

StrepTrap HP

Product Information

Cat#No# HP-117P

Product Overview

StrepTrap HP is a ready to use HiTrap column prepacked with StrepTactin Sepharose High Performance for purifying Strep-tag II recombinant proteins.

Description

This robust and stable Sepharose based resin results in high resolution, sharp concentrated peaks, and reproducible purifications. The binding capacity is also high.

Characteristic

Highly pure Strep-tag II recombinant proteins eluted in concentrated form and small volumes.

Physiological conditions and mild elution preserves the activity of the target protein.

Convenient, time-saving operation and reproducible results.

Compatible with a wide range of reducing agents, detergents, denaturants, and other additives.

Easily regenerated with 0.5 M NaOH.

Applications

Purification is done under physiological conditions and mild elution preserves the activity of the target protein.

Maximum operating pressure

5 bar [0.5 MPa] (70 psi)

Sample preparation

Adjust the sample to the composition of the binding buffer. Either dilute the sample with binding buffer or buffer exchange using HiTrap Desalting, HiPrep 26/10 Desalting or Desalting PD-10 column.

To avoid clogging the column when loading large sample volumes, filter the sample through a 0.45 µm filter or centrifuge it immediately before application.

Matrix

Rigid highly cross-linked 6% agarose

Average particle size

StrepTrap HP

34 µm

Ligand

Strep-Tactin

Ligand density

Approx. 5 mg/ml medium

Dynamic binding capacity

Approx. 6 mg Strep-tag II protein/ml medium.

Recommended flow rate

< 4 ml/min

Recommended column height

25 mm

Chemical stability

Stable in all commonly used aqueous buffers reducing agents, and detergents.

pH working range

> pH 7.0

Storage

4 to 8°C, 20% Ethanol

Binding buffer

100 mM Tris-HCl, 150 mM NaCl, 1 mM EDTA, pH 8 or PBS: 20 mM sodium phosphate, 280 mM NaCl, 6 mM potassium chloride, pH 7.4.

Elution buffer

2.5 mM desthiobiotin in binding buffer.

Regeneration

0.5 M NaOH or 1 mM HABA (2-[4'-hydroxy-benzeneazo] benzoic acid) in binding buffer.

StrepTrap HP

Purification procedures

1. Fill the syringe or pump tubing with binding buffer. Remove the stopper and connect the column to the syringe (with the adapter provided) or pump tubing “drop-to-drop” to avoid introducing air into the column.
2. Remove the snap-off end at the column outlet. Wash out the ethanol with at least 5 column volumes (CV) of distilled water or binding buffer.
3. Equilibrate the column with 5 CV binding buffer at 1 ml/min or 5 ml/min for 1 ml and 5 ml columns respectively.
4. Apply the sample using a syringe fitted to the luer adapter or by pumping it onto the column.
5. Wash with 5 to 10 CV binding buffer or until no material appears in the effluent.
6. Elute with 6 CV elution buffer. The eluted fractions can be buffer exchanged using a HiTrap Desalting, HiPrep 26/10 Desalting or Desalting PD-10 column.

Pack size

5 × 1 mL

Maximum flow velocity

4 and 20 ml/min for 1 and 5 ml columns respectively.

Dimensions

7 × 25 mm

Column volume

1 ml

Column i.d.

7 mm

Column hardware pressure limit

5 bar (0.5 MPa)