

PvuI (7)
SgfI (6) MfeI (82) EcoNI (96)
1 GGATCTGGATCGCTCCGGTGCCCGTCAGTGGGAGAGCGCACATCGCCACAGTCCCGGAGAAGTTGGGGGAGGGGTGGCAATTGAACGGGTGCCTA
101 GAGAAGTGGCGCGGGTAAACTGGAAAGTGATGTCGTGTAAGTGGCTCCGCCTTTTCCGAGGGTGGGGGAGAACCCTATATAAGTGCAGTAGTCGCC
Psp1406I (203) Bsu36I (291)
201 GTGAACGTTCTTTTTTCGCAACGGGTTTGGCCGAGAACACAGCTGAAGCTTCGAGGGGCTCGCATCTCTCTTACCGCCGCCCGCCCTACCTGAGGCC
EcoNI (287)
301 GCCATCCACGCGGTTGAGTGCAGTCTGCCGCTCCCGCCTGTGGTGCCTCTGAAGTGCCTCCGCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC
NcoI (441)
401 GGGCCTTTGTCCGGCGCTCCCTTGGAGCCTACCTAGACTCAGCCGGCTCTCCACGCTTTGCTGACCCTGCTTGTCAACTCTACGTCTTTGTTTCGTTT
NaeI (441)
501 TCTGTTCTGCGCCGTTACAGATCCAAGCTGTGACCGGGCCCTACCTGAGATCACCGGTCCACCATGGCTCTCCAGTGGGAAGGGAGCCCGGGCGCTGGA
KasI (535) NcoI (560) XmaI (587)
AgeI (552) **SrfI (586)**
1 ▶ M A S P S G K G A R A L E
601 GGCTCCTGGCTGCGGGCCCGGGCGCTCGCCGGGACCTGGTGGACTCCGTGGACGATGCGGAGGGGTGTACGTGGTGTGGAGCGCTGCCCGCTGTGC
Bsp120I (613) XmaI (629) **Eco47III (683)**
13▶ A P G C G P R P L A R D L V D S V D D A E G L Y V A V E R C P L C
NcoI (710)
701 AACACTACCGCCGGCGGCTGACCTGCGCCAAATGCGTTCAGAGCGGGGATTTCTGCTACTTCGACGGCCGCGACCGGGAGAGGTTTATCGACAAGAAGG
SgrAI (709)
47▶ N T T R R R L T C A K C V Q S G D F V Y F D G R D R E R F I D K K
801 AAAGTAAAGCCGACTTAAGAGCAAGCAAGAAGATTTAGAAAGAGTGTAAAAGCTATGGAAGGAAAATGGATAACAGATCAGTTGAGATGGAAAAT
80▶ E R L S R L K S K Q E E F Q K E V L K A M E G K W I T D Q L R W K I
StuI (978)
901 AATGTCCTGCAAGATGAGGATTGAACAGTTAAAACAAACAATATGTAAGGAAATGAAGAAATGGAGAAAAATTTCTGAAGGCCTTCTAAAACCAAGGAA
113▶ M S C K M R I E Q L K Q T I C K G N E E M E K N S E G L L K T K E
1001 AAGAATCAGAAGCTTTACAGTCGAGCACAACCGGACCAAGAAAAAGGAGAAGATTCAGAGGCATAATCGAAAACCTGGTACCTGGTAGAAAAAAGA
147▶ K N Q K L Y S R A Q R H Q E K K E K I Q R H N R K L G D L V E K K
1101 CCATTGACTTAAGAAGTCAATATGAGCGTCTGGCAAATCTTCGACGATCCCATATATTAGAGCTCACCTCTGTCAATTTTCCAATCGAGGAAGTAAAGAC
180▶ T I D L R S H Y E R L A N L R R S H I L E L T S V I F P I E E V K T
BbsI (1224)
1201 GGGTGTGAGAGACCCGAGATGTGTCTTCAGAGAGTGACAGTGCATGACCTCCAGCACTGTGAGCAAGCTTGTGAAGCCCGAGGACAACCTACCTC
213▶ G V R D P A D V S S E S D S A M T S S T V S K L A E A R R T T Y L
1301 TCAGGACGATGGGTCTGTGACGATCACAACGGAGACACCAGCATTAGCATTACAGGGCCTTGATTAGCTCCCTAACAAATGGGGACTACTCTGCCTACT
247▶ S G R W V C D D H N G D T S I S I T G P W I S L P N N G D Y S A Y
1401 ACAGCTGGGTGGAGGAGAAGAAAACCCAGGGGCTGACATGGAGCAGAGTAACCTGCCTACACCATCAGTGTGCTGCGCTGTGCTATGCAACTCAGCT
280▶ Y S W V E E K K T T Q G P D M E Q S N P A Y T I S A A L C Y A T Q L
BsaBI (1525) XhoI (1595)
1501 GGCAACATTCTGTCTCATATACTTGTGATAAATCTTCCAAAAAGCTCTGCAACAGTGAATTTGTGGCGAAAATCTAAGCAAGCAGAAATTTACTCGA
313▶ V N I L S H I L D V N L P K K L C N S E F C G E N L S K Q K F T R
SspI (1621) Bsu36I (1683)
1601 GCAGTGAAGAAAATGAATGCAAAATATTCTTTACCTTTGTTTTCTCAGCATGTAATTTAGATCAATTACAACCACTGCATACCTCAGGAATCTAATGT
347▶ A V K K L N A N I L Y L C F S Q H V N L D Q L Q P L H T L R N L M
AvrII (1725) Bsp120I (1738) XcmI (1772)
1701 ACCTGGTCACTCCAGCTCTGAACACCTAGGCAGGTGACGGCCCTTTGAAAGTACGAGCAGACCTTGGAGGATCCATGGAAATTTGTGGATCCCGGAGTTGC
380▶ Y L V S P S S E H L G R S G P F E V R A D L E E S M E F V D P G V A
NcoI (1772) **BamHI (1785)**
1801 TGGAGAATCAGATGAGAGCGGAGATGAGCGCGTCAGCGATGAAGAAACCGACCTGGGCACAGACTGGGAGAACCTGCCTAGTCCCGGTTTTGTGATATC
413▶ G E S D E S G D E R V S D E E T D L G T D W E N L P S P R F C D I
NruI (1955) PstI (1988)
1901 CCTTCCAGTCTGTGGAAGTCTCCAGAGTCAGAGCACCCAGGCGTCCCAACCATCGCGAGCAGCAGTGCAGGTGGGATGATCTCTCTGCAGCAGCCT
447▶ P S Q S V E V S Q S Q S T Q A S P P I A S S S A G G M I S S A A A
NheI (2048)
2001 CGGTGACCTCCTGGTTTAAAGCTTACACTGGACACCGTTAACGAGCATGCTAGCTGGCCAGACATGATAAGATACATTGATGAGTTTGGACAACCCACAA
480▶ S V T S W F K A Y T G H R •
HpaI (2186) MfeI (2197)
2101 CTAGAATGCAGTGAAAAAATGCTTTATTTGTGAAATTTGTGATGCTATTGCTTTATTTGTAACCATTATAAGCTGCAATAAACAAAGTTAAACAACAACA
EcoRI (2282)
2201 TTGCATTCATTTTATGTTTCAGGTTTCAGGGGAGGTGTGGGAGGTTTTTAAAGCAAGTAAAACCTCTACAAATGTGGTATGGAATTCAAAATACAGCA
2301 TAGCAAACTTTAACCTCCAATCAAGCCTCTACTTGAATCCTTTTCTGAGGGATGAATAAGGCATAGGCATCAGGGGCTGTTGCCAATGTGCATTAGCT
2401 GTTTGACGCTCACCTTCTTTCATGGAGTTAAGATATAGTGATTTTCCAAGGTTTGAAGTACCTTCTTCTTATGTTTAAATGCACTGACCT

2501 **SspI (2521)** **SwaI (2535)**
 CCCACATTCCCTTTTATGAAAAATTCAGAAATAATTTAAATACATCATTGCAATGAAAATAAATGTTTTTTATTAGGCAGAATCCAGATGCTCAAGGC
 2601 CCTTCATAATATCCCCAGTTTAGTAGTTGGACTTAGGGAACAAAGGAACCTTTAATAGAAATTTGGACAGCAAGAAAGCGAGCTTCTAGCTTTAGTTCCT
 2701 GGTGTACTTGAGGGGGATGAGTTCCTCAATGGTGGTTTTGACCAGCTTGCATTATCTCAATGAGCACAAGCAGTCAGGAGCATAGTCAGAGATGAGC
 138 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 Y D S I L
BstXI (2825)
 2801 TCTCTGCACATGCCACAGGGGCTGACCACCTGATGGATCTGTCCACCTCATCAGAGTAGGGGTGCTGACAGCCACAATGGTGTCAAAGTCTTCTGCC
 104 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 D F D K Q G
StuI (2960)
 2901 CGTTGCTCACAGCAGACCCAATGGCAATGGCTTCAGCACAGACAGTGACCCTGCCAATGTAGGCCTCAATGTGGACAGCAGAGATGATCTCCCAGTCTT
 71 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 I E G T K
 3001 GGTCTGATGGCCGCCCGACATGGTGTCTGTTGCTCATAGAGCATGGTATCTTCTCAGTGGCGACCTCCACCAGCTCCAGATCTGCTGAGAGATG
 38 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 D Q Q S I
BspHI (3110)
BbsI (3106) **AseI (3168)**
 3101 TTGAAGGTTTCATGATGGCCCTCTATAGTGAGTCGTATTATACTATGCCGATATACTATGCCGATGATTAATTGTCAAACAGCGTGGATGGCGTCTC
 4 N F T K M
 3201 CAGCTTATCTGACGGTTCACATAACGAGCTCTGCTTATATAGACCTCCACCGTACACGCTACCGCCCATTTGCGTCAATGGGGCGGAGTTGTTACGA
SpeI (3323)
 3300 CATTTTGGAAAGTCCCGTTGATTTACTAGTCAAAAACAACTCCATTGACGTCAATGGGGTGGAGACTTGAAATCCCCGTGAGTCAAACCGCTATCCA
SnaBI (3451)
 3399 CGCCATTGATGTACTGCCAAAACCGCATCATCATGGTAATAGCGATGACTAATACGTAGATGTACTGCCAAGTAGGAAAGTCCATAAGGTCATGTACT
NdeI (3556)
 3499 GGGCATAATGCCAGGCGGGCCATTTACCGTCATTGACGTCAATAGGGGGCGTACTTGGCATATGATACACTTGTACTGCCAAGTGGCGAGTTTACCG
 3599 TAAATACTCCACCATTGACGTCAATGGAAAGTCCCTATTGGCGTTACTATGGAAACATACGTATTATTGACGTCAATGGGGGGGGTCTGTTGGGGCGT
PstI (3735) **SdaI (3734)** **PacI (3742)** **BspLU11I (3752)**
 3699 CAGCCAGGCGGGCCATTTACCGTAAGTTATGTAACGCCCTGCAGGTTAA TTAAGAACATGTGAGCAAAGGCCAGCAAAGGCCAGGAACCGTAAAAAG
 3797 GCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGCATCACA AAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAA
 3897 GATACCAGGCGTTTCCCCCTGGAAGCTCCCTCGTGCCTCTCCTGTTCCGACCCTGCCGTTACCGGATACCTGTCCGCCTTTCTCCCTTCGGGAAGCGT
ApaLI (4066)
 3997 GGGCCTTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTCGTTCCGCTCCAAGCTGGGCTGTGTGCACGAACCCCCGTTACGCCGACCGC
 4097 TCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGT
 4197 ATGTAGGCGGTGCTACAGAGTTCTGAAGTGGTGCCTAACTACGGCTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTT
 4297 CGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCACCGCTGGTAGCGGTGGTTTTTTTTGTTTGAAGCAGCAGATTACGCGCAGAAAAAAGGA
PacI (4482) **SwaI (4491)**
 4397 TCTCAAGAAGATCCTTTGATCTTTTCTACGGGTCTGACGCTCAGTGGAAACGAAAACCTCACGTTAAGGGATTTTGGTCATGGCTAGTTAATTAACATTTA
NotI (4501)
 4497 AATC AGCGGGCCGAATAAAATATCTTTATTTTATTACATCTGTGTGGTTTTTTGTGTGAATCGTAACATAACGCTCTCCATCAAACAAAACG
 4597 AAACAAAACAACTAGCAAATAGGCTGTCCCCAGTGAAGTGCAGGTGCCAGAACATTTCTCTATCGAA