

Heparin-Sepharose

CATALOG #: 6553-1 1 ml
6553-10 10 ml
6553-50 50 ml

LOT #: _____

PREPARATION: Heparin-Sepharose is prepared by covalently coupling heparin to epoxy-activated 6% cross-linked sepharose beads. The coupling was optimized to give a high binding capacity and could be greater than 0.4 mg of heparin-binding protein (such as thrombin) per ml of wet gel.

CONTENTS: Supplied as a 50% slurry in 20 % Ethanol/H₂O.
>2.5 mg heparin per ml Sepharose beads.

FEATURES: Heparin-beads have been widely used in affinity purification of various heparin-binding proteins or ligand, such as antithrombin III, lipoprotein, DNA binding proteins (transcription factors, virus coat proteins etc.) and other ligands. BioVision's Heparin-Sepharose is designed for the purpose of purification of these kinds of proteins and ligands. It can also be used as a high capacity cation exchange medium. Specific proteins can be separated by using different concentrations of salt or a salt gradient. This Heparin-Sepharose formulation exhibits excellent binding capacity, high flow rate, no significant loss of the heparin ligand and a pH stability range of 2-10.

APPLICATIONS: Purification of heparin-binding proteins, enzymes or other ligands.

STORAGE: Store at 4°C. Do not freeze.

BUFFER EXAMPLE:

- Binding buffer: 1X PBS
- Elution buffer: 2 M NaCl in PBS

FOR RESEARCH USE ONLY! Not to be used on humans.

SUGGESTED PROTOCOL:

1. Wash column with ddH₂O to remove air bubbles.
2. Fill column with heparin beads.
3. Wash the column with 5X volume of Binding Buffer.
4. Dilute sample with Binding Buffer (1:1 ratio) or change the sample solution to binding buffer by means of your choice.
5. Add the sample solution onto the column.
6. Collect the solution and repeat step 5 & 6 several times if necessary.
7. Wash the column 5-10 times with the Binding Buffer.
8. Add Elution Buffer to elute bound protein.
9. Collect the eluent using microcentrifuge tube.
10. Assay protein concentration and combine the fractions containing sufficient heparin-binding protein.
11. Bead can be cleaned and regenerated by washing with 2-3x volume of high concentration salt solution and then the binding buffer

HEPARIN-SEPHAROSE PROPERTIES

Bead Structure	6% cross-linked spherical agarose
Mean particle size	90 µm (45-165 µm)
Ligand	Porcine heparin
pH stability	2 - 10
Chemical stability	1M NaOH (1 wk, 20 °C) 0.01M NaOH , pH 12 0.01 M HCl, pH 2 4 M NaCl 8M urea 6M guanidine hydrochloride
Storage buffer	0.01 % Thimersol / ddH ₂ O

RELATED PRODUCTS:

- Recombinant Protein A & Sepharose Beads
- Recombinant Protein G & Sepharose Beads
- Recombinant Protein L & Sepharose Beads
- Recombinant Protein A/G & Sepharose Beads
- Recombinant Protein A/G/L & Sepharose Beads
- Protein A Polyclonal Antibody
- Protein G Polyclonal Antibody
- Protein L Polyclonal Antibody
- Glutathione-Sepharose