



EcoRI (23)

EcoRV (17)

NotI (2) SalI (9) XbaI (19) SdaI (38) SpeI (45)

1 CGCGCCGCGTGCAGCATATCTAGAATTTCGGATCCTGCAAGGCCACTAGTCCACTCCAGAGCCTTGCCAGGCAGCTGCAATCACCAACCACAGCATCC
101 TTTGGGTTTGACCCACTGAGCACATGACCCCAATTAGTCTGGCAGCATCCCTGCTCCTCTGCTTACATCAGAGAGCACAGAGTAGCCGATATAAA

NcoI (270)

201 GCTACTGGATGCTGGAGGGTGCAGAACAGACAAGTCCACACAGCAGCTTGGTGCACACCTAGCAGACACCATGGTTCTGGGGCCCTGCATGCTGCTGCT
301 GCTGCTGCTGCTGGCCCTGAGGCTACAGCTCTCCCTGGGCATCATCCAGTTGAGGAGGAGAACCCGGACTTCTGGAACCGCGAGGCAGCCGAGGCCCTG
10 L L L L L G L R L L Q L S L G I I P V E E N P D F W N R E A A E A L
401 GGTGCCCAAGAAGCTGCAGCCTGCACAGACAGCCGCAAGAACCTCATCATCTTCTGGGCGATGGGATGGGGTGTCTACGGTGCAGCTGCCAGGA
44 G A A K K L Q P A Q T A A K N L I I F L G D G M G V S T V T A A R

NdeI (565)

501 TCCTAAAAGGCGAGAAGAAGGACAACTGGGGCCTGAGATACCCCTGGCTATGGACCGCTTCCCATATGTGGCTCTGTCCAAGACATACAATGTAGACAA
77 I L K G Q K K D K L G P E I P L A M D R F P Y V A L S K T Y N V D K
601 ACATGTGCCAGACAGTGGAGCCACAGCCACGCCCTACTGTGCGGGTCAAGGGCAACTTCCAGACCAATTGGCTTGTAGTGCAGCCGCCCCGCTTTAACAG
110 H V P D S G A T A T A Y L C G V K G N F Q T I G L S A A R A R N Q
701 TGCAACACGACACGCGGCAACGAGGTTCATCTCCGTGATGAATCGGGCAAGAAAGCAGGGAAGTCAAGTGGGAGTGGTAACACCACACGAGTGCAGCAG
144 C N T T R G N E V I S V M N R A K K A G K S V G V V T T T R V Q H
801 CCTCGCCAGCCGACCTACGCCACACGGTGAACCGCAACTGGTACTCGGACGCGAGCTGCCTCGCCCGCCAGGAGGGTGCAGGACATCGC
177 A S P A G T Y A H T V N R N W Y S D A D V P A S A R Q E G C Q D I A
901 TACGACCTCATCTCAACATGACATGTGATCTGGTGGAGGCGAAGTACATGTTTCGCATGGGAACCCAGACCCAGACCTTGAGTACCAGATGAC
210 T Q L I S N M D I D V I L G G K Y M F R M G T P D P E Y P D D
1001 TACAGCCAAGTGGGACCAGGCTGGACGGGAAGAATCTGGTGCAGGAATGGCTGGCGAAGCGCCAGGGTGCCTGGTATGTGTGGAACCGCAGTGCATCA
244 Y S Q G G T R L D G K N L V Q E W L A K R Q G A R Y V W N R T E L
1101 TGCAAGCTTCCCTGGACCCGTCTGTGACCCATCTCATGGTCTCTTTGAGCCTGGAGACATGAAATACGAGATCCACCGAGACTCCACACTGGACCCCTC
277 M Q A S L D P S V T H L M G L F E P G D M K Y E I H R D S T L D P S
1201 CCTGATGGAGATGACAGAGGCTGCCCTGCGCTGCTGAGCAGAACCCCGCGGCTTCTTCTCTTCTGCGGAGGGTGGTGCATCGACCAACCGTCAATCA
310 L M E M T E A A L R L L S R N P R G F F L F V E G G R I D H G H
1301 GAAAGCAGGGCTTACCGGGCACTGACTGAGACGATCATGTTTCGACGACGCAATTGAGAGGGCGGGCCAGCTCACAGCGAGGAGGACACGCTGAGCCTG
344 E S R A Y R A L T E T I M F D D A I E R A G Q L T S E E D T L S L
1401 TCACTGCGCACCCTCCACGCTTCTCCTTCGGAGGCTACCCCTCGAGGGAGCTCCATCTTGGGCTGGCCCTGGCAAGGCCCGGACAGGAAGGC
377 V T A D H S H V F S F G G Y P L R G S S I F G L A P G K A R D R K A
1501 CTACAGTCTCTCTTACGGAACCGTCCAGGCTATGTCTCAAGGACGGCCCGCGGATGTTACCGAGAGCGAGAGCGGGACCCCGAGTATCGG
410 Y T V L L Y G N G P G Y V L A G R A R P D V T E S E S G S P E Y R
1601 CAGCAGTGCAGTGCCTTGGACGAAGAGACCCACGCGAGGCGAGGACGTTGGCGGTGTTTCGCGCGGGCCGAGGCGCACCTGGTTTACCGCGTGCAGG
444 Q Q S A V P L D E E T H A G E D V A V F A R G P Q A H L V H G V Q
1701 AGCAGACTTTCATAGGCGACGTCATGGCCTTCCGCGCCTGCTGGAGCCCTACACGCTGCGAAGCTGGCGCCCGCCGCGGACCAACCGACGCCGCGCA
477 E Q T F I A H V M A F A A C L E P Y T A C D L A P P A G T T D A A H

NheI (1836)

1801 CCCGGGGCGGTCCCGTCCAAGCGTCTGGATTGAAAGCTAGCTGGCCAGACATGATAAGATACATTGATGAGTTTGGACAAACCAACTAGAATGACGATG
510 P G R S R S K R L D
1901 AAAAAATGCTTTATTGTAAGAAATTTGTGATGCTATTGCTTTATTTGTAACCAATTATAAGCTGCAATAAACAAAGTTAACACAAACAAATTCATTTCATTTT
2001 ATGTTTCAGGTTTCAGGGGAGGTGTGGGAGGTTTTTTAAAGCAAGTAAACCTCTACAAATGTGGTATGGAATTAATTTCTAAAATACAGCATAGCAAAAAC
2101 TTTAACTCCAATAACAAGCCTCTACTTGAATCCTTTCTGAGGGATGAATAAGGCATAGGCATCAGGGGCTGTTGCCAATGTGCATTAGCTGTTTGCAGC
2201 CTCACCTTCTTTTCATGGAGTTTAAGATATAGTGTATTTTCCCAAGGTTTGAAGTACTCTTTCATTTCTTTATGTTTTAAATGCACTGACCTCCCAATTC

SspI (2315)

2301 CCTTTTATGTAATAATTCAGAAATAATTTAAATACATCATTTGCAATGAAAAATAATGTTTTTTATTAGGCAGAAATCCAGATGCTCAAGGCCCTTCATAA
2401 TATCCCCAGTTTATGATGTTAGGACTTAGGGAACAAGGAACCTTTAATAGAAATTTGACAGCAAGAAAGCAGGCTTCTAGCTTATCCTCAGTCTGCTCC
125 D Q E
2501 TCTGCCACAAAGTGCACGCAAGTTGCCGCGCGGTGCGCGAGGGGCAACTCCCGCCCCACGGCTGCTCGCGATCTCGGTTCATGGCCCGCCGAGGCGGT
120 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 T M A P G S A D
2601 CCCGAAGTTGCTGGACACGACTCCGACCCTCGCGCTACAGCTCGTCCAGGCGCGCACCCACACCCAGGCCAGGGTGTGTCCGGCACCCCTGGTTC
87 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 T N D P V V Q D

SgrAI (2743)

2701 CTGGACCGCGTGTGATGAACAGGTCACGTCGTCGCCGACACACCGCGAAGTGTCTCCACGAAGTCCCGGAGAACCCGAGCCGGTTCGGTCCAGAAC
54 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 F G L R D T W F
2801 TCGACCGCTCCGGCGAGTTCGCGCGGTGAGCACCGGAACCGCACTGGTCAACTTGGCCATGATGGCTCCTCTGTGAGGAGGAAAGAGAGAGGT
20 E V A G A V D R A T L V P V A S T L K A M
2901 TAGTACAATGCTATAGTGTGATTTATATATACTATGCAGATATACTATGCCAATGATTAATTTGTCAAAGTGGGCTGCAGGTTAATTAAGAACATGTGAG
3001 CAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAGGCCGCGTGTGCTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGCATCACAAAATCGACGCTC
3101 AAGTCAGAGGTGGCGAAACCCGACGAGACTATAAAGATACCAGGCGTTTTCCCTGGAAGCTCCCTCGTGGCTCTCCTGTTCCGACCTCCGCGCTTACC
3201 GGATACCTGTCCGCTTTCTCCCTTCGGGAAGCGTGGCGCTTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTGCGTTCGCTCAAGCTGG
3301 GCTGTGTGACGAACCCCGTTCAGCCGACCGCTGCGCTTATCCGTAACATATCGTCTTGTAGTCCAACCCGTAAGACACGACTTATGCGCACTGGC
3401 AGCAGCCACTGTTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTTCCTTGAAGTGGTGGCCTAACTACGGCTACACTAGAGAACAGTA
3501 TTTGGTATCTGCGCTGCTGTAAGCCAGTTACTCTTCGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAAACCAACCCGCTGGTAGCGGTGGTTTTTTTTG

3601 TTTGCAAGCAGCAGATTACGGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGGTCTGACGCTCAGTGGAACGAAACTCACGTTA

---

3701 AGGGATTTTGGTCATGGCTAGTTAATTAACATTTAAATCA

---