pMAL-p5X Vector

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 amylose 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/LATTTC) will produce a fusion protein that, after Factor Xa cleavage, contains no vector-derived residues on the protein of interest.

pMAL-p5X Polylinker:

<table>
<thead>
<tr>
<th>Restriction Site</th>
<th>Sacl</th>
<th>Ndel</th>
<th>NcoI</th>
<th>NotI</th>
<th>EcoRV</th>
<th>Sall</th>
<th>BamHI</th>
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<th>Sfl</th>
</tr>
</thead>
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<tr>
<td><em>5´ malE...TCG AGC TCG (AAC)</em>, AAT AAC AAT (AAC), CTC GGG ATC GAG GGA AGG ATT TCA</td>
<td>CAT ATG TCC ATG GGC GGC CGC GAT ATC GTC GAC GGA TCC GAA TTC CCT GCA GGT</td>
<td>AAT TAA ATA A...</td>
<td></td>
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</tbody>
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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:

Notice to Buyer/User: The buyer/user has a non-exclusive license to use the vector for *Research Purposes Only*. Commercial use of this vector requires a license from New England Biolabs, Inc.

U.S. Patent No. 5,643,758

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