

Large Pore SEC (1000 Å and 2000 Å) for Biomolecule Separation

Highlighted FACTS:

- SRT® SEC-1000 and SRT® SEC-2000 provide high separation resolution of very large biomolecules and their fragments.
- A large variety of sample types such as virus like particles, hydrophobic protein complexes and biological polymers can be resolved successfully on large pore (1000 Å and 2000 Å) SEC.
- Combinations of large pore size SEC columns in tandem exhibit excellent separation for an expanded molecular weight range of biomolecules.

What are SRT SEC-1000 and SRT SEC-2000?

Sepax SRT SEC 1000 Å and 2000 Å (Size Exclusion):

Ultra-high efficiency and resolution SEC columns. SRT SEC-1000 and SRT SEC-2000 5 μm are specifically designed for large biomolecule separations. Delivering unrivaled resolving power and reproducibility. Made of uniform, hydrophilic, and neutral nanometer thick proprietary surface coating chemically bonded on silica, offers long column lifespan and negligible non-specific interactions.

Order Information

215950-7830	SRT SEC-1000, 5μm, 1000 Å 7.8 x 300 mm
215980-7830	SRT SEC-2000, 5μm, 2000 Å 7.8 x 300 mm
215300-7830	SRT SEC-300, 5μm, 300 Å 7.8 x 300 mm

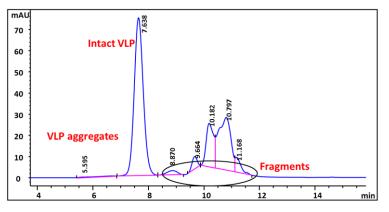
Analysis of a Virus Like Particle on SRT SEC-1000

Column: SRT SEC-1000 (5µm, 1000Å, 7.8 x 300 mm)

Flow rate: 1 mL/min; Detection: UV 280 nm; Mobile phase: 25 mM Tris,

150 mM NaCl, 1 mM CaCl₂, pH 7.5;

Injection Volume: 50 μ L VLP (14 million dalton) 1mg/mL; Pressure: 51 bar

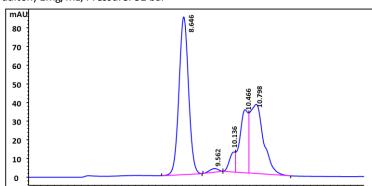


APPLICATION

Analysis of a Virus Like Particle on SRT SEC-2000

Column: SRT SEC-2000 (5μm, 2000Å, 7.8 x 300 mm)

Flow rate: 1 mL/min; Detection: UV 280 nm; Mobile phase: 25 mM Tris, 150 mM NaCl, 1 mM CaCl $_2$; Injection Volume: 50 μ L VLP (14 million dalton) 1mg/mL; Pressure: 52 bar



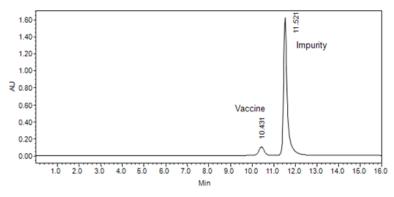
Analysis of Vaccine Sample on SRT SEC-2000

Column: SRT SEC-2000 (5µm, 2000Å, 7.8 x 300 mm) Mobile phase: 150 mM Na Phosphate Buffer, pH=7.0

Flow rate: 1.0 mL/min; Detection: 214 nm;

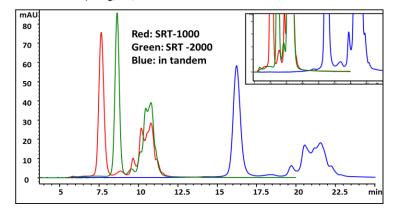
Column temperature: 25°C; Sample: vaccine (target MW ~80,000KD)

and impurity; Injection Volume: 20 μL



Analysis of a VLP on SRT 1000 and 2000 in Tandem

Column: SRT SEC-2000 + SRT SEC-1000, 7.8 x 600 mm, Flow rate: 1 mL/min; Detection: UV 280 nm; Mobile phase: 25 mM Tris, 150 mM NaCl, 1 mM CaCl₂; Injection Volume: 50 μ L VLP (14 million dalton) 1mg/mL; Pressure: 52 bar





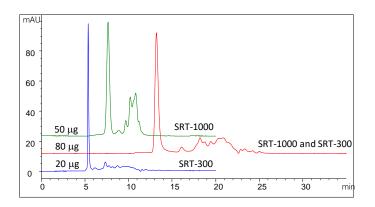
Large Pore SEC (1000 Å and 2000 Å) for Biomolecule Separation

Analysis of a VLP on SRT SEC-1000 and SEC-300 in tandem

Column: SRT SEC-1000 + SRT SEC-300, 7.8 x 600 mm

Flow rate: 1 mL/min; Detection: UV 280 nm, Mobile phase: 25 mM Tris, 150 mM NaCl, 1 mM CaCl $_2$; Injection Volume: VLP (14 million dalton) 1mg/mL;

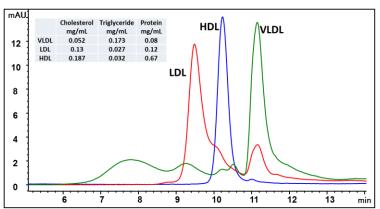
Pressure: 52 bar



Analysis of Lipoproteins (LDL, HDL and VLDL) on SRT SEC-1000

Column: SRT SEC-1000 (5µm, 1000Å, 7.8 x 300 mm)

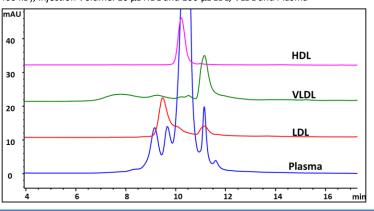
Mobile phase: PBS, pH 7.4; Flow rate: 1 mL/min; Detection: UV 280 nm; Sample: Very Low Density Lipoprotein(VLDL, MW is 6,000 kD), Low Density Lipoprotein(LDL, MW is 1,800 kD), and High Density Lipoprotein (HDL, MW is 64-400 kD); Injection Volume: 10 μL HDL and 100 μL LDL and VLDL



Analysis of LDL, HDL, VLDL and Plasma on SRT SEC-1000

Column: SRT SEC-1000 (5µm, 1000Å, 7.8 x 300 mm)

Mobile phase: PBS, pH 7.4; Flow rate: 1 mL/min; Detection: UV 280 nm; Sample: Very Low Density Lipoprotein(VLDL, MW is 6,000 kD), Low Density Lipoprotein(LDL, MW is 1,800 kD), and High Density Lipoprotein (HDL, MW is 64-400 kD); Injection Volume: 10 µL HDL and 100 µL LDL, VLDL and Plasma



APPLICATION

Analysis of Polystyrene Sulfonate Separation on SRT SEC-1000

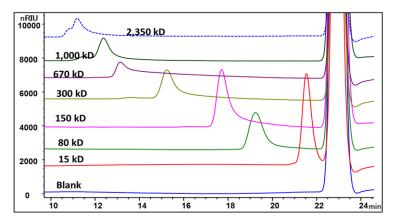
Column: SRT® SEC-1000 (5 µm, 1000 Å, 7.8 x 300 mm)

Mobile phase: 0.2 M NaCl + 0.01% NaN3

Flow rate: 0.5 mL/min, Detector: RI (35° C), Column temperature: 35° C

Injection volume: 100 μL 0.1 mg/mL, Pressure: 23 bar; Sample: Blank, 15, 80, 150,

300, 670, 1,000 and 2,350 kD Sodium polystyrene sulfonate

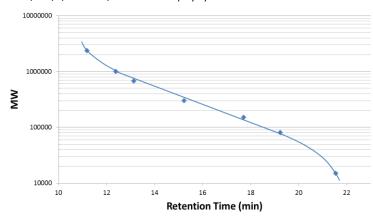


Polystyrene Sulfonate MW Calibration Curve

Column: SRT® SEC-1000 (5 μ m, 1000 Å, 7.8 x 300 mm)

Mobile phase: 0.2 M NaCl + 0.01% NaN3

Flow rate: 0.5 mL/min, Detector: RI (35° C), Column temperature: 35° C Injection volume: $100~\mu$ L 0.1 mg/mL, Pressure: 23 bar; Sample: Blank, 15, 80, 150, 300, 670, 1,000 and 2,350 kD Sodium polystyrene sulfonate



SRT Stability-300 Injections

Column: SRT SEC-300 (5 μm, 300 Å, 7.8 x 300 mm)

Mobile phase: 150 mM Na Phosphate Buffer, pH=7.0; Flow rate: 1.0 mL/min; Detection: 214 nm; Column temperature: 25°C; Injection Volume:10 μ L

