



100

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

1 GGATCTGCATCGCTCCGGTGCCCGTCAGTGGGAGAGCGCACATCGCCACAGTCCCGGAGAAGTTGGGGGAGGGGTGGCAATTGAACGGGTGCCTA
 101 GAGAAGGTGGCGCGGGTAAACTGGAAAGTGATGTCGTGTAAGTGGTCCGCCTTTTCCCGAGGGTGGGGGAGAACCCTATATAAGTGCAGTAGTCGCCG

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

202 TGAACGTTCTTTTTCGCAACGGGTTTGCCGCCAGAACACAGCTGAAGCTTCGAGGGGCTCGCATCTCTCCTTACAGCGCGCCGCCCTACCTGAGGCCGG
 303 CATCCACGCCGGTTGAGTGCAGTCTGCCGCTCCCGCCTGTGGTGCCTCTGAACTGCGTCCGCCGTCTAGGTAAGTTAAAGCTCAGGTCGAGACCGGG

NgoMIV (441)

404 CTTTTGTCCGGCGCTCCCTTGGAGCCTACCTAGACTCAGCCGGCTCTCCACGCTTTGCTGACCTGCTTGTCTCAACTCTACGCTTTTGTTCGTTTTCTG

AgeI (552)
SphI (568) **FspI (586)**

505 TTCTGCGCGTTACAGATCCAAGCTGTGACCGCGCTACCTGAGATCACCGGTAGGAGGGCCAGCATGCCATCACTCGGATGCGCATGAGACCTGGCT
 1 M P I T R M R M R P W L
 SphI (686)

XmaI (632)
NcoI (678)

606 AGAGATGCAGATTAATTCACAAATCCCGGGGCTCATCTGGATTAATAAGAGGAGATGATCTCCAGATCCCATGGAAGCATGCTGCCAAGCATGGCT
 12 E M Q I N S N Q I P G L I W I N K E E M I F Q I P W K H A A K H G

BspEI (733)

707 GGGACATCAACAAGGATGCCTGTTTGTCCGGAGCTGGCCATTACACAGGCCGATACAAAGCAGGGGAAAAGGAGCCAGATCCCAAGACGTGGAAGGCC
 46 W D I N K D A C L F R S W A I H T G R Y K A G E K E P D P K T W K A

EcoRV (837)
PvuII (880)

808 AACTTTGCGTGTGCCATGAACCTCCCTGCCAGATATCGAGGAGGTGAAAGACCAGAGCAGGAACAAGGGCAGCTCAGCTGTGCGAGTGTACCGGATGCTTCC
 80 N F R C A M N S L P D I E E V K D Q S R N K G S S A V R V Y R M L P
 909 ACCTCTCACCAAGAACCAGAGAAAAGAAAGTGAAGTCCAGCCGAGATGCTAAGAGCAAGGCCAAGAGGAAGTCAATGTGGGGATTCCAGCCCTGATA
 113 P L T K N Q R K E R K S K S S R D A K S K A K R K S C G D S S P D

EcoO109I (1099)

1010 CCTTCTGATGGACTCAGCAGCTCCACTCTGCCTGATGACCACAGCAGTACACAGTCCAGGCTACATGCAGGACTTGGAGGTGGAGCAGGCCCTGACT
 147 T F S D G L S S S T L P D D H S S Y T V P G Y M Q D L E V E Q A L T

BsrGI (1195)

1111 CCAGCACTGTCGCCATGTGCTGTGAGCAGCACTCTCCCGACTGGCACATCCAGTGGAAAGTTGTGCCGACAGCACCAGTGTCTGTACAACCTCCAGGT
 181 P A L S P C A V S S T L P D W H I P V E V V P D S T S D L Y N F Q V

Bsu36I (1269) **BspHI (1279)**

1212 GTCACCCATGCCCTCCACCTCTGAAGCTACAACAGATGAGGATGAGGAAGGGAAATTACCTGAGGACATCATGAAGCTCTGGAGCAGTCGGAGTGGCAGC
 214 S P M P S T S E A T T D E D E E G K L P E D I M K L L E Q S E W Q

Acc65I (1333)

1313 CAACAAACGTGGATGGGAAGGGGTACCTACTCAATGAACCTGGAGTCCAGCCACCTCTGTCTATGGAGACTTGTAGTGAAGGAGGAGCCAGAAATTGAC
 248 P T N V D G K G Y L L N E P G V Q P T S V Y G D F S C K E E P E I D

BbsI (1449) **BglII (1457)**
BstXI (1477) **PshAI (1499)**

1414 AGCCAGGGGGGATATTGGGCTGAGTCTACAGCGTGTCTTACAGATCTGAAGAACATGGATGCCACCTGGCTGGACAGCCTGCTGACCCAGTCCGGTT
 282 S P G G D I G L S L Q R V F T D L K N M D A T W L D S L L T P V R L

BamHI (1545)
ApaLI (1537) **NdeI (1585)**

1515 GCCCTCCATCCAGGCCATCCCTGTGCACCGGATCCTATCCCTATGATGTGCCAGACTATGCTGGCTATCCATATGATGTTCTGATTATGCTGGATACC
 315 P S I Q A I P C A P G S Y P Y D V P D Y A G Y P Y D V P D Y A G Y

MscI (1648)
NheI (1642)

1616 CTTATGATGTGCCAGACTATGCCTAAAGCTAGCTGGCCAGACATGATAAGATACATTGATGAGTTTGGACAAACCACAACCTAGAATGCAGTGAAAAAATG
 349 P Y D V P D Y A •

HpaI (1780) **MfeI (1791)**

1717 CTTATTTTGTGAAATTTGTGATGCTATTGCTTTATTTGTAACCATTATAAGCTGCAATAAACAAGTTAACAACAACAATTGCATTTCATTTTATGTTTCAGG

EcoRI (1876)

1818 TTCAGGGGGAGGTGTGGGAGTTTTTTAAAGCAAGTAAACCTCTACAAATGTGGTATGGAATTCTAAAATACAGCATAGCAAACTTTAACCTCCAAATC
 1919 AAGCCTCTACTTGAATCCTTTTCTGAGGGATGAATAAGGCATAGGCATCAGGGGCTGTTGCCAATGTGCATTAGCTGTTTGCAGCCTCACCTTCTTTCAT

SapI (2058) **SspI (2115)**

2019 GGAGTTTAAAGATATAGTGTATTTTCCCAAGTTTGAACCTAGCTCTTCATTTCTTTATGTTTTAAATGCACTGACCTCCACATCCCTTTTTAGTAAATA

SwaI (2129)
EcoO109I (2190)

2120 TTCAGAAAATAATTTAAATACATCATTGCAATGAAAATAAATGTTTTTTATTAGGCAGAATCCAGATGCTCAAGGCCCTTCATAATATCCCCAGTTTAGTA
 2221 GTTGGACTTAGGGAACAAAGAACCTTTAATAGAAATTGGACAGCAAGAAAGCGAGCTTCTAGCTTTAGTTTCTGGTGTACTTGAGGGGGATGAGTTCCTC

SacI (2390) **BstXI (2419)**

2322 AATGGTGGTTTTGACCAGCTTGCATTCTCAATGAGCACAAAGCAGTCAGGAGCATAGTCAGAGATGAGCTCTGCACATGCCACAGGGGCTGACCA
 129 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 C M G C P S V V
 2423 CCCTGATGGATCTGTCCACCTCATCAGAGTAGGGGTGCTGACAGCCACAATGGTGTCAAAGTCTTCTGCCCGTTGCTCACAGCAGACCAATGGCAATG
 95 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 S V A S G I A I

2524 **StuI (2554)**
614 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 R I A A G V H H K
BspHI (2704)
BbsI (2700)
2625 **XmnI (2696)**
284 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 T K M
SacI (2819)
2726 GAGTCGTATTATACTATGCCGATATACTATGCCGATGATTAATTGTCAAACACGCGTGGATGGCGTCTCCAGCTTATCTGACGGTCACTAAACGAGCTC
SpeI (2917)
2826 TGCTTATATAGACCTCCCACCGTACACGCCTACCGCCCATTTGCGTCAATGGGGCGGAGTTGTTACGACATTTTGAAAGTCCCGTTGATTTACTAGTCA
2926 AAACAAACTCCCATTGACGTCAATGGGGTGGAGACTTGAAATCCCCGTGAGTCAAACCGCTATCCACGCCCATTTGATGTACTGCCAAAACCGCATCATC
SnaBI (3045)
3026 ATGGTAATAGCGATGACTAATACGTAGATGACTGCCAAGTAGGAAAGTCCATAAGGTCATGTACTGGGCATAATGCCAGGCGGCCATTTACCGTCATT
NdeI (3150)
3127 GACGTCAATAGGGGGCGTACTTGGCATATGATACACTTGTACTGCCAAGTGGGCAGTTTACCCTAAATACTCCACCATTGACGTCAATGGAAAGTCC
3228 CTATTGGCGTTACTATGGGAACATACGTCATTATTGACGTCAATGGGGGGGGTCTGGGGCGGTGAGCCAGGCGGGCCATTTACCGTAAGTTATGTAACG
PstI (3329)
SdaI (3328) PacI (3336) BspLU11I (3346)
3329 CCTGCAGGTTAA TTAAGAACATGTGAGCAAAGGCCAGCAAAGGCCAGGAACCGTAAAAAGCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCCC
3427 CCTGACGAGCATCACAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTTCCCTGGAAGCTCCCTCGTGCG
3528 CTCTCCTGTTCCGACCCTGCCGCTTACCGGATACCTGTCCGCTTTCTCCCTTCGGAAGCGTGGCGTTTTCTCATAGCTCACGCTGTAGGTATCTCAGTT
ApaLI (3660)
3629 CGGTGTAGGTCGTTTCGCTCCAAGCTGGGCTGTGTGCACGAACCCCGTTTCAGCCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACCCG
3730 GTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGCGGTGCTACAGAGTCTTGAAGTGGTGGCCTAA
3831 CTACGGCTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCA
3932 CCGCTGGTAGCGGTGTTTTTTGTTTGAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGGTCTGACGCT
EagI (4096)
PacI (4076) SmaI (4085) NotI (4095)
4033 CAGTGAACGAAACTCACGTTAAGGGATTTTGGTCATGGCTAGTTAATTAACATTTAAATCAGCGGCCGCAATAAAATATCTTTATTTTCATTACATCT
4133 GTGTGTTGGTTTTTTGTGTAATCGTAACTAACATACGCTCTCCATCAAAACAAAACGAAACAAAACAAACTAGCAAATAGGCTGTCCCCAGTGCAAGTG
4234 CAGGTGCCAGAACATTTCTCTATCGAA