



EcoRI (19)

NotI (2) XbaI (15) SdaI (29) SpeI (36)

1 CGGGCCGCTATGCATCTAGAATTCCTGCAGGGCCCACTAGTCTGTAATCCCAGCATTTTGGGAGGCTGAGGCAGATGGATCACCTGAGGTCAGGAGTTCC
101 AGACCAGCCTGGCCAACATGATGAAACCCCGTCTCTAGTAAAAATACAAAATTAGCCAGGCATGGTGTATATACCTGTAGTACCAGCTACTTGGGAGA

NcoI (239)

201 CAGAGGTGGGAGAATTACTTGAACCTGGGAGGTTCAAGCCATGGGAGGTGGAAGTTGCAGTGAGCCGAGATGCCACTGCACTCCAGCCTGAGCAACAGAG
301 CAAGACTATCTCAAGAAAAAAGAAAGAAAGAAAGGACTTGCCAAGGTCATGTATCAGGGCAAGGAAGAGCTGGGGGCCAGCTGGCTGTCCCTCGC
401 TGAGCTGGGAGACCCTTGATCTGACTTCTCCATCTTCCAGCCTAAGCCAGGCCTGGGGTACGGAGGCTGGGGAGGCACCGAGGAACGCGCCTGG
501 CATGTGCTGACAGGGAATTTATGCTCCAGCTGGGCCAGCTGGGAGGAGCCTGCTGGGCAGAGGCCAGAGCTGGGGCTCTGGAAGGTACCTGGGGAGG

SacI (620)

601 TTGCACTGTGAGAATGAGCTCAAGCTGGGTCAGAGAGCAGGGCTGACTCTGCCAGTGCTGCATCAGCCTCATCGCTCTCTAGGCTCTGGCTGTCTGG
701 ACTCTGGGCTGCAGGTCCTTCTTAAAAGGCTGTGAGTAGTGAGACAAGGAGCAGGAGTGAGGGGTGGCAGGAGAGAAGATAGAGATTGAGAGAGAGAGAG
801 AGAGAGACAGAGAGAGAGGAAGAGACAGAGACAAAAGGAGAGAGAACGGCTTAGACAAGGAGAGAAGATGGAAGATAAAGAGACTGGGCGCAGTGGCT
901 CACGCTGTAATCCCAACACTTGGGGAGGCCAAGGTGGGAGGATGGCTTGAAGAAAGAGTCTGAGATCAACCTGGCCAACATAGTGAGACCCCGTCTCT
1001 AAAAAAAAAAAGAAAAAAAAAAGAAAAAAAAAAGTTTTTTTTAAAGAGACAGAGAAAAGAGACTCAGAGATTGAGACTGAGAGCAAGACAGAGAGA
1101 GACACTCACAGGGAAGGGGGAAGAGGAAAACGAGAAAGGGAGGAGTAACGAAAAGAGATAAAAAAGAAAAGCAGGTGGCAGAGACACAGAGAGAGGG

BspHI (1271)

1201 ACCCAGAGAAAGCCAGACAGACGCAGGTGGCTGGCAGCGGGCGCTGTGGGGTACAGTAGGGGGACCTGTcATGATGGAAATCAAGGTGCTGTTTGCCC
M M E I K V L F A

BglII (1389)

1301 TCATCTGTATTGCTGTTGCTGAGGCAAAACCCACTGAAATCAATGAAGACCTCAATATAGCTGCTGTGGCCTCCAACCTTTGCCACCACAGATCTTGAGAC
10>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 E T
1401 TGACCTGTTCAACCACTGGGAGACCATGAATGTGATTAGCACTGACACAGAGCAGGTGAACACAGATGCTGACAGGGGCAAGCTGCCTGGCAAAAAACTC
43> 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 L
1501 CCCCAGATGCTCTGAGGGAGCTGGAGGCCAATGCCAGAAGGGCTGGTTGCACAAGAGGCTGCCTCATTGCTCTCCACATTAAGTGACCCCTAAGA
77> 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 K

EcoRV (1686)

1601 TGAAGAAATTTATCCTGGCAGGTGCCACACTTATGAAGGTGAAAAGGAGTCTGCTCAGGGAGGGATTGGAGAGGCAATTTGATATCCCAGAGATTTCC
110>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 I P
1701 TGGCTTCAAGGATAAGGACCACTGGACCAGTTTATTGCTCAAGTGGACCTCTGTGCTGATTGCACCACTGGCTGTCTGAAGGGCCTTGCCAATGTCCAG
143> 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 Q
1801 TGCTCTGACCTCTGAAGAAGTGGCTTCCACAGAGGTGTACCCTTTTCCAGCAAGATTGAGGGTAGGGTGGACAAAATCAAGGGTCTGGCTGGGGACA
177> 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 D

NheI (1908)

1901 GATGATAGCTAGCTGGCCAGACATGATAAGATACATTGATGAGTTTGGACAAACCACAACCTAGAATGCAGTGAAAAAATGCTTTATTTGTGAAATTTGT
210>R •
2001 GATGCTATTGCTTTATTTGTAACCATTATAAGCTGCAATAAACAAGTTAACAACAACAATTGCATTCATTTTATGTTTCAGGTTTCAGGGGGAGGTGTGGG
2101 AGGTTTTTTAAAGCAAGTAAAACCTCTACAAATGTGGTATGGAATTAATTCTAAAATACAGCATAGCAAACTTTAACCTCCAAATCAAGCCTCTACTTG

SpeI (2387)

2301 TAGTGATTTTTCCCAAGGTTTGAAGTAGCTCTTCAATTTCTTTATGTTTTAAATGCACTGACCTCCCACATTCCTTTTATGTAATAATTCAGAAATAAT
2401 TTAATACATCATTGCAATGAAAATAAATGTTTTTATTAGGCAGAAATCCAGATGCTCAAGGCCCTTCATAATATCCCCAGTTTAGTAGTTGGACTTAG
2501 GGAACAAAGGAACCTTTAATAGAAATTGGACAGCAAGAAAGCGAGCTTCTAGCTTATCCTCAGTCCTGCTCCTGCCACAAAGTGCACGCAGTTGCCGG
125> • D Q E E A V F H V C N G A
2601 CCGGGTCGCGCAGGGCGAACTCCCGCCCCACGGTCTCGCGGATCTCGGTCATGGCCGGCCGGAGGCGTCCCGAAGTTCGTGGACACGACCTCCGA
111> 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 S
2701 CCACTCGGCTACAGCTGTCCAGGCCGCGCACCCACACCAGGCCAGGGTGTGTCCGGCACCCTGGTCTGGACCGCCTGATGAACAGGGTCCAG
78> 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 V

SgrAI (2815)

2801 TCGTCCCGGACCACACCGGCGAAGTCGCTCCACGAAGTCCCGGAGAACCCGAGCCGGTCCGTCAGAACTGACCGCTCCGGCAGCTCGCGCGCGG
44>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 A T
2901 TGAGCACCAGGAAACCGCACTGGTCAACTTGGCCATGATGGCTCCTCCTGTCCAGGAGAGAAAGAGAAGAAGTTAGTACAATTGCTATAGTGAGTTGTATT
11> L V P V A S T L K A M
3001 ATACTATGCAGATATACTATGCCAATGATTAATTGTCAAAGTGGCTGCAGGTTAATTAAGAACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACCG
3101 TAAAAAGGCCGCTTGTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGCATCAAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGA
3201 CTATAAGATACCAGGCGTTTCCCCTGGAAGCTCCCTCGTGCCTCTCCTGTTCCGACCCTGCCGTTACCGGATACCTGTCCGCTTTTCTCCTTCGG
3301 GAAGCGTGGCGTTTCTCATAGCTCAGCTGTAGGTATCTCAGTTCGGTGTAGGTGTTCCGCTCCAAGCTGGGCTGTGTGCACGAACCCCGTTCAGCC
3401 CGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGGTAAGACACGACTTACGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGA

3501 GCGAGGTATGTAGGCGGTGCTACAGAGTTCTTGAAGTGGTGGCCTAACTACGGCTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAG
3601 TTACCTTCGGAAAAAGATTGGTAGCTCTTGATCCGGCAAACAACCACCGCTGGTAGCGGTGGTTTTTTGTTTGCAAGCAGCAGATTACGCGCAGAAA
3701 AAAAGGATCTCAAGAAGATCCTTTGATCTTTCTACGGGTCTGACGCTCAGTGGAACGAAAACACGTTAAGGGATTTTGGTCATGGCTAGTTAATTA
3801 ACATTTAAATCA