



PvuI (7) SgfI (6) MfeI (82)
 1 GGATCTGCATCGCTCCGGTGCCCGTCAGTGGGAGAGCGCACATCGCCACAGTCCCGGAGAAGTTGGGGGAGGGGTGGCAATTGAACGGGTGCCTA
 101 GAGAAAGTGGCGGGGTAACGGAAAGTGTGTCTGTACTGGCTCCGCCTTTTCCGAGGGTGGGGGAGAACCCTATATAAGTGCAGTAGTCGCC
 Psp1406I (203) HindIII (245) Bsu36I (291)
 201 GTGAACGTTCTTTTCGCAACGGGTTTGCCGCCAGAACACAGCTGAAGCTTCGAGGGCTCGCATCTCTCTTACGCGCCCGCCCTACCTGAGGCC
 301 GCCATCCACGCGGTTGAGTCGCGTTTCTGCCGCTCCCGCTGTGGTGCCTCCTGAAGTGCCTCCGCCGTCTAGGTAAGTTAAAGCTCAGGTCGAGACC
 NgoMIV (441)
 401 GGGCCTTTGTCCGGCGCTCCCTTGAGCCTACCTAGACTCAGCCGGCTCTCCACGCTTTGCTGACCTGCTTGTCTCAACTCTACGCTTTGTTTCGTTT
 KasI (535) AgeI (552) BspHI (568)
 501 TCTGTTCTGCGCCGTTACAGATCCAAGCTGTGACCGCGCCCTACCTGAGATCACCGGTAGGAGGGCCATCATGACCCCGCAGCTTCTCCTGGCCCTTGT
 1 M T P Q L L L A L V
 PvuI (691) Bsp120I (636) Acc65I (685)
 601 CTCTGGCCAGCTGCCCGCCCTGCAGTGGAAAGAAAGGGCCCGCCAGCAGCTGTGACACTGCCCGGGTGCAATGCCGAGCCTCTCGGTACCCGATCGCCG
 11 L W A S C P P C S G R K G P P A A L T L P R V Q C R A S R Y P I A
 701 TGGATTGCTCTGGACCTGCCGCTGCTCAAACCTCCACGAGCCCGTGTCTTATTGCCACGTACAGGCTCGGCATGGCTGCCGGGGCCACAGCTG
 44 V D C S W T L P P A P N S T S P V S F I A T Y R L G M A A R G H S W
 NcoI (862)
 801 GCCCTGCCTGCAGCAGACGCCAACGTCCACCAGCTGCACCATCACGGATGTCAGCTGTTCTCCATGGCTCCCTACGTGCTCAATGTCACCGCCGTCAC
 77 P C L Q Q T P T S T S C T I T D V Q L F S M A P Y V L N V T A V H
 901 CCCTGGGGCTCCAGCAGCAGCTTCTGTCCTTTCATAACAGAGCACATCATCAAGCCCGACCTCCAGAAGCGTGCGCCTAAGCCCTCCTGCTGAGCGCC
 111 P W G S S S S F V P F I T E H I I K P D P P E G V R L S P L A E R
 BamHI (1066) BglII (1045) ScaI (1060) BssHIII (1092)
 1001 AGCTACAGGTGCAGTGGGAGCCTCCCGGTCTGGCCCTCCAGAGATCTTCTCACTGAAGTACTGGATCCGTTACAAGCGTCAGGAGCTGCCGCTT
 144 Q L Q V Q W E P P G S W P F P E I F S L K Y W I R Y K R Q G A A R F
 Bsp120I (1110) DraIII (1101) Bsu36I (1136)
 1101 CCACCGGTGGGGCCATTGAAGCCACGTCCTTATCTCAGGCTGTGCGGCCCGAGCCAGTACTACA TCCAAGTGGCGGCTCAGGACCTCACAGAC
 177 H R V G P I E A T S F I L R A V R P R A R Y Y I Q V A A Q D L T D
 PshAI (1215) XcmI (1237) Acc65I (1271) KasI (1284)
 1201 TACGGGAACTGAGTGACTGGAGTCTCCCGCCACTGCCACAATGAGCCTGGGCAAGGTTCTCTGGAGTAGGGGTACCTGGGGTGGCGCCAGAAACCTCC
 211 Y G E L S D W S L P A T A T M S L G K V P G V G V P G V G A R N L
 MscI (1303) XbaI (1397)
 1301 CCGTGGCCACTCCAGACCCAGGAATGTTCCCATGCCTTACCCTCCCAAACCTGCTGAGGGCCGTGAGCAACATGCTCCAGAAGGCCAGACAACTCT
 5 P V A T P D P G M F P C L H H S Q N L L R A V S N M L Q K A R Q T L
 EcoRV (1440) BspHI [m] (1431) BstXI (1459) StuI (1471)
 1401 AGAATTTTACCCTTGCACTTCTGAAGAGATTGATCATGAAGATATCACAAAAGATAAAACCAGCACAGTGGAGGCTGTTTACCATTGGAATTAACCAAG
 38 E F Y P C T S E E I D H E D I T K D K T S T V E A C L P L E L T K
 1501 AATGAGAGTTGCATAAATCCAGAGAGACCTCTTTCATAACTAATGGGAGTTGCTGGCTCCAGAAAGACCTTTTTATGATGGCCCTGTGCCTTAGTA
 72 N E S C L N S R E T S F I T N G S C L A S R K T S F M M A L C L S
 XbaI (1685) BbsI (1608) BamHI (1664) BglII (1678)
 1601 GTATTTATGAAGACTTGAAGATGTACCAGGTGGAGTTCAGACCATGAATGCAAAGCTGCTGATGGATCCTAAGAGGCAGATCTTTCTAGATCAAACAT
 105 S I Y E D L K M Y Q V E F K T M N A K L L M D P K R Q I F L D Q N M
 1701 GCTGGCAGTTATTGATGAGCTGATGCAGGCCCTGAATTTCAACAGTGAAGTGTGCCACAAAAATCCTCCCTTGAAGAACCAGGATTTTTATAAACTAAA
 138 L A V I D E L M Q A L N F N S E T V P Q K S S L E E P D F Y K T K
 EcoRI (1831)
 1801 ATCAAGCTCTGCATACTTCTTTCATGCTTTCAGAAATTCGGGCGAGTACTATTGATAGAGTGTGAGCTATCTGAATGCTTCTTAAAAAGCGAGGTCCTCC
 172 I K L C I L L H A F R I R A V T I D R V M S Y L N A S •
 MscI (1979) NheI (1973)
 1901 AAACCGTTGCATTTTTATAAACTTTGAAATGAGGAACTTTGATAGGATGTGGATTAAGAACTAGGGAGGGGCTAGCTGGCCAGACATGATAAGATAC
 2001 ATTGATGAGTTTGGACAAACCAACTAGAATGCAGTGAAAAAATGCTTTATTTGTGAAATTTGTGATGCTATTGCTTTATTTGTAACCATTATAAGCT
 HpaI (2111) MfeI (2122)
 2101 GCAATAAACAAAGTTAAACAACAACAAATTGCATTCATTTTATGTTTCAGGTTTCAGGGGAGGTGTGGGAGGTTTTTTAAAGCAAGTAAAACCTCTACAAATG
 EcoRI (2207)
 2201 TGGTATGGAATTCATAAATACAGCATAGCAAACTTTAACCTCCAATCAAGCCTCTACTTGAATCCTTTTCTGAGGGATGAATAAGGCATAGGCATCAG
 SapI (2389)
 2301 GGGCTGTTGCCAATGTGCATTAGCTGTTTGCAGCCTCACCTTCTTTCATGGAGTTAAGATATAGTGTATTTTCCAAGGTTTGAAGTACTGCTTTCATTT
 SspI (2446) SwaI (2460)
 2401 CTTTATGTTTTAAATGCACTGACCTCCACATTCCTTTTATGAAAAATTCAGAAATAATTTAAATACATCATTGCAATGAAAAATAATGTTTTTTAT

2501 TAGGCAGAATCCAGATGCTCAAGGCCCTTCATAATATCCCCAGTTTAGTAGTTGGACTTAGGGAACAAAGGAACCTTTAATAGAAATTGGACAGCAAGA
2601 AAGCGAGCTTCTAGCTTTAGTTCCTGGTACTTGAGGGGGATGAGTTCCTCAATGGTGGTTTTGACCAGCTTGCCATTATCTCAATGAGCACAAGCA
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
SacI (2721) BstXI (2750)
2701 GTCAGGAGCATAGTCAGAGATGAGCTCTCTGCACATGCCACAGGGGCTGACCACCTGATGGATCTGCCACCTCATCAGAGTAGGGGTGCTGACAGCC
113 D P A Y 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
StuI (2885)
2801 ACAATGGTGTCAAAGTCCTTCTGCCCGTTGCTCACAGCAGACCCAATGGCAATGGCTTACAGCAGACAGTGACCCTGCCAATGTAGGCCTCAATGTGGA
79 V I T D F D K Q G N S V A S G I A I A E A C V T V R G I Y A E I H V
2901 CAGCAGAGATGATCTCCCGAGTCTGGTCTGATGGCCGCCCGACATGGTGCTTGTGTCTCATAGAGCATGGTGATCTTCTCAGTGGCGACCTCCAC
46 A S I I E G T K T R I A A G V H H K N D E Y L M T I K E T A V E V
BbsI (3031) XmnI (3027) AseI (3093)
3001 CAGCTCCAGATCCTGCTGAGAGATGTTGAAGGTCTTCATGGTGGCCCTCTATAGTGAGTCGTATTATACTATGCCGATATACTATGCCGATGATTAATT
13 L E L D Q Q S I N F T K M
SacI (3150)
3101 GTCAAACACAGCGTGGATGGCGTCTCCAGCTTATCTGACGGTTCACTAAACGAGCTCTGCTTATATAGACCTCCCACCGTACACGCCTACCGCCATTTC
SpeI (3248)
3201 GTC AATGGGGCGGAGTTGTTACGACATTTGGAAAGTCCCGTTGATTTACTAGTCAAACAAACTCCCATTGACGTCAATGGGGTGGAGACTTGGAAATC
SnaBI (3376)
3301 CCCGTGAGTCAAACCGCTATCCACGCCATTGATGTACTGCCAAAACCGCATCATCATGGTAATAGCGATGACTAATACGTAGATGTACTGCCAAGTAGG
NdeI (3481)
3401 AAAGTCCCATAAGGTCATGTACTGGCATAATGCCAGGCGGGCATTACCGTATTGACGTCAATAGGGGGCTACTTGGCATATGATACACTTGATGT
3501 ACTGCCAAGTGGGAGTTTACCGTAAATACTCCACCCATTGACGTCAATGAAAGTCCCTATTGGCGTTACTATGGGAACATACGTCAATTATTGACGTCA
PacI (3667) SdaI (3659) BspLU11I (3677)
3601 ATGGGCGGGGTCGTTGGGCGGTGAGCCAGGCGGGCCATTACCGTAAGTTATGTAACGCTGCAGGTTAATTAAGAACATGTGAGCAAAAGGCCAGCAA
AAGCCAGGAACCGTAAAAAGCCGCTTGGCTGGCGTTTTCCATAGGCTCCGCCCCCTGACGAGCATCACAAAATCGACGCTCAAGTCAGAGGTGGC
3701 GAAACCCGACAGGACTATAAAGATACCAGGCGTTTCCCCTGGAAGCTCCCTCGTGCGCTCTCTGTTCCGACCTGCCGTTACCGGATACCTGTCCGC
3801 CTTTCTCCCTTCGGGAAGCGTGGCGCTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTGTTCCGCTCCAAGCTGGGCTGTGTGCACGAA
ApaLI (3991)
3901 CCCCCGTTACGCCGACCGCTGCGCTTATCCGGTAACTATCGTCTTGTAGTCCAACCCGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTA
4001 ACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTCTTGAAGTGGTGGCCTAACTACGGCTACACTAGAAGAACAGTATTTGGTATCTGCCG
4101 TCTGCTGAAGCCAGTTACCTTCGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCACCGCTGGTAGCGGTGGTTTTTTTGTGTTGCAAGCAGCAG
4201 ATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGTCTGACGCTCAGTGAACGAAAACCTCACGTTAAGGGATTTTGGTCA
4301 EagI (4427)
PacI (4407) SmaI (4416) NotI (4426)
4401 TGGCTAGTTAATTAACATTTAAATC AGCGGCCGCAATAAAATATCTTTATTTTTCATTACATCTGTGTGTTGGTTTTTTGTGTAATCGTAACTAACATAC
4501 GCTCTCCATCAAACAAAACGAAACAAAACAACTAGCAAAATAGGCTGTCCCCAGTGCAAGTGCAGGTGCCAGAACATTTCTCTATCGAA