

PreDicator Capto adhere ImpRes

Product Information

Cat#No# Pr-296P

Product Overview

PreDicator plates are disposable, 96-well filter plates for parallel screening of resins and chromatographic conditions such as binding, wash, and elution conditions. Different applications may require different amounts of resins in the wells. Data generated using PreDicator plates show good correlation with data from chromatography columns, making the plates an excellent tool for initial screening of process conditions.

Characteristic

Supports high-throughput process development (HTPD) by allowing parallel screening of chromatographic conditions using a 96-well plate format.

Allows fast and efficient evaluation of parameters for binding/wash/elution conditions, and resin benchmarking.

Results show good correlation with data obtained by column chromatography.

Each well is prefilled with defined amounts of Capto adhere ImpRes.

Can be used with centrifugation or vacuum, manually or in automated robotic systems.

Assist software supports the PreDicator workflow from set-up of experimental design to data evaluation.

Metal ion capacity

0.08 to 0.11 mmol Cl⁻ /mL resin

Matrix

highly cross-linked agarose

Average particle size

36 to 44 µm

Chemical stability

All commonly used aqueous buffers, 1 M acetic acid, 1 M sodium hydroxide.

pH working range

3 to 12

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CIP stability

2 to 14

Storage

4°C to 30°C

Evaluation of Packing

The best method of expressing the efficiency of a packed column is in terms of the height equivalent to a theoretical plate (HETP) and the asymmetry factor (A_s). The values are easily determined by applying a test sample such as 1% acetone solution or sodium chloride to the column.

Cleaning-in-place

Precipitated hydrophobically bound proteins or lipoproteins: Wash with at least 3 column volumes of 1 M NaOH at a low flow velocity with reversed flow direction. Contact time at least 15 min.

Ionically bound proteins: Wash with 0.5 to 2 column volumes of 2 M NaCl with reversed flow direction.

Lipids and very hydrophobic proteins: Wash with 1-propanol 1 to 5% or isopropanol 5 to 30%. 1-propanol has a higher flash point and might be preferred in an industrial environment.

Nucleic acids: Wash with 0.1 M acetate, pH 3 for 2 to 5 column volumes followed by buffer at neutral pH for 1 to 2 column volumes. Then wash with at least 3 column volumes 1 M NaOH at a low flow velocity with reversed flow direction. Contact time 15 min.

Sanitization

To reduce microbial contamination in the packed column, sanitization using 0.5 to 1 M NaOH with a contact time of 1 hour is recommended. The CIP protocol for precipitated, hydrophobic bound proteins or lipoproteins removes bound contaminants and sanitizes the chromatography resin effectively.

Pack size

6 μ l

Maximum flow velocity

300 cm/h

Dimensions

PreDicator Capto adhere ImpRes

127.8 x 85.5 x 30.6 mm

Functional group

Multimodal strong anion exchanger

Number of wells

96

Material

Polypropylene (PP) and Polyethylene (PE)

Resin suspensions in total volumes

200 µl for 2 µl sedimented medium/well 500 µl for 6, 20, and 50 µl sedimented medium/well For PreDicator isotherm plates: – 500 µl for 50 µl sedimented medium/well – 200 µl for 20 µl sedimented medium/well – 500 µl for 8 µl sedimented medium/well – 375 µl for 6 µl sedimented medium/well – 250 µl for 4 µl sedimented medium/well – 125 µl for 2 µl sedimented medium/well.

Centrifugation force recommended

100 x g (Sample Dependent)-500 x g (Sample Dependent)

Centrifugation force max.

700 x g

Operating temp. max.

30°C

Operating temp. min.

4°C
