

GST SpinTrap

Product Information

Cat#No# GST-095P

Product Overview

GST SpinTrap columns are designed for rapid small-scale purification of GST-tagged proteins directly from clarified or unclarified cell lysates.

Description

GST SpinTrap columns are designed for rapid small-scale purification of GST-tagged proteins directly from clarified or unclarified cell lysates. GST-tagged proteins can be recovered under mild elution conditions (10 mM glutathione), which preserves the functionality of the proteins, and more than 90% purity can be obtained in a single step. GST SpinTrap columns are suitable for purification of multiple samples in parallel, for example in screening experiments such as evaluation of chromatography media, growth temperature, culture density, and other variables to find optimal conditions for expression.

Characteristic

Preserves protein antigenicity and function.

Yields up to 500 µg of pure protein per column.

Allows direct purification of both clarified and unclarified cell lysates.

Applications

For simple, small-scale purification of GST-tagged proteins and rapid expression screening by centrifugation.

Average particle size

90 µm

Ligand

Glutathione and 10-carbon linker arm

Ligand density

7–15 µmol glutathione/mL medium.

Dynamic binding capacity

GST SpinTrap

Up to 500 µg recombinant glutathione S-transferase (rGST)

Chemical stability

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

CIP stability

4 to 13

Storage

4 to 30°C, PBS and 0,05% Kathon CG/ICP Biocide.

Binding buffer

10 mM PBS, pH 7.4 (10 mM Na₂HPO₄ , 140 mM NaCl, 2.7 mM KCl, 1.8 mM KH₂PO₄ , pH 7.4).

Elution buffer

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

Pack size

50 × 50 µL

Column volume

900 µL

Material

Polypropylene barrel, polyethylene frits