



EcoRI (23)

NotI (2) **XbaI (19)** **SdaI (38)** **SpeI (45)**

1 CCGGCCGCGTCGACGATATCTAGAATTCGGATCCTGCAGGGCCCACTAGTTTTCCTTAGGAAGCAGAAGACTGAGGAAATGACTTGGCGGGTGCATC

101 AATGGCGCCAAAAAGACACGGACACGCTCCCTGGGACCTGAGCTGGTTCGAGTCTTCCCAAAGGTGCCAAGCAAGCGTCAGTTCCTCCCTCAGGCGCTC

201 CAGGTTAGTGCCTTGTGCCGAGGGTCTCCGGTGCCTTCTAGACTTCTCGGGACAGTCTGAAGGGTCCAGGAGCGCGGGACAGCGCGGAAGAGCAGG

AvrII (394)

301 CAAGGGGAGACAGCCGACTGCGCCTCAGTCTCCGTGCCAAGAACACCGTCGCGGAGGCGCGGCCAGTTCCTTGATCGGACTTTCGCCCTAGGG

401 CCAGGCGCGGAGCTTACGCTTGTCCCTTCCCAGTTCGCGGCGCCCCAGAGCTGAGTAAGCCGGGTGGAGGGAGTCTGCAAGGATTTCTGAGCGC

501 GATGGCAGGAGGAGGGCAAGGGCAAGAGGGCGCGGAGCAAAGACCCTGAACCTGCCGGGGCCGCTCCCGGGCCGCTGCCAGCACCTCCCACG

601 CGCGCTCGGCCCGGGCCACCCGCCCTCGTCGGCCCCGCCCTCTCCGTAGCCGAGGGAAGCGAGCCTGGGAGGAAGAAGAGGGTAGGTGGGGAGGCG

701 GATGAGGGTGGGGACCCCTTACGCTCACCAGAAGGAGGTGCCGGGTAGGAAGTGGCTGGGAAAGTTATAAATCGCCCCGCCCTCGGCTGCTCT

801 TCATCGAGTCCGCGGAGGCTCGGAGCGCCAGGCGGACACTCTCTCGGCTCTCCCGGACGCGCGGGCTCGGAGCGGGTCCGGGGCTCGGG

901 TGCAGCGCCAGCGGGCGCTGGCGGCGAGGATTACCCGGGAAGTGGTTGTCTCTGGTGGAGCCGAGACGGGCGCTCAGGGCGGGGCCGGCGCG

NcoI (1086)

1001 CGGCAACAAGAGGACGACTCTGGCGCCGGTCTGGCCGCGGGGAGCGGGGACCGGGGAGCAGGCCGCTCGCGCTCACCATGGAAATCAAGG

1101 TGCTGTTTGCCTCATCTGTATTGCTGTTGCTGAGGCAAAACCCACTGAAATCAATGAAGACCTCAATATAGCTGCTGTGGCCTCCAACCTTGGCCACCAC

BglII (1201)

1201 AGATCTTGAGACTGACCTGTTCCACCACTGGGAGACCATGAATGTGATTAGCACTGACACAGAGCAGGTGAACACAGATGCTGACAGGGGCAAGCTGCCT

1301 GGCAAAAACTCCCCCAGATGCTCTGAGGAGCTGGAGGCCAATGCCAGAAGGGCTGGTGCACAAGAGGCTGCCTCATTGCTCTCCACATTAAGT

1401 GCACCCCTAAGATGAAGAAATTTATCCCTGGCAGGTGCCACACTTATGAAGTGAAAAGGAGTCTGCTCAGGAGGGGATTGGAGAGGCAATTGTTGATAT

1501 CCCAGAGATTCTGGCTTCAAGGATAAGGAGCCACTGGACCAGTTTATTGCTCAAGTGGACCTCTGTGCTGATTGCACCACTGGCTGCTGAAGGGCCCT

1601 GCCAATGTCCAGTGTCTGACCTCTGAAGAAGTGCTTCCCAGAGGTGTACCACTTTTCCAGCAAGATTGAGGGTAGGGTGGACAAAATCAAGGGTCT

1701 ANVQCSDLLKWLPRQRCCTTFASKIQGRVDKIKG

NheI (1720)

1701 TGGCTGGGGACAGATGATAGCTAGCTGGCCAGACATGATAAGATACATTGATGAGTTGGACAAACCACAACCTAGAATGCAGTGAAAAAATGCTTTATT

1801 TGTGAAATTTGTGATGCTATTGCTTTATTTGTAACCATTATAAGCTGCAATAAACAGTTAACAAACAATTGCATTCATTTTATGTTTCAGGTTACAG

1901 GGGAGGTGTGGGAGTTTTTTAAAGCAAGTAAACCTCTACAATGTGGTATGGAAATTAATCTAAAATACAGCATAGCAAACTTTAACCTCCAAATCA

2001 AGCCTTACTTGAATCCTTTTCTGAGGGATGAATAAGGCATAGGCATCAGGGGCTGTTGCCAATGTGCATTAGCTGTTTGCAGCCTCACCTTCTTTTCATG

SspI (2199)

2101 GAGTTAAGATATAGTGATTTTCCCAAGGTTTGAAGTAGCTCTTCATTTCTTTATGTTTTAAATGCACTGACCTCCACATTCCCTTTTTAGTAAAAATA

2201 TTCAGAAATAATTTAAATACATCATTGCAATGAAATAAATGTTTTTATTAGGCAGAATCCAGATGCTCAAGGCCCTTCATAATATCCCCAGTTTAGT

2301 AGTTGGACTTAGGGAACAAAGAACCTTTAATAGAAATTGGACAGCAAGAAAGCGAGCTTCTAGCTTATCCAGTCTGCTCCTCTGCCACAAAGTGCA

2401 CGCAGTTGCGCGCCGGTTCGCGCAGGGCGAACTCCCGCCCCACGGCTGCTCGCCGATCTCGGTCAATGGCCGCGCCGGAGGCTCCCGGAAGTTCTGTGA

2501 CACGACCTCCGACCACTCGCGTACAGCTCGTCCAGGCGCGCACCCACACCCAGGCCAGGGTGTGTCCGGCACCACTGGTCTGGACCCGCGCTGATG

2601 AACAGGGTACGTCGTCGCCGACACACCGCGGAAGTCTCTCCACGAAGTCCCGGGAGAACCAGCCGCTCGGTCCAGAACTCGACCGCTCCGGCGCA

2701 CGTCGCGCGGGTGAACCCGGAACGGCACTGGTCAACTGGCCATGATGGCTCCTCTGTCAGGAGAGGAAAGAGAAGAAGGTTAGTACAATTGCTATA

2801 GTGAGTTGATTACTATGAGATATACTATGCCAATGATTAATTGTCAAAGTGGGCTGCAGGTTAATTAAGAACATGTGAGCAAAAGGCCAGCAAAA

2901 GGCCAGGAACCGTAAAAAGCCGCTTGTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGCATCACAAAAATCGACGCTCAAGTCAGAGGTGGCGA

3001 AACCCGACAGGACTATAAGATACCAGGCGTTTCCCCTGGAAGCTCCCTCGTGCCTCTCTGTTCCGACCTGCGCTTACCGGATACCTGTCCGCT

3101 TTCTCCCTTCGGGAAGCGTGGCGCTTTCTCATAGCTCACGCTGATGATATCTCAGTTCGGGTAGGTCTTCCGCTCCAAGCTGGGCTGTGTGCAGAAC

3201 CCCCCTTCCAGCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGTAGTCAACCCGGTAAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAA

3301 AGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTCTTGAAGTGGTGGCCTAACTACGGCTACACTAGAAGAACAGTATTTGGTATCTGCGCTC

3401 TGCTGAAGCCAGTTACCTTCGAAAAAGAGTTGGTAGCTCTTGTATCCGGCAAAACACCCGCTGGTAGCGGTGGTTTTTTTGTGCAAGCAGCAGAT

3501 TACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGGTCTGACGCTCAGTGGAAACGAAAACCTCACGTTAAGGGATTTTGGTCATG

3601 GCTAGTTAATTAACATTTAAATCA