



PvuI (7)
SgfI (6) **EcoNI (96)**
1 GGATCTGCATCGCTCCGGTGCCCGTCAGTGGGAGAGCGCACATCGCCACAGTCCCGGAGAAGTTGGGGGAGGGGTCGGCAATTGAACGGGTGCCTA
101 GAGAAGGTGGCGCGGGTAAACTGGAAAGTGATGTCGTGACTGGCTCCGCCTTTTCCGAGGGTGGGGGAGAACCCTATATAAGTGCAGTAGTCGCC

HindIII (245) **Bsu36I (291)**
Psp1406I (203) **PvuII (239)** **EcoNI (287)**
201 GTGAACGTTCTTTTTTCGCAACGGGTTTGCCGCCAGAACACAGCTGAAGCTTCGAGGGGCTCGCATCTCTCTTACAGCGCCCGCCCTACCTGAGGCC
301 GCCATCCACGCGGTTGAGTGCCTGTTGCGCCTCCCGCCTGTGGTGCCTCTGAAGTGCCTCCGCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC

NgoMIV (441)
NaeI (441)
401 GGGCCTTTGTCCGGCGCTCCCTTGAGCCTACCTAGACTCAGCCGGCTCTCCACGCTTTGCTGACCCTGCTTGTCTCAACTCTACGTCTTTGTTTCGTTT

KasI (535) **SgrAI (551)**
501 TCTGTTCTGCGCGTTACAGATCCAAGCTGTGACCGCGCGCTACCTGAGATCACCGCGAAGGAGGGCCACCATGAAGTCGCTGTTCTTTTCTCTTGG
1▶ M K S A V L F L L
601 GCATCATCTTCTGGAGCAGTGTGGAGTTCGAGGAACCCTAGTGATAAGGAATGCACGATGCTCCTGCATCAGCACCAGCCGAGGCACGATCCACTACAA
10▶ G I I F L E Q C G V R G T L V I R N A R C S C I S T S R G T I H Y K

BspEI (796)
701 ATCCCTCAAAGACCTCAAACAGTTTGCCCAAGCCCAATTGCAACAAAAGTAAATCATTGCTACACTGAAGAACGGAGATCAAACCTGCCTAGATCCG
43▶ S L K D L K Q F A P S P N C N K T E I I A T L K N G D Q T C L D P
801 GACTCGGCAAATGTGAAGAAGCTGATGAAAGAATGGGAAAAGAAGATCAGCCAAAAGAAAAGCAAAGAGGGGGAAAAAACATCAAAGAACATGAAAA
77▶ D S A N V K K L M K E W E K K I S Q K K K Q K R G K K H Q K N M K

MscI (988)
NheI (982)
901 ACAGAAAACCCAAAACACCCCAAAGTCGTGCTGTTCAAGGAAGACTACATAAGAGACCATTACTTTACCAACAAGCACCCCTGCTAGCTGGCCAGACATG
110▶ N R K P K T P Q S R R R S R K T T •
1001 ATAAGATACATTGATGAGTTTGGACAAACCACAACCTAGAATGCAGTGAAAAAATGCTTTATTTGTGAAATTTGTGATGCTATTGCTTTATTTGTAACCA

HpaI (1120)
1101 TTATAAGCTGCAATAAACAAGTTAAACAACAACATTGCATTCATTTTATGTTTCAGGTTTCAGGGGAGGTGTGGGAGGTTTTTAAAGCAAGTAAACCT

EcoRI (1216)
1201 CTACAAATGTGGTATGGAATTCTAAAATACAGCATAGCAAACCTTAACTCCAAATCAAGCCTCTACTTGAATCCTTTTCTGAGGGATGAATAAGGCAT
1301 AGGCATCAGGGGCTGTGCCAATGTGCATTAGCTGTTTGACGCTCACCTTCTTCATGGAGTTAAGATATAGTGATTTTTCCAAGGTTTGAAGTAC

SspI (1455) **SwaI (1469)**
1401 TCTTCATTTCTTTATGTTTTAAATGCACTGACCTCCACATTCCTTTTTAGTAAAATATTGAGAAATAATTTAAATACATCATTGCAATGAAAAATAAT

EcoO109I (1530)
1501 GTTTTTTATTAGGCAGAATCCAGATGCTCAAGGCCCTTATAATATCCCCAGTTTAGTAGTTGGACTTAGGGAACAAAGAACCTTTAATAGAAATTGG
1601 ACAGCAAGAAAGCAGCTTCTAGCTTTAGTTCTGCTGACTTGAGGGGATGAGTTCCTCAATGGTGGTTTTGACCAGCTTGCCATTCATCTCAATGAG
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

SacI (1730) **BstXI (1759)**
1701 CACAAAGCAGTCAGGAGCATAGTCAGAGATGAGCTCTGTCACATGCCACAGGGGCTGACCACCTGATGGATCTGTCCACCTCATCAGAGTAGGGGTGC
116▶ 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 H

StuI (1894)
1801 CTGACAGCCACAATGGTGTCAAAGTCTTCTGCCGTTGCTCACAGCAGACCCAATGGCAATGGCTTCCAGCAGACAGTACCCTGCCAATGTAGGCCT
82▶ 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 A E
1901 CAATGTGGACAGCAGAGATGATCTCCCAAGTCTGGTCTGATGGCCGCCGACATGGTCTGTTGCTCCTCATAGAGCATGGTATCTTCTCAGTGGC
49▶ 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 A

BspHI (2044)
BbsI (2040)
XmnI (2036)
2001 GACCTCCACCAGCTCCAGATCCTGCTGAGAGATGTTGAAGGTCTTCATGATGGCCCTCTATAGTGAGTCTGATTATACTATGCCGATATACTATGCCGA
16▶ V E V L E L D Q Q S I N F T K M

AseI (2102) **SacI (2159)**
2101 TGATTAATTGTCAAACAGCGTGGATGGCGTCTCCAGCTTATCTGACGGTCACTAAACGAGCTCTGCTTATATAGACCTCCACCGTACACGCCTACC

SpeI (2257)
2200 GCCCATTGCGTCAATGGGGCGGAGTTGTTACGACATTTTGGAAAGTCCCGTTGATTTACTAGTCAAACAACTCCATTGACGTCAATGGGGTGGAG

SnaBI (2385)
2299 ACTTGAAATCCCGTGAGTCAAACCGCTATCCAGCCCAATTGATGTAAGTCCAAAACCGCATCATCATGGTAATAGCGATGACTAATACGTAGATGTAC

NdeI (2490)
2399 TGCCAAGTAGAAAGTCCATAAGGTCATGTAAGTGGGCATAATGCCAGGCGGGCCATTTACCGTCATTGACGTCAATAGGGGGCTACTTGGCATATGAT
2499 ACACCTGATGTAAGTCCAAAGTGGGAGTTTACCGTAAATACTCCACCCATTGACGTCAATGAAAGTCCCTATTGGCGTTACTATGGGAACATACGTCAT

PstI (2669)
SdaI (2668) **PacI (2676)** **BspLU11I (2686)**

2599 TATTGACGTCAATGGGCGGGGTCGTTGGGCGGTCAGCCAGGCGGGCCATTTACCGTAAGTTATGTAACGCTGCAGGTTAA TTAAGAACATGTGAGC
 2697 AAAAGGCCAGCAAAGGCCAGGAACCGTAAAAAGGCCGCTTGTGGCGTTTTCCATAGGCTCCGCCCCCTGACGAGCATCACAAAATCGACGCTCA
 2797 AGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTTCCCCCTGGAAGCTCCCTCGTGCGCTCTCTGTTCCGACCCTGCCGTTACCG
 2897 GATACCTGTCCGCTTTCTCCCTTCGGGAAGCGTGGCGCTTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTCGTTCCGCTCCAAGCTGGG

ApaLI (3000)

2997 CTGTGTGCACGAACCCCCGTTTCAGCCGACCGCTGCGCCTTATCCGTAACATATCGTCTTGAGTCCAACCCGGTAAGACACGACTTATCGCCACTGGCA
 3097 GCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTTCTTGAAGTGGTGGCCTAACTACGGCTACACTAGAAGAACAGTAT
 3197 TTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCACCGCTGGTAGCGGTGTTTTTTTGT
 3297 TTGCAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGTCTGACGCTCAGTGAACGAAAACACTCACGTTAA

EagI (3436)

PacI (3416) SwaI (3425) **NotI (3435)**

3397 GGGATTTTGGTCATGGCTAGTTAATTAACATTTAAATC AGCGGCCGCAATAAAATATCTTTATTTTCATTACATCTGTGTGTTGGTTTTTTGTGTGAAT
 3496 CGTAACTAACATACGCTCTCCATCAAACAAAACGAAACAAAACAAACTAGCAAATAGGCTGTCCCCAGTGCAAGTGCAAGTGCCAGAACATTTCTCTA
 3596 TCGAA