



2701 ATGTTTTTTATTAGGCAGAATCCAGATGCTCAAGGCCCTTCATAATATCCCCAGTTTAGTAGTTGGACTTAGGGAACAAAGGAACCTTTAATAGAAATT

2801 GGACAGCAAGAAAGCGAGCTTCTAGCTTTAGTTCCTGGTACTTGAGGGGGATGAGTTCCTCAATGGTGGTTTTGACCAGCTTGCCATTCATCTCAATG
 141 • N R T Y K L P I L E E I T T K V L K G N M E I

2901 AGCACAAAGCAGTCAGGAGCATAGTCAGAGATGAGCTCTCGACATGCCACAGGGGCTGACCACCCTGATGGATCTGTCCACCTCATCAGAGTAGGGGT
 116 L V F C D P A Y D S I L E R C M G C P S V V R I S R D V E D S Y P H

3001 GCCTGACAGCCACAATGGTGTCAAAGTCTTCTGCCCGTTGCTCACAGCAGACCCAATGGCAATGGCTTCAGCACAGACAGTACCCTGCCAATGTAGGC
 83 R V A V I T D F D K Q G N S V A S G I A I A E A C V T V R G I Y A

3101 CTCAATGTGGACAGCAGAGATGATCTCCCCAGTCTGGTCTGATGGCCGCCCGACATGGTCTTGTGTCCTCATAGAGCATGGTATCTTCTCAGTG
 50 E I H V A S I I E G T K T R I A A G V H H K N D E Y L M T I K E T

3201 GCGACCTCCACCAGCTCCAGATCCTGCTGAGAGATGTTGAAGGCTTTCATGATGGCCCTCTATAGTGAGTCGTATTATACTATGCCGATATACTATGCC
 16 A V E V L E L D Q Q S I N F T K M

3301 GATGATTAATTGTCAAACACGCGTGATGGCGTCTCCAGCTATCTGACGGTTCCTAAACGAGCTCTGCTTATATAGACCTCCACCGTACACGCCTA
 AseI (3304) BspHI (3246) SacI (3361)

3400 CCGCCATTTGCGTCAATGGGGCGGAGTTGTTACGACATTTTGGAAAGTCCCGTTGATTACTAGTCAAACAAACTCCCATTGACGTCAATGGGGTGG
 SpeI (3459)

3499 AGACTTGAAATCCCGTGAGTCAAACCGCTATCCACGCCATTGATGTACTGCCAAAACCGCATCATCATGGTAATAGCGATGACTAATACGTAGATGT
 SnaBI (3587)

3599 ACTGCCAAGTAGGAAAGTCCATAAGGTCATGTACTGGGCATAATGCCAGGCGGGCCATTTACCGTCATTGACGTCAATAGGGGGCGTACTTGGCATATG
 NdeI (3692)

3699 ATACACTTGATGTACTGCCAAGTGGCAGTTTACCGTAAATACTCCACCATTGACGTCAATGGAAAGTCCCTATTGGCGTACTATGGGAACATACGTC

3799 ATTATTGACGTCAATGGGCGGGGTCGTTGGCGGTGACGCCAGGCGGGCATTACCGTAAGTTATGTAACGCC T G C A G G T T A A T T A A G A A C A T G T G A
 PstI (3871) SdaI (3870) PacI (3878) BspLU11I (3888)

3897 GCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAAGGCCGCTTGGCTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGCATCACAAAATCGACGCT

3997 CAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTTCCCTGGAAGCTCCCTCGTGCGCTCTCTGTCCGACCTGCCGCTTAC

4097 CGGATACCTGTCCGCTTCTCCCTTCGGGAAGCGTGCGCTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTGCTTCGCTCCAAGCTG

4197 GGCTGTGTGCACGAACCCCCGTTACGCCGACCCTGCGCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGTAAGACACGACTTATCGCCACTGG
 ApaLI (4202)

4297 CAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTCTACAGAGTCTTGAAGTGGTGGCCTAACTACGGCTACACTAGAAGAACAGT

4397 ATTTGGTATCTGCCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCACCGCTGGTAGCGGTGGTTTTTTT

4497 GTTTGAAGCAGCAGATTACGCGCAGAAAAAAGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGTCTGACGCTCAGTGAACGAAAACACTCACGTT

4597 AAGGGATTTTGGTCATGGCTAGTTAATTAACATTTAAATC AGCGGCCGAATAAAATATCTTTATTTTTCATTACATCTGTGTGTTGGTTTTTTGTGTGAA
 Pacl (4618) Swal (4627) EagI (4638) NotI (4637)

4697 TCGTAACTAACATACGCTCTCCATCAAACAAAACGAAACAAAACAACTAGCAAATAGGCTGTCCCAGTGCAAGTGCAGGTGCCAGAACATTTCTCT
 4797 ATCGAA