



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

1 GGATCTGCATCGCTCCGGTGCCCGTCAGTGGGAGAGCGCACATCGCCACAGTCCCGGAGAAGTTGGGGGAGGGGTGGCAATTGAACGGGTGCCTA
 101 GAGAAGTGGCGCGGGTAAACTGGAAAGTGATGCTGTACTGGCTCCGCCTTTTCCGAGGGTGGGGGAGAACCCTATATAAGTGCAGTAGTCGCC

Bsu36I (291)
Psp1406I (203) **HindIII (245)** **EcoNI (287)**

201 GTGAACGTTCTTTTTTCGCAACGGGTTTGCCGCCAGAACACAGCTGAAGCTTCGAGGGGCTCGCATCTCTCTTACAGCGCCCGCCGCTACCTGAGGCC
 301 GCCATCCACGCGGTTGAGTGCAGTTCGCCGCTCCCGCTGTGGTGCCTCTGAACTGCGTCCGCCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC
 401 GGGCCTTTGTCCGGGCTCCCTTGAGGCTACCTAGACTCAGCCGGCTCTCCACGCTTTGCTGACCCTGCTTCTCAACTCTACGTTCTTTGTTTCGTTT

SphI (560)
AgeI (552)

501 TCTGTTCTGCGCCGTTACAGATCCAAGCTGTGACCGGGCCTACCTGAGATCACCGGTACGATGCCGCCCTCCGGGTGCGGCTGCTGCCGCTGCTGCT
1 M P P S G L R L L P L L L

SacII (641)

601 ACCGCTGCTGTGGCTACTGGTGTGACGCTGGCCGGCCGGCCGCGGGACTATCCACCTGCAAGACTATCGACATGGAGCTGGTGAAGCGGAAGCGCATC
 13 P L L W L L V L T P G R P A A G L S T C K T I D M E L V K R K R I

SacII (708)

701 GAGGCCATCCGGCCAGATCCTGTCCAAGCTGCGGCTGCCAGCCCCCGAGCCAGGGGAGGTGCCGCCCGCCCGCTGCCGAGGCCGTGCTCGCCC
 47 E A I R G Q I L S K L R L A S P P S Q G E V P P G P L P E A V L A

Bsu36I (856) **BstEII (882)**

801 TGTACAACAGCACCCGCGACCGGTGGCCGGGAGAGTGCAGAACCGAGCCCGAGCCTGAGGCCGACTACTACGCCAAGGAGGTACCCCGCTGCTAAT
 80 L Y N S T R D R V A G E S A E P E P E P E A D Y Y A K E V T R V L M

Acc65I (990)

901 GGTGGAAACCCACAACGAAATCTATGACAAGTTCAAGCAGAGTACACACAGCATATATATGTTCTTCAACACATCAGAGCTCCGAGAAGCGGTACCTGAA
 113 V E T H N E I Y D K F K Q S T H S I Y M F F N T S E L R E A V P E

XmaI (1013) **BbrPI (1060)**

1001 CCCGTGTTGCTCTCCGGCAGAGCTGCGTCTGCTGAGGCTCAAGTAAAAGTGGAGCAGCACGTGGAGCTGTACCAGAAATACAGCAACAATTCCTGGC
 147 P V L L S R A E L R L L R L K L K V E Q H V E L Y Q K Y S N N S W
 1101 GATACCTCAGCAACCGGCTGCTGGCACCAGCGACTCGCCAGAGTGGTTATCTTTGATGTCACCGGAGTTGTGCGGCAGTGGTTGAGCCGTGGAGGGGA
 180 R Y L S N R L L A P S D S P E W L S F D V T G V V R Q W L S R G E

BstEII (1294)

1201 AATTGAGGGCTTTTCGCCTTAGCGCCACTGCTCCTGTGACAGCAGGGATAACACACTGCAAGTGGACATCAACGGGTTTACTACCGGCCCGGAGGTGAC
 213 I E G F R L S A H C S C D S R D N T L Q V D I N G F T T G R R G D

BstXI (1346) **Bsp120I (1361)**

1301 CTGGCCACCATTATGGCATGAACCGGCCTTCTGCTTCTCATGCGCCACCCGCTGGAGAGGGCCAGCATCTGCAAGCTCCCGGCCACCGCCGAGCCC
 247 L A T I H G M N R P F L L L M A T P L E R A Q H L Q S S R H R R A

BamHI (1490)

1401 TGGACCAACTATTGCTTCACTCCACGGAGAAGAACTGCTGCGTGGCAGCTGTACATTGACTTCCGCAAGGACCTCGGCTGGAAGTGGATCCACGA
 280 L D T N Y C F S S T E K N C C V R Q L Y I D F R K D L G W K W I H E

Bsp120I (1531)

1501 GCCAAGGGTACCATGCCAATCTTGCCTCGGCGCCTGCCCTACATTTGGAGCCTGGACACGCAGTACAGCAAGGCTCTGGCCTGTACAACCAGCAT
 313 P K G Y H A N F C L G P C P Y I W S L D T Q Y S K V L A L Y N Q H

XmaI (1602)

1601 AACCCGGCGCCGCGGCGCGCTGCTGCGTGGCGAGGCGTGGAGCCGCTGCCATCGTGTACTAGTGGCCGCAAGCCCAAGTGGAGCAGCTGT
 347 N P G A S A A P C C V P Q A L E P L P I V Y Y V G R K P K V E Q L

NheI (1744)

1701 CCAACATGATCGTGCCTCCTGCAAGTGCAGCTGAGGTCCCGCCCTAGCTGGCCAGACATGATAAGATACATTGATGAGTTTGGACAAACCACAACCTAG
 380 S N M I V R S C K C S •

HpaI (1882) **MfeI (1893)**

1801 AATGCAGTAAAAAATGCTTTATTTGTGAAATTTGTGATGCTATTGCTTTATTTGTAACCATTATAAGTGAATAAACAAGTTAACAACAACAATTGC

EcoRI (1978)

1901 ATTCATTTTATGTTTCAGGTTTCAGGGGAGGTGTGGGAGGTTTTTAAAGCAAGTAAACCTCTACAAATGTGGTATGGAATTTAAAATACAGCATAGC
 2001 AAAACTTTAACCTCAAATCAAGCCTCTACTTGAATCCTTTTCTGAGGGATGAATAAGGCATAGGCATCAGGGGCTGTTGCCAATGTGCATTAGCTGTTT

SapI (2160)

2101 GCAGCCTCACCTTCTTTCATGGAGTTTAAAGATATAGTGTATTTTCCCAAGTTTGAAGTACTCTTCATTTCTTTATGTTTTAAATGCACTGACCTCCCA

SspI (2217) **SwaI (2231)**

2201 CATTCCCTTTTATGATAAATATTCAGAAATAATTTAAATACATCATTGCAATGAAAATAAATGTTTTTATTAGGCAGAAATCCAGATGCTCAAGGCCCTT

2301 CATAATATCCCCAGTTTAGTAGTTGGACTTAGGGAACAAAGAACCTTTAATAGAAATTGGACAGCAAGAAAGCGAGCTTCTAGCTTTAGTTCTCGTGTG
141 N R T

BstXI (2521)

2401 TACTTGAGGGGATGAGTTCCTCAATGGTGGTTTTGACCAGCTTGCCATTCATCTCAATGAGCACAAAGCAGTCAGGAGCATAGTCAGAGATGAGCTCTC
 136 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 S I L E R

2501 TGCACATGCCACAGGGGCTGACCACCCTGATGGATCTGTCCACCTCATCAGAGTAGGGGTGCCTGACAGCCACAATGGTGTCAAAGTCTTCTGCCGCTT
 103 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 K Q G N

2601 GCTCACAGCAGACCCAATGGCAATGGCTTCAGCACAGACAGTACCCTGCCAATGTAGGCCTCAATGTGGACAGCAGAGATGATCTCCCAGTCTTGCTC
70 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 G T K T **StuI (2656)**

2701 CTGATGGCCGCCCGACATGGTGTCTTGTCTCCTCATAGAGCATGGTGTCTTCTCAGTGGCGACCTCCACCAGCTCCAGATCCTGCTGAGAGATGTTGA
36 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 Q S I N F **XmnI (2798)**

2801 AGGTCTTCATGGTGGCCCTCCTATAGTGTGATTATACTATGCCGATATACTATGCCGATGATTAATTGTCAAACAGCGTGGATGGCGTCTCCAGC
3 T K M **BbsI (2802)** **AseI (2864)**

2901 TTATCTGACGGTTCACTAAACGAGCTCTGCTTATATAGACCTCCACCGTACACGCTACCGCCATTTGCGTCAATGGGGCGGAGTTGTTACGACATTT

3001 TGGAAAGTCCCCTTGATTTACTAGTCAAAAACAAACTCCCATTGACGTCAATGGGGTGGAGACTTGAAATCCCCTGAGTCAAACCGCTATCCACGCCCA
SpeI (3019)

3101 TTGATGTAAGTCCAAAACCGCATCATCATGGTAATAGCGATGACTAATACGTAGATGACTGCCAAGTAGGAAAGTCCCATAAGGTCATGTAAGTGGGCAT
SnaBI (3147)

3201 AATGCCAGGCGGGCCATTTACCGTCATTGACGTCAATAGGGGGCTACTTGGCATATGATACACTTGATGTAAGTGGCAGTTTACCGTAAATA
NdeI (3252)

3301 CTCCACCCATTGACGTCAATGGAAAGTCCCTATTGGCGTTACTATGGGAACATACGTCATTATTGACGTCAATGGGGCGGGTCTGTTGGGCGGTACGCCA

3401 GGCGGGCCATTTACCCTAAGTTATGTAACGCTGCAGGTTAATTAAGAACATGTGAGCAAAAGCCAGCAAAAGCCAGGAACCGTAAAAAGCCGCGTT
PacI (3438) **PstI (3431)** **SdaI (3430)** **BspLU11I (3448)**

3501 GCTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGCATCACAAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAG

3601 CGGTTTTCCCCTGGAAAGCTCCCTCGTGCCTCTCTGTTCCGACCCTGCCGTTACCGGATACCTGTCCGCTTTCTCCCTTCGGGAAGCGTGGCGCTTT

3701 CTCATAGCTCAGCTGTAGGTATCTCAGTTCGGTGTAGGTCGTTGCTCCAAGCTGGGCTGTGTGCACGAACCCCGTTAGCCCGACCGCTGCGCCTT
ApaLI (3762)

3801 ATCCGGTAACTATCGTCTTGAGTCCAACCCGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGC

3901 GGTGCTACAGAGTTCTTGAAGTGGTGGCCTAACTACGGCTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAACAAA

4001 GAGTTGGTAGCTCTTGATCCGGCAAACAAACCACCGCTGGTAGCGGTGTTTTTTTTGTTTGAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGA

4101 AGATCCTTTGATCTTTTCTACGGGGTCTGACGCTCAGTGAACGAAAACCTCACGTTAAGGGATTTTGGTCATGGCTAGTTAATTAACATTTAAATC AGCC
PacI (4178) **SwaI (4187)** **NotI (4197)**

4201 GCCGCAATAAAATATCTTTATTTTATTACATCTGTGTGTTGTTTTTTGTGTGAATCGTAACTAACATACGCTCTCCATCAAAAACAAACGAAACAAAA
4301 CAAACTAGCAAAATAGGCTGTCCCAGTGCAAGTGCAGGTGCCAGAACATTTCTCTATCGAA