

HiScreen MabSelect SuRe protein A column

Product Information

Cat#No# Hi-010P

Product Overview

The HiScreen MabSelect SuRe column uses protein A chromatography for antibody purification. This protein A column is prepacked with MabSelect SuRe affinity resin and is part of our process development platform. These packed columns are used for method optimization and parameter screening for capture of monoclonal antibodies.

Description

MabSelect SuRe (Superior Resistance) is a member of the MabSelect family of affinity chromatography resins for the capture of monoclonal antibodies (mAbs) at process scale. MabSelect SuRe is composed of a rigid, high-flow agarose matrix and alkali-stabilized protein A-derived ligand. This ligand provides greater stability than conventional protein A-based resins under the alkaline conditions used in cleaning-in-place (CIP) protocols. The enhanced alkali stability of MabSelect SuRe improves process economy; cleaning can be performed with cost-effective reagents such as sodium hydroxide, which improves process economy and product quality.

Characteristic

Novel, alkali-stabilized protein A ligand allows the use of 0.1–0.5 M sodium hydroxide for CIP.

Improves product quality and reduces overall costs.

Novel ligand design gives enhanced protease resistance resulting in lower ligand leakage.

Generic elution conditions for different monoclonal antibodies enables platform approach to purification.

High dynamic binding capacity (DBC) reduces process time and amount of resin used.

High-flow agarose matrix allows processing of large volumes of feed.

Maximum operating pressure

3 bar [0.3 MPa] (44 psi)

Matrix

Highly cross-linked agarose, spherical

Average particle size

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~ 85 µm

Ligand

Alkali-stabilized, protein A-derived (E. coli).

Coupling chemistry

Epoxy activation

Dynamic binding capacity

~ 30 mg human IgG/ml medium

Recommended flow rate

100 to 500 cm/h

Recommended column height

100 mm

Chemical stability

Stable to commonly used aqueous buffers.

pH working range

3–12

CIP stability

3 to 13.7

Temperature stability

2°C to 40°C

Storage

2-8°C, 20% ethanol

Shipping

20% ethanol

Elution buffer

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0.1 M sodium citrate, pH 3.0 to 3.6.

Cleaning-in-place

1. Wash the column with 3 column volumes (CV) of start buffer.
2. Wash with at least 2 CV 0.1 to 0.5 M NaOH with a contact time of 10 to 15 minutes.
3. Wash immediately with at least 5 CV start buffer at pH 7 to 8.

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

0.8 MPa (8 bar)
