

## GST GraviTrap

### Product Information

**Cat#No#** GST-093P

#### Product Overview

GST GraviTrap contains 10 disposable columns prepacked with 2 mL of Glutathione Sepharose 4B, sufficient for purification of up to 20 mg of fusion protein.

#### Description

GST GraviTrap contains 10 disposable columns prepacked with 2 mL of Glutathione Sepharose 4B, sufficient for purification of up to 20 mg of fusion protein. GST-tagged proteins are recovered under mild elution conditions (10 mM glutathione), which preserves functionality of the proteins.

#### Characteristic

Convenient, prepacked gravity-flow columns.

Allows direct purification of both clarified and unclarified cell lysates.

Yields up to 20 mg of pure proteins per column.

#### Applications

For fast and simple manual purification of GST-tagged proteins by gravity flow.

#### Particle Size

45 to 165  $\mu$ m

#### Ligand

Glutathione and 10-carbon linker arm

#### Ligand density

7 to 15  $\mu$ mol glutathione/ml medium

#### Dynamic binding capacity

Approx. 10 mg recombinant glutathione Stransferase (Mr 26 000)/mL medium (protein dependent)

#### Chemical stability

No significant loss of the capacity is detected when Glutathione Sepharose 4B is exposed to 0.1 M citrate (pH

## **GST GraviTrap**

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4.0), 0.1 M NaOH, 70% ethanol or 6 M guanidine hydrochloride2 for 2 hours at room temperature. No significant loss of binding capacity is observed after exposure to 1% SDS for 14 days.

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### **pH working range**

4 to 13

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### **Storage**

4 to 30°C, 20% Ethanol

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### **Binding buffer**

10 mM PBS, pH 7.4 (10 mM Na<sub>2</sub>HPO<sub>4</sub> , 140 mM NaCl, 2.7 mM KCl, 1.8 mM KH<sub>2</sub>PO<sub>4</sub> , pH 7.4).

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### **Elution buffer**

50 mM Tris-HCl, 10 to 20 mM reduced glutathione, pH 8.0.

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### **Regeneration**

The gel may be regenerated by washing the column with high salt buffer (PBS + 3 M NaCl. For longer storage, wash the column with 2 × 5 (2 × 10 mL) bed volumes of PBS and the 2 × 5 (2 × 10 mL) bed volumes of 20% ethanol Store at 4°C to 30°C.

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### **Purification procedures**

1. Cut off the bottom tip. Remove the top cap and pour off the excess liquid.
2. Wash the column with 10–20 mL of 10 mM PBS pH 7.4 to remove the preservative.
3. Apply the sample to the column. If needed, clarify the sample by centrifugation. The sample may be diluted in PBS if it is too concentrated. If large volumes are needed use LabMate reservoir.
4. Wash the column with 2 × 10 mL of PBS.
5. Elute the bound material with 10 mL of elution buffer (10 mM Glutathione in 50 mM Tris-HCl pH 8.0) and collect 1–2 mL fractions.

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### **Pack size**

10 × 2 mL

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### **Column volume**

13 mL



## GST GraviTrap

### Material

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Polypropylene barrel, polyethylene frits

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Tel: 1-631-559-9269 1-516-512-3133

Fax: 1-631-938-8127

Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)

45-1 Ramsey Road, Shirley, NY 11967, USA