For research use only ISO9001

GST•Bind Magnetic Agarose Resin

Product Name	Qty	Cat. No.	Remarks
GST•Bind Magnetic Agarose Resin	2 ml	EBE-1042	75% slurry

Description

Elpis Biotech's GST•Bind magnetic agarose resin is designed for ultra 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 magnetic agarose resin. The high degree of substitution of glutathione to magnetic agarose resin ensures a high binding capacity with yields of GST fusion proteins of 5-10 mg/ml settled resin. Para-magnetic particles are embedded onto agarose bead enables to purify in a batch style high-throughput purification using a magnet. The GST•Bind magnetic agarose resin is suitable for small scale purification rather than large purification.

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 with magnetite, cross-linked
- **Activation** Epoxy
- **Ligand** Sulfhydryl, reduced glutathione
- **Linker Size** 12-atom space linker
- **Bead Size** 10-25 μm
- **Binding Capacity** 5-10 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℃, do not freeze

Resin preparation

1. Prepare 1x Bind/washing buffer, and 1x Elution buffer before purification (see below for buffer composition).
2. Gently mix the tube of GST•Bind magnetic agarose resin by inversion until completely suspended. Using a wide-mouth pipette, transfer the desired amount of magnetic agarose resin slurry to a tube.
3. Wash the bead with 3 volumes of 1x Bind/washing buffer by centrifugal or magnetic force.

Small Scale Purification

1. Add pre-washed magnetic beads to the prepared extract (50 μl to 1 ml) in 1x Bind/washing buffer. Allow for 5-10 min at room temperature or at 4℃ with gentle agitation (10 –20 μl bead volume is sufficient to purify 50-100 μg GST tagged proteins, but the optimized amount of bead volume must be determined empirically).
2. Wash the bead three times with 200 μl 1X Bind/washing buffer by centrifugal or magnetic force.
3. Elute the bound protein with 10 – 100 μl of 1X Elute buffer.

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, pH 9.6.

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