

HiTrap Capto adhere

Product Information

Cat#No# Hi-291P

Product Overview

HiTrap Capto adhere is prepacked with Capto adhere, a multimodal BioProcess ion exchange resin designed to remove contaminants in post-protein A purification.

Description

Capto adhere is a strong anion exchanger with multimodal functionality. The multimodal functionality gives a different selectivity compared to traditional anion exchangers. Capto adhere is designed for post-protein A purification of monoclonal antibodies. Removal of leached protein A, aggregates, host cell proteins, nucleic acids, and viruses from monoclonal antibodies is performed in flowthrough mode at which the antibodies pass directly through the column while the contaminants are adsorbed. For optimal performance of Capto adhere, screening/optimization of loading conditions are required.

Characteristic

High capacity and productivity in flowthrough mode.

Savings in time and operating costs with a two-step chromatographic process.

Wide operational window of pH and conductivity.

Prepacked HiTrap columns for easy screening and convenient process development.

Applications

Contaminant removal to formulation levels in post protein A purification.

Maximum operating pressure

5 bar [0.5 MPa] (70 psi)

Sample preparation

1. Adjust the sample to the composition of the start buffer, using one of these methods: Dilute the sample with start buffer. Exchange buffer using a HiPrep 26/10 Desalting, HiTrap Desalting or PD-10 Desalting column.
2. Filter the sample through a 0.45 µm filter or centrifuge at 10 000 × g for 10 min immediately before loading it to the column. This prevents clogging and increases the life time of the column when loading large sample

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volumes.

Metal ion capacity

0.09 to 0.12 mmol Cl⁻ /mL resin

Matrix

Highly cross-linked agarose, spherical

Ionic Exchanger Type

Multimodal strong anion exchanger

Average particle size

~ 75 µm

Recommended flow rate

< 4 ml/min

Recommended column height

25 mm

Chemical stability

Stable to commonly used aqueous buffers, 1 M acetic acid, 1.0 M NaOH.

pH working range

3 to 12

CIP stability

2 to 14

Storage

4 to 30°C, 20% Ethanol

Cleaning-in-place

1. Wash with at least 2 column volumes (CV) of 2 M NaCl.
2. Wash with at least 3 CV 1 M NaOH with at least 15 min contact time.

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3. Wash with at least 2 CV 2 M NaCl.
4. Wash with at least 2 CV distilled water.
5. Wash with 5 CV start buffer or until eluent pH and conductivity have reached the required values.

Scaling up

1. Select bed volume according to required sample load. Keep sample concentration constant.
2. Select column diameter to obtain the desired bed height. The excellent rigidity of the high flow base matrix allows for flexibility in choice of bed heights.
3. Check the buffer delivery and monitoring systems for time delays or volume changes if the larger equipment used when scaling up causes some deviations.

Pack size

5 × 1 mL

Dimensions

7 × 25 mm

Column volume

1 mL

Column i.d.

7 mm

Column hardware pressure limit

5 bar (0.5 MPa)
