

HiTrap Streptavidin HP

Product Information

Cat#No# Hi-081P

Product Overview

HiTrap Streptavidin HP is a column prepacked with Streptavidin Sepharose High Performance for purification of biotinylated proteins and biomolecules.

Description

Streptavidin Sepharose High Performance is an affinity chromatography medium designed for fast and reliable binding of biotinylated substances. The medium is very useful since any biotinylated substance bound via streptavidin can be used as a ligand for an affinity purification. Prepacked, ready to use, HiTrap columns offer added convenience and speed. Streptavidin Sepharose High Performance is also supplied as a preswollen medium in suspension.

Characteristic

Convenient, fast, reliable purification of biotinylated compounds.

The strong interactions of biotin and streptavidin, as well as the somewhat weaker interactions of 2-iminobiotin and streptavidin are utilized.

The column can be operated with a syringe, peristaltic pump, or liquid chromatography system such as ÄKTA design or FPLC System.

Maximum operating pressure

5 bar [0.5 MPa] (70 psi)

Sample preparation

The sample should be adjusted to the composition of the binding buffer. This can be done either by diluting the sample with binding buffer or by buffer exchange using HiTrap Desalting, HiPrep 26/10 Desalting or PD-10 Desalting columns. The sample should be filtered through a 0.45 µm filter or centrifuged immediately before it is applied to the column.

Matrix

Highly cross-linked spherical agarose.

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Average particle size

34 μ m

Ligand

Streptavidin

Dynamic binding capacity

Biotin, > 300 nmol/ml medium Biotinylated bovine serum albumin, 6 mg/ml medium.

Recommended flow rate

< 4 ml/min

Recommended column height

25 mm

pH working range

2 to 10.5

CIP stability

4 to 9

Temperature stability

4°C to room temperature

Storage

4 to 30°C, 20% Ethanol, 0.1 M Potassium Phosphate buffer, pH 8.

Binding buffer

20 mM sodium phosphate, 0.15 M NaCl, pH 7.5.

Elution buffer

8 M guanidine-HCl, pH 1.5.

Purification procedures

1. Fill the syringe or pump tubing with binding buffer. Remove the stopper. To avoid introducing air into the

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column, connect the column “drop to drop” to either the syringe (via the luer connector) or to the pump tubing.

2. Remove the snap-off end at the column outlet.
3. Equilibrate the column with 10 column volumes of binding buffer.
4. Apply the sample, using a syringe fitted to the luer connector or by pumping it onto the column. For best results use a low flow rate, 0.1–0.5 ml/min, during sample application.
5. Wash with at least 10 column volumes of binding buffer or until no material appears in the effluent.
6. Elute with 10–20 column volumes of elution buffer. To protect the sample, adjust the pH of the eluate with buffer exchange, for example on a HiTrap Desalting or a PD-10 Desalting column.

Pack size

5 × 1 mL

Maximum flow velocity

4 ml/min

Dimensions

7 × 25 mm

Column volume

1 mL

Column i.d.

7 mm

Column hardware pressure limit

5 bar (0.5 MPa)
