



PvuI (7)
SgfI (6) **EcoNI (96)**
1 GGATCTGGATCGCTCCGGTGCCCGTCAGTGGGAGAGCGCACATCGCCACAGTCCCGGAGAAGTTGGGGGAGGGGTCGGCAATTGAACGGGTGCCTA
101 GAGAAGGTGGCGCGGGTAAACTGGAAAGTGATGTCGTGTAAGTGGCTCCGCCTTTTCCGAGGGTGGGGGAGAACCCTATATAAGTGCAGTAGTCGCC

HindIII (245) **Bsu36I (291)**
Psp1406I (203) **PvuII (239)** **EcoNI (287)**
201 GTGAACGTTCTTTTTCGCAACGGGTTTGCCGCCAGAACACAGCTGAAGCTTCGAGGGGCTCGCATCTCTCTTACAGCGCCCGCCGCTACCTGAGGCC
301 GCCATCCACGCGGTTGAGTCGCGTTTCTGCCGCTCCCGCCTGTGGTGCCTCTGAAGTGCCTCCGCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC

NgoMIV (441)
401 GGGCCTTTGTCCGGCGCTCCCTTGAGCCTACCTAGACTCAGCGGCTCTCCACGCTTTGCTGACCCTGCTTGTCAACTCTACGCTTTTGTTCGTTT

NcoI (560)
BstEII (555)
AgeI (552)
501 TCTGTTCTGCGCCGTTACAGATCCAAGCTGTGACCGGCGCCTACCTGAGATCACCGGTCACCATGGCTTGCAATTGTCAGTTGATGCAGGATACACCACT
601 CCTCAAGTTTCCATGTCCAAGGCTCATTCTTCTTTGTGCTGATTGCTGTTTCCACAAGTGTCTTCAGATGTTGATGAACAACCTGTTCAAGTCAGTG
13▶ L K F P C P R L I L L F V L L I R L S Q V S S D V D E Q L S K S V

BspHI (738)
701 AAAGATAAGGTATTGCTGCCTTGCCGTTACAACCTCCTCATGAAGATGAGTCTGAAGACCGAATCTACTGGCAAAAACATGACAAAAGTGGTGTCTGTCTG
47▶ K D K V L L P C R Y N S P H E D E S E D R I Y W Q K H D K V V L S
801 TCATTGCTGGAAACTAAAAGTGTGGCCGAGTATAAGAACCGGACTTTATATGACAACACTACTCTTATCATCTGGGCTGTGCTCCTTTCCAGAA
80▶ V I A G K L K V W P E Y K N R T L Y D N T T Y S L I I L G L V L S D

PvuII (912)
901 CCGGGGCACATACAGCTGTGTCGTTCAAAGAAGGAAAGAGGAACGTATGAAGTTAAACACTTGGCTTTAGTAAAGTTGTCATCAAAGCTGACTTCTCT
113▶ R G T Y S C V V Q K K E R G T Y E V K H L A L V K L S I K A D F S

PstI (1031)
1001 ACCCCCAACATAACTGAGTCTGAAACCCATCTGCAGACACTAAAAGATTACCTGCTTTGCTTCCGGGGGTTTCCCAAAGCCTCGTCTCTTGTGGTGG
147▶ T P N I T E S G N P S A D T K R I T C F A S G G F P K P R F S W L

BamHI (1143) **BsrGI (1160)**
1101 AAAATGGAAGAGAATTACCTGGCATCAATACGACAATTTCCAGGATCCTGAATGTACACCATTAGTACCAACTAGATTTCAATACGACTCG
180▶ E N G R E L P G I N T T I S Q D P E S E L Y T I S S Q L D F N T T R

BbrPI (1240)
1201 CAACCACACCATTAAGTGTCTCATTAAATATGGAGATGCTCAGGTGTGACAGGACTTACCTGGGAAAAACCCCAAGAACCCCTCTGATAGCAAGAAC
213▶ N H T I K C L I K Y G D A H V S E D F T W E K P P E D P P D S K N
1301 ACACCTGTGCTCTTTGGGGCAGGATTCGGCGCAGTAATAACAGTGTGCTGTCATCGTTGTCATCAAAATGCTTCTGTAAGCACAGAAGCTGTTTCAGAA
247▶ T L V L F G A G F G A V I T V V V I V V I I K C F C K H R S C F R

MscI (1489)
NheI (1483)
1401 GAAATGAGGCAAGCAGAGAAACAACAACAGCCTTACCTTCGGGCTGAAGAAGCATTAGCTGAACAGACCGTCTTCTTTAGGCTAGCTGGCCAGACAT
280▶ R N E A S R E T N N S L T F G P E E A L A E Q T V F L •
1501 GATAAGATACATTGATGAGTTTGGACAAACCACAACACTAGAATGCAGTGAAAAAATGCTTTATTTGTGAAATTTGTGATGCTATTGCTTTATTTGTAACC

HpaI (1621)
1601 ATTATAAGCTGCAATAAACAAGTTAAACAACAACAAATTGCATTCATTTTATGTTTCAGGTTTCAGGGGGAGGTGGGAGGTTTTTAAAGCAAGTAAAACC

EcoRI (1717)
1701 TCTACAAATGTGGTATGGAATTCAAAAACAGCATAGCAAACTTTAACCTCCAAATCAAGCCTCTACTTGAATCCTTTTCTGAGGGATGAATAAGGCA

SapI (1899)
1801 TAGGCATCAGGGGCTGTTGCCAATGTGCATTAGCTGTTTGACGCTCACCTTCTTTCATGGAGTTAAGATATAGTGTATTTTCCAAGGTTTGAAGT

SspI (1956) **Swal (1970)**
1901 CTCTTCATTTCTTTATGTTTTAAATGCACTGACCTCCACATTCCTTTTATGTAATAATTCAGAAAATAATTTAAATACATCATTGCAATGAAAATAAA

EcoO109I (2031)
2001 TGTTTTTTATTAGGCAGAATCCAGATGCTCAAGGCCCTCATAATATCCCCAGTTTAGTAGTTGACTTAGGGAACAAAGGAACCTTTAATAGAAATTG
2101 GACAGCAAGAAAGCGAGCTTCTAGCTTTAGTTCCTGGTGTACTTGAGGGGATGAGTTCCTCAATGGTGGTTTTGACCAGCTTGCCATTCATCTCAATGA
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

SacI (2231) **BstXI (2260)**
2201 GCACAAAGCAGTCAGGAGCATAGTCAGAGATGAGCTCTCTGCACATGCCACAGGGGCTGACCACCTGATGGATCTGTCCACCTCATCAGAGTAGGGGTG
116▶ 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 Y P H

StuI (2395)
2301 CCTGACAGCCACAATGGTGTCAAAGTCTTCTGCCGTTGCTCACAGCAGACCCAATGGCAATGGCTTACGACAGACAGTACCCTGCCAATGTAGGCC
83▶ 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 I Y A
2401 TCAATGTGGACAGCAGAGATGATCTCCCGAGTCTGGTCTGATGGCCGCCCCGACATGGTGTGTTGCTCATAGAGCATGGTGTCTTCTCAGTGG
49▶ 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 K E T A

BspHI (2545)

XmnI (2537)

2501 CGACCTCCACCAGCTCCAGATCCTGCTGAGAGATGTTGAAGTCTTCATGATGGCCCTCTATAGTGAGTCGTATTATACTATGCCGATATACTATGCCG
16 V E V L E L D Q Q S I N F T K M

AseI (2603) SacI (2660)

2601 ATGATTAATTGTCAAACACAGCGTGGATGGCGTCTCCAGCTTATCTGACGGTCTACTAAACGAGCTCTGCTTATATAGACCTCCCACCGTACACGCCTACC

SpeI (2758)

2701 GCCCATTTCGCTCAATGGGGCGGAGTTGTTACGACATTTTGGAAAGTCCCGTTGATTTACTAGTCAAACAAACTCCCATTGACGTCAATGGGGTGGAGA

SnaBI (2886)

2801 CTTGGAAATCCCCGTGAGTCAAACCGCTATCCACGCCATTGATGTACTGCCAAAACCGCATCATCATGGTAATAGCGATGACTAATACGTAGATGTACT

NdeI (2991)

2901 GCCAAGTAGGAAAGTCCCATAAGGTCATGTACTGGGCATAATGCCAGGCGGGCCATTTACCGTCATTGACGTCAATAGGGGGCTACTTGGCATATGATA

3001 CACTTGATGTACTGCCAAGTGGGAGTTTACCGTAAATACTCCACCCATTGACGTCAATGGAAAGTCCCTATTGGCGTTACTATGGGAACATACGTCATT

PstI (3170) Pacl (3177)

SdaI (3169) **BspLU11I (3187)**

3101 ATTGACGTCAATGGGCGGGGTCGTTGGGCGGTGAGCCAGGCGGGCCATTTACCGTAAGTTATGTAACGCTGCGAGTTAATTAAGAACATGTGAGCAAA
CCTGCGAGTTAATTAAGAACATGTGAGCAAA

3201 AGGCCAGCAAAAGGCCAGGAACCGTAAAAAGGCCGCTTGTGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGCATCACAAAAATCGACGCTCAAGT

3301 CAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTTCCCTGGAAGCTCCCTCGTGCGCTCTCCTGTTCCGACCCTGCCGCTTACCGGAT

3401 ACCTGTCCGCTTTCTCCCTTCGGGAAGCGTGGCGTTTTCTCATAGCTACGCTGTAGGTATCTCAGTTCGGTGTAGGTGCTTCGCTCCAAGCTGGGCTG

ApaLI (3501)

3501 TGTGCACGAACCCCGTTCAGCCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGGTAAGACACGACTTATCGCCACTGGCAGCA

3601 GCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGTACAGAGTTCTTGAAGTGGTGGCCTAACTACGGTACACTAGAAGAACAGTATTTG

3701 GTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCACCGCTGGTAGCGGTGGTTTTTTGTTTG

3801 CAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGTCTGACGCTCAGTGGAAACGAAAACTCACGTTAAGGG

EagI (3937)

Pacl (3917) SmaI (3926) **NotI (3936)**

3901 ATTTTGGTCATGGCTAGTTAATTAACATTTAAATCAGCGGCCGCAATAAAATATCTTTATTTTTCATTACATCTGTGTGTTGGTTTTTTGTGTAATCGTA

4001 ACTAACATACGCTCTCCATCAAACAAACGAAACAAACAAACTAGCAAATAGGCTGTCCCAGTGCAAGTGCAGGTGCCAGAACATTTCTCTATCGA

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