



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

HindIII (245) Bsu36I (291)
201 **Psp1406I (203)** PvuII (239) EcoNI (287)
GTGAACGTTCTTTTTCGCAACGGGTTTGCCGCCAGAACACAGCTGAAGCTTCGAGGGGCTCGCATCTCTCTTACAGCGCCCGCCCTACCTGAGGCC
301 GCCATCCACGCGGTTGAGTGCAGTCTGCCGCTCCCGCCTGTGGTGCTCTGAAGTGCCTCCGCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC

NgoMIV (441)
401 **NaeI (441)**
GGGCCTTTGTCCGGCGCTCCCTTGAGCCTACCTAGACTCAGCCGGCTCTCCACGCTTTGCTGACCTGCTTCTCAACTCTACGTCTTTGTTTCGTTT

KasI (535) **AgeI (552)** **BspHI (560)**
501 TCTGTTCTGCGCCGTTACAGATCCAAGCTGTGACCGGGCGCTACCTGAGATCACCGGTCATCATGAAGTTCAGTATAAGGAGGACCACCCCTTCGAGTA
1▶ M K F Q Y K E D H P F E Y

RsrII (638) **SandI (680)**
601 TCGAAAAAGGAAGGTGAAAAGATTAGGAAGAAATACCCGGACCGGGTCCGGTTCATCGTGGAGAAGGCTCCTAAAGCCAGGGTCCCTGATCTGGATAAG
13▶ R K K E G E K I R K K Y P D R V P V I V E K A P K A R V P D L D K

MscI (732) **BspEI (752)** **BamHI (761)** Bsu36I (775)
701 AGGAAGTACCTTGTGCCCTCCGACCTCACTGTTGGCCAGTTCTACTTCTTAATCCGGAAGAGGATCCACCTGAGACCTGAGGACGCCCTTATTCTTTG
47▶ R K Y L V P S D L T V G Q F Y F L I R K R I H L R P E D A L F F F

XcmI (821) **NcoI (830)** **BbsI (862)**
801 TCAACAACACCATCCCTCCACCACTGCTACCTGAGGACAGTGTATGAGGACAACCACGAGGAAGACTATTTTCTGTATGTGGCCTACAGTGTAAAG
80▶ V N N T I P P T S A T M G Q L Y E D N H E E D Y F L Y V A Y S D E S

MscI (963) **NheI (957)**
901 TGTCTATGAAAAATGAGGCAGAAGCCAGCAGATGGGAGCACCTGGACTTGGGGTAGCTAGCTGGCCAGACATGATAAGATACATTGATGAGTTGGAC
113▶ V Y G K •

HpaI (1095)
1001 AAACCACAAC TAGAATGCAGTGA AAAAAATGCTTTATTTGTGAAATTTGTGATGCTATTGCTTTATTTGTAACCATTATAAGCTGCAATAAACAAAGTTAA

MfeI (1106) **EcoRI (1191)**
1101 CAACAACAATTGCATTCA TTTTATGTTTCAGGTT CAGGGGAGGTGTGGGAGGTTTTTAAAGCAAGTAAAACCTCTACAAATGTGGTATGGAATTCTAA
1201 AATACAGCATAGCAAAC TTTAACCTCAAATCAAGCCTCACTTGAATCCTTTTCTGAGGGATGAATAAGGCATAGGCATCAGGGGCTGTTGCCAATGT
1301 GCATTAGCTGTTTGACGCTCACCTTCTTTCATGGAGTTAAGATATAGTGTATTTTCCAAGTTTGAAGTCTTCTATTCTTTATGTTTTAAATG

SspI (1430) **SwaI (1444)**
1401 CACTGACCTCCACATTCCCTTTTATGTA AAAATATTCAGAAAATAATTTAAATACATCATTGCAATGAAAATAAATGTTTTTTATTAGGCAGAATCCAGAT

EcoO109I (1505)
1501 GCTCAAGGCCCTTCATAATATCCCCAGTTTAGTAGTTGGACTTAGGGAACAAAGAACCTTTAATAGAAATTGGACAGCAAGAAAGCGAGCTTCTAGCT

1601 TTAGTTCTGGTGTACTTGAGGGGATGAGTTCCTCAATGGTGGTTTTGACCAGCTTGCCATTCTCAATGAGCACAAAGCAGTCAGGAGCATAGTCA
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 P A Y D

SacI (1705) **BstXI (1734)**
1701 GAGATGAGCTCTG CACATGCCACAGGGGCTGACCACCTGATGGATCTGTCCACCTCATCAGAGTAGGGTGCTGACAGCCACAATGGTGTCAAAGT
107▶ 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 I T D F D

StuI (1869)
1801 CCTTCTGCCGTTGCTCACAGCAGACCAATGGCAATGGCTTCAGCACAGACAGTGCCTGCCAATGTAGGCCTCAATGTGGACAGCAGAGATGATCTC
74▶ 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 S I I E
1901 CCCAGTCTTGGTCTGAGGCTTCTGACATGGTCTGTTGCTCCTCATAGAGCATGGTGTCTTCTCAGTGGCGACCTCCACAGCTCCAGATCTGC
41▶ 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 V E V L E L D Q

BspHI (2019) **BbsI (2015)** **XmnI (2011)** **AseI (2077)**
2001 TGAGAGATGTTGAAGGTCTTCATGATGGCCCTCTATAGTGAGTCTGATTATACTATGCGGATATACTATGCCGATGATTAATTGTCAAACAGCGTGGAA
7▶ Q S I N F T K M

SacI (2134)
2101 TGGCGTCTCCAGCTTATCTGACGGTCACTAAACGAGCTCTGCTTATATAGACCTCCACCGTACACGCCTACCGCCATTTGCGTCAATGGGGCGGAGT

SpeI (2232)
2201 TGTTACGACATTTTGGAAAGTCCGTTGATTTACTAGTCAAAAACAACTCCATTGACGTCAATGGGGTGGAGACTTGGAAATCCCGTGAGTCAAACC

SnaBI (2360)
2300 GCTATCCACGCCATTGATGTA CTGCAAAAACCGCATCATCATGGTAATAGCGATGACTAATACGTAGATGTA CTGCAAGTAGGAAAGTCCCATAAAGT

NdeI (2465)

2400 CATGTA CTGGGCATAATGCCAGGCGGGCCATTTACCGTCATTGACGTCAATAGGGGGCGTACTTGGCATATGATACACTTGATGTA CTGCCAAGTGGGCA

2500 GTTTACC GTAAATACTCCACCCATTGACGTCAATGAAAGTCCCTATTGGCGTTACTATGGAAACATACGTCAATTATTGACGTCAATGGGCGGGGTCGT

PstI (2644)
SdaI (2643)PaeI (2651) BspLU11I (2661)

2600 TGGGCGGTCAGCCAGGCGGGCCATTTACCGTAAGTTATGTAACGCCTG CAG G TT AA TTAAGAACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACC

2698 GTAAAAAGGCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGCATCACAAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGG

2798 ACTATAAAGATACCAGGCGTTTTCCCTGGAAGCTCCCTCGTGCCTCTCCTGTTCCGACCCTGCCGCTTACCGGATACCTGTCCGCCTTTCTCCCTTCG

ApaLI (2975)

2898 GGAAGCGTGGCGCTTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTCGTTTCGCTCCAAGCTGGGCTGTGTGCACGAACCCCCGTTTCAGC

2998 CCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAG

3098 AGCGAGGTATGTAGGCGGTGCTACAGAGTTCCTGAAGTGGTGGCTAACTACGGCTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCA

3198 GTTACCTTCGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAACCACCGCTGGTAGCGGTGGTTTTTTTTGTTTGCAAGCAGCAGATTACGCGCAGAA

PacI (3391)

3298 AAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGGTCTGACGCTCAGTGGAACGAAACTCACGTTAAGGGATTTTGGTCATGGCTAGTTAATT

EagI (3411)
SwaI (3400) NotI (3410)

3398 AACATTTAAATC AGCGGCCGCAATAAAATATCTTTATTTTCATTACATCTGTGTGTTGGTTTTTTGTGTGAATCGTAACTAACATACGCTCTCCATCAA

3498 ACAAACGAAACAAACAAACTAGCAAATAGGCTGTCCCAGTGCAAGTGCAGGTGCCAGAACATTTCTCTATCGAA