



BamHI (29)
EcoRI (23)

1 CGGCGCCGTCGACGATATCTAGAATTCGGATCCTGCAGGGCCTGAAATAACCTCTGAAAGAGGAAGTGGTTAGGTACCTTCTGAGGCGAAAGAACCA
101 GCTGTGGAATGTGTGTCAGTTAGGGTGTGAAAGTCCCCAGGCTCCCCAGCAGGCAGAAGTATGCAAAGCATGCATCTCAATTAGTCAGCAACCAGGTGT

SpeI (275)

201 GGAAAGTCCCCAGGCTCCCCAGCAGGCAGAAGTATGCAAAGCATGCATCTCAATTAGTCAGCAACCATAGTCCCACTAGTTCTCAGGCTCACATTCACAC
301 CACCCACCTCTGAGCCCAGCCCTCCCTAGCATCACACTTCCATCCATTCTCAGCCAAGAGCCAGGAATCTGATTCCAGATCCCACGCTTCCCTGCC
401 TCCCTCAGGTGAGCCCCAGACCCCGAGCCCGCTGGCCCTGAAGGAGCAGGTGATGGTGTCTTCCGCCAGCAGCTGTGGGAGCAGGCGGGTGG
501 GGCAGGATGGAGGGTGGTGGGGTGGGTGGAGCCAGGGCCACTTCTTCCCTTGGGGCCCTGCTCTTCCAGTCTTCCCCAGCCTCGGGAGGTGG
601 TGGAGTGACCTGGCCCCAGTGTGCTCCTTATCAGCCGAGCCGgtaagagggtagagacttggtggggtaggggctcagtgggcctgggaatgtgcctg
701 tggcttgaadagactctgacaggttatgatgggaagagattgggagccattgggctgcacagggctaggggaagccaggggggctggtcactgctggaa
801 tctaagctgctgaggctggagggagcctcaggtatggggctgatggggagctgccagcatctgttctctgtcatttctgataacagtaaaagccagcat
901 ggaaaaaaccgttaaccgaggttggcctggccgttggcagggagtgaggggagggcccgccaggtcctccggcaactcccgctgttctgc

NcoI (1055)

1001 ttctccgctgcccactgcagGTCACAGCTCTTGCTCCTGCCTGTTGCTGACCATGGAATCAAGGTGCTGTTTGCCTCATCTGTATTGCTGTTGC
1101 TGAGGCAAAACCACTGAAATCAATGAAGACCTCAATATAGCTGCTGTGGCCTCAACTTTGCCACCACAGATCTTGAGACTGACCTGTTACCAACTGG
15▶ 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 D L F T N W
1201 GAGACCATGAATGTGATTAGCACTGACACAGAGCAGGTGAACACAGATGCTGACAGGGCAAGCTGCCTGGCAAAAACCTCCCCAGATGCTCCTGAGGG
49▶ 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 P P D V L R
1301 AGCTGGAGGCAATGCCAGAAGGGTGGTTGCACAAGAGGCTGCCTCATTTGCCTCTCCACATTAAGTGCACCCCTAAGATGAAGAAATTTATCCCTGG
82▶ 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 M K K F I P G
1401 CAGGTGCCACACTTATGAAGGTGAAAAGGAGTCTGCTCAGGGAGGGATTGGAGAGGCAATTGTTGATATCCCAGAGATTCTGGCTTCAAGGATAAGGAG
115▶ 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 G F K D K E
1501 CCACTGGACCAGTTTATTGCTCAAGTGGACCTCTGTGCTGATTGCACCACTGGCTGTCTGAAGGGCCTTGCCAATGTCAGTGTCTGACCTCCTGAAGA
149▶ 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 C S D L L K

NheI (1689)

1601 AGTGGCTTCCCCAGAGGTGTACCACTTTTCCAGCAAGATTACAGGAGGGTGGACAAAATCAAGGGTCTGGCTGGGGACAGATGATAGCTAGCTGGCA
182▶ 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 R •
1701 GACATGATAAGATACATTGATGAGTTTGGACAAACCACAACACTAGAATGCAGTGAAAAAATGCTTTATTTGTGAAATTTGTGATGCTATTGCTTTATTTG
1801 TAACCATTATAAGCTGCAATAAACAAGTTAACAACAACAATTGCATTCATTTTATGTTTCAGGTTTCAGGGGAGGTGTGGGAGGTTTTTAAAGCAAGTA
1901 AAACCTTACAAATGTGGTATGGAAATTAATTCTAAAATACAGCATAGCAAACTTTAACCTCCAAATCAAGCCTCTACTTGAATCCTTTTCTGAGGGATG
2001 AATAAGGCATAGGCATCAGGGGCTGTTGCCAATGTGCATTAGCTGTTTGCAGCCTCACCTTCTTTCATGGAGTTTAAAGATATAGTGTATTTTCCCAAGGT
2101 TTGAACTAGCTCTTCATTTCTTTATGTTTTAAATGCACTGACCTCCCACATTCCTTTTATGATAAATATTAGAAATAATTTAAATACATCATTGCAAT
2201 GAAAAATAATGTTTTTATTAGGCAGAAATCCAGATGCTCAAGGCCCTCATAATATCCCCAGTTTAGTAGTTGGACTTAGGGAAACAAAGGAACCTTTAA
2301 TAGAAATTTGGACAGCAAGAAAGCGAGCTTCTAGCTTATCCTCAGTCTGCTCCTTCCACAAAGTGCACGCAGTTGCCGGCCGGGTGCGCAGGGCGAA
125▶ • D Q E E A V F H V C N G A P D R L A F
2401 CTCCCGCCCCACGGTCTCGCGATCTCGGTGATGGCCGGCCGGAGGCGTCCCGAAGTTCGTGGACACGACCTCCGACCACTCGGCGTACAGCTCG
105▶ 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 W E A Y L E
2501 TCCAGGCGCGCACCCACACCAGGCCAGGGTGTGTCGGCACCACTGGTCTGGACCGCGTGATGAACAGGGTCACTGCTCCCGACCAACCCGG
71▶ 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 D G A R V V G A
2601 CGAAGTGTCTCCACGAAATCCCGGGAGAACCAGCCGGTCCAGAACTGCACCGCTCCGGCGACGTGCGCGCGGTGAGACCCGGAACCCGCACT
38▶ 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 L V P V A S
2701 GGTCAACTTGGCATGATGGCTCCTCCTGTGAGAGAGAAAGAGAAGGTTAGTACAATTGCTATAGTGAGTTGATTATACTATGCAGATATACTA
5▶ T L K A M
2801 TGCCAATGATTAATTGTCAAAGTAGGGTCTCAGGTTAATTAAGAACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAAGGCCGCTGTGCTG
2901 CGGTTTTTCATAGGCTCCGCCCTGACGAGCATCACAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAGATACCAGGCGT
3001 TTCCCTGGAAGCTCCCTGTGCGCTCCTGTTCCGACCCTGCCGTTACCGGATACCTGTCCGCTTTCTCCCTTCCGGAAAGCGTGGCGCTTTCTCA
3101 TAGCTCACGCTGAGGTATCTCAGTTCCGGTGTAGGTCGTTCCGCTCAAGCTGGGCTGTGTGCACGAACCCCGTTCAGCCGACCGCTGCGCCTTATCC

3201 GGTAACATCGTCTTGAGTCCAACCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTG
3301 CTACAGAGTTCTTGAAGTGGTGGCCTAACTACGGCTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGT
3401 TGGTAGCTCTTGATCCGGCAAACAACCACCGCTGGTAGCGGTGGTTTTTTTGGTTGCAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGAT
3501 CCTTTGATCTTTTCTACGGGTCTGACGCTCAGTGGAACGAAAACACGTTAAGGGATTTTGGTCATGGCTAGTTAATTAACATTTAAATCA