

ProteinIso[®] GST Resin

Cat. No. DP201

Storage: at 2-8°C (20% ethanol) for two years

Description

ProteinIso[®] GST Resin allows rapid affinity purification of GST-tagged proteins. GST fusion proteins expressed in *E.coli*, insect cells and mammalian cells can be purified with ProteinIso[®] GST Resin. The GST Resin is only suitable for soluble protein purification.

Resin Specifications

Resin	Cross-linked 4% agarose
Ligand	glutathione
Shape	sphere
Pore size	90 μm
Support density	8 mg GSH/ml wet gel
Binding capacity	10~12 mg/ml wet gel (MW 42 kDa) 3.5 mg/ml wet gel (rat liver)
Maximum flow rate (25°C)	450 cm/h
Recommended flow rate	<150 cm/h
Highest resistance of atmospheric pressure	0.3 Mpa
pH stability	3~10

Procedures

1. Prepare GST purification column

- (1) Thoroughly resuspend the GST resin to achieve a homogeneous suspension of the resin in the 20% ethanol storage buffer.
- (2) Immediately transfer the resin into a purification column. Ensure that the bottom of the column is plugged with a stopper. Close the valve of the column. Allow the resin to settle.
- (3) Equilibrate the column with 5~10 bed volume of equilibration buffer.

2. Prepare samples

To avoid blocking column, samples should be centrifuged and filtrated with 0.45 μm filter before loading.

3. Load samples and wash

Load samples and wash with 5~10 bed volume of equilibration buffer and collect the flow-through in one tube.

4. Elute

Elute target protein with elution buffer.

5. Regeneration of GST resin

- (1) Wash the column/resin with 2 bed volume of 6 M GuHCl, 0.2 M acetic acid and then 5 bed volume of deionized water or PBS buffer.
Or
- (2) 3-4 bed volume of 70% ethanol or 30% isopropanol and then 3-5 bed volume of deionized water.
Or
- (3) 2 bed volume of 10-100 mM NaOH and then 10 bed volume of deionized water.
- (4) Store column/resin in 20% ethanol.



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Life Science*

Notes

- Samples should be centrifuged and filtrated with 0.45 μm filter before loading.
- To avoid cross-contamination, do not use the same medium to purify different proteins.
- Equilibration Buffer
140 mM NaCl, 2.7 mM KCl, 10 mM Na_2HPO_4 , 1.8 mM KH_2PO_4 , pH 7.3
- Elution Buffer
50 mM Tris-HCl pH 8.0, 10 mM reduced glutathione.

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