Heparin Beads

Cat. 6024-5/10/25

Affinity purification beads

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Introduction

Adar's Heparin Beads are made by coupling 20-35 KD size Heparin extracted from Porcine intestinal mucosa (Type I) to Sepharose beads. These beads are useful for isolating heparin-binding protein such as Antithrombin III, lipoproteins, various enzymes and DNA binding proteins.

Heparin Beads Specifications

Matrix: Sepharose™ CL-4B
Coupling method: TargetLock.
Heparin density: 0.7-1.2 mg/ml of 20-35 KD Heparin
Thrombin binding capacity minimum 0.7 mg/ml of beads
Mean bead size: 40 -165 µm
Range of pH values allowed: 3.0-11.0
Bead structure: Highly cross-linked spherical agarose, 4%
Max back pressure: 0.3 MPa, 3 bar
Max. flow rates: 4 ml/min/cm^2
Recommended flow rate: 1-3 ml/min/cm^2
Storage: 4°C in PBS pH 7.4, 0.3N NaCl added with 0.01% (w/v) Thimerosal as a preservative.

Protocol: Salt purification of Heparin-binding proteins

1. Invert bottle several times to mix beads in storage buffer.
2. Pack column with 2-4ml beads
3. Equilibrate column with 10mM Tris-HCl pH 7.5. Matrix is robust -You may modify buffer to include reducing agents, urea, guanidine, sodium thiocyanate and detergents as needed.
4. Load you protein sample on column at 0.5-1.0 ml/min.
5. Wash column with approximately 30 volumes of the equilibration buffer.
6. Elute bound proteins by applying high salt buffer (10mM Tris-HCl pH 7.5 added with NaCl to 1.5N or other commonly used salts such as KCl and Ammonium sulfate).
7. Wash column with 20 volumes of ddH2O to regenerate it.
8. Equilibrate column with 10mM Tris-HCl pH 7.5.
9. Store column at 4°C in PBS pH 7.4, 0.3N NaCl added with 0.01% (w/v) Thimerosal as a preservative