N8109S

10 µg Lot: 0011702 Exp: 2/20

200 µg/ml Store at –20°C

Description: The vector pMAL-p5X is designed to produce maltose-binding protein (MBP) fusions, where the protein of interest can be cleaved from MBP with the specific protease factor Xa (NEB #P8010).

MBP fusions made with this vector include an N-terminal signal sequence, so the fusion protein is directed to the periplasm. The MBP has been engineered for tighter binding to amyllose resin.

pMAL-p5X Vector

N8109S

10 µg Lot: 0011702 Exp: 2/20

200 µg/ml Store at –20°C

Description: The vector pMAL-p5X is designed to produce maltose-binding protein (MBP) fusions, where the protein of interest can be cleaved from MBP with the specific protease factor Xa (NEB #P8010).

MBP fusions made with this vector include an N-terminal signal sequence, so the fusion protein is directed to the periplasm. The MBP has been engineered for tighter binding to amyllose resin.

pMAL-p5X Vector

The vector pMAL-p5X is designed to produce maltose-binding protein (MBP) fusions, where the protein of interest can be cleaved from MBP with the specific protease factor Xa (NEB #P8010).

MBP fusions made with this vector include an N-terminal signal sequence, so the fusion protein is directed to the periplasm. The MBP has been engineered for tighter binding to amyllose resin.

N8109S

10 µg Lot: 0011702 Exp: 2/20

200 µg/ml Store at –20°C

Description: The vector pMAL-p5X is designed to produce maltose-binding protein (MBP) fusions, where the protein of interest can be cleaved from MBP with the specific protease factor Xa (NEB #P8010).

MBP fusions made with this vector include an N-terminal signal sequence, so the fusion protein is directed to the periplasm. The MBP has been engineered for tighter binding to amyllose resin.

pMAL-p5X Vector

Source: NEB 10-beta Competent E. coli (pMAL-p5X)

Supplied in: 10 mM Tris-HCl, 1 mM EDTA, (pH 7.5).

A gene or open reading frame is inserted into a restriction site of the vector polylinker, in the same translational reading frame as the malE gene (encoding maltose-binding protein). The fusion protein thus produced can be purified by amyllose affinity chromatography. The sequence coding for the four amino acids Ile-Glu-Gly-Arg is present just upstream of the XmnI site. This allows the protein of interest to be cleaved from maltose-binding protein with the specific protease Factor Xa. Fragments inserted in the XmnI site (cleaves GAAGG, ATTTC) will produce a fusion protein that, after Factor Xa cleavage, contains no vector-derived residues on the protein of interest.

pMAL-p5X Polylinker:

Sacl Aval XmnI

5’ maIE...TCG ACC TCG (AAC), AAT AAC AAT (AAC), CTC GGG ATC GAC GGA TCC GAA TTC CCT GCA GGT
Ndel Ncol NotI EcoRV Salt BamHII EcoRI Shfl

AAT TAA ATA A...

The sequences of the pMAL vectors, as well as other pMAL information, are available at www.neb.com or by e-mail from info@neb.com. A detailed map of pMAL-p5X can be found in the appendix of the New England Biolabs Catalog.

Usage Notes: NEB 10-beta Competent E. coli (High Efficiency) (NEB #C3019) is recommended for propagation and subcloning. NEB Express Competent E. coli (High Efficiency) (NEB #C2523) is recommended for expression using this vector.

References:

NEW ENGLAND BIOLABS® is a registered trademark of New England Biolabs, Inc.

This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals. The Buyer/User has a non-exclusive license to use this vector for RESEARCH PURPOSES ONLY. Commercial use requires a license from New England Biolabs, Inc. This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals. The Buyer/User has a non-exclusive license to use this vector for RESEARCH PURPOSES ONLY. Commercial use requires a license from New England Biolabs, Inc. This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals. The Buyer/User has a non-exclusive license to use this vector for RESEARCH PURPOSES ONLY. Commercial use requires a license from New England Biolabs, Inc. This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.