



Having trouble applying size exclusion chromatography to peptides under 50,000 Da? What if there was a size exclusion column specifically designed for small protein and peptide separations?

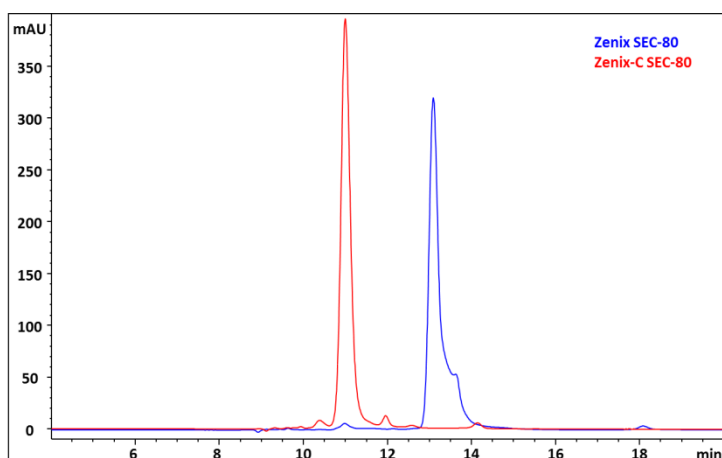
Sepax's Zenix™ and Zenix™-C SEC-80 provide a valuable solution

Highlighted FACTS:

- ▶ Sepax's 80 Å pore size was developed for analyzing small peptides and proteins with molecular weights under 50,000 Daltons.
- ▶ Organics in the mobile phase are an alternative additive for the analysis of hydrophobic, or sticky, sample types.
- ▶ The Zenix™-C SEC phase has a coating chemistry with a lay-down monolayer on porous silica which was developed for the analysis of hydrophobic, or sticky, sample types.
- ▶ A short, 2.1 x 50 mm, column is advantageous for use during a fast mass spec analysis of large biomolecules and small molecule drugs.

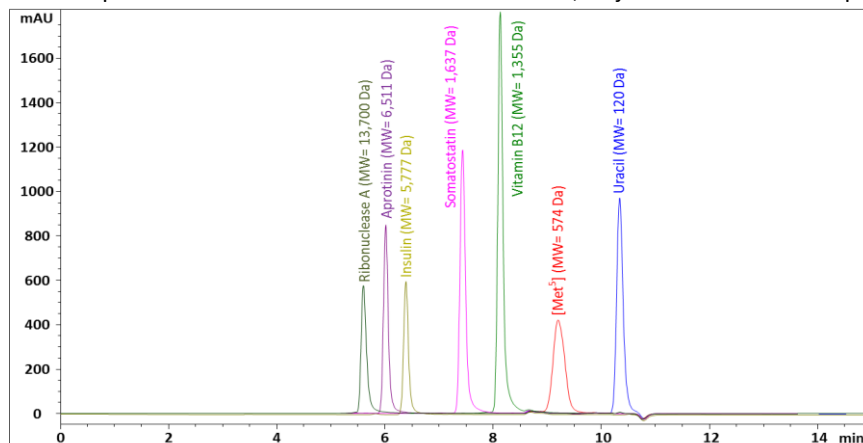
Differences between Zenix™ and Zenix™-C SEC-80 Phases for the Analysis of Angiotensin I Acetate

Column: Zenix SEC-80 7.8x300 mm, Flow rate: 1 mL/min, Detection: UV 214 and 280 nm, Mobile phase: 150 mM Sodium Phosphate Buffer pH 7.0, Injection Volume: 5 µL



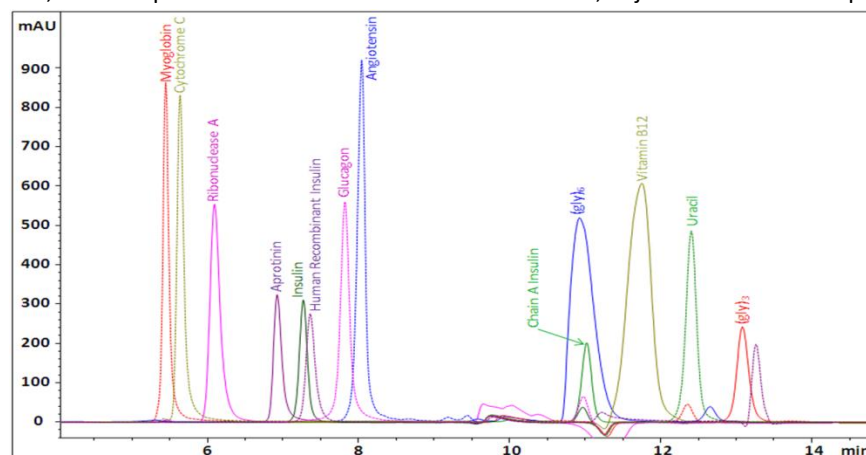
Overlay of Peptide Runs on Zenix™ SEC-80 7.8 x 300 mm

Column: Zenix SEC-80 7.8x300 mm, Flow rate: 1mL/min, Detection: UV 214 nm, Mobile phase: 75% Acetonitrile with 0.1% TFA, Injection Volume: 5 µL



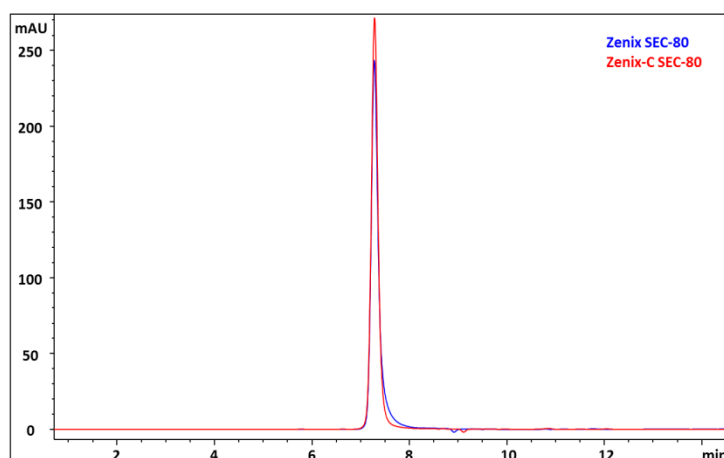
Overlay of Peptide Runs on Zenix™-C SEC-80 7.8 x 300 mm

Column: Zenix-C SEC-80 7.8x300 mm, Flow rate: 1mL/min, Detection: UV 214 nm, Mobile phase: 75% Acetonitrile with 0.1% TFA, Injection Volume: 5 µL



Similarities between Zenix™ and Zenix™-C SEC-80 Phases for the Analysis of Aprotinin

Column: Zenix SEC-80 7.8x300 mm, Flow rate: 1 mL/min, Detection: UV 214 and 280 nm, Mobile phase: 150 mM Sodium Phosphate Buffer pH 7.0, Injection Volume: 5 µL





Zenix™ SEC-80 and Zenix™-C SEC-80 for Peptide Analysis

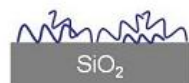
What are Zenix™ SEC-80 and Zenix™-C SEC-80?

Sepax Zenix™ and Zenix-C SEC-80 (Size Exclusion):

Ultra-high efficiency and resolution SEC column. Zenix™-80 SEC 3um is specifically designed for small protein and peptide 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.



SRT and Zenix Phase Stand-up Monolayer



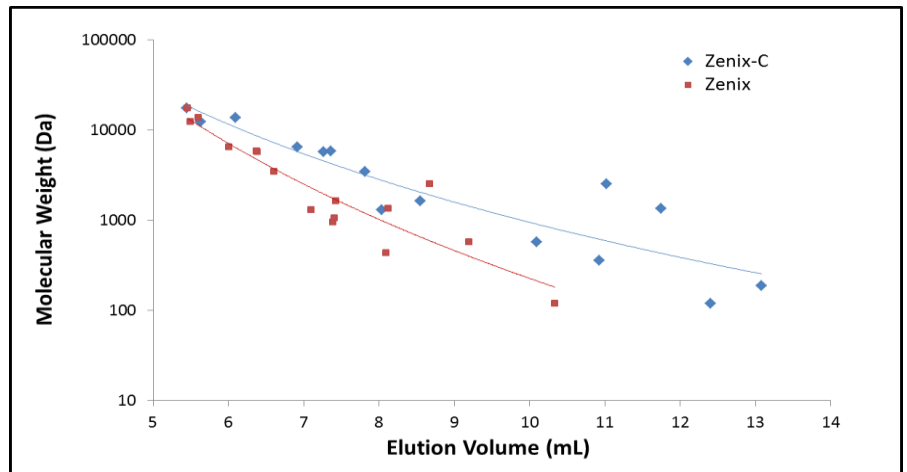
SRT-C and Zenix-C Phase Lay-down Monolayer

Technical Specifications:

Phase	Zenix SEC-80 and Zenix-C SEC-80
Material	Neutral, hydrophilic film bonded silica
Particle size (µm)	3
Pore size (Å)	80
pH stability	2 – 8.5 (pH 8.5-9.5 can be tolerated temporarily)
Backpressure (psi)	~ 1,500
Maximum backpressure	~ 4,500
Maximum temperature	~ 80 °C
Mobile phase compatibility	Aqueous and organics

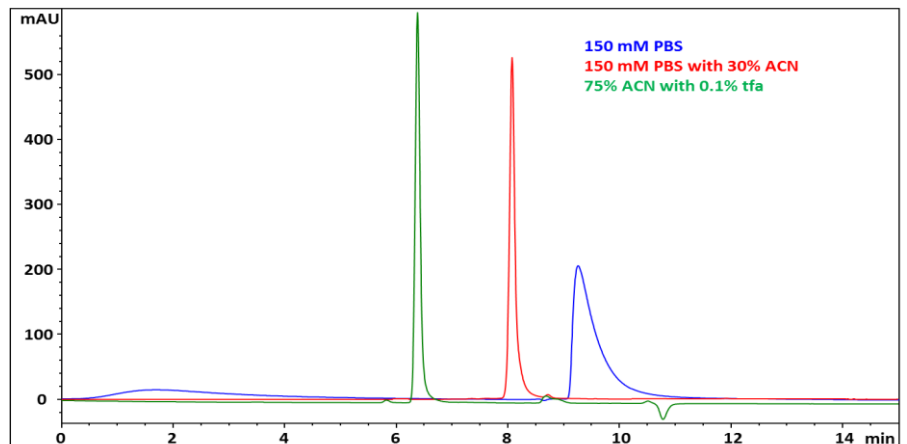
Calibration Curve for Zenix™ and Zenix™-C SEC-80

Column: Zenix™ SEC-80 and Zenix™-C SEC-80 7.8x300 mm, Flow rate: 1 mL/min, Detection: UV 214 nm, Mobile phase: 75% Acetonitrile with 0.1% TFA



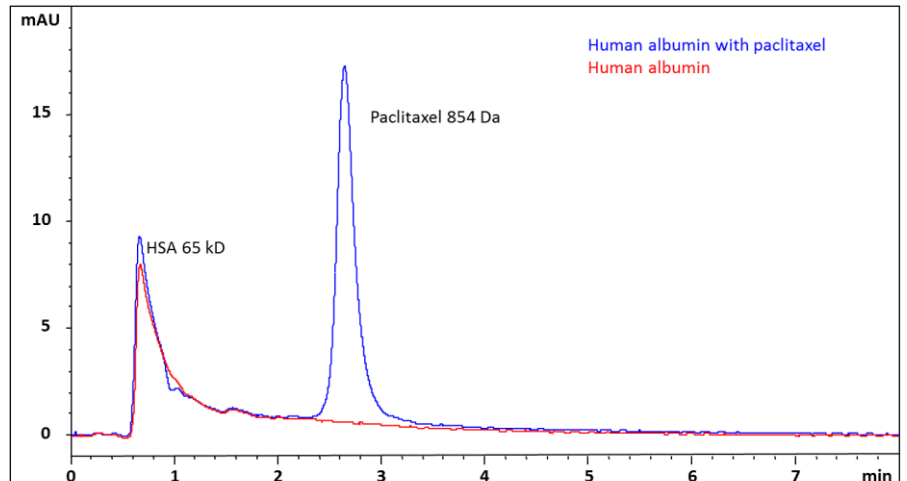
Mobile Phase Comparison on Zenix™ SEC-80 7.8 x 300 mm

Column: Zenix™ SEC-80 7.8x300 mm, Flow rate: 1 mL/min, Detection: UV 214 nm, Injection Volume: 5 µL, Sample: Insulin (1 mg/mL)



Fast Analysis using a Zenix™ SEC-80 2.1 x 50 mm for Mass Spec

Column: Zenix™ SEC-80 7.8x300 mm, Flow rate: 0.2 mL/min, Detection: UV 228 nm, Mobile phase: 50 mM NH₄Ac : ACN = 70:30 (v/v), Injection Volume: 0.1 µL



Sepax Technologies, Inc.

5 Innovation Way

Newark, Delaware 19711, USA

Tel: (302) 366-1101 | Fax: (302) 366-1151

E-mail: info@sepax-tech.com