For research use only ISO9001

MBP•Bind Agarose Resin

Product Name	Qty	Cat. No.	Remarks
MBP•Bind Agarose Resin	10 ml	EBE-1071	75% slurry

Description

Elpis Biotech's MBP•Bind agarose resin is designed for rapid purification of recombinant proteins containing MBP (maltose binding protein) tag sequence. The MBP•Tag sequence binds to amylose, which is immobilized on the MBP•Bind agarose resin. The high degree of substitution of amylose to agarose resin ensures a high binding capacity with yields of MBP fusion proteins of 5-10 mg/ml settled resin.

After unbound proteins are washed away, the target protein is recovered by elution with maltose containing elution buffer. The MBP•Bind resin can be regenerated and reused many times.

Features

- **Matrix** Agarose 4B, cross-linked
- **Activation** Epoxy
- **Ligand** Hydroxyl, amylose
- **Linker Size** 12-atom space linker
- **Bead Size** 45-165 μm
- **Binding Capacity** 5-10 mg MBP•Tagged proteins/ml resin
- **pH Stability** pH 2 to 14
- **Storage** 75% slurry in PBS with 20% ethanol

Storage Condition

Store at 4℃, do not freeze

Resin preparation

1. Prepare 13 volumes 1x Bind/washing buffer, and 3 volumes 1x Elution buffer before (see below for buffer composition).
2. Gently mix the bottle of MBP•Bind agarose resin by inversion until completely suspended. Using a wide-mouth pipette, transfer the desired amount of agarose resin slurry to a column. Allow the resin to pack under gravity flow.
3. When the level of storage buffer drops to the top of the column bed, wash the column with 3 volumes of 1x Bind/washing buffer.

Column chromatography

1. Allow the Bind/washing buffer to drain to the top of the column bed and load the column with the prepared extract. A flow rate of about 10 column volumes per hour is optimal for efficient purification. If the flow rate is too fast, more impurities will contaminate the eluted fraction.
2. Wash the column with 10 volumes of 1X Bind/washing buffer.
3. Elute the bound protein with 3 volumes of 1X Elute buffer. The eluate may be captured in fractions (e.g. 1 ml fractions) if desired.

Buffers Used

Bind/washing buffer : 20 mM Tris-HCl, pH 7.4, 200 mM NaCl, 1 mM EDTA, 10 mM β-mercaptoethanol

Elution buffer : Bind/washing buffer + 10 mM maltose

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