGTATCTGCGCTCTGCT
4731 GAAGCCAGTTACCTTCGAAAAAGAGTTGGTAGCTCTTGATCCGCAACAAACCACCGCTGGTAGCGGTGGTTTTTTGTTTGAAGCAGCAGATTACGC
4832 GCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGTCTGACGCTCAGTGAACGAAAACCTCACGTTAAGGGATTTTGGTCATGGCTAGT
4933 TAATTAACATTTAAATCA