



For research use only

ISO9001

GST•Bind Agarose Resin

Product Name	Qty	Cat. No.	Remarks
GST•Bind Agarose Resin	10 ml	EBE-1041	75% slurry

Description

Elpis Biotech's GST•Bind agarose resin is designed for rapid purification of recombinant proteins containing GST (glutathione S-transferase) tag sequence. The GST•Tag sequence binds to GSH (glutathione, reduced), which is immobilized on the GST•Bind agarose resin. The high degree of substitution of glutathione to agarose resin ensures a high binding capacity with yields of GST fusion proteins of 10-15 mg/ml settled resin.

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

Features

- **Matrix** Agarose 4B, cross-linked
- **Activation** Epoxy
- **Ligand** Sulfhydryl, reduced glutathione
- **Linker Size** 12-atom space linker
- **Bead Size** 45-165 μ m
- **Binding Capacity** 10-15 mg GST•Tagged proteins/ml resin
- **pH Stability** pH 2 to 14
- **Storage** 75% slurry in PBS with 20% ethanol

Storage Condition

Store at 4°C, 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 GST•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.

Caution :The 1x GST Elution buffer must be prepared fresh immediately before use to prevent oxidation of the glutathione.

Buffers Used

Bind/washing buffer : 20 mM Potassium phosphate buffer, pH 7.0 ,1 mM EDTA

Elution buffer : 15 mM reduced glutathione, 1mM EDTA, 50 mM Tris -HCl, pH 9.6.