



PvuI (7) SgfI (6) MfeI (82)
 1 GGATCTGGATCGCTCCGGTGCCCGTCAGTGGGAGAGCGCACATCGCCACAGTCCCGGAGAAGTTGGGGGAGGGGTGGCAATTGAACGGGTGCCTA
 101 GAGAAAGTGGCGGGGTAAGTGGAAAGTGTGCTGTACTGGTCCGCCTTTTCCGAGGGTGGGGGAGAACCCTATATAAGTGCAGTAGTCGCC

Psp1406I (203) HindIII (245) Bsu36I (291)
 201 GTGAACGTTCTTTTTTCGCAACGGGTTTGGCCGAGAACACAGTGAAGCTTCGAGGGCTCGCATCTCTCTTACGCGCCCGCCGCTACCTGAGGCC
 301 GCCATCCACGCGGTTGAGTCGCGTTTCTGCCGCTCCCGCTGTGGTGCCTCTGAAGTGCCTCCGCGCTCTAGGTAAGTTAAAGCTCAGGTCGAGACC

NgoMIV (441)
 401 GGGCCTTTGTCCGGGCTCCCTTGGAGCCTACCTAGACTCAGCCGGCTCTCCACGCTTTGCTGACCCGCTTGTCTCAACTCTACGCTTTTGTTCGTTT

KasI (535) AgeI (552) SphI (560) XmaI (572)
 501 TCTGTTTCTGCGCCGTTACAGATCCAAGCTGTGACCGGGCGCTACCTGAGATCACCGGTCAGCATGCGCCTGCCCGGGCTCTCTCCCTGCGGCTGGC
 601 CTGGGGCCACTCCTGCTGGACTCAGCGGGCTTCTGGTGGCCTCTCAGCCCCAGCTGGTGGCCCTTATCGCATAGAAAACAGACTTGTGGACCCAG
 13> W G P L L L G L S G L L V A S Q P Q L V P P Y R I E N Q T C W D Q
 701 GACAAGGAATACTACGACCCATGCACGACGTCTGCTGCTCCCGCTGCCAGGCGAGTTTGTCTTGGGATGCAGCCGACGCAAGACACGGTTT
 47> D K E Y Y E P M H D V C C S R C P P G E F V F A V C S R S Q D T V
 801 GCAAGACTGCCCCATAATTCTATAATGAACACTGGAACCTCTCTCCACCTGCCAGCTGTGCCGCCCTGTGACATTGTGCTGGGCTTTGAGGAGGT
 80> C K T C P H N S Y N E H W N H L S T C Q L C R P C D I V L G F E E V

PvuI (915) ApaLI (979) BsrBI (994)
 901 TGCCCTTGCACAGCGATCGGAAAGCCGAGTGGCGTGTGAGCCGGGATGCTCTGTGTATCTGGACAATGAGTGTGCACTGTGAGGAGGAGCGG
 113> A P C T S D R K A E C R C Q P G M S C V Y L D N E C V H C E E R
 1001 CTTGACTCTGCCAGCCTGGCACAGAAGCCGAGGTACAGATGAAATTATGGATACTGACGTCAACTGTGTCCCTGTAAGCCGGGACACTTCCAGAACA
 147> L V L C Q P G T E A E V T D E I M D T D V N C V P C K P G H F Q N

XhoI (1109) Acc65I (1171)
 1101 CTTCTCCCTCGAGCCGCTGTCAACCCATACCAGATGTGAGATCCAGGCGCTGGTGGAGGACGCTCCAGGTACCTCTACTCGGATACCATCTGTAA
 180> T S S P R A R C Q P H T R C E I Q G L V E A A P G T S Y S D T I C K
 1201 AAATCCCCAGAGCCAGGAGCAATGCTACTGCTGGCCATCCTGCTGCTGCTGCTCTTTCTGCTCTTACCAGTGTCTGGCCTGTGCTGGATGAGG
 213> N P P E P G A M L L L A I L L S L V L F L L F T T V L A C A W M R

PstI (1311) BsrBI (1373)
 1301 CACCCGCTCTCTCGAGAAAGCTGGTACTCTGCTCAAGCGGCACCCAGAGGGAGAAGTCTCCCCCTTGCCTCCAGAGCCGACCCACATTTCC
 247> H P S L C R K L G T L L K R H P E G E E S P P C P A P R A D P H F
 1401 CTGACCTGGCAGAGCCACTCTACCCATGTCTGGAGACTTGTCCCATCCCTGCTGGACCCCAACGGCCCCCTCTTGAGGAAGTGGTGTACAACA
 280> P D L A E P L L P M S G D L S P S P A G P P T A P S L E E V V L Q Q

XcmI (1563)
 1501 GCAGAGTCCCCTGGTCCAGGCCAGAGAGCTGGAGGCTGAACCTGGGAACATGGCCAGGTGGCCACGGTGGCAATGGCATTGATGACCGGGGCTCT
 313> Q S P L V Q A R E L E A E P G E H G Q V A H G A N G I H V T G G S

Bsp120I (1656)
 1601 GTGACTGTACCGGCAACATCTACATATAAATGGCCAGTGTGGGGGAACACGGGGCCCTGGAGACCCTCCAGCTCCCCCTGAGCCTCCATACCCCA
 347> V T V T G N I Y I Y N G P V L G G T R G P G D P P A P P E P P Y P

HindIII (1760)
 1701 CTCCTGAAGAGGGAGCTCCTGGCCCTTCTGAGCTGTCTACACCTACCAGGAGGATGGCAAAGCTTGGCATCTGCCGAGACAGAGACTAGGATGCCA
 380> T P E E G A P G P S E L S T P Y Q E D G K A W H L A E T E T L G C Q

NheI (1814)
 1801 AGACCTGTGACAGGGCTAGCTGGCCAGACATGATAAGATACATTGATGAGTTTGGACAAACCACAAGTGAATGCAGTAAAAAATGCTTTATTGTGA
 413> D L •

HpaI (1952) MfeI (1963)
 1901 AATTTGTGATGCTATTGCTTTATTGTAACCATTATAAGCTGCAATAAACAAGTTAACAAACAATTGCATTATTTATGTTTCAGGTTTCAGGGGGAG

EcoRI (2048)
 2001 GTGTGGGAGGTTTTTAAAGCAAGTAAACCTCTACAATGTGGTATGGAATTCTAAAATACAGCATAGAAAACCTTAACTCAAATCAAGCTCTAC
 2101 TTGAATCCTTTTCTGAGGGATGAATAAGGCATAGGCATCAGGGGCTGTGCCAATGTGCATTAGCTGTTTGCAGCCTCACCTTCTTTCATGGAGTTTAA

SspI (2287)
 2201 ATATAGTGTATTTTCCAAAGTTTGAAGTACTCTTCATTTCTTTATGTTTTAAATGCACTGACCTCCACATTCCTTTTATGAAAATATTCAGAAAT

SmaI (2301)
 2301 AATTTAAATACATCATTGCAATGAAAATAAATGTTTTTTATTAGGCAGAAATCCAGATGCTCAAGGCCCTTCATAATATCCCCAGTTTAGTAGTTGGACT
 2401 TAGGGAACAAAGGAACCTTTAATAGAAATTGGACAGCAAGAAAGCGAGCTTCTAGCTTTAGTTCTGGTGTACTTGGGGGATGAGTTCCTCAATGGTG

StuI (2726)
 2501 GTTTTGACAGCTTGGCATTCTCAATGAGCACAAAGCAGTCAAGGACATGTCAGATGAGCTCTGACATGCCACAGGGGCTGACCCCTGA
 126> 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 V R I
 2601 TGGATCTGCCACCTCATCAGAGTAGGGTGCCTGACAGCCACAATGGTGTCAAAGTCTTCTGCCGTTGCTCACAGCAGACCCAATGGCAATGGCTTC
 93> 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 I A E

2701 AGCACAGACAGTACCCTGCAATGTAGGCCTCAATGGACAGCAGAGATGATCTCCCCAGTCTTGGTCTGATGGCCGCCCGACATGGTCTTGTG
 60> 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 H K N

2801 TCCTCATAGAGCATGGTGATCTTCTCAGTGGCGACCTCCACCAGCTCCAGATCCTGCTGAGAGATGTTGAAGGTCCTTCATGATGGCCCTCTATAGTGAG
26 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 TCGTATTATACTATGCCGATATACTATGCCGATGATTAATTGTCAA AACAGCGTGGATGGCGTCTCCAGCTTATCTGACGGTTCCTAAACGAGCTCTG
←

3000 CTTATATAGACCTCCCACCGTACACGCCTACCGCCATTTGCGTCAATGGGGCGGAGTTGTTACGACATTTTGAAAGTCCCCTTGATTTACTAGTCAA
←

3099 AACAAACTCCATTGACGTCAATGGGGTGGAGACTTGAAATCCCCGTGAGTCAAACCGCTATCCACGCCATTGATGTACTGCCAAAACCGCATCATCA
←

3199 TGGTAATAGCGATGACTAATACGTAGATGTACTGCCAAGTAGGAAAGTCCATAAGGTCATGTACTGGCATAATGCCAGGCGGGCCATTTACCGTCATT
←

3299 GACGTCAATAGGGGGCTACTTGGCATATGATACACTTGTACTGCAAGTGGGCGAGTTTACCGTAAATACTCCACCCATTGACGTCAATGGAAAGTC
←

3399 CCTATTGGCGTTACTATGGGAACATACGTCATTATTGACGTCAATGGGCGGGGTCGTTGGGCGGTACGCCAGGCGGGCCATTTACCGTAAGTTATGTAA
←

3499 CGCCTGCAGGTTAA TTAAGAACATGTGAGCAAAGGCCAGCAAAGGCCAGGAACCGTAAAAAGGCCGCTTGTGGCGTTTTTCCATAGGCTCCGCC
←

3597 CCCCTGACGAGCATCACAAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTTCCCCTGGAAGCTCCCTCGT
←

3697 GCGCTCTCCTGTTCCGACCCCTGCCGTTACCGGATACCTGTCCGCTTTCTCCCTTCGGGAAGCGTGGCGTTTTCTCATAGCTACGCTGTAGGTATCTC
←

3797 AGTTCGGTGTAGGTCGTTTCGCTCCAAGCTGGGCTGTGTGCACGAACCCCCGTTACGCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCCA
←

3897 ACCCGGTAAGACACGACTTATCGCCACTGCGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGTACAGAGTTCTTGAAGTGGTG
←

3997 GCCTAACTACGGCTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTTTGATCCGGCAA
←

4097 CAAACCACCGCTGGTAGCGGTGGTTTTTTTTGTTGCAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGT
←

4197 CTGACGCTCAGTGGAAACGAAAACCTCACGTTAAGGGATTTTGGTCATGGCTAGTTAATTAACATTTAAATC AGCGGCCGCAATAAAAATATCTTTATTTTCA
←

4297 TTACATCTGTGTGGTTTTTTTGTGTGAATCGTAACTAACATACGCTCTCCATCAAACAAAACGAAACAAAACAACTAGCAAATAGGCTGTCCCA
←

4397 GTGCAAGTGCAGGTGCCAGAACATTTCTCTATCGAA
←

BspHI (2876)
BbsI (2872)
XmnI (2868)
AseI (2934)
SpeI (3089)
SnaBI (3217)
NdeI (3322)
PstI (3501)
SdaI (3500)**PacI (3508)**
BspLU11I (3518)
ApaLI (3832)
EagI (4268)
PacI (4248)
SwaI (4257)
NotI (4267)