



PvuI (7)
SgfI (6) MfeI (82) EcoNI (96)
1 GGATCTGCATCGCTCCGGTGCCCGTCAGTGGGAGAGCGCACATCGCCACAGTCCCGGAGAAGTTGGGGGAGGGGTGGCAATTGAACGGGTGCCTA
101 GAGAAGGTGGCGCGGGTAAACTGGAAAGTGATGTCGTGTAAGTGGCTCCGCCTTTTCCGAGGGTGGGGGAGAACCCTATATAAGTGCAGTAGTCGCC

HindIII (245) Bsu36I (291)
Psp1406I (203) **PvuII (239)** EcoNI (287)
201 GTGAACGTTCTTTTTCGCAACGGGTTTGGCCGACAGACAGCTGAAGCTTCGAGGGGCTCGCATCTCTCTTACAGCGCCCGCCCTACCTGAGGCC
301 GCCATCCACGCGGTTGAGTGCCTGCTCCGCTCCCGCTGTGGTGCCTCTGAAGTGCCTCCGCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC

NgoMIV (441)
401 GGGCCTTTGTCGGCGCTCCCTTGAGCCTACCTAGACTCAGCGGCTCTCCACGCTTTGCTGACCCTGCTTGTCAACTCTACGTCTTTGTTTCGTTT

AgeI (552) **BspHI [m] (568)** **BsrBI (584)**
501 TCTGTTTCTGCGCCGTTACAGATCCAAGCTGTGACCGGCGCCTACCTGAGATCACCGTAGGAGGCCATCATGATCCCAGCCACCCGCTCGTTCTCTGT
1 M I P A T R S L L C

Eco47III (602) **BstXI (622)** **XcmI (619)** **PstI (675)** **NcoI (682)**
601 GCAGCGCTGCTGCTGCTGGCCACAGCCGCTGCCACAGGGGCGCTATCGCCAATGAGCTGCGCTGTGAGTGCCTGCAGACCCGCTGGGATTCACC
11▶ A A L L L A T S R L A T G A P I A N E L R C Q C L Q T M A G I H

Bsp120I (735) **NruI (782)**
701 TCAAGAACATCCAGAGCTTGAAGGTGTTGCCCTCAGGGCCCACTGCACCCAAACCGAAGTCATAGCCACACTCAAGAATGGTCGCGAGGCTTGCCCTGA
44▶ L K N I Q S L K V L P S G P H C T Q T E V I A T L K N G R E A C L D

BbsI (869) **NheI (893)**
801 CCCTGAAGCTCCCTTGGTTCAGAAAATTGTCCAAAAGATGCTAAAAGGTGTCGCCAAGTAACGGAGAAAGAAGACAGACTGCTCTGATGGCAGCCTAGCT
77▶ P E A P L V Q K I V Q K M L K G V P K •

901 GGCCAGACATGATAAGATACATTGATGAGTTTGGACAAACCACAACCTAGAATGCAGTGAATAAATGCTTTATTTGTGAAATTTGTGATGCTATTGCTTT

HpaI (1031) MfeI (1042)
1001 ATTTGTAACCATTATAAGCTGCAATAAACAAAGTAAACAACAACAAATTGCATTCAATTTTATGTTTCAGGTTTCAGGGGGAGGTGGGAGGTTTTTAAAGC

EcoRI (1127)
1101 AAGTAAAACCTCTACAAATGTGGTATGGAATTCATAAATACAGCATAGCAAACCTTTAACCTCCAATCAAGCCTCTACTTGAATCCTTTTCTGAGGGAT
1201 GAATAAGGCATAGGCATCAGGGGCTGTTGCCAATGTGCATTAGCTGTTTGACGCTCACCTTCTTTATGAGGTTAAGATATAGTGTATTTTCCAAGG

SapI (1309) **SspI (1366)** **SwaI (1380)**
1301 TTTGAAGTACGCTCTTCATTTCTTATGTTTAAATGCACTGACCTCCACATTCCTTTTATGATAAATATTAGAAAATATTAGAAAATATTAAATACATCATTGCAA
1401 TGAAAATAAATGTTTTTATTAGGCAGAATCCAGATGCTCAAGGCCCTCATAATATCCCCAGTTTATGAGTTGACTTAGGGAACAAAGGAACCTTTA
1501 ATAGAAATGGACAGCAAGAAAGCGAGCTTCTAGCTTTAGTTCCTGGTACTTGAGGGGGATGAGTTCCTCAATGGTGGTTTTGACCAGCTTGCCATTC
141▶ • N R T Y K L P I L E E I T T K V L K G N

SacI (1641) **BstXI (1670)**
1601 ATCTCAATGAGCACAAAGCAGTCAGGAGCATAGTCAGAGATGAGCTCTCTGCACATGCCACAGGGGCTGACCACCTGATGGATCTGCCACCTCATCAG
119▶ 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 S R D V E D S
1701 AGTAGGGGCTGCTGACAGCCACAATGGTGTCAAAGTCTTCTGCCGTTGCTCACAGCAGACCAATGGCAATGGCTTCCAGCAGACAGTGCCTGCC
86▶ 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 A C V T V R G

StuI (1805)
1801 AATGTAGGCTCAATGTGGACAGCAGAGATGATCTCCCAGTCTTGGTCTGATGGCCGCCCCGACATGGTGCTTGTGCTCATAGAGCATGGTGATC
53▶ 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 D E Y L M T I

BbsI (1951) **XmnI (1947)**
1901 TTCTCAGTGGGACCTCCACCAGCTCCAGATCCTGCTGAGAGATGTTGAAGTCTTCAATGGTGGCCCTCTATAGTGAGTCTATTATACTATGCCGATA
19▶ K E T A V E V L E L D Q Q S I N F T K M

AseI (2013) **SacI (2070)**
2001 TACTATGCCGATGATTAATTGTCAAACAGCGTGGATGGCGTCTCCAGCTTATCTGACGGTCTACTAAACGAGCTCTGCTTATATAGACCTCCCACCGTA

SpeI (2168)
2101 CACGCTACCGCCATTTGCGTCAATGGGCGGAGTTGTTACGACATTTTGGAAAGTCCCGTTGATTTACTAGTCAAAACAAACTCCCATTGACGTCAAT

SnaBI (2296)
2201 GGGGTGGAGACTTGAAATCCCCGTGAGTCAAACCGCTATCCACGCCATTGATGTAAGTCCAAAACCGCATCATCATGGTAATAGCGATGACTAATACG
2301 TAGATGTAAGTCCAAAGTGGAAAGTCCATAAGGTCATGTAAGTGGCATAATGCCAGGCGGGCCATTTACCGTCAATGACGTCAATAGGGGGCTACTTG

NdeI (2401)
2401 GCATATGATACACTTGTGACTGCAAGTGGGAGTTTACCGTAAATACTCCACCATTGACGTCAATGGAAAGTCCCTATTGGCGTACTATGGGAAC

PacI (2587)

PstI (2580)

SdaI (2579)

BspLU11I

2501 ATACGTCATTATTGACGTCAATGGGCGGGGTCGTTGGGCGGTCAGCCAGGCGGGCCATTTACCGTAAGTTATGTAACGCTGCAGGTTAATTAAAGAACA
 2601 TGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAAGGCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGCATCACAAAAATCG
 2701 ACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTCCCCTGGAAGCTCCCTCGTGCGCTCTCCTGTTCCGACCCTGCCG
 2801 CTTACCGGATACCTGTCCGCCTTTCTCCCTTCGGGAAGCGTGGCGCTTTCTCATAGCTCAGCTGTAGGTATCTCAGTTCGGTGTAGGTCGTTCCGCTCCA

ApaLI (2911)

2901 AGCTGGGCTGTGTGCACGAACCCCGTTTCAGCCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGGTAAGACACGACTTATCGCC
 3001 ACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGTACAGAGTTCTTGAAGTGGTGGCCTAACTACGGCTACACTAGAAGA
 3101 ACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCACCGCTGGTAGCGGTGGTT
 3201 TTTTGTGTTGCAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGTCTGACGCTCAGTGGAACGAAAACTC

EagI (3347)

PacI (3327) SwaI (3336)

NotI (3346)

3301 ACGTTAAGGGATTTTGGTCATGGCTAGTTAATTAACATTTAAATCAGCGGCCGAATAAAATATCTTTATTTTCATTACATCTGTGTGTTGGTTTTTGT
 3401 GTGAATCGTAACTAACATACGCTCTCCATCAAACAAAACGAAACAAAACAACTAGCAAATAGGCTGTCCCCAGTGAAGTGCAGGTGCCAGAACATT
 3501 TCTCTATCGAA