



EcoRI (23)

XbaI (19)

NotI (2)

EcoRV (17)

SdaI (38)

SpeI (45)

1 GCGGCCGCGTCGACGATATCTAGAATTCGGATCCTGCAGGGCCACTAGTCTGTAAGCTGAAGACCTGGCAGTGCTGAGCTGGTCAGCCCCAGGACCTC
101 CTTTTGTGCCACGAGTGAATCACCTTGGCATAGACATAATGGTCAGGGTGGGCACGCAGCCTGCTCCCGCTGTGCTCCAGGCTCCTTCGATGCTTT
201 CCGAGAAGTCTATTGAGCTGGGAGCTTGTACTGCACCCGGGGCTGACATCCTGGCATCCTGGGATAAAAGCAGCCACGGGGCTGCCCTTGCCATATGCC
301 TCACTGGCGCAGAGAACAAGGCTCTATTACGCGAGTACCCTGGAGTAGACACCAGAAGCCAAAGCATGGGCAGAGGAAGGCAGGGGTGGGGGAGCAG
401 AGCTGTCTGTGTTCCAGAAGCCAAAGGACACAGATGGCTAAGGCGCTGGGAGAGGGACCTGAGTGAAGAGATAGATGGGCTGAAGTCTCAAGCAGCA
501 ACAGCTCCTCCCCGCCATTGGTGAGGGTGGGTTTGGTTTCCGGACCTACATATCCCTCAGAGGCTGGTGTGTAAGAAATTTAAAGGGGTAAATCTC

Acc65I (615)

SphI (660)

601 CTGAGAGAATGAGGGGTACCCAGGAAGACGGGGTGTACAGAAAGAAAGACTCCAGCATGCACAGCCAACCTATTCAAACACTCTGTGAGGGGCTGCC
701 AGGGGCAGGCTCGGGTGGGGTGGGGGCAACGAGAAGCTGGATCAGGGAGAAATGGCCCACTAGGCTGGATAAGAGGCCACAGGGGGCTCAGGAA
801 TGAAGCTGCTGCTTACCCTATTAGGATCTGCGTGCATACCTTCTGCCGTGACTCTAAACACACAGCCAGAGGCTCAAGTTGACCTGGAGTCACAGA
901 GAGGGCTCAACCTTAGCCCTCACTCCTGAATCCAGGAATGAGAAGATAGAGTTGGAGAGATTGAGGGGAGAGGACTCTGTTGAGAATGGGGTACACA
1001 GGAACCTGTAATATAGTTGATCCCGAGGAAGGAATAGTTTCTCAAGTTCTAGCATCTCACAGGCCCCAGAGAAGGACAGAGTTGGGGTGGTCTCT
1101 GGCTTACAGGCTTAAGAAGCTGGAAGCTGATTACCCACCGAGCTGTGACTCTCTGTCTGTCTGTGTGTGCGCTCGTGCACACTTATCACAAAA
1201 TGTTATGTGTGTCACATACATGTGTTGAGACCAGAGGTCAACCTCAGGCACTGTTGCCTTGGTTTTCTGAGAGGCAATTTCTCTGGATCTGGAAT
1301 CGCCAATTAGTGAGAGCCAGGAAGTCTGCTGATTTTCACTGCCAGCACTGGAGTTTACAAGTATGCACTGTCAACCCAGGCTTTTGTATTATTCTGC
1401 AGCTAGAAGTGGTGGTCTTTCATGCTTGACAGGCAAGCAATTTATGGACTAAGCTGTTCCCTCGGCCCTCTTTGACCCATTACCAGAAAGGGGTT
1501 CCTTGATCAATGGCAAGCCAGGCTGGTGTCCCAAGAAAGCCTGACTCTGGGTACAGTACCTCAGTGGGTGAGAGGATTTCTCCCTAGTGGGG
1601 TGGGGCCAGCTCCACCCCTCAGGCTATTCAATGGGGTGTCTCCAGGAAGTCAAGGGCAGATTTAGTCCAACCCGTTCTCCATAAAGGCCCTGACAT

NcoI (1726)

1701 CCCAGGAGCCAGCAGAGGCGAGGACCATGGAATCAAGGTGCTGTTTGCCTCATCTGTATTGCTGTTGCTGAGGCAAAACCCACTGAAATCAATGAAG
1 M E I K V L F A L I C I A V A E A K P T E I N E

BglII (1841)

1801 ACCTCAATATAGCTGCTGTGGCTCCAACCTTGGCCACCACAGATCTTGAGACTGACCTGTTCCCAACTGGGAGACCATGAATGTGATTAGCACTGACAC
25 D L N I A A V A S N F A T T D L E T D L F T N W E T M N V I S T D T
1901 AGAGCAGGTGAACACAGATGCTGACAGGGGCAAGCTGCCTGGCAAAAACCTCCCCAGATGCTCTGAGGGAGCTGGAGGCAATGCCAGAAGGGCTGGT
58 E Q V N T D A D R G K L P G K K L P P D V L R E L E A N A R R A G
2001 TGCACAAGAGGCTGCTCATTGCTCTCCACATTAAGTGCACCCTAAGATGAAGAAATTTATCCCTGGCAGGTGCCACACTTATGAAGGTGAAAAGG
92 C T R G C L I C L S H I K C T P K M K K F I P G R C H T Y E G E K

EcoRV (2138)

2101 AGTCTGCTCAGGGAGGGATTGGAGAGGCAATTTGGATATCCAGAGATTCTGGCTCAAGGATAAGGAGCCACTGGACCAGTTTATTGCTCAAGTGGA
125 E S A Q G G I G E A I V D I P E I P G F K D K E P L D Q F I A Q V D
2201 CCTCTGTGCTGATTGCACTGGCTGTCTGAAGGGCCTTCCCAATGTCCAGTGTCTGACCTCCTGAAGAAGTGGCTTCCCAGAGGTGTACCACCTTT
158 L C A D C T T G C L K G L A N V Q C S D L L K K W L P Q R C T T F

NheI (2360)

2301 GCCAGCAAGATTGAGGTAGGGTGGACAAAATCAAGGGTCTGGCTGGGACAGATGATAGCTAGCTGGCCAGACATGATAAGATACATTGATGAGTTGG
192 A S K I Q G R V D K I K G L A G D R
2401 ACAAAACCAACTAGAATGCACTGAAAAAATGCTTTATTTGTGAATTTGTGATGCTATTGCTTTATTTGTAACATTATAAGCTGCAATAAAACAAGTT
2501 AACAAACAATTCATTCATTTTATGTTTCAGGTTTCAGGGGAGGTGTGGAGGTTTTTAAAGCAAGTAAAACCTCTACAAATGTGGTATGGAATTA

2601 TTCTAAAATACAGCATAGCAAACTTTAACCTCCAATCAAGCCTCACTTGAATCCTTTTCTGAGGGATGAATAAGGCATAGGCATCAGGGGCTGTTGC
2701 CAATGTGCATTAGCTGTTTGACGCTCACCTTCTTCATGGAGTTAAGATATAGTGATTTTTCCCAAGGTTGAAGTGTCTTCAATTTCTTATGTTT

SspI (2839)

2801 TAAATGCACTGACCTCCACATTCCTTTTTAGTAAAAATTCAGAAAATAATTTAAATACATCATTGCAATGAAAATAAATGTTTTTATTAGGCAGAAT
2901 CCAGATGCTCAAGCCCTTCAATAATCCCCAGTTTGTAGTGGACTTAGGAAACAAAGGAACCTTAAATAGAAAATTGGACAGCAAGAAGCGAGCTT
3001 CTAGCTTATCTCAGTCTCTCTCTGCCACAAAGTGCACGAGTTCGCGGGCGGGTCGCGCAGGGCGAACTCCCGCCCCACGGCTGCTCGCCGATCT
125 D Q E E A V F H V C N G A P D R L A F E R G W P Q E G I E
3101 CGGTATGGCCGGCCGGAGGCGTCCCGAAGTTCTGGACACGACCTCCGACCACTCGCGTACAGCTGCTCCAGGCGCGCACCCACACCCAGGCCAG
95 T M A P G S A D R F N T S V V E S W E A Y L E D L G R V W V W A L

SgrAI (3267)

3201 GGTGTTGTCGGCACCACCTGGTCTGGACCGCGTGATGAACAGGGTACGTCGTCGCCGACACACCGGCGAAGTGTCTCCACGAAGTCCCGGGAG
62 T N D P V V Q D Q V A S I F L T V D D R V V G A F D D E V F D R S
3301 AACCCGAGCCGGTGGTCCAGAACTCGACCGCTCCGGCGAGTGCAGCAGGACCGGACCGGACCGCACTGGTCAACTGGCCATGATGGCTCCTCCTG
28 F G L R D T W F E V A G A V D R A T L V P V A S T L K A M
3401 TCAGGAGAGAAAGAGAAGAGGTTAGTACAATGCTATAGTGTGATTATACTATGCAGATATACTATGCCAATGATTAATTGTCAAAGTGGGCT
3501 GCAGGTTAATTAAGAACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAAGGCCGCTTGTGGCTTTTTCCATAGGCTCCGCCCCCTGA

3601 CGAGCATCACAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAGATACCAGGCGTTTCCCCCTGGAAGCTCCCTCGTGCGCTCT  
3701 CCTGTTCCGACCCTGCCGTTACCGGATACCTGTCGCCTTCTCCCTTCGGGAAGCGTGGCGCTTTCATAGCTCAGCTGTAGGTATCTCAGTTCGG  
3801 TGTAGGTCGTTGCTCCAAGCTGGGCTGTGTGCACGAACCCCGTTTCAGCCGACCGCTGCGCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGGT  
3901 AAGACACGACTTATGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTTCTTGAAGTGGTGGCCTAAC  
4001 TACGGTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCA  
4101 CCGCTGGTAGCGGTGTTTTTTTTGTTTGAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGGTCTGACGC  
4201 TCAGTGGAACGAAAACACGTTAAGGGATTTTGGTCATGGCTAGTTAATTAACATTTAAATCA