



PvuI (7)
SgfI (6)
MfeI (82) **EcoNI (96)**

1 GGATCTGCATCGCTCCGGTGCCCGTCAGTGGGAGAGCGCACATCGCCACAGTCCCGGAGAAGTTGGGGGAGGGGTCGGCAATTGAACGGGTGCCTA
 101 GAGAAGGTGGCGCGGGTAAACTGGAAAGTGATGTCGTGTAAGTGGTCCGCCTTTTCCCGAGGGTGGGGGAGAACCCTATATAAGTGCAGTAGTCGCC

Psp1406I (203)
HindIII (245) **Bsu36I (291)**

201 GTGAACGTTCTTTTTCGCAACGGGTTTCCGCCAGAACACAGCTGAAGCTTCGAGGGGCTCGCATCTCTCTTACAGCGCCGCCGCCCTACCTGAGGCC
 301 GCCATCCACGCGCGTTGAGTGCCTTCTGCCGCTCCCGCTGTGGTGCCTCCTGAAGTGCCTCCGCCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC

NgoMIV (441)
NaeI (441)

401 GGGCCTTTGTCCGGCGCTCCCTTGGAGCCTACCTAGACTCAGCCGGCTCTCCACGCTTGGCTGACCTGCTTGTCAACTCTACGTCTTTGTTTCGTTT

KasI (535)
SphI (560) **BbsI (573)** **BstBI**

501 TCTGTTCTGCGCCGTTACAGATCCAAGCTGTGACCGGGCGCTACCTGAGATCACCGGTCAGCATGCCGTCGGAGAAGACCTTCAAGCAGCGCCGCACCTT
 601 CGAACAAAGAGTAGAAGATGTCCGACTTATTTCGAGAGCAGCATCCAACCAAATCCCGGTGATAATAGAACGATACAAGGGTGAGAAGCAGCTTCTGT
 13▶ E Q R V E D V R L I R E Q H P T K I P V I I E R Y K G E K Q L P V
 701 CTGGATAAAACAAAGTTCCTTGTACCTGACCATGTCAACATGAGTGTGAGCTCATCAAGATAATTAGAAGCGCTTACAGCTCAATGCTAATCAGGCCCTTCT
 47▶ L D K T K F L V P D H V N M S E L I K I I R R R L Q L N A N Q A F
 801 TCCTGTTGGTGAACGGACACAGCATGGTCAGCGTCTCCACACCAATCTCAGAGGTGTATGAGAGTGAGAAAGATGAAGATGGATTCTGTACATGGTCTA
 80▶ F L L V N G H S M V S V S T P I S E V Y E S E K D E D G F L Y M V Y

Tth111I (727) **StuI (791)**

901 TGCCTCCCAGGAGACGTTCCGGGATGAAATTGTGAGTGTAAAACAGAAAAATGCAGCTCTTCTAGAATTGCTAGCTGGCCAGACATGATAAGATACATT
 113▶ A S Q E T F G M K L S V •
 1001 GATGAGTTTGACAAACCACAAC TAGAATGCAGTGAATAATGCTTTATTTGTGAAATTTGTGATGCTATTGCTTTATTTGTAACCATTATAAGCTGCA

XbaI (961) **NheI (970)** **MscI (976)**

1101 AATAACAAGTTAAACAACAACAATTGCATTCAATTTATGTTTCAGGTTCCAGGGGAGGTGTGGGAGTTTTTTAAAGCAAGTAAACCTCTACAATGTGG

HpaI (1108) **MfeI (1119)**

1201 TATGGAATTCTAAAATACAGCATAGCAAACTTTAACCTCAAATCAAGCCTCTACTTGAATCCTTTTCTGAGGGATGAATAAGGCATAGGCATCAGGGG
 1301 CTGTTGCCAATGTGCATTAGCTGTTTGCAGCCTCACCTCTTTTATGGAGTTTAAAGTATAGTGTATTTTCCCAAGGTTTGAAGTCTTTCATTCTT

EcoRI (1204)

1401 TATGTTTTAAATGCACTGACCTCCACATTCCCTTTTTAGTAAAATATTTCAGAAATAATTTAAATACATCATTGCAATGAAAATAAATGTTTTTATTAG

SspI (1443) **SwaI (1457)**

1501 GCAGAATCCAGATGCTCAAGGCCCTTCAATATCCCCAGTTTAGTAGTTGGACTTAGGGAACAAAGGAACCTTTAATAGAAATTGGACAGCAAGAAAG
 1601 CGAGCTTCTAGCTTTAGTTCTGGTGTACTTGAGGGGATGAGTTCCTCAATGGTGGTTTTGACCAGCTTGCCATTCTCAATGAGCACAAAGCAGTC
 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 V F C D

BstXI (1747)

1701 AGGAGCATAGTCAGAGATGAGCTCTCTGCACATGCCACAGGGGCTGACCACCTGATGGATCTGTCCACCTCATCAGAGTAGGGGTGCCTGACAGCCACA
 112▶ 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 R V A V
 1801 ATGGTGTCAAAGTCTTCTGCCGTTGCTCACAGCAGACCAATGGCAATGGCTTCCAGCACAGACAGTACCCTGCCAATGTAGGCCTCAATGTGGACAG
 78▶ 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 I H V A
 1901 CAGAGATGATCTCCCAAGTCTTGGTCTGATGGCCGCCGACATGGTGTCTTGTCTCATAGAGCATGGTATCTTCTCAGTGGCGACCTCCACCAG
 45▶ S I I E G T K T R I A A G V H K N D E Y L M T I K E T A V E V L

BspHI (2032)

2001 CTCCAGATCCTGCTGAGAGATGTTGAAGTCTTCATGATGGCCCTCTATAGTGTGATGATTATACTATGCCGATATACTATGCCGATGATTAATTGTC
 12▶ E L D Q Q S I N F T K M
 2101 AAACAGCGTGGATGGCTCTCCAGCTTATCTGACGGTCTACTAAACGAGCTCTGCTTATATAGACCTCCACCCTACACGCTACCGCCATTGCGCT

BbsI (2028) **AseI (2090)**

2201 AATGGGGCGGAGTTGTTACGACATTTTGGAAAGTCCCGTTGATTTACTAGTCAAACAAACTCCATTGACGTCAATGGGGTGGAGACTTGGAAATCCC

SpeI (2245)

2300 CGTGAGTCAAACCGCTATCCACGCCATTGATGTACTGCCAAAACCGCATCATCATGGTAATAGCGATGACTAATACGTAGATGACTGCCAAGTAGGAA

SnaBI (2373)

2400 AGTCCATAAGGTCATGTAAGTGGCATAATGCCAGGCGGGCCATTTACCGTCAATTGACGTCAATAGGGGGCGTACTTGGCATATGATACACTTGTATGAC

NdeI (2478)

2500 TGCCAAGTGGGAGTTTACCCTAAATACTCCACCCATTGACGTCAATGGAAAGTCCCTATTGGCGTTACTATGGGAACATACGTCAATTATTGACGTCAAT

PstI (2657)
SdaI (2656) **PacI (2664)** **BspLU11I (2674)**

2600 GGGCGGGGTCGTTGGGCGGTCAGCCAGGCGGCCATTTACCGTAAGTTATGTAACGCC **T G C A G G T T A A** TTAAGAACATGTGAGCAAAAGGCCAGCAA
←

2698 AAGGCCAGGAACCGTAAAAAGGCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGCATCACAAAAATCGACGCTCAAGTCAGAGGTGGC

2798 GAAACCCGACAGGACTATAAAGATACCAGGCGTTTCCCCTGGAAGCTCCCTCGTGCGCTCTCTGTCCGACCCTGCCGTTACCGGATACCTGTCCGC

ApaLI (2988)

2898 CTTTCTCCCTTCGGGAAGCGTGGCGCTTTCTCATAGCTCAGCTGTAGGTATCTCAGTTCGGTGTAGGTGTTTCGCTCCAAGCTGGGCTGTGTGCACGAA

2998 CCCCCGTTACCCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTA

3098 ACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTCTTGAAGTGGTGGCCTAACTACGGCTACACTAGAAGAACAGTATTTGGTATCTGCGC

3198 TCTGCTGAAGCCAGTTACCTTCGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAACACCGCTGGTAGCGGTGGTTTTTTTGTGTGCAAGCAGCAG

3298 ATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGTCTGACGCTCAGTGAACGAAAACTCACGTTAAGGGATTTTGGTCA

EagI (3424)
PacI (3404) **SwaI (3413)** **NotI (3423)**

3398 TGGCTAGTTAATTAACATTTAAATC **AGCGGCCGCA**ATAAAATATCTTTATTTTATTACATCTGTGTGTTGGTTTTTTGTGTGAATCGTAACTAACATAC

3498 GCTCTCCATCAAAACAAAACGAAACAAAACAACTAGCAAAATAGGCTGTCCCAGTGCAAGTGCAGGTGCCAGAACATTTCTCTATCGAA