MacroSep IEX Q Resin

New in Downstream Processing: Innovative Anion Exchange Resin for the Purification of Large Biomolecules

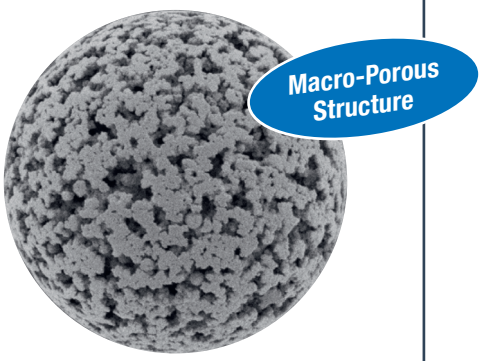
Ion exchange chromatography is an ideal technique to purify biomolecules with high productivity. As the target substances become larger, the demands on the process resins are changing. YMC has developed a new and innovative resin to target large biomolecules and particles such as adeno-associated viruses (AAVs), protein complexes and plasmid DNA (pDNA): **MacroSep IEX Q!**

This new strong anion exchange resin offers an optimised macro-porous structure that ensures an efficient purification of these molecules. With its high binding capacity for large particles and molecules and high separation efficiency even at elevated flow rates, MacroSep IEX Q is a perfect addition to DSP platforms.

Features of MacroSep IEX Q

- **Macro-porous structure** for the separation of large-sized biomolecules such as AAVs
- Strong anion exchanger providing **high dynamic binding capacity (DBC)**
- **Ideal particle size (30 µm)** for efficient purifications at improved resolution
- **High resolution** even at increased flow rate

MacroSep IEX (30 µm)

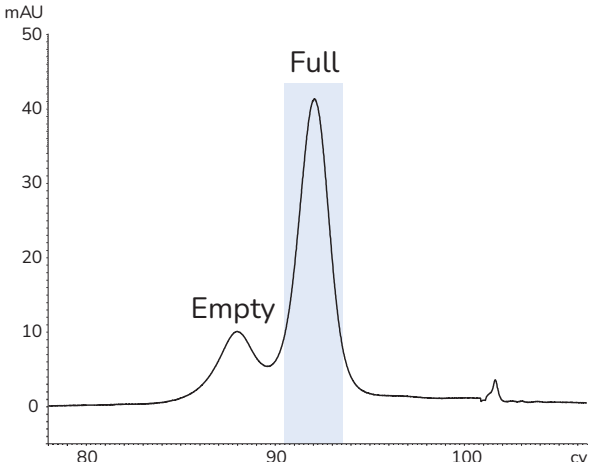


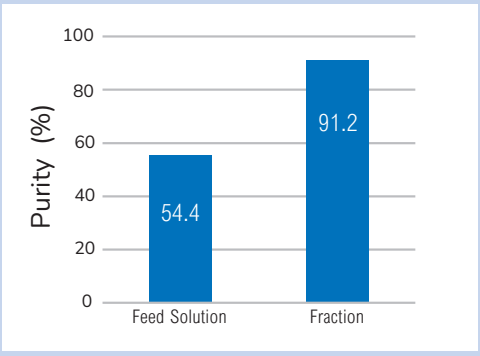
BioPro IEX SmartSep (30 µm)

Contact YMC America for samples and more information!

For all Types of Large Biomolecules

With MacroSep IEX Q, large biomolecules and viral particles are efficiently purified. This application shows the separation of full and empty AAV – a challenging separation task with high demands on resolution and recovery. With MacroSep IEX Q both species are separated efficiently.





Courtesy of Prof. S. Uchiyama, Osaka University

This research was supported by AMED under Grant Number JP18ae0201001

Good Resolution:
Efficient Separation of Full and Empty AAVs!

Specifications - MacroSep IEX Q

Matrix:	methacrylate-based hydrophilic porous polymer
Charged Group:	-R-N+$(CH_3)_3$
Particle Size:	30 µm
Pore Size:	9000 Å
pH Range:	2–12
Pressure Limit:	2 MPa (for regular use) 3 MPa (upper limit)
Temperature:	4–60 °C
Ion Exchange Capacity:	>0.09 mEq/mL-resin
Dynamic Binding Capacity:	30 mg/mL-Resin (Thyroglobulin)

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