



BglII

TGGCCAGGACCCAACGCTGCCCGAGATCTCGATCCCGCGAAATTAATACGACTCACTATAGGGAGACCACAACGG
 ++++++
 ACCGGTCCTGGGTTGCGACGGGCTCTAGAGCTAGGGCGCTTTAATTATGCTGAGTGATATCCCTCTGGTGTGGC

3375

T7 promoter

XbaI **NdeI**

TTTCCCTCTAGAAATAATTTTGTTTAACTTTAAGAAGGAGATATACATATGAAATACCTGCTGCCGACCGCTGCT
 ++++++
 AAAGGGAGATCTTTATTAACAAATTGAAATTCTTCTCTATATGTATACTTTATGGACGACGGCTGGCGACGA

3450

1 5
 Met Lys Tyr Leu Leu Pro Thr Ala Ala
 pelB signal sequence

NcoI **EcoRV** **BamHI** **EcoRI**

GCTGGTCTGCTGCTCCTCGCTGCCCGAGCCGGCGATGGCCATGGATATCGGAATTAATTCGGATCCGAATTCGAGC
 ++++++
 CGACCAGACGACGAGGAGCGACGGGTCGGCCGCTACCGGTACCTATAGCCTTAATTAAGCCTAGGCTTAAGCTCG

3525

10 15 20
 Ala Gly Leu Leu Leu Leu Ala Ala Gln Pro Ala Met Ala Met Asp Ile Gly Ile Asn Ser Asp Pro Asn Ser Ser
 pelB signal sequence (in frame with pelB signal sequence)

MCS

SacI **SalI** **HindIII** **NotI** **XhoI**
 TCCGTCGACAAGCTTGC GGCCGCACTCGAGCACCACCACCACCACC ACTGAGATCCGGCTGCTAACAAAGCCCGA
 AGGCAGCTGTTTCGAACGCCGGCGTGAGCTCGTG GGTGGTGGTGGTGGT GACTCTAGGCCGACGATTGTTTCGGGCT

3600

Ser Val Asp Lys Leu Ala Ala Ala Leu Glu His His His His His His
 --- (in frame with pelB signal sequence) --> **6xHis**

MCS

BlpI

AAGGAAGCTGAGTTGGCTGCTGCCACCGCTGAGCAATAACTAGCATAACCCCTTGGGGCCTCTAAACGGGTCTTG
 TTCCTTCGACTCAACCGACGACGGTGGCGACTCGTTATTGATCGTATTGGGGAACCCCGGAGATTGCCCAGAAC

3675

T7 terminator

AGGGGTTTTTTGCTGAAAGGAGGAACTATATCCGGAT 3'
 TCCCAAAAAACGACTTTCCTCCTTGATATAGGCCTA 5'

T7 terminator