



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

Psp1406I (203) **HindIII (245)** **Bsu36I (291)**
201 GTGAACGTTCTTTTTTCGCAACGGGTTTGGCCGAGAACACAGCTGAAGCTTCGAGGGCTCGCATCTCTCCTTACCGCCGCCGCCCTACCTGAGGCC
301 GCCATCCACGCCGGTTGAGTGCCTTCTGCCGCTCCCGCCTGTGGTGCCTCTGAACTGCGTCCGCCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC

NgoMIV (441)
NgoMI (441)
NaeI (441)
401 GGGCCTTTGTCCGGCGCTCCCTTGAGCCTACCTAGACTCAGCCGGCTCTCCACGCTTTGCTGACCCTGCTTGTCTCAACTCTACGCTTTTGTTCGTTT

BspLU11I (560)
501 TCTGTTCTGCGCCGTTACAGATCCAAGCTGTGACCGCGCCTACCTGAGATCACCGGTCAACATGTCGTCCAGCAATATCAGCAGCAACGTAGAAAATT
1▶ M S S Q Q Y Q Q Q R R K F

KasI (535) **AgeI (552)**
601 TGCAGCTGCCTTCTGGCATTGATTTTCATCTTGGCAGCTGTGGACTGCTGAGGCCGGGAAGAAAGAGAAACCTGAAAAAAGGTGAAAAAGTCTGAC
13▶ A A A F L A L I F I L A A V D T A E A G K K E K P E K K V K K S D

BsiBI (621)
BsaBI (621)
701 TGTGGAGAATGGCAGTGGAGTGTGTGTGTGCTACCAGCGGGGACTGTGGATTGGGCACCCGGGAGGGCACTCGCACTGGCGCCGAGTGCAACAGACCA
47▶ C G E W Q W S V C V P T S G D C G L G T R E G T R T G A E C K Q T
801 TGAAGACTCAGAGATGTAAGATCCCTTGAAGTGAAGAGCAGTTGGAGCTGAGTGCAGTCAAGTACCAGTTCCAGGCTTGGGGAGAATGTGACCTCAATAC
80▶ M K T Q R C K I P C N W K K Q F G A E C K Y Q F Q A W G E C D L N T
901 CGCCTTGAAGACCAGAACGGCAGCCTGAAGCGAGCTCTGCACAATGCTGACTGTCAGAAAACGTACCATCTCAAGCCCTGTGGCAAGCTACCAAG
113▶ A L K T R T G S L K R A L H N A D C Q K T V T I S K P C G K L T K

XmaI (758)
SmaI (758) **KasI (778)**
1001 CCAAGCCTCAAGCGGAGTCAAAGAAGAAGAAAAAGGAAGCAAGAAACAGGAGAAGATGCTGGATTAAGACGCCACCGTCTGTGCTAGCTGGCCAGA
147▶ P K P Q A E S K K K K E G K K Q E K M L D •
1101 CATGATAAGATACATTGATGAGTTTGGACAAACCAACTAGAATGCAGTGAATAAATGCTTTATTTGTGAAATTTGTGATGCTATTGCTTTATTTGTA

MscI (1092)
BalI (1092)
NheI (1086)
1201 ACCATTATAAGCTGCAATAAACAAGTTAAACAACAATTGCATTCTATTTATGTTTCAGGTTTCAGGGGAGGTGTGGGAGGTTTTTAAAGCAAGTAAA

HpaI (1224) **MfeI (1235)**
1301 ACCTCTACAAATGTGGTATGGAATTCTAAAATACAGCATAGCAAACTTTAACCTCCAATCAAGCCTCTACTTGAATCCTTTCTGAGGGATGAATAAG
1401 GCATAGGCATCAGGGCTGTTGCCAATGTGCATTAGCTGTTTGCAGCCTCACCTCTTTCATGGAGTTAAGATATAGTATTTTCCAAGGTTTGAAC

EcoRI (1320)
1501 TAGCTCTTCAATTTCTTTATGTTTTAAATGCACTGACCTCCACATTCCCTTTTTAGTAAAATATTCAGAAATAATTTAAATACATCATTGCAATGAAAAT

SspI (1559) **Swal (1573)**
1601 AAATGTTTTTTATTAGGCAGAATCCAGATGCTCAAGGCCCTTCATAATATCCCCAGTTTAGTAGTTGGACTTAGGGAACAAAGAACCTTTAATAGAAA
1701 TTGACAGCAAGAAAGCGAGCTTCTAGCTTTAGTTCCTGGTGTACTTGGGGGATGAGTTTCTCAATGGTGGTTTTGACCAGCTTGCCATTCTCTCAA
141▶ N R T Y K L P I L E E I T T K V L K G N M E I

BstXI (1863)
1801 TGAGCACAAGCAGTCAGGAGCATAGTCAGAGATGAGCTCTCTGCACATGCCACAGGGGCTGACCACCTGATGGATCTGTCCACCTCATCAGAGTAGGG
117▶ L V F C 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

StuI (1998)
Eco147I (1998)
1901 GTGCCTGACAGCCACAATGGTGTCAAAGTCTTCTGCCGTTGCTCACAGCAGACCAATGGCAATGGCTTCAGCACAGACAGTGACCCTGCCAATGTAG
84▶ H R V A V 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
2001 GCCTCAATGTGGACAGCAGAGATGATCTCCCGAGTCTGGTCTGATGGCCGCCCGACATGGTGCTTGTGCTCATAGAGCATGGTGATCTTCTCAG
50▶ A E I H V 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

BspHI (2148)
2101 TGGCGACCTCCACAGCTCCAGATCCTGCTGAGAGATGTTGAAGGTCTTCATGATGGCCCTCCTATAGTGAGTGCATTATACATATGCCGATATACTATG
17▶ A V E V L E L D Q Q S I N F T K M

XmnI (2140)
2201 CCGATGATTAATTGTCAAACAGCGTGGATGGCGTCTCCAGCTATCTGACGGTTCACTAAACGAGCTCTGCTTATATAGACCTCCACCGTACACGCCT

VspI (2206)
AseI (2206)
2301 ACCGCCCATTTGCGTCAATGGGGCGGAGTTGTTACGACATTTGGAAAGTCCCGTTGATTTACTAGTCAAACAAACTCCATTGACGTCATGGGGTG

SpeI (2361)

SnaBI (2489)
Eco105I (2489)

2400 GAGACTTGAAATCCCCGTGAGTCAAACCGCTATCCACGCCATTGATGTACTGCCAAAACCGCATCATCATGGTAATAGCGATGACTAATACGTAGATG

NdeI (2594)

2500 TACTGCCAAGTAGGAAAGTCCATAAAGTCATGTACTGGGCATAATGCCAGGCGGGCCATTTACCGTCATTGACGTCAATAGGGGGCGTACTTGGCATAT

2600 GATACACTTGATGTACTGCCAAGTGGGCAGTTTACCGTAAATACTCCACCCATTGACGTCAATGGAAAGTCCCTATTGGCGTTACTATGGGAACATACGT

PstI (2773)
SdaI (2772) PacI (2780) BspLU11I (2790)

2700 CATTATTGACGTCAATGGGCGGGGTCGTTGGGCGGTCAGCCAGGCGGGCCATTTACCGTAAGTTATGTAACGCTGCAGGTTAA TTAAGAACATGTG

2798 AGCAAAAGGCCAGCAAAGGCCAGGAACCGTAAAAAGGCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGCATCACAAAAATCGACGC

2898 TCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTTCCCTGGAAAGCTCCCTCGTGCCTCTCCTGTTCCGACCCCTGCCGCTTA

2998 CCGGATACCTGTCCGCTTTCTCCCTTCGGAAGCGTGGCGCTTTCTCATAGCTCAGCTGTAGGTATCTCAGTTCGGTGTAGGTCGTTCCGCTCCAAGCT

ApaLI (3104)

3098 GGGCTGTGTGCACGAACCCCGTTTACGCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGGTAAGACACGACTTATCGCCACTG

3198 GCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTTCTTGAAGTGGTGGCCTAACACGGCTACACTAGAAGAACAG

3298 TATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCACCGCTGGTAGCGGTGTTTTTTT

3398 TGTTTGCAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGGTCTGACGCTCAGTGAACGAAAACTCACGT

EagI (3540)

PacI (3520) SmaI (3529) NotI (3539)

3498 TAAGGGATTTTGGTCATGGCTAGTTAATTAACATTTAAATC AGCGGCCCAATAAAATATCTTTATTTTCATTACATCTGTGTGTTGGTTTTTTGTGTGA

3598 ATCGTAACTAACATACGCTCTCCATCAAACAAAACGAAACAAAACAACTAGCAAATAGGCTGTCCCAGTGCAAGTGCAGGTGCCAGAACATTTCTC

3698 TATCGAA