



PvuI (7) SgfI (6) MfeI (82)
 1 GGATCTGCGATCGCTCCGGTGCCGTCAGTGGGAGAGCGCACATCGCCACAGTCCCCGAGAAGTTGGGGGAGGGGTGGCAATTGAACGGGTGCCTA
 101 GAGAAGGTGGCGCGGGTAAACTGGAAAAGTATGTCGTGTACTGGCTCCGCTTTTTCCGAGGGTGGGGGAGAACCCTATATAAGTGCAGTAGTCGCC

Psp1406I (203) HindIII (245)
 201 GTGAACGTTCTTTTTCGCAACGGGTTTGCCGCCAGAACACAGCTGAAGCTTCGAGGGCTCGCATCTCTCCTTCACGCGCCCGCCCTACCTGAGGCC
 301 GCCATCCACGCCGGTTGAGTCGCGTTCTGCCGCTCCCGCTGTGGTGCTCCTGAACTGCGTCCGCCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC

NgoMIV (441)
 401 GGGCCTTTGTCCGGCGCTCCCTTGAGCCTACCTAGACTCAGCCGGCTCTCCACGCTTTGCTGACCCTGCTTGTCTCAACTCTACGCTTTTGTTCGTTT

AgeI (552) BspHI (568)
 501 TCTGTTTGCGCCGTTACAGATCCAAGCTGTGACCGCGCCTACCTGAGATCACCGGTAGGAGGGCCATCATGACCCCGCAGCTTCTCTGGCCCTGTGCT
 1▶ M T P Q L L L A L V

Bsp120I (636) PvuI (691) Acc65I (685)
 601 CTCTGGCCAGCTGCCCCCCTGCAGTGAAGGAAAGGGCCCCCAGCAGCTGACTGACACTGCCCCGGTGCAATGCCGAGCCTCTCGGTACCCGATCGCCG
 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 TGGATTGCTCCTGGACCTGCCGCTGTCCAACTCCACCAGCCCCGTGCTTTCATTGCCACGTACAGGCTCGGCATGGCTGCCGGGGCCACAGCTG
 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
 801 GCCCTGCCTGCAGCAGACGCCAACGTCACCAGCTGCACCATCAGGATGTCACGCTGTTCTCCATGGCTCCCTACGTGCTCAATGTCACCGCCGTCAC
 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 CCCTGGGGCTCCAGCAGCAGCTTCGTGCCTTTATAACAGAGCACATCATCAAGCCCGACCTCCAGAAGGCGTGCGCCTAAGCCCCCTCGTGAGCGCC
 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) BglIII (1045) ScaI (1060) BssHIII (1092)
 1001 AGCTACAGGTGCAGTGGGAGCCTCCCGGTCTGGCCCTTCCAGAGATCTTCTCACTGAAGTACTGGATCCGTTACAAGCGTCAGGGAGCTGCGCGCTT
 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)
 1101 CCACCGGTGGGGCCATTGAAGCCACGTCTTTCATCTCAGGCTGTGCGGCCCGAGCCAGGTAATACATCCAAGTGGCGGCTCAGGACCTCACAGAC
 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

Acc65I (1271)
 1201 TACGGGAACTGAGTACTGAGTCTCCCCGCCACTGCCAATGAGCCTGGGCAAGGTTCTCTGGAGTAGGGGTACCTGGGGTGGGCAGAGCTGTGCCTG
 211▶ Y G E L S D W S L P A T A T M S L G K 1▶ R A V P
 1▶ V P G V G V P G V G

ApaLI (1366) SpeI (1376)
 1301 GGGCAGCAGCCCTGCCTGGAAGTGCAGCAGCTTTCACAGAAGCTCTGCACACTGGCCTGGAGTGCACATCCACTAGTGGGACACATGGATCTAAG
 5▶ G G S S P A W T Q C Q Q L S Q K L C T L A W S A H P L V G H M D L R
 1401 AGAAGAGGAGATGAAGACTACAAATGATGTTCCCATATCCAGTGTGGAGATGGCTGTGACCCCAAGGACTCAGGGACAACAGTCAAGTCTGCTGTG
 38▶ E E G D E E T T N D V P H I Q C G D G C D P Q G L R D N S Q F C L

BamHI (1504)
 1501 CAAAGGATCCACCAGGCTGATTTTTATGAGAAGCTGCTAGGATCGGATATTTTACAGGGGAGCCTTCTCTGCTCCCTGATGCCCTGTGGGCCAGC
 72▶ Q R I H Q G L I F Y E K L L G S D I F T G E P S L L P D S P V G Q

BstEII (1644)
 1601 TTCATGCCTCCCTACTGGGCTCAGCCAACTCCTGCAGCCTGAGGGTCACTGGGAGACTCAGCAGATCCAAGCCTCAGTCCCAGCCAGCCATGGCA
 105▶ L H A S L L G L S Q L L Q P E G H H W E T Q Q I P S L S P S Q P W Q

StuI (1738)
 1701 GCGTCTCTTCTCCGCTTCAAAATCCTTCGAGCCTCCAGGCTTTGTGGCTGTAGCCGCCGGGTCTTTGCCATGGAGCAGCAACCCTGAGTCCCTAA
 138▶ R L L L R F K I L R S L Q A F V A V A A R V F A H G A A T L S P •

MscI (1829) NheI (1823)
 1801 AGGCAGCAGCTCAAGGATGGCACGCTAGCTGCCAGACATGATAAGATACATTGATGAGTTTGGACAAACCACAACCTAGAATGCAGTGAATAAATGCTT

HpaI (1961) MfeI (1972)
 1901 TATTTGTGAAATTTGTGATGCTATTGCTTTATTTGTAACCATTATAAGCTGCAATAAACAAGTTAAACAACAACATTCATTCTTTATGTTTCAGGTT

EcoRI (2057)
 2001 CAGGGGGAGGTGTGGGAGTTTTTAAAGCAAGTAAACCTCTACAAATGTGGTATGGAATTTCTAAAATACAGCATAGCAAACTTTAACCTCAAATCA
 2101 AGCCTCTACTTGAATCCTTTTCTGAGGGATGAATAAGGCATAGGCATCAGGGGCTGTTGCCAATGTGCATTAGCTGTTTGCAGCCTCACCTCTTTTCATG

SapI (2239) SspI (2296)
 2201 GAGTTTAAAGATATAGTGTATTTTCCCAAGGTTGAACTAGCTCTTCTTTATGTTTTAAATGCACTGACCTCCACATTCCTTTTTAGTAAAAATA

2301 ^{SwaI (2310)}
TTCAGAAATAATTTAAATACATCATTGCAATGAAAATAAATGTTTTTTATTAGGCAGAATCCAGATGCTCAAGGCCCTTCATAATATCCCCAGTTTAGT

2401 AGTTGGACTTAGGGAACAAAGAACCTTTAATAGAAATTGGACAGCAAGAAAGCGAGCTTCTAGCTTTAGTTCCTGGTACTTTGAGGGGATGAGTTCC
141 • N R T Y K L P I L E

2501 ^{SacI (2571)}
TCAATGGTGGTTTTGACCAGCTTGCCATTCATCTCAATGAGCACAAAGCAGTCAGGAGCATAGTCAGAGATGAGCTCTCTGCACATGCCACAGGGGCTGA
129 E I T T K V L K 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

2601 ^{BstXI (2600)}
CCACCCTGATGGATCTGTCCACCTCATCAGAGTAGGGGTGCCTGACAGCCACAATGGTGTCAAAGTCCTTCTGCCCGTTGCTCACAGCAGACCCAATGGC
96 V R I S R D V 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

2701 ^{StuI (2735)}
AATGGCTTCAGCAGACAGTACCCTGCCAATGTAGGCCTCAATGTGGACAGCAGAGATGATCTCCCAGTCTTGGTCTGATGGCCGCCCGGACATGG
63 I A E A C V T 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

2801 ^{BbsI (2881)}
^{XmnI (2877)}
TGCTTGTGTCTCATAGAGCATGGTGTCTTCTCAGTGGCGACTCCACCAGCTCCAGATCCTGCTGAGAGATGTTGAAGTCTTCATGGTGGCCCTCC
29 H K N D E Y L M T I K E T A V E V L E L D Q Q S I N F T K M

2901 ^{AseI (2943)}
TATAGTGAGTCGTATTATACTATGCCGATATACTATGCCGATGATTAATTGTCAAACAGCGTGGATGGCGTCTCCAGCTTATCTGACGGTTCCTAAAC

3001 ^{SacI (3000)} ^{SpeI (3098)}
GAGCTCTGCTTATATAGACCTCCACCCTACACGCCTACCGCCATTTGCGTCAATGGGGCGGAGTTGTACGACATTTTGAAAGTCCCGTTGATTTAC

3101 TAGTCAAAACAAACTCCATTGACGTCAATGGGTGGAGACTTGAAATCCCGTGAGTCAAACCGCTATCCACGCCATTGATGTAAGTCCAAAACCGC

3201 ^{SnaBI (3226)}
ATCATCATGGTAATAGCGATGACTAATACGTAGATGTAAGTCCCAAGTAGGAAAGTCCCATAGGTCATGTAAGTGGGCATAATGCCAGGCGGGCCATTTAC

3301 ^{NdeI (3331)}
CGTCATTGACGTCAATAGGGGGCTACTTGGCATATGATACACTTGTACTGCAAGTGGGCGAGTTTACCGTAAATACTCCACCCATTGACGTCAATG

3401 GAAAGTCCCTATTGGCGTTACTATGGGAACATACGTCAATTATTGACGTCAATGGGGGGGGTCTGGGCGGTGAGCCAGGCGGGCCATTTACCGTAAGT

3501 ^{PacI (3517)}
^{SdaI (3509)} ^{BspLU111 (3527)}
TATGTAACGCTGCAGGTTAAITTAAGAACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAAGCCGCGTTGCTGGCGTTTTTCCATAGGCT

3601 CCGCCCCCTGACGAGCATCACAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTCCCTGGAAAGCTCC

3701 CTCGTGCGCTCTCCTGTTCCGACCTGCCGTTACCGGATACCTGTCCGCTTCTCCCTTCGGAAGCGTGGCGTTTCTCATAGCTCAGCTGTAGGT

3801 ^{ApaLI (3841)}
ATCTCAGTTCGGTGTAGGTCGTTGCTCCAAGCTGGGCTGTGTGCACGAACCCCGTTCAGCCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGA

3901 GTCCAACCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTCTTGAAG

4001 TGGTGGCCTAACTACGGCTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGAAAAAGAGTTGGTAGCTCTTGATCCG

4101 GCAAACAAACCACCGCTGGTAGCGGTGGTTTTTTTTGTTTGCAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTAC

4201 ^{EagI (4277)}
^{PacI (4257)} ^{SwaI (4266)} ^{NotI (4276)}
GGGTCTGACGCTCAGTGAACGAAAACCTCACGTTAAGGGATTTGGTCATGGCTAGTTAATTAACATTTAAATCAGCGGCCGCAATAAAATATCTTTAT

4301 TTTCATTACATCTGTGTGTTGGTTTTTTGTGTGAATCGTAACTAACATACGCTCTCCATCAAAACAAAACGAAACAAAACAACTAGCAAAATAGGCTGT

4401 CCCAGTGCAAGTGCAGGTGCCAGAACATTTCTCTATCGAA