



PvuI (7)
 SgfI (6) MfeI (82)
 1 GGATCTGCGATCGCTCCGGTGCCCGTCAGTGGGAGAGCGCACATCGCCACAGTCCCCGAGAAGTTGGGGGAGGGGTGCGCAATTGAACGGGTGCCTA
 101 GAGAAGGTGGCGCGGGTAAACTGGAAAAGTGTGCTGTACTGGCTCCGCTTTTTCCCGAGGGTGGGGGAGAACCCTATATAAGTGCAGTAGTCGCC
 Psp1406I (203) HindIII (245) Bsu36I (291)
 201 GTGAACGTTCTTTTTTCGCAACGGGTTTGCCGCCAGAACACAGCTGAAGCTTCGAGGGCTCGCATCTCTCCTTCACGCGCCCGCCCTACCTGAGGCC
 301 GCCATCCACGCCGGTTGAGTCGCGTTCTGCCGCTCCCGCTGTGGTGCTCCTGAACTGCGTCCGCCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC
 NgoMIV (441)
 401 GGGCCTTTGTCCGGCGCTCCCTTGAGCCTACCTAGACTCAGCCGGCTCTCCACGCTTTGCTGACCCTGCTTGTCTCAACTCTACGCTTTTGTTCGTTT
 BstEII (555)
 AgeI (552) NcoI (560)
 501 TCTGTTTGTGCGCGTTACAGATCCAAGCTGTGACCGGGCCTACCTGAGATCACCGGTACCATTGGAAGATCCGCGTAGAAGGACGACGGCGCCACGCGC
 1▶ M E D P R R R T T A P R A
 PvuI (685)
 601 TAAGAAGCCGTCGCGAAGCGCGCCCGACGCAGCCAGCAGGACCAGGGCCACGCGGAAAGCTGCGGCCGCAAAGGGGGCTCGATCGCGGGGGGGC
 13▶ K K P S A K R A P T Q P S R T R A H A E S C G P Q R G A R S R R A
 BbrPI (728) NcoI (797)
 701 GAGCGTGACGGGGACACCACGGAGAAGCCACGTGCCCCAGGGCCCCGAGTGCATCCAGCAAGGGCCACTGAGCTCACCAAAGATGCACAGCCCTCGGCCA
 47▶ E R D G D T T E K P R A P G P R V H P A R A T E L T K D A Q P S A
 BspEI (864) BsiWI (879) SacII (899)
 801 TGGACGCGGCAGGAGCCACCGCGCGGCTGCCGTCCGGGTGCCCGCAGCAGGCCATCCTGGATCCGGAGCTGCCCGCGTACGGGAGCCCCAGCCGCC
 80▶ M D A A G A T A R P A V R V P Q Q Q A I L D P E L P A V R E P Q P P
 901 CGCGGATCCCGAGGCGCGGAAAGTCGTAAGGGGACCTAGCCACAGAAGGGGCGCGCTCCACCGGGCAGCCAGAGCGCCGCGAGGGTCCAGGAAGGAA
 113▶ A D P E A R K V V R G P S H R R G A R S T G Q P R A P R G S R K E
 EcoRV (1048) EagI (1061) FspI (1097)
 1001 CCGACAAGCTAAAGAAGGTGCTGGACAAATTGAGATTGAAACGCAAAGATATCTCGGAGGCGCCGAGACGGTGAATAAAGTTGTGGAACGCTGCTGC
 147▶ P D K L K K V L D K L R L K R K D I S E A A E T V N K V V E R L L
 1101 GCAGAATGCAGAAACGGGAGTCGGAGTTCAAAGGTGTGGAGCAGCTGAACACTGCGCGATACTATGAACATGTGAAGATTTCTGCTCCTAATGAATTTGA
 180▶ R R M Q K R E S E F K G V E Q L N T A A Y Y E H V K I S A P N E F D
 PmeI (1206) SspI (1241) EcoRI (1283)
 1201 TGTTATGTTTAACTGGAAGTCCCAGGATTGAGCTACAAGAATATTGAAACAGTGTCTTTCTATCTTGTGAAATCAAAGAATTCCACGAGGAAAT
 213▶ V M F K L E V P R I E L Q E Y Y E T G A F Y L V K F K R I P R G N
 1301 CCCTGAGTCATTTCTTAGAAGGGGAAGTATTATCAGCTACCAAGATGCTGTCAAAGTTTAGGAAAATCATTAAAGAAGAAGTTAAAGAAATCAAAGATA
 247▶ P L S H F L E G E V L S A T K M L S K F R K I I K E E V K E I K D
 1401 TAGATGTCAGTGTGGAGAAGGAAAAACCAGGAAGCCCTGCTGTAACACTTCTTATCAGGAACCCTGAAGAAATCTCTGTGGATATAATTCTGGCTTTGGA
 280▶ I D V S V E K E K P G S P A V T L L I R N P E E I S V D I I L A L E
 1501 GTCAAAAGGCAGCTGGCCTATTAGTACCAAAGAAGGACTACCTATTCAAGGCTGGCTGGGCACAAAAGTGAGGACCAATCTAAGACGAGAGCCGTTTTAT
 313▶ S K G S W P I S T K E G L P I Q G W L G T K V R T N L R R E P F Y
 1601 CTCGTACCAAGAATGCAAAGGATGAAATAGTTTTCAAGGAGAGACTGGCGCCTCTCTTTCTCTCACACTGAAAAGTACATTTTGAATAATCACGGGA
 347▶ L V P K N A K D G N S F Q G E T W R L S F S H T E K Y I L N N H G
 BspEI (1723) PstI (1737) AseI (1758)
 1701 TAGAGAAAACATGCTGTGAATCTTCCGGAGCAAATGCTGCAGAAAAGATGTTTAAATTAATGAAATACCTTTTGGAACAGTTGAAAAAGAGTTTCA
 380▶ I E K T C C E S S G A K C C R K E C L K L M K Y L L E Q L K K E F Q
 NsiI (1808) SmaI (1880)
 1801 AGAGCTGGATGCATTCTGTTCTACCATGTGAAAACGTCATCTTTACATGTGGACCCAGGACCCGAGGACAGTCAAGTGGGACCCAGGAACCTCAGC
 413▶ E L D A F C S Y H V K T A I F H M W T Q D P Q D S Q W D P R N L S
 Bsu36I (1938)
 1901 TCCTGCTTCGATAAGTTGTTAGCATTCTTTCTGAGTGCTCAGGACAGAGAACTGGATCATTATTTTATTCCAAAGTTCAATCTATTCTCTCAAGAAC
 447▶ S C F D K L L A F F L E C L R T E K L D H Y F I P K F N L F S Q E
 HindIII (2077)
 2001 TAATTGACCGAAAAAGTAAAGAATTTCTATCGAAGAAAATGAATATGAAAGAAATAATGGGTTTCCAATTTTTGACAAGCTTTGAAACTGTATTTGTGT
 480▶ L I D R K S K E F L S K K I E Y E R N N G F P I F D K L •
 MscI (2107)
 NheI (2101)
 2101 TGCTAGCTGGCCAGACATGATAAGATACATTGATGAGTTTGGACAACCACAACCTAGAATGCAGTGAAAAAATGCTTTATTTGTGAAATTTGTGATGCT
 HpaI (2239) MfeI (2250)
 2201 ATTGCTTTATTTGTAACCATTATAAGCTGCAATAAACCAAGTTAAACAACAACATTGCATTCATTTTATGTTTCAGGTTTACGGGGAGGTGTGGGAGTTT
 EcoRI (2335)
 2301 TTTAAAGCAAGTAAAACCTCTACAAATGTGGTATGGAATCTAAAATACAGCATAGCAAACTTTAACCTCCAATCAAGCCTCTACTGAACTCTTTTC
 2401 TGAGGGATGAATAAGGCATAGGCATCAGGGGCTGTTGCCAATGTGCATTAGCTGTTTGACGCTCACCTTCTTTCATGGAGTTAAGATATAGTGTATT

SapI (2517) SspI (2574) SwaI (2588)
 2501 TCCAAGTTTGAAGTAGCTCTTCATTTCTTTATGTTTAAATGCACTGACCTCCACATTCCCTTTTATGAAAATATTAGAAAATAATTTAAATACAT
 2601 CATTGCAATGAAAATAAATGTTTTTTATTAGGCAGAATCCAGATGCTCAAGGCCCTTCATAATATCCCCAGTTTAGTAGTTGGACTTAGGGAACAAAGG
 2701 AACCTTTAATAGAAATTGGACAGCAAGAAAGCGAGCTTCTAGCTTTAGTTCCTGGTACTTGAGGGGATGAGTTCCCTCAATGGTGGTTTTGACCAGCT
 141 • N R T Y K L P I L E E I T T K V L K
BstXI (2878)
 2801 TGCCATTCATCTCAATGAGCACAAAGCAGTCAGGAGCATAGTCAGAGATGAGCTCTCTGCACATGCCACAGGGGCTGACCACCTGATGGATCTGTCCAC
 122 G N M E I L V F C D P A Y D S I L E R C M G C P S V V R I S R D V
 2901 CTCATCAGAGTAGGGTGCCTGACAGCCACAATGGTGTCAAAGTCTTCTGCCGTTGCTCACAGCAGACCAATGGCAATGGCTTCAGCACAGACAGTG
 89 E D S Y P H R V A V I T D F D K Q G N S V A S G I A I A E A C V T
StuI (3013)
 3001 ACCCTGCCAATGTAGGCCTCAATGTGGACAGCAGAGATGATCTCCCCAGTCTTGGTCTGATGGCCGCCCGACATGGTGCTTGTGTCTCATAGAGCA
 55 V R G I Y A E I H V A S I I E G T K T R I A A G V H H K N D E Y L M
BbsI (3159)
XmnI (3155)
 3101 TGGTGATCTTCTCAGTGGCGACCTCCACAGCTCCAGATCCTGCTGAGAGATGTTGAAGTCTTCATGGTGGCCCTCCTATAGTGAGTCGTATTATACTA
 22 T I K E T A V E V L E L D Q Q S I N F T K M
AseI (3221)
 3201 TCGCGATATACTATGCCGATGATTAATTGTCAAACACAGCGTGGATGGCGTCTCCAGCTTATCTGACGGTTCATAACGAGCTCTGCTTATATAGACCTC
SpeI (3376)
 3301 CCACCGTACACGCCTACCGCCATTGCGTCAATGGGCGGAGTTGTTACGACATTTTGAAAGTCCCGTTGATTTACTAGTCAAAAACAACTCCCATGG
 3401 ACGTCAATGGGGTGGAGACTTGGAAATCCCCGTGAGTCAAACCGCTATCCACGCCATTGATGTACTGCCAAAACCGCATCATCATGGTAATAGCGATGA
SnaBI (3504)
 3501 CTAATACGTAGATGTAAGTACTGCAAGTAGGAAAGTCCCATAAAGTCTGACTGGGCATAATGCCAGGCGGGCCATTTACCGTCAATTGACGTCAATAGGGGG
NdeI (3609)
 3601 CGTACTTGGCATATGATACACTTGTACTGCAAGTGGGCAGTTTACCCTAAATACTCCACCCATTGACGTCAATGAAAGTCCCTATTGGCGTTACT
PacI (3795)
PstI (3788)
SdaI (3787)
 3701 ATGGGAACATACGTCAATTATTGACGTCAATGGGCGGGGTCGTTGGCGGTACGCCAGGCGGGCCATTTACCGTAAGTTATGTAACGCTGCAGGTTAAT
 3801 TAAGAACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAAGCGCGTGTGCTGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGCATCAC
 3901 AAAAATCGACGCTCAAGTCAAGTCAAGTGGCGAAACCCGACAGGACTATAAAGATACCAGCGTTTTCCCTGGAAGTCCCTCGTGCCTCTCCTGTTCCGA
 4001 CCTGCGCTTACCGGATACCTGTCCGCTTTCTCCCTTCGGGAAGCGTGGCGTTTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTCGT
ApaLI (4119)
 4101 TCGCTCCAAGCTGGGCTGTGTGCACGAACCCCGTTACGCCGACCGCTGCGCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGGTAAGACACGAC
 4201 TTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGCGGTGCTACAGATTCTTGAAGTGGTGGCCTAACTACGGCTACA
 4301 CTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAACCACCGCTGGTAG
 4401 CGGTGTTTTTTTTGTTTGAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGTCTGACGCTCAGTGGAAAC
EagI (4555)
PacI (4535) SwaI (4544) NotI (4554)
 4501 GAAAACCTCACGTTAAGGGATTTTGGTCATGGCTAGTTAATTAACATTTAAATCAGCGGCCGCAATAAAATATCTTTATTTTATTACATCTGTGTGTTGG
 4601 TTTTTTGTGTGAATCGTAACTAACATACGCTCTCCATCAAAACAAAACGAAACAAAACAACTAGCAAAATAGGCTGTCCCCAGTGAAGTGCAGGTGCC
 4701 AGAACATTTCTCTATCGAA