



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

1 GGATCTGGGATCGCTCCGGTGCCCGTCAGTGGGAGAGCGCACATCGCCACAGTCCCCGAGAAGTTGGGGGAGGGGTGGCAATTGAACGGGTGCCTA

101 GAGAAGGTGGCGGGGTAAGTGGAAAGTGATGTCGTGTAAGTGGCTCCGCCTTTTCCGAGGGTGGGGGAGAACCCTATATAAGTGCAGTAGTCGCC

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

201 GTGAACGTTCTTTTTCGCAACGGGTTTGCCGCCAGAACACAGCTGAAGCTTCGAGGGGCTCGCATCTCTCTTACACGCCGCCGCCCTACCTGAGGCC

301 GCCATCCACGCCGGTTGAGTCGCGTTCTGCCGCCTCCCGCCTGTGGTGCCCTCTGAAGTGCCTCCGCCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC

**NgoMIV (441)** **NaeI (441)**

401 GGGCCTTTGTCCGGCGCTCCCTTGAGCCTACCTAGACTCAGCCGGCTCTCCACGCTTTGCTGACCCTGCTTGTCTCAACTCTACGTCTTTGTTTCGTTT

**KasI (535)**
**BspHI (560)**

501 TCTGTTCTGCGCCGTTACAGATCCAAGCTGTGACCGCGCCCTACCTGAGATCACAGGTCATCATGAAGAAAAGTGGTGTCTTTTCTCTTGGGCATCAT

601 CTTGCTGGTTCTGATTGGAGTGAAGGAACCCAGTAGTGAGAAAAGGTCGCTGTTCTGCATCAGCACAACCAAGGACTATCCACCTACAATCCTTG

13▶ L L V L I G V Q G T P V V R K G R C S C I S T N Q G T I H L Q S L

**BspLU11I (778)**

701 AAAGACCTTAAACAATTTGCCCAAGCCCTTCTGCGAGAAAATTGAAATCATTGCTACACTGAAGAATGGAGTTCAAACATGCTAAACCCAGATTCAG

47▶ K D L K Q F A P S P S C E K I E I I A T L K N G V Q T C L N P D S

**BstBI (899)**

801 CAGATGTGAAGAACTGATTAATAAAGTGGGAGAAAACAGGTCAGCCAAAAGAAAAGCAAAAAGAATGGGAAAAACATCAAAAAAGAAAGTTCTGAAAGT

80▶ A D V K E L I K K W E K Q V S Q K K K Q K N G K K H Q K K K V L K V

**Psp1406I (911)** **BbsI (927)**

901 TCGAAAATCTCAACGTTCTCGTCAAAAGAAAGACTACATAAGAGACCACTTACCAATAAGTATTCTGTGTTAAAAATGTTCTATTTTAATTATACCGCTA

113▶ R K S Q R S R Q K K T T •

**MscI (1029)** **NheI (1023)**

1001 TCATTCAAAGGAGGATGGCATAGCTAGCTGGCCAGACATGATAAGATACATTGATGAGTTTGGACAAACCACAACCTAGAATGCAGTAAAAAATGCTT

**HpaI (1161)** **MfeI (1172)**

1101 TATTTGTGAATTTGTGATGCTATTGCTTTATTTGTAACCATTATAAGCTGCAATAAACAAAGTAAACAACAACATTGCATTCATTTTATGTTTCAGGTT

**EcoRI (1257)**

1201 CAGGGGGAGGTGTGGGAGGTTTTTAAAGCAAGTAAAACCTCTACAAATGTGGTATGGAATTTCAAAATACAGCATAGCAAACTTTAACCTCCAATCA

1301 AGCCTCTACTTGAATCCTTTTCTGAGGGATGAATAAGGCATAGGCATCAGGGGCTGTTGCCAATGTGCATTAGCTGTTTGAGCCTCACCTTCTTTCATG

**SspI (1496)**

1401 GAGTTTAAGATATAGTGATTTTTCCAAGGTTTGAAGTCTCTTCATTTCTTTATGTTTAAATGCACTGACCTCCACATTCCTTTTATGTAATA

**SwaI (1510)**
**EcoO109I (1571)**

1501 TTCAGAAATAATTTAAATACATCATTGCAATGAAATAAATGTTTTTATTAGGCAGAATCCAGATGCTCAAGGCCCTTCATAATATCCCCAGTTTAGT

1601 AGTTGGACTTAGGGAACAAAGAACCTTTAATAGAAAATTGGACAGCAAGAAAGCGAGCTTCTAGCTTTAGTTCCTGGTACTTGAGGGGGATGAGTTCC

141▶ • N R T Y K L P I L E

**SacI (1771)**

1701 TCAATGGTGGTTTTGACCAGCTTCCATTCTCAATGAGCACAAGCAGTCAGGAGCATAGTCAGAGATGAGCTCTCTGCACATGCCACAGGGGCTGA

129▶ 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 C M G C P S V

**BstXI (1800)**

1801 CCACCTGATGGATCTGTCCACCTCATCAGAGTAGGGGTGCTGACAGCCACAATGGTGTCAAAGTCTTCTGCCGTTGCTCACAGCAGACCAATGGC

96▶ 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 S V A S G I A

**StuI (1935)**

1901 AATGGCTTCAAGCAGACAGTACCCTGCAATGTAGCCTCAATGTGGACAGCAGAGATGATCTCCCAAGTCTTGGTCTGATGGCCGCCCGACATGG

63▶ 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 R I A A G V H

**BspHI (2085)** **BbsI (2081)**

2001 TGCTTGTGCTCATAGAGCATGGTATCTTCTCAGTGGCGACCTCCACCAGCTCCAGATCCTGCTGAGAGATGTTGAAGGCTTTCATGATGGCCCTCC

29▶ 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 T K M

**XmnI (2077)**

2101 TATAGTGAAGTATTATACTATGCGGATATACTATGCGGATGATTAATTGTCAAACAGCGTGGATGGCGTCTCCAGCTTATCTGACGGTTCACTAAA

**SacI (2200)**
**SpeI (2298)**

2200 CGAGCTCTGCTTATATAGACCTCCACCGTACACGCCTACCGCCATTTGCGTCAATGGGGCGGAGTTGTTACGACATTTTGGAAAGTCCCGTTGATTTA

2300 CTAGTCAAAACAAACTCCATTGACGTCATGGGGTGGAGACTTGGAAATCCCGTGAGTCAAACCGCTATCCACGCCATTGATGACTGCCAAAACC

**SnaBI (2426)**

2399 GCATCATCATGGTAATAGCGATGACTAATACGTAGATGTAAGTGGCAAGTAGGAAAGTCCATAAGGTCATGTAAGTGGCATAATGCCAGGCGGGCCATTT

**NdeI (2531)**

2499 ACCGTCATTGACGTCAATAGGGGGCGTACTTGGCATATGATACACTTGATGTACTGCCAAGTGGGCGAGTTTACCGTAAATACTCCACCCATTGACGTCAA

2599 TGGAAAGTCCCTATTGGCGTTACTATGGGAACATACGTCAATTATTGACGTCAATGGCGGGGGTCTGTTGGGCGGTTCAGCCAGGCGGGCCATTTACCGTAA

**PstI (2710)**

**SdaI (2709)** **PacI (2717)** **BspLU11I (2727)**

2699 GTTATGTAACGCTGCAGGTTAA TTAAGAACATGTGAGCAAAAGGCCAGAAACCGTAAAAAGGCCGCGTTGCTGGCGTTTTTCCATA

2797 GGCTCCGCCCCCTGACGAGCATCACAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTCCCTGGAAG

2897 CTCCCTCGTGGCTCTCCTGTTCCGACCCTGCCGTTACCGGATACCTGTCCGCTTTCTCCCTTCGGGAAGCGTGGCGCTTTCATAGCTCACGCTGT

**ApaLI (3041)**

2997 AGGTATCTCAGTTCGGTGTAGGTCGTTTCGCTCCAAGCTGGGCTGTGTGCACGAACCCCGTTCAGCCCAGCCGCTGCGCCTTATCCGGTAACTATCGTC

3097 TTGAGTCCAACCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTTCTT

3197 GAAGTGGTGGCCTAACTACGGCTACACTAGAAGACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTGA

3297 TCCGGCAAACAACCCAGCTGGTAGCGGTGGTTTTTTGTTTGAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTT

**EagI (3477)**

**PacI (3457)** **SwaI (3466)** **NotI (3476)**

3397 CTACGGGTCTGACGCTCAGTGGAAACGAAAACCTCACGTTAAGGGATTTTGGTCATGGCTAGTTAATTAACATTTAAATCAGCGCCGCAATAAAATATCT

3497 TTATTTTCATTACATCTGTGTGTTGGTTTTTTGTTGTAATCGTAACTAACATACGCTCCATCAAAACAAAACGAAACAAAACAACTAGCAAATAGG

3597 CTGTCCCCAGTGCAAGTGCAGGTGCCAGAACATTTCTCTATCGAA