



EcoRI (23) SdaI (38)

NotI (2) XbaI (19) BamHI (29)

1 CGCGCCGCGTCGACGATATCTAGAATTCGGATCCTGCAGGACCTTGCTTCTAGCTGGCCCTTCTCTCTATAAATACCAGCTCTGGTATTTTCG
101 CTTGGCAGCTGTTGCTGCTAGGGAGACGGCTGGCTTGACATGCATCTCTGACAAAAACAAACCCGGTGTGAGTGGGTGTTGGCCGGTGTGAGTAGGG
201 GGATGAATCAGAGAGGGGGCGAGGGAGACAGGGGCGCAGGAGTCAAGGCGATGCGGGGGTGCCTACTACGCGAGTTGAAACAGTCGTCAGAAGA
301 TTCTGAAACTATCTTGCTGGCTATAAACTTGAGGGAAGCAGAAGGCCAACATTCTCCCAAGGAAACTGAGGCTCAGAGTAAAACCCAGGTATCAGT

Acc65I (442)

AgeI (439)

401 GATATGCATGTGCCCCGGCCAGGGTCACTCTCTGACTAACCGGTACCTACCTACAGGCCTACCTAGAGACTCTTTTGAAAGGATGGTAGAGACTGTCC
501 GGGCTTTGCCACAGTCGTTGAAACCTCAGCATTTTCTAGGCAACTTGTCGAATAAAACACTTCGGGGGTCTTCTTGTTCATTCCAATAACCTAAAA
601 CCTCTCTCGGAGAAAATAGGGGGCCTCAAACAAACGAAATTTCTTAGCCCGCTTCCCAAGGATAAGGCAGGCATCCAATGAAAAAAGGGGCGGGC
701 CGGGGGTCTCTGTGCTCAGCTCCTTGCCCTGTGAAACCCAGCAGGCCTGCTGTCTTCTGTCTCTTGGGGTGTCCAGGGGCGCAGGCCTCTTGGGGGG

BamHI (854)

801 GCTGGCCTCCCCGCCCTCGCTGTGGCCGCCCTTTCTTGGCAGGACAGAGGGATCCTGCAGCTGCAGGGGAGGGGCGCCGGGGGTGATGTCAGGA
901 GGGCTACAAATAGTCGACACAGCTAAGGGGCTCCGTCACCCATCTTACATCCACTCCAGCCGGTCCCGCCCGCTGCCTCTGTGCTCCGCCAG

NcoI (1022)

1001 CCAGCCTCGTCCACGCCGCCACCATGGAAATCAAGGTGCTGTTTGCCTCATCTGTATTGCTGTTGCTGAGGCAAAACCCACTGAAATCAATGAAGACCT
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 D L

BglII (1137)

1101 CAATATAGCTGCTGTGGCCTCCAACCTTTGCCACCACAGATCTTGAGACTGACCTGTTCCACCACTGGGAGACCATGAATGTGATTAGCACTGACACAGAG
26 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 E
1201 CAGGTGAACACAGATGCTGACAGGGGCAAGCTGCTGGCAAAAACCTCCCCCAGATGCTCTGAGGGAGCTGGAGGCCAATGCCAGAAGGGCTGGTTGCA
60 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 C
1301 CAAGAGGCTGCCTCATTGCTCTCCACATTAAGTGCACCCCTAAGATGAAGAAATTTATCCCTGGCAGGTGCCACACTTATGAAGGTGAAAAGGAGTC
93 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 E S
1401 TGCTCAGGGAGGGATTGGAGAGGCAATTGTTGATATCCAGAGATTCTGGCTTCAAGGATAAGGAGCCACTGGACCAGTTTATTGCTCAAGTGGACCTC
126 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 L
1501 TGTGCTGATTGCACCACTGGCTGTCTGAAGGGCCTTGCATGTCCAGTGTCTGACCTCCTGAAGAAGTGGCTTCCCAAGAGGTGTACCACCTTTTGCCA
160 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 A

NheI (1656)

1601 GCAAGATTCAAGGTAGGGTGGACAAAATCAAGGGTCTGGCTGGGGACAGATGATAGCTAGCTGGCCAGACATGATAAGATACATTGATGAGTTGGACAA
193 S K I Q G R V D K I K G L A G D R
1701 ACCACAAC TAGAATGCAGTGAATAAATGCTTTATTGTGAAATTTGTGATGCTATTGCTTTATTGTAACCATTATAAGCTGCAATAAACAAGTTAACA

1801 ACAACAATTGCATTCATTTTATGTTTCAGGTTTCAGGGGAGGTGTGGGAGGTTTTTAAAGCAAGTAAAACCTCTACAAATGTGGTATGGAATTAATCTC
1901 AAAATACAGCATAGCAAACTTTAACCTCAAATCAAGCCTCTACTTGAATCCTTTTCTGAGGGATGAATAAGGCATAGGCATCAGGGGCTGTTGCCAAT
2001 GTGCATTAGCTGTTTGCAGCCTCACCTTCTTTCATGGAGTTAAGATATAGTGTATTTTCCCAAGGTTTGAAGTACTGCTTTCATTTCTTTATGTTTTAAA

SspI (2135)

2101 TGCCTGACCTCCACATTCCTTTTATGTAATAATTTAGTAAATATTTAAATACATCATTGCAATGAAAATAAATGTTTTTATTAGGCAGAATCCAG
2201 ATGCTCAAGGCCCTTCATAATATCCCCAGTTTAGTAGTTGGACTTAGGGAAACAAAGGAACCTTTAATAGAAATTTGGACAGCAAGAAAGCGAGCTTCTAG
2301 CTTATCCTCAGTCTGCTCTGCTGCCACAAAGTGCACGAGTGTCCGGCCGGGTCCGCGCAGGGCGAACTCCCGCCCCACGGCTGCTCCCGATCTCGGT
125 D Q 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
2401 CATGGCCGGCCCGAGGCGTCCCGAAGTTCGTGGACACGACCTCCGACCACTCGGCGTACAGCTCGTCCAGGCGCGCACCCACACCCAGGCCAGGGTG
94 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 T

SgrAI (2563)

2501 TTGTCGGCACCACTGGTCTGACCGCGCTGATGAACAGGGTCACTGCTGCTCCGGACACACCGGCGAAGTCTGCTCCACGAAGTCCCGGAGAACC
60 N D P V V Q D Q V A S I F L T V D D R V L V G A F D D E V F D R S F G
2601 CGAGCCGGTCCGTCAGAACTCGACCGCTCCGGGACGTCGCGCGGGTGAACACCGGAACTGGTCAACTTTGGCCATGATGGCTCCTCTCTGTCAG
27 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
2701 GAGAGGAAAGAGAAGAGGTTAGTACAATTGCTATAGTGAGTTGATTATACTATGCAGATATACTATGCCAATGATTAATTGTCAAAGTAGGGCTGCAG

2801 GTTAATTAAGAACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAAGGCCGCTTGTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGAG
2901 CATCACAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACAGGCGTTTTCCCTGGAAGCTCCTCGTGCCTCTCCTG
3001 TTCCGACCCTGCCGTTACCGGATACCTGTCCGCCTTTCTCCTTCGGGAAGCGTGGCGCTTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTA

3101 GGTCTGTCGCTCAAAGTGGGCTGTGTGCACGAACCCCGTTCAGCCGACCGTGCCTTATCCGGTAACTATCGTCTTGTGATCCAACCCGGTAAGA
3201 CACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGTACAGAGTTCTTGAAGTGGTGGCCTAACTACG

3301 GCTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTATCCGGCAAAACAAACCCGCG
3401 TGGTAGCGGTGGTTTTTTTGGTGAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGTCTGACGCTCAG

3501 TGGAACGAAAACCTCAGTTAAGGGATTTGGTCATGGCTAGTTAATTAACATTTAAATCA