



ATCCCGCGAAATTAATACGACTCACTATAGGGGAATTGTGAGCGGATAACAATTCCCCTCTAGAAATAATTTTGT 5175  
 TAGGGCGCTTTAATTATGCTGAGTGATATCCCCTTAACACTCGCCTATTGTTAAGGGGAGATCTTTATTAACAACA

T7 promoter → lac operator

TTAACTTTAAGAAGGAGATATACATATGAAATACCTGCTGCCGACCGCTGCTGCTGGTCTGCTGCTCCTCGCTGC 5250  
 AATTGAAATTCCTCCTCTATATGTATACTTTATGGACGACGGCTGGCGACGACGACCAGACGACGAGGAGCGACG

1 Met Lys Tyr Leu 5 Leu Pro Thr Ala Ala 10 Gly Leu Leu Leu 15 Leu Ala Ala

pelB signal sequence →

CCAGCCGGCGATGGCCATGGATATCGGAATTAATTCGGATCCGAATTCGAGCTCCGTGCGACAAGCTTGCGGCCGC 5325  
 GGTCGGCCGCTACCGGTACCTATAGCCTTAATTAAGCCTAGGCTTAAGCTCGAGGCAGCTGTTTTCGAACGCCGGCG

20 Gln Pro Ala Met Ala Met Asp Ile Gly Ile Asn Ser Asp Pro Asn Ser Ser Ser Val Asp Lys Leu Ala Ala Ala

pelB signal sequence → (in frame with pelB signal sequence)

MCS

ACTCGAGATCAAACGGGCTAGCCAGCCAGAACTCGCCCCGGAAGACCCCGAGGATGTCGAGCACCACCACCACCA 5400  
 TGAGCTCTAGTTTGCCCGATCGGTCGGTCTTGAGCGGGGCTTCTGGGGCTCCTACAGCTCGTGGTGGTGGTGGT

Leu Glu Ile Lys Arg Ala Ser 1 Gln Pro Glu Leu 5 Ala Pro Glu Asp Pro 10 Glu Asp Val Glu 1 His His His His 5

MCS → HSV tag → 6xHis →

CCACTGAGATCCGGCTGCTAACAAAGCCCGAAAGGAAGCTGAGTTGGCTGCTGCCACCGCTGAGCAATAACTAGC  
GGTGACTCTAGGCCGACGATTGTTTCGGGCTTTCCTTCGACTCAACCGACGACGGTGGCGACTCGTTATTGATCG

5475

**BspI**

His  
6xHis

T7 terminator

ATAACCCCTTGGGGCCTCTAAACGGGTCTTGAGGGGTTTTTTGCTGAAAGGAGGAACTATATCCGGAT 3'  
TATTGGGGAACCCCGGAGATTTGCCCAGAACTCCCCAAAAACGACTTTCCTCCTTGATATAGGCCTA 5'

5543

T7 terminator