

His MultiTrap HP

Product Information

Cat#No# Hi-399C

Product Overview

His MultiTrap HP are prepacked disposable 96-well plates for reproducible high throughput parallel purification of histidine-tagged recombinant proteins by Immobilized Metal ion Affinity Chromatography (IMAC).

Description

His MultiTrap HP are prepacked, 96-well filter plates for screening and small-scale, high-throughput parallel purification of histidine-tagged recombinant proteins by immobilized metal ion affinity chromatography (IMAC). Consistent well-to-well and plate-to-plate performance ensures high reproducibility. The ability to load unclarified lysates on His MultiTrap plates simplifies the workflow and saves time. The standardized 96-well plate format gives great flexibility, both when working with automated robotic systems and when manually using centrifugation or vacuum. Using the filter plates, 96 samples with up to 1 mg of histidine-tagged protein/well can be purified in 60 min.

Characteristic

Highly reproducible well-to-well and plate-to-plate results.

Less sample pretreatment needed — load unclarified sample directly, increase reproducibility in results, and save time.

Easy and predictable scale-up to HisTrap FF, HisPrep FF 16/10, or HisTrap HP prepacked columns.

High chemical stability and high binding capacity — purifies up to 1 mg of histidine-tagged protein per well.

Prepacked with Ni Sepharose media, which have low nickel leakage and are compatible with a wide range of additives used in protein purification.

Applications

High reproducibility of histidine-tagged protein purification from unclarified and clarified lysates using His MultiTrap.

Solubility effects of detergents in buffers during purification of membrane proteins.

Sample preparation

His MultiTrap HP

His MultiTrap HP purify histidine-tagged proteins directly from unclarified cell lysates. No centrifugation or filtration is needed prior to loading the wells. Samples are prepared by straightforward chemical and/or mechanical lysis. If the sample is viscous, simply extend the mechanical treatment. A general sample preparation protocol involves: (1) suspending the cells/cell paste, (2) enzymatic lysis using lysozyme, DNase I, and adding MgCl₂ etc., (3) mechanical lysis by sonication, homogenization, or freeze/thaw, (4) adjusting pH, and (5) applying unclarified lysate directly to the wells.

Metal ion capacity

~15 µmol Ni²⁺ /mL medium

Average particle size

34 µm

Dynamic binding capacity

Up to 1 mg histidine-tagged protein/well

Chemical stability

0.01 M HCl, 0.1 M NaOH (tested for one week at 40°C); 1 M NaOH or 70% acetic acid (tested for 12 h) 2% SDS (tested for 1 h); 30% 2-propanol (tested for 30 min).

Chemical compatibility

Stable in all commonly used buffers, reducing agents, denaturants, and detergents.

pH working range

2–14

CIP stability

3–12

Storage

4 - 30°C, 20% Ethanol

Pack size

4 × 96-well filter plates

His MultiTrap HP

Column volume

800 µL
