

StrepTrap XT

Product Information

Cat#No# XT-118P

Product Overview

A chromatography resin for the purification of recombinant proteins tagged with Strep-tag II and Twin-Strep-tag, which provides higher affinity, resulting in higher yields and lower loss of valuable target protein.

Characteristic

Highly pure Strep-tag II and Twin-Strep-tag recombinant proteins.

Fast purifications with simple elution.

Physiological conditions and mild elution preserve target protein activity.

Fast and easy regeneration.

Compatible with a wide range of detergents, denaturants, and other additives.

Available in 10 and 50 mL lab packs of bulk resin and prepacked in 1 and 5 mL StrepTrap XT chromatography columns for convenience.

Applications

Purification of recombinant proteins tagged with Strep-tag II and Twin-Strep-tag.

Sample preparation

Adjust the sample to the composition of the binding buffer. Either dilute the sample with binding buffer or exchange buffer using a column for desalting.

To avoid clogging the column, clarify the sample by centrifugation and filtration through a 0.45 µm filter immediately before application.

Matrix

Rigid highly cross-linked 6% agarose

Average particle size

34 µm

Ligand

Strep-Tactin XT

StrepTrap XT

Ligand density

Approx. 5 mg/mL resin

Dynamic binding capacity

Approx. 10 mg protein with Strep-tag II or Twin-Strep-tag/mL resin.

Recommended flow rate

1 mL/min

Recommended column height

25 mm

Chemical stability

Stable in all commonly used aqueous buffers.

pH working range

6 to 10

Storage

2°C to 8°C in 20% ethanol

Binding buffer

100 mM Tris-HCl, 150 mM NaCl, 1 mM EDTA, pH 8.

Elution buffer

50 mM biotin in binding buffer.

Regeneration

1. Regenerate the column with 3 CV distilled water followed by 3 CV 50 mM NaOH and 3 CV distilled water. Use a flow rate of 1.0 mL/min or 5.0 mL/min for 1 mL and 5 mL columns respectively.
2. Immediately re-equilibrate the column with 8 CV binding buffer.

Cleaning-in-place

6 M urea or 4 M GuHCl can also be used to remove non-specifically bound proteins.

StrepTrap XT

Scaling up

Scaling up from 1 mL to 5 mL StrepTrap XT column is easily performed by increasing sample load and flow rate five-fold. An alternative method for quick scale-up is to connect two or three StrepTrap XT columns in series (back pressure will increase). Strep-Tactin XT Sepharose is also available in 10 and 50 mL lab packs.

Pack size

1 × 1 mL

Maximum flow velocity

4 and 20 mL/min for 1 and 5 mL columns respectively.

Dimensions

7 × 25 mm

Column volume

1 ml

Column i.d.

7 mm

Column hardware pressure limit

5 bar (0.5 MPa)