



PvuI (7)
SgfI (6) MfeI (82) EcoNI (96)
1 GGATCTGGATCGCTCCGGTGCCCGTCAGTGGGAGAGCGCACATCGCCACAGTCCCGGAGAAGTTGGGGGAGGGGTGGCAATTGAACGGGTGCCTA
101 GAGAAAGTGGCGCGGGTAAACTGGAAAGTGATGTCGTGTAAGTGGTCCGCCTTTTCCGAGGGTGGGGGAGAACCCTATATAAGTGCAGTAGTCGCC

HindIII (245) **Bsu36I (291)**
Psp1406I (203) **PvuII (239)** EcoNI (287)
201 GTGAACGTTCTTTTTCGCAACGGGTTTGGCCGAGAACACAGCTGAAGCTTCGAGGGGCTCGCATCTCTCTTACCGCGCCCGCCCTACCTGAGGCC
301 GCCATCCACGCGGTTGAGTGCAGTTCGCCGCTCCCGCCTGTGGTGCCTCTGAAGTGCCTCCGCCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC

NgoMIV (441)
401 GGGCCTTTGTCCGGCGCTCCCTTGAGCCTACCTAGACTCAGCGGCTCTCCACGCTTGGCTGACCCTGCTTGTCAACTCTACGCTTTTGTTCGTTT

KasI (535) **AgeI (552)** **BspHI (560)** **DraIII (568)**
501 TCTGTTCTGCGCCGTTACAGATCCAAGCTGTGACCGCGCCCTACCTGAGATCACCGGTCATCATGAACCACATTGTGCAAACCTTCTCTCTGTCAACAG
1▶ M N H I V Q T F S P V N S
601 CGCCAGCCTCCAACTACGAGATGCTCAAGGAGGAGCAGGAAGTGGCTATGCTGGGGCGCCCAACCTGTCTCCCGGATGTCACCGTGATCCAC
13▶ G Q P P N Y E M L K E E Q E V A M L G A P H N P A P P M S T V I H
701 ATCCGAGCGAGACCTCCGTGCCTGACCATGTGGTCTGGTCCCTGTTCAACACCTCTTCATGAACACCTGCTGCCTGGGCTTCATAGCATTGCGTACT
47▶ I R S E T S V P D H V V W S L F N T L F M N T C C L G F I A F A Y

StuI (848) **Bsp120I (842)** **Bsp120I (884)**
801 CCGTGAAGTCTAGGGACAGGAAGATGGTTGGCGACGTGACCGGGGCCAGGCCTATGCCTCCACCGCCAAGTGCCTGAACATCTGGGCCCTGATTTTGGG
80▶ S V K S R D R K M V G D V T G A Q A Y A S T A K C L N I W A L I L G

BspHI (905) **NheI (964)** **MscI (970)**
901 CATCTTCATGACCATTCTGCTCGTCATCATCCAGTGTGGTCTCCAGGCCAGCGATAGATCGCTAGCTGGCCAGACATGATAAGATACATTGATGAG
113▶ I F M T I L L V I I P V L V V Q A Q R •
1001 TTTGGACAACCACAAC TAGAATGCAGTGAAAAAATGCTTTATTTGTGAAATTTGTGATGCTATTGCTTTATTTGTAACCATTATAAGCTGCAATAAC

HpaI (1102) MfeI (1113) **EcoRI (1198)**
1101 AAGTTAAACAACAACCAATTGCATTCATTTATGTTTCAGTTTCAGGGGAGGTGTGGGAGGTTTTTAAAGCAAGTAAACCTCTACAATGTGGTATGGA
1201 ATTCTAAAATACAGCATAGCAAACTTTAACCTCAAATCAAGCCTCTACTTGAATCCTTTTCTGAGGGATGAATAAGGCATAGGCATCAGGGGCTGTTG

SapI (1380)
1301 CCAATGTGCATTAGCTGTTTGCAGCCTCACCTTCTTCATGGAGTTTAAAGATATAGTGTATTTTCCCAAGTTTGAAGTACTGCTTTCATTTCTTTATGTT

SspI (1437) **SwaI (1451)**
1401 TTAATGCACTGACCTCCACATTCCTTTTTAGTAAATATTCAGAAATAATTTAAATACATCATTGCAATGAAAATAAATGTTTTTATTAGGCAGAA
1501 TCCAGATGCTCAAGGCCCTCATAATATCCCCAGTTTAGTAGTTGGACTTAGGGAACAAAGGAACCTTAAATAGAAATTGGACAGCAAGAAAGCGAGCT
1601 TCTAGCTTTAGTTCTGGTGACTTGGAGGGGATGAGTTCCTCAATGGTGGTTTTGACCAGCTTGCCATTCTCAATGAGCACAAAGCAGTCAGGAGC
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 D P A

SacI (1712) **BstXI (1741)**
1701 ATAGTCAGAGATGAGCTCTGTCACATGCCACAGGGGCTGACCACCTGATGGATCTGTCCACCTCATCAGAGTAGGGTGCCTGACAGCCACAATGGT
110▶ 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 I T

StuI (1876)
1801 TCAAAGTCTTCTGCCCCTGCTCACAGCAGACCAATGGCAATGGCTTCAGCACAGACAGTACCCTGCAATGTAGGCCTCAATGTGGACAGCAGAGA
76▶ 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 A S I
1901 TGATCTCCCAAGTCTGGTCTGATGGCCGCCGACATGGTCTGTTGTCCTCATAGAGCATGGTATCTTCTCAGTGGCGACCTCCACCAGCTCCAG
43▶ 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 L E L

BbsI (2022) **XmnI (2018)** **AseI (2084)**
2001 ATCCTGCTGAGAGATGTTGAAGTCTTCATGGTGGCCCTCCTATAGTGAGTCGTATTATACTATGCCGATATACTATGCCGATGATTAATTGTCAAACA
10▶ D Q Q S I N F T K M

SacI (2141)
2101 GCGTGATGGCGTCTCCAGCTTATCTGACGGTTCACTAAACGAGCTCTGCTTATATAGACCTCCACCGTACACGCCTACCGCCATTTGCGTCAATGGG

SpeI (2239)
2201 GCGGAGTTGTACGACATTTGGAAAGTCCCGTTGATTTACTAGTCAAAACAACCTCCATTGACGTCAATGGGTGGAGACTTGAAATCCCGTGAGT

SnaBI (2367)
2301 CAAACCGCTATCCACGCCATTGATGTAAGTGCCTGCAAAACCGCATCATCATGGTAATAGCGATGACTAATACGTAGATGTAAGTGCCTGCAAAAGTCCCA

NdeI (2472)
2401 TAAGTGCATGTAAGTGGCATAATGCCAGCGGGCCATTTACCGTATTGACGTCAATAGGGGGCTACTTGGCATATGATACTTGTACTGCAAG

2501 TGGGCAGTTTACCGTAAATACTCCACCCATTGACGTCAATGGAAAGTCCCTATTGGCGTTACTATGGGAACATACGTCAATTATTGACGTCAATGGGCGGG

PacI (2658)

PstI (2651)

SdaI (2650)

BspLU11I (2668)

2601 GGTCGTTGGGCGGTCAGCCAGGCGGGCCATTTACCGTAAGTTATGTAACGCCTGCAGGTTAATTAAAGAACATGTGAGCAAAAGGCCAGCAAAAGGCCAGG

2701 AACCGTAAAAAGGCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGCATCACAAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGA

2801 CAGGACTATAAGATACCAGGCGTTTCCCCTGGAAGCTCCCTCGTGCCTCTCCTGTTCCGACCTGCCGCTTACCGGATACCTGTCCGCTTTCTCCC

ApaLI (2982)

2901 TTCGGAAGCGTGGCGCTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTCGTTCCGCTCCAAGCTGGGCTGTGTGCACGAACCCCGCTT

3001 CAGCCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTA

3101 GCAGAGCGAGGTATGTAGCGGTGCTACAGAGTCTTGAAGTGGTGGCCTAACTACGGCTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAA

3201 GCCAGTTACCTTCGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAAACAAACCACCGCTGGTAGCGGTGGTTTTTTTGTGTTGCAAGCAGCAGATTACGCGC

PacI (3398)

3301 AGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGGTCTGACGCTCAGTGGAAACGAAAACCTCACGTTAAGGGATTTTGGTCATGGCTAGTT

EagI (3418)

SwaI (3407)

NotI (3417)

3401 AATTAACATTTAAATCAGCGGCCGCAATAAAATATCTTTATTTTCATTACATCTGTGTGTTGGTTTTTTGTGTAATCGTAACTAACATACGCTCTCCAT

3501 CAAAAAAAACGAAAAAAAACAACTAGCAAAATAGGCTGTCCCAGTGCAAGTGCAGGTGCCAGAACATTTCTCTATCGAA