Monomix Core Chromatographic Media from Sepax Technologies, Inc.

Sepax Monomix Core Technology is a novel polymeric multimodal chromatographic media with a core-shell(s) hierarchical layer structure, a narrow size distribution, and desired porous structure, which combines a size exclusion separation and various binding chemistries:

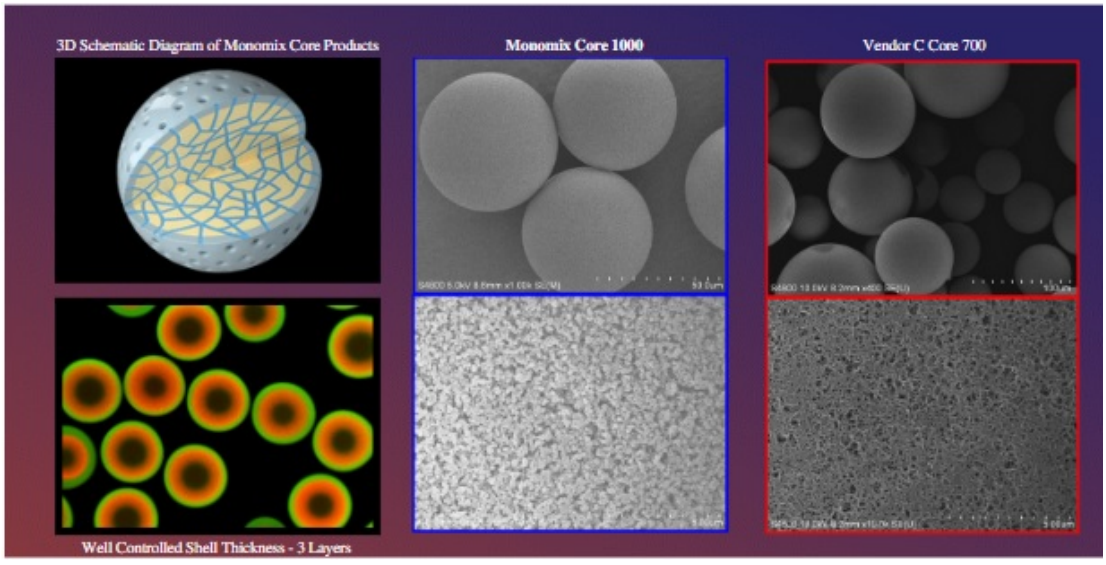
- The multimodal dual properties allow the target sample being collected in the flowthrough while efficiently capture the smaller impurities through amine ligand in the pore structure
- Greatly improve the productivity and capacity than standard size exclusion resin
- Broad applicable to purification of VLPs, Vaccines, AAV, Viral Vectors or Viruses, Liposomes, Exosome, LNP (lipid nanoparticles), Plasmid, DNA, mRNA, etc.

The new generation Monomix Core 1000 and 500 provides improved performance than other vendor:

- Double the Dynamic Binding Capacity and Ion Exchange Capacity – Higher Yield
- Much narrower particle size distribution and better uniformity - easier to clean (1 M NaOH with or without 30% IPA in aqueous solution) and longer life cycles
- More hydrophilic chemistries of the core and shell layer - improved undesirable nonspecific binding

Find more product information here.

SEM Comparison of Sepax and Vendor C
Better Controlled Size Distribution and Porous Structure

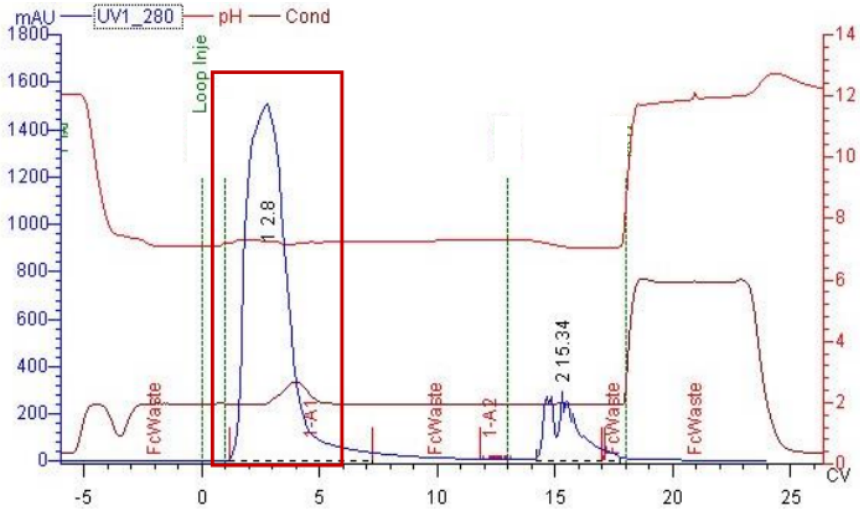


Comparison of Technical Parameters

Medium Brand	Vendor C Core, COA (measured value)	Sepax Monomix Core
Matrix	Agarose based	Polymeric based
Volume average particle diameter D50	NA (88.3 µm)	60 ± 10 µm
Particle size distribution D_{90}/D_{10}	NA (2.22), polydispersed	≤1.5, mono-sized
Protein cut off MW	CC 700: 700 kD CC 400: 400 kD	Monomix Core 1000: 700 kD Monomix Core 500: 400 kD
Surface chemistry of shell layer	-OH	More Hydrophilic Functionality
Surface chemistry of core layer	Octylamine	Hydrophobic Amine
DBC BSA (mg/mL)	CC 700: NA (8.1)	Monomix Core 1000: > 15

Ion exchange capacity of core layer (µmol Cl-/mL medium)	40-85 (45)	80-300

Influenza Vaccine – Capture Step
Monomix Core 1000 vs. Vendor C 700



Monomix Core 1000 was able to improve the yield from 57% to 68% and HCP removal level by 86% than 81% against vendor CC 700.

Find more data on the purification of large molecules like VLP, Plasmid by Monomix Core 1000 vs. Vendor C Core 700 in the full application note:

READ MORE

Order Information

More information can be found at: Sepax-Tech.com/Monomix_Core

Monomix Core 1000
Bulk Resin Part Number: 290160950
4.2 mL Cartridge Part Number: 290160500-750100

Monomix Core 500
Bulk Resin Part Number: 290160500
4.2 mL Cartridge Part Number: 290160950-750100

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