

ZetaPrep™ Pre-packed Chromatography Columns



Key Specifications and Features

Specification	ZetaPrep™ 16/100	ZetaPrep™ 26/100
Column dimensions	Ø 16 mm x 100 mm bed length (20 mL volume)	Ø 26 mm x 100 mm bed length (53 mL volume)
Materials	PP column housing, PEEK piston, POM caps, 20–60 µm PE frits, 10/32 thread fittings	
Column pressure stability	≥ 8 bar	≥ 8 bar
Solid phase portfolio	Affinity, ion exchange, hydrophobic interaction, desalting/buffer exchange and activated	
Flowrate stability	Stable at ≥ 20 mL/min (600 cm/h) tested up to ≥ 30 mL/min	Stable at ≥ 40 mL/min (450 cm/h) tested up to ≥ 40 mL/min
Operating pressure (gel bed)	≥ 1.5 bar Δ-pressure at 20 mL/min	≥ 2.0 bar Δ-pressure at 40 mL/min
Column asymmetry	0.80–1.60	0.80–1.60

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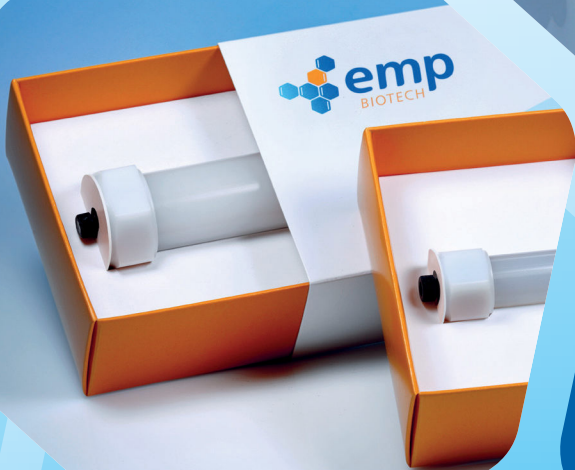
emp BIOTECH is an ISO 9001:2015 certified company
Registration number 011001300789 (TÜV Rheinland)

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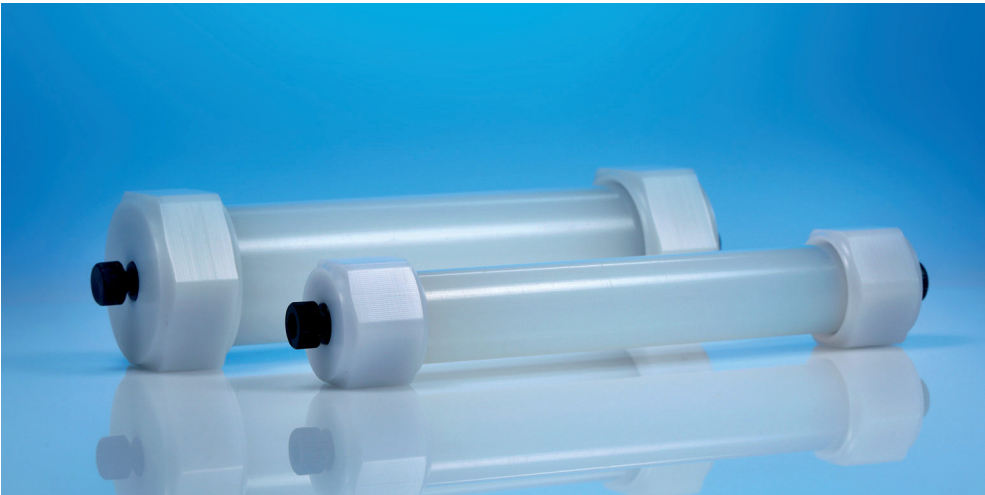
ZetaPrep™ FPLC Columns for reproducible, scalable biomolecule purification

NEW



excellence
made possible

ZetaPrep™ Pre-packed Chromatography Columns



Engineered for reproducible, scalable biomolecule purification

ZetaPrep™ pre-packed chromatography columns from *emp BIOTECH* are precision-engineered to meet the technical requirements of modern bioprocessing. Each column is validated for pressure-flow behavior, bed symmetry, packing consistency, and gel-bed stability to support reliable and repeatable purification outcomes across research, development, and production workflows.

Key Advantages

- Reproducibility: controlled packing and documented QC for consistent performance
- Reliable pressure tolerance with stable flow behavior across typical operating ranges
- Optimized flow distribution to minimize backpressure
- Flexibility to accommodate multiple resin chemistries and workflows

Applications

- Monoclonal antibody purification
- Ion-exchange chromatography
- Desalting and buffer exchange
- General protein purification

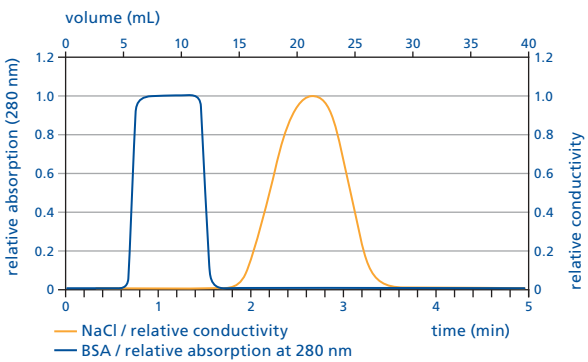
Customization

Columns are available in stock for standard configurations. Customized packing services for specific resin types and column dimensions (i.e. 250, 500, 800 mm bed lengths) are available on request.

Sample Desalting Application

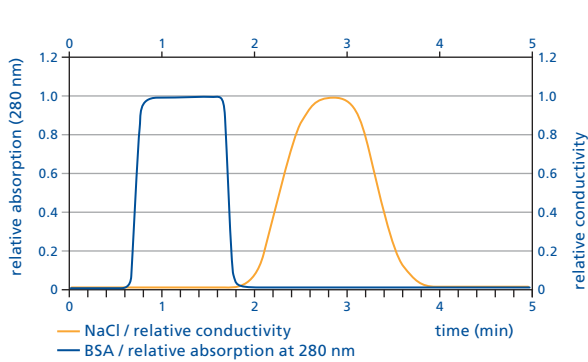
ZetaPrep™ Desalt 16/100

Model system: 2 M NaCl and 2% BSA
6 mL sample volume (30%)
7.5 mL min⁻¹ flow rate
clean separation



ZetaPrep™ Desalt 26/100

Model system: 2 M NaCl and 2% BSA
20 mL sample volume (30%)
20 mL min⁻¹ flow rate
clean separation



Chromatography Media Portfolio

Affinity	Ion Exchange (IEX)	Hydrophobic Interaction (HIC)	Desalting / Buffer exchange	Activated
Zetarose Protein A Elevate	Zetarose Q FF6 (Strong AEX)	Zetarose Butyl FF6	Zetadex-25 (desalting, 5 kDa MWCO)	Zetarose Aldehyde FF4
Zetarose Protein G Elevate	Zetarose DEAE FF6 (Weak AEX)	Zetarose Phenyl FF6	Zetadex-50 (desalting, 25 kDa MWCO)	Zetarose Aldehyde FF6
Zetarose NTA/Ni-NTA FF6 (IMAC)	Zetarose SP FF6 (Strong CEX)	Zetarose Phenyl HC	Zetadex-20 LH (hydroxypropylated, for polar organic/aqueous solvent systems)	Zetarose Epoxy FF4
Zetarose Semper Dye Blue F3GA FF6	Zetarose CM FF6 (Weak CEX)			Zetarose Epoxy FF6