

HiScreen Phenyl HP

Product Information

Cat#No# Hi-146P

Product Overview

HiScreen Phenyl HP columns are prepacked with Phenyl Sepharose High Performance hydrophobic interaction chromatography (HIC) resins. The columns are an excellent choice for method optimization and parameter screening.

Description

The small column volume of 4.7 mL and bed height of 10 cm make HiScreen columns excellent tools for method optimization, parameter screening, robustness testing, and convenient scale-up. Process fluid velocities can be applied, since the 10 cm bed height gives enough residence time and the results can then serve as basis for linear process scale-up.

Characteristic

Butyl Sepharose High Performance is an aliphatic HIC resin, designed for intermediate and polishing step purification steps when high resolution has priority.

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 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)

Matrix

Cross-linked agarose, spherical

Average particle size

~ 34 µm

HiScreen Phenyl HP

Ligand

Phenyl

Ligand density

~ 25 µmol/mL resin

Recommended flow rate

< 150 cm/h

Recommended column height

100 mm

Chemical stability

Stable to commonly used aqueous buffers, 0.01 M NaOH, 8 M Urea, 6 M guanidine hydrochloride, 30% isopropanol, and 70% ethanol.

pH working range

3 to 12

CIP stability

3 to 12

Storage

4 to 30°C, 20% Ethanol or 0.01M NaOH

Elution buffer

50 mM sodium phosphate, pH 7.0.

Cleaning-in-place

1. Wash with 3 column volumes (CV) of water or elution buffer.
2. Wash with 4 CV 0.5 to 1.0 M NaOH at a low flow rate (≤ 0.78 mL/min (≤ 100 cm/h)).
3. Wash with at least 3 CV water.

Pack size

HiScreen Phenyl HP

1 × 4.7 mL

Maximum flow velocity

1.2 mL/min

Dimensions

7.7 × 100 mm

Column volume

4.7 mL

Column i.d.

7.7 mm

Column hardware pressure limit

0.8 MPa (8 bar, 116 psi)
