

HiTrap MabSelect Prisma

Product Information

Cat#No# Hi-017P

Product Overview

These HiTrap columns are prepacked with MabSelect Prisma protein A chromatography resin. This affinity resin in the packed column has been improved with an optimized high-flow agarose base matrix and a genetically engineered protein ligand, allowing efficient cleaning between monoclonal antibody purification runs. This allows future demands in monoclonal antibody purification to be met, including processing of many bispecific antibodies.

Characteristic

Enhanced dynamic binding capacity compared with other protein A resins.

Excellent alkaline stability enables efficient cleaning and sanitization using 0.5–1.0 M NaOH.

Convenient HiTrap format for easy connection to a syringe, peristaltic pump, or chromatography systems such as an ÄKTA system for convenient process optimization.

Maximum operating pressure

5 bar (0.5 MPa, 70 psi)

Matrix

Rigid, highly cross-linked agarose

Average particle size

~ 60 µm

Dynamic binding capacity

~ 40 mg polyclonal IgG/mL resin, 2 minutes residence time; ~ 80 mg polyclonal IgG/mL resin, 6 minutes residence time.

Recommended flow rate

< 4 mL/min

Recommended column height

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25 mm

Chemical stability

Stable to commonly used aqueous buffers for Protein A chromatography.

pH working range

3 to 12

CIP stability

2 to 14

Temperature stability

2°C to 40°C

Storage

20% ethanol, 2°C to 8°C

Binding buffer

20 mM sodium phosphate, 0.15 M NaCl, pH 7.2.

Elution buffer

0.1 M sodium citrate, pH 3.0 to 3.6.

Cleaning-in-place

1. Wash the column with 3 column volumes (CV) of binding buffer.
2. Wash with at least 3 CV 0.5 to 1.0 M NaOH with a contact time of 15 minutes.
3. Wash immediately with at least 5 CV sterile and filtered binding buffer at pH 7 to 8.

Sanitization

1. Wash the column with 3 column volumes (CV) of binding buffer.
2. Wash the column with at least 3 CV 0.5 to 1.0 M NaOH.
3. Use a contact time of at least 15 minutes for 0.5 to 1.0 M NaOH (see also the note below).
4. Wash immediately with at least 5 CV sterile and filtered binding buffer at pH 7 to 8.

Scaling up

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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. The larger equipment used when scaling up may cause some deviations from the method optimized at small scale. In such cases, check the buffer delivery and monitoring systems for time delays or volume changes.

Pack size

1 × 1 mL

Maximum flow velocity

4 mL/min

Dimensions

7 × 25 mm

Column volume

1 mL

Column i.d.

7 mm
