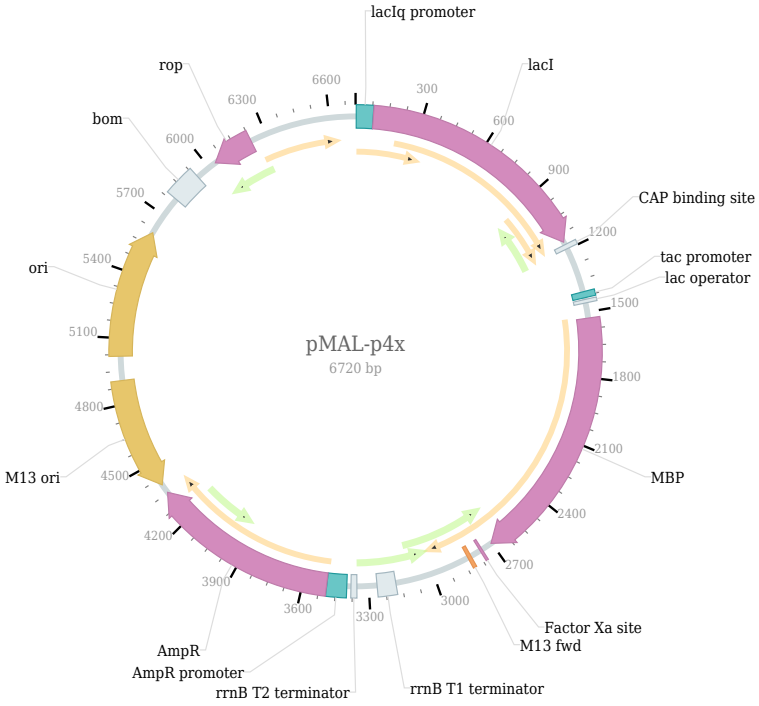
pMAL-p4x

Vector ID	V000720
Antibiotic Resistance	Ampicillin
Length	6720 bp
Vector Type	E. coli Expression Vectors

Product Information

Replication Origin	ori
Copy Number	High copy number
Promoter	Tac
Cloning Method	Enzyme digestion and ligation
5' Primer	MalE: 5'-GGTCGTCAGACTGTCGATGAAGCC-3'; MBP-F: 5'-gatgaagccctgaaagacgcgcag-3'
3' Primer	pBad-R: 5'-gatttaatctgtatcagg-3'; M13-F: 5'-TGTAAAACGACGGCCAGT-3'
Fusion Tag	N-MBP, N-Factor Xa
Growth Strain(s)	DH10B
Growth Temperature	37℃
Comment	pMAL-p4X, one of the pMAL-4 vectors, enables high-level production of MBP-fusion proteins under the strong tac promoter. Its MBP facilitates one-step amylose affinity purification. Equipped with an MBP signal peptide, it targets fusions to E. coli periplasm for proper folding. It carries lacIq for IPTG-controlled expression and a Factor Xa cleavage site to separate target protein from MBP after purification.

Vector Map



Plasmid Resuspension Protocol

1. Centrifuge at 5,000×g for 5 min.
2. Carefully open the tube and add sterile water to dissolve the DNA: add 20 µl for 5 µg plasmid, and 100 µl for 100 µg plasmid.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin to concentrate the liquid at the bottom. Speed is less than 5000×g.
5. Store the plasmid at -20 ℃.