



PvuI (7)
SgfI (6) **MfeI (82)**
1 GGATCTGCGATCGCTCCGGTGCCCGTCAGTGGCAGAGCGCACATCGCCACAGTCCCGGAGAAGTTGGGGGAGGGGTGGCAATTGAACGGGTGCCTA
101 GAGAAGGTGGCGCGGGTAAACTGGAAAGTGATGTCGTGTAAGTGGCTCCGCCTTTTCCGAGGGTGGGGGAGAACCCTATATAAGTGCAGTAGTCGCC

Psp1406I (203) **HindIII (245)** **Bsu36I (291)**
201 GTGAACGTTCTTTTTCGCAACGGGTTTGCCGCCAGAACACAGCTGAAGCTTCGAGGGGCTCGCATCTCTCTTACAGCGCCCGCCGCCCTACCTGAGGCC
301 GCCATCCACGCGGTTGAGTGCCTTCTGCCGCTCCCGCCTGTGGTGCCTCCTGAAGTGCCTCCGCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC

NgoMIV (441) **NaeI (441)**
401 GGGCCTTTGTCCGGCGCTCCCTTGGAGCCTACCTAGACTCAGCCGGCTCTCCACGCTTTGCTGACCCTGCTTGTCTCAACTCTACGTCTTTGTTTCGTTT

KasI (535) **AgeI (552)** **BspHI (560)**
501 TCTGTTTCTGCGCCGTTACAGATCCAAGCTGTGACCGGGCGCTACCTGAGATCACCGGTCATCATGACAAAACCTGAAGAGCATCTGGAGGGAATTGTCAA
PvuII (664)
601 TATCTTCCACCAATACTCAGTTCGGAAGGGGCATTTTACACCCTCTTAAGGGTGAAGTGAAGCAGCTGCTTACAAAGGAGCTTGCACCAACCATCAAG
13▶ I F H Q Y S V R K G H F D T L S K G E L K Q L L T K E L A N T I K

SspI (729) **StuI (738)** **BsaBI (745)** **SalI (766)** **EcoRI (778)**
701 AATATCAAAGATAAAGCTGTCATTGATGAAATATTCCAAGGCCTGGATGCTAATCAAGATGAACAGGTCGACTTCAAGAATTCATATCCCTGGTAGCCA
47▶ N I K D K A V I D E I F Q G L D A N Q D E Q V D F Q E F I S L V A

MscI (878) **NheI (872)**
801 TTGCGCTGAAGGCTGCCATTACACACCCACAAGAGTAGTGTAGCTCTGAAAGCCTTTTACCAGCAATGCTAGCTGGCCAGACATGATAAGATACA
80▶ I A L K A A H Y H T H K E •

901 TTGATGAGTTGGACAAACCACAACCTAGAATGCAGTGAATAAATGCTTTATTTGTGAAATTTGTGATGCTATTGCTTTATTTGTAACCATTATAAGCTG

HpaI (1010) **MfeI (1021)**
1001 CAATAAACAAAGTTAAACAACAATTGCATTCTTTTATGTTTCAGGTTCAAGGGGAGGTGTGGGAGGTTTTTAAAGCAAGTAAACCTCTACAAATGT

EcoRI (1106)
1101 GGTATGGAATTCTAAAATACAGCATAGCAAAACTTAACCTCCAAATCAAGCCTCTACTTGAATCCTTTTCTGAGGGATGAATAAGGCATAGGCATCAGG
1201 GGCTGTTGCCAATGTGCATTAGCTGTTGCAGCCTCACCTTCTTTCATGGAGTTAAGATATAGTGATTTTCCCAAGGTTTGAAGTACTGCTCTTCATTTCC

SspI (1345) **SwaI (1359)**
1301 TTTATGTTTTAAATGCACTGACCTCCACATTCCCTTTTTAGTAAAATATTGAGAAATAATTTAAATACATCATTGCAATGAAAATAAATGTTTTTTATT

EcoO109I (1420)
1401 AGGCAGAATCCAGATGCTCAAGGCCCTTATAATATCCCCAGTTTAGTAGTTGGACTTAGGGAACAAAGGAACCTTTAATAGAAATGGACAGCAAGAA
1501 AGCGAGCTTCTAGCTTTTAGTTCTGGTGTACTTGAGGGGATGAGTTCCTCAATGGTGGTTTTGACCAGCTTGCCATTCATCTCAATGAGCACAAAGCAG
144▶ • 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 (1620) **BstXI (1649)**
1601 TCAGGAGCATAGTCAGAGATGAGCTCTGCACATGCCACAGGGGCTGACCACCCTGATGGATCTGTCCACCTCATCAGAGTAGGGGTGCCTGACAGCCA
112▶ 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 V

StuI (1784)
1701 CAATGGTGTCAAAGTCTTCTGCCGTTGCTCACAGCAGACCAATGGCAATGGCTTACAGCACAGACAGTACCTGCCAATGTAGGCCTCAATGTGGAC
79▶ 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
1801 AGCAGAGATGATCTCCAGTCTTGGTCTGATGGCCGCCGACATGGTGTGTTGCTCCTCATAGAGCATGGTGTCTTCTCAGTGGCGACCTCCACC
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

BspHI (1934) **BbsI (1930)** **AseI (1992)**
1901 AGCTCCAGATCCTGCTGAGAGATGTTGAAGTCTTCATGATGGCCCTCTATAGTGTGATGCTATTATACTATGCCGATATACTATGCCGATGATTAATTG
12▶ L E L D Q Q S I N F T K M

SacI (2049)
2001 TCAAACAGCGTGGATGGCGTCTCCAGCTATCTGACGGTCACTAAACGAGCTCTGCTTATATAGACCTCCACCGTACACGCCTACCGCCATTGGC

SpeI (2147)
2100 GTCAATGGGGCGGAGTTGTTACGACATTTTGGAAAGTCCCGTTGATTTACTAGTCAAAAACAACTCCATTGACGTCAATGGGGTGGAGACTTGGAAAT

SnaBI (2275)
2199 CCCCCTGAGTCAAACCGCTATCCACGCCATTGATGTAAGTGCACAAAACCGCATCATCATGGTAATAGCGATGACTAATACGTAGATGTAAGTGCACAAAGTAC

NdeI (2380)
2299 GAAAGTCCATAAGGTCATGTAAGTGGGCATAATGCCAGGGGGCCATTACCCTGATTGACGTCAATAGGGGGCTACTTGGCATATGATACACTTGTATG
2399 TACTGCCAAGTGGGAGTTTACCATAAATACTCCACCCATTGACGTCAATGGAAAGTCCCTATTGGCGTTACTATGGGAACATACGTCAATTATTGACGTC

PstI (2559)
SdaI (2558) **PacI (2566)** **BspLU11I (2576)**

2499 AATGGGCGGGGTCGTTGGGCGGTCAGCCAGGCGGGCCATTTACCGTAAGTTATGTAACGCTGCAGGTTAA TTAAGAACATGTGAGCAAAGGCCAG
 2597 CAAAAGGCCAGGAACCGTAAAAAGGCCGCGTTGCTGGCGTTTTCCATAGGCTCCGCCCCCTGACGAGCATCACAAAATCGACGCTCAAGTCAGAGGT
 2697 GGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTCCCCCTGGAAGCTCCCTCGTGCGCTCCTCTGTTCCGACCTGCCGCTTACCGGATACCTGTC

ApaLI (2890)

2797 CGCCTTTCTCCCTTCGGGAAGCGTGGCGCTTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGGTGTAGGTCGTTCCGCTCCAAGCTGGGCTGTGTGCAC
 2897 GAACCCCGTTTCAGCCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTG
 2997 GTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTTCTTGAAGTGGTGGCCTAACTACGGCTACACTAGAAGAACAGTATTTGGTATCTG
 3097 CGCTCTGCTGAAGCCAGTTACCTTCGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCACCGCTGGTAGCGGTGTTTTTTTGTGTTGCAAGCAG
 3197 CAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGGTCTGACGCTCAGTGGAACGAAAACACTCACGTTAAGGGATTTTGG

EagI (3326)
PacI (3306) **SwaI (3315)** **NotI (3325)**

3297 TCATGGCTAGTTAATTAACATTTAAATC AGCGGCCGCAATAAAATATCTTTATTTTCATTACATCTGTGTGTTGGTTTTTTGTGTAATCGTAACTAAC
 3396 ATACGCTCTCCATCAAAACAAAACGAAACAAAACAAACTAGCAAATAGGCTGTCCCCAGTGCAAGTGCAAGTGCCAGAACATTTCTCTATCGAA