



**EcoRI (23) SdaI (38)**  
**NotI (2) XbaI (19) BamHI (29) SpeI (45)**  
1 GCGGCCGCGTCGACGATATCTAGAATTCGGATCCTGCAGGGCCCACTAGTCAGGGCCCAACCCCCAAGCCCCATTTACAACACGCTGGCGCTACA

**BspEI (152)**  
101 GCGCGTGACTTCCCCTTGTCTTGGGGCGGGGGCTGAGACTCCTATGTGCTCCGGATTGGTCAGGCACGGCCTTCGGCCCCGCTCTGCCACGCGAGA

**NheI (207) SacII (298)**  
201 TTGGCCGCTAGCCCTCCCGAGCGCCCTGCCTCCGAGGGCCGGCGACCATAAAGAAGCCGCCCTAGCCACGTCCCCTCGCAGTTCGGCGGTCCCGCGG

301 GTCTGTCTCTTGTCTCAACAGTGTGGACGGAACAGATCCGGGGACTCTCTCCAGCTCCGACCGCCTCCGATTTCTCTCCGCTTGCAACCTCCGG

**NcoI (478)**  
401 GACCATCTTCTCGCCATCTCCTGCTTCTGGGACCTGCCAGCACCGTTTTTGTGGTTAGTCTTCTTGCACCAACCATGGAAATCAAGGTGCTGTTTT  
M E I K V L F

**BglIII (593)**  
501 GCCCTCATCTGTATTGCTGTTGCTGAGGCAAAACCACTGAAATCAATGAAGACCTCAATATAGCTGTGTGGCCTCAAACCTTGGCCACCACAGATCTTG  
8▶ A L I C I A V A E A K P T E I N E D L N I A A V A S N F A T T D L  
601 AGACTGACCTGTTACCAACTGGGAGCCATGAATGTGATTAGCACTGACACAGAGCAGGTGAACACAGATGCTGACAGGGGCAAGCTGCCTGGCAAAAA  
41▶ E T D L F T N W E T M N V I S T D T E Q V N T D A D R G K L P G K K  
701 ACTCCCCCAGATGCTCCTGAGGGAGCTGGAGGCCAATGCCAGAAGGGCTGGTTGCACAAGAGGCTGCCTCATTGGCTCTCCACATTAAGTGACCCCT  
74▶ L P P D V L R E L E A N A R R A G C T R G C L I C L S H I K C T P  
801 AAGATGAAGAAATTTATCCCTGGCAGGTGCCACACTTATGAAGGTGAAAAGGAGTCTGCTCAGGGAGGGATTGGAGAGGCAATTGTTGATATCCAGAGA  
108▶ K M K K F I P G R C H T Y E G E K E S A Q G G I G E A I V D I P E  
901 TTCCTGGCTTCAAGGATAAGGACCACTGGACCACTTATTGCTCAAGTGGACCTCTGTGCTGATTGCACCACTGGCTGTCTGAAGGGCCTTGCCAACTGT  
141▶ I P G F K D K E P L D Q F I A Q V D L C A D C T T G C L K G L A N V  
1001 CCAGTGTCTGACCTCTGAAGAAGTGGCTTCCCAGAGGTGTACCACCTTTGCCAGCAAGATTAGGGTAGGGTGGACAAAATCAAGGGTCTGGCTGGG  
174▶ Q C S D L L K K W L P Q R C T T F A S K I Q G R V D K I K G L A G

**NheI (1112)**  
1101 GACAGATGATAGCTAGCTGGCCAGACATGATAAGATACATTGATGAGTTTGGACAAACCACAACCTAGAATGCAGTGAAAAAATGCTTTATTTGTGAAAT  
208▶ D R •  
1201 TTGTGATGCTATTGCTTTATTTGTAACCATTATAAGCTGCAATAAACAAGTTAACAACAACAAATTGCATTCATTTTATGTTTCAGGTTTCAGGGGAGGTG

1301 TGGGAGGTTTTTAAAGCAAGTAAAACCTCTACAAATGTGGTATGGAATTAATTCTAAAATACAGCATAGCAAAACTTAACTCCAATCAAGCCTCTA

1401 CTTGAATCCTTTTCTGAGGGATGAATAAGGCATAGGCATCAGGGGCTGTTGCCAATGTGCATTAGCTGTTTGCAGCCTCACCTTCTTTCATGGAGTTTAA

**SspI (1591)**  
1501 GATATAGTGTATTTCCCAAGGTTTGAAGTACTAGCTCTTCATTTCTTTATGTTTTAAATGCACTGACCTCCACATTCCTTTTTAGTAAAATATTCAGAAA  
1601 TAATTTAAATACATCATTGCAATGAAAATAAATGTTTTTATTAGGCAGAATCCAGATGCTCAAGGCCCTTCATAATATCCCCAGTTTAGTAGTTGGAC  
1701 TTAGGGAACAAAGGAACCTTTAATAGAAATTTGACAGCAAGAAAGCGAGCTTCTAGCTTATCTCAGTCTCTCTGCCACAAAGTGCACGAGTTG  
125▶ • D Q E E A V F H V C N  
1801 CCGGCCGGTTCGCGCAGGGCGAACTCCCGCCCCACGGCTGCTCGCCGATCTCGGTGATGGCCGGCCGGAGGCGTCCCGGAAGTTCGTGGACACGACCT  
112▶ G A P D R L A F E R G W P Q E G I E T M A P G S A D R F N T S V V E  
1901 CCGACCACTCGCGTACAGCTCGTCCAGGCCGCGCACCCACCCAGGCCAGGGTGTGTCCGGCACCACCTGGTCTGGACCGCGTGTGAAACAGGGT  
79▶ S W E A Y L E D L G R V W V W A L T N D P V V Q D Q V A S I F L T

**SgrAI (2019)**  
2001 CACGTCGTCCCGACCAACCGGCGAAGTCGCTCCACGAAGTCCCGGAGAACCCGAGCCGGTTCGAGAACTCGACCGCTCCGGCGACGTCCGCGC  
46▶ V D D R V V G A F D D E V F D R S F G L R D T W F E V A G A V D R  
2101 GCGGTGAGCACCAGGCAACGGCACTGGTCAACTTGGCCATGATGGCTCCTCTGTGAGGAGGAAAGAGAAGGTTAGTACAATTGCTATAGTGAGTTG  
12▶ A T L V P V A S T L K A M  
2201 TATTATACTATGCAGATATACTATGCCAATGATTAATTGTCAAAGTAGGGCTGCAGGTTAATTAAGAACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGA

2301 ACCGTAAAAAGGCCGCTTGTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGCATCACAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGAC

2401 AGGACTATAAAGATACCAGGCGTTTCCCCTGGAAGCTCCCTCGTGGCTCTCCTGTTCCGACCCTGCCGTTACCGGATACCTGTCCGCTTTCTCCCT

2501 TCGGGAAGCGTGGCGTTTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCCGGTGTAGGTGTTGCTCCAAGTGGGCTGTGTGCAGAACCCCCGTTTC

2601 AGCCCCACCGCTGCGCCTTATCCGGTAACTATCGTCTTGTGATCCAACCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAG

2701 CAGAGCGAGGTATGTAGGCGGTGCTACAGAGTTCTTGAAGTGGTGGCCTAACTACGGCTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAG

2801 CCAGTTACCTTCGAAAAAGAGTTGGTAGCTTTGATCCGGCAAAACAAACCCGCTGGTAGCGGTGTTTTTTTTGTTTGAAGCAGCAGATTACGGCA

2901 GAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGTCTGACGCTCAGTGAACGAAAACCTCACGTTAAGGGATTTTGGTCATGGCTAGTTA

3001 ATTAACATTTAAATCA