

HiScreen Capto L

Product Information

Cat#No# Hi-006P

Product Overview

HiScreen Capto L columns are prepacked with Capto L, an affinity chromatography resin for capture of antibodies and antibody fragments such as Fab fragments, scFv, and Dabs. HiScreen Capto L columns are part of the process development platform available from Cytiva. The columns are an excellent choice for method optimization and parameter screening.

Description

HiScreen columns are prepacked with a range of BioProcess chromatography resins and are designed for method optimization and parameter screening. HiScreen columns have small bed volumes (4.7 mL), reducing the cost of sample and buffer consumption. The resins used in HiScreen columns are also available in other prepacked formats and as bulk packs, for all scales of work from development and pilot studies to routine production.

Characteristic

Prepacked, ready-to-use columns for convenient process development optimization.

10 cm bed height of HiScreen columns is designed to allow method optimization and parameter screening.

Easily connected in series to achieve 20 cm bed height.

Small bed volume (4.7 mL) gives fast results and minimal sample/buffer consumption.

Reproducible results, scalable to BioProcess columns packed with the same resin using the same linear fluid velocity.

Maximum operating pressure

3 bar [0.3 MPa] (44 psi)

Average particle size

85 µm

Ligand

Recombinant protein L (E. coli)

HiScreen Capto L

Coupling chemistry

Epoxy

Dynamic binding capacity

~ 25 mg Fab

Recommended flow rate

100 to 300 cm/h

Recommended column height

100 mm

Chemical stability

All commonly used aqueous buffers, e.g., 15 mM sodium hydroxide, 8 M urea, 6 M guanidine hydrochloride, 1 M acetic acid.

pH working range

2 to 10

Temperature stability

2°C to 40°C

Storage

2 to 8°C, 20% Ethanol

Cleaning-in-place

1. Wash the column with 3 CV binding buffer.
2. Wash with at least 2 CV 15 mM NaOH. Contact time 10 to 15 minutes.
3. Wash immediately with at least 5 CV binding buffer.

Scaling up

Scale-up of a chromatography step can be as straightforward as increasing column diameter to accommodate a larger feed volume while keeping the bed height and the linear flow velocity constant. The 10 cm bed height of HiScreen columns gives sufficient residence time to serve as the basis for linear process

HiScreen Capto L

scale-up. If necessary, however, two columns can be connected in series with a union to give a bed height of 20 cm. Successful scale-up from HiScreen to larger column formats is described in the third and sixth examples in Examples of HiScreen column use.

Pack size

1 × 4.7 mL

Maximum flow velocity

500 cm/h

Dimensions

7.7 × 100 mm

Column volume

4.7 ml

Column i.d.

7.7 mm

Column hardware pressure limit

8 bar (0.8 MPa, 117 psi)
