

Amylose Resin



1-800-632-7799
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www.neb.com



E8021S 016140317031

E8021S

15 ml Lot: **0161403**
Store at 4°C Exp: **3/17**

Description: Amylose Resin is an affinity matrix used for the isolation of proteins fused to maltose-binding protein (MBP). It is intended for use in a gravity flow column.

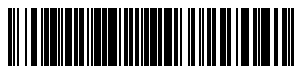
Supplied in: 20% ethanol.

Store At 4°C. After Use, Resin Should Be Stored In Column Buffer Plus 0.02% Sodium Azide Or 20% Ethanol.

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Column Buffer:

20 mM Tris-HCl (pH 7.4)
0.2 M NaCl
1 mM EDTA

Optional:

1 mM DTT or 10 mM β -mercaptoethanol

Binding Capacity: 6–8 mg MBP5* -paramyosin Δ Sal fusion protein/ml bed volume.

Quantitative Analysis: Crude extract from *E. coli* containing a plasmid that expresses a MBP2* -paramyosin Δ Sal fusion protein is passed over a 1 ml column at 4°C. The column is then washed with 10 column volumes of column buffer. The protein is eluted with column buffer plus 10 mM maltose. Electrophoresis on a 4–20% SDS-PAGE gel results in a single band.

Regeneration: The packed resin may be regenerated by the following wash sequence:

Water	3 column volumes
0.1% SDS	3 column volumes
Water	1 column volume
Column Buffer	5 column volumes

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Maximum recommended linear flow rate:

24 cm/hour

For a 1.6 cm diameter column: 0.8 ml/min

For a 2.5 cm column diameter: 2.0 ml/min

linear flow rate (cm/hour) $\times \pi r^2$ = volumetric flow rate (ml/hour)

Usage Notes:

1. Amylose Resin column should be washed with 5 volumes of column buffer before each use.
2. When regenerating the column at 4°C, please note that 0.1% SDS can precipitate at that temperature. It is therefore recommended that the SDS solution be stored at room temperature until needed. The resin may be generated up to five times.
3. For a complete affinity purification protocol, download the pMAL Protein Fusion and Purification System Manual (NEB #E8000) from www.neb.com.

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