Amylose Resin

E8021S

15 ml  Lot: 0101203
Store at 4°C Exp: 3/15

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.

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 ΔSal fusion protein/ml bed volume.

Quantitative Analysis: Crude extract from E. coli containing a plasmid that expresses a MBP2* -paramyosinΔSal 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

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) x πr²=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.