



Zenix™ SEC 7.8x200mm

Thinking about ~\$80K UHPLC Bio System and sub 2 SEC column? What if Similar High Resolution & Fast Biomolecule Separation can be achieved with just One Single Column using your existing regular HPLC?

Sepax Zenix™ SEC 7.8x200mm provides valuable solution

\$1,300 > \$80,000

Zenix™ SEC
7.8x200mm
Regular HPLC

>

sub 2 SEC
column +
UHPLC Bio
system

Highlighted FACTS:

3um and 300A: high efficiency 3um, 300A pore for high resolution separation of MAb aggregates and main peak

Fast and low back pressure: 2 ml/min flow rate at 1,600 psi, resulting in **~3 minute** assays

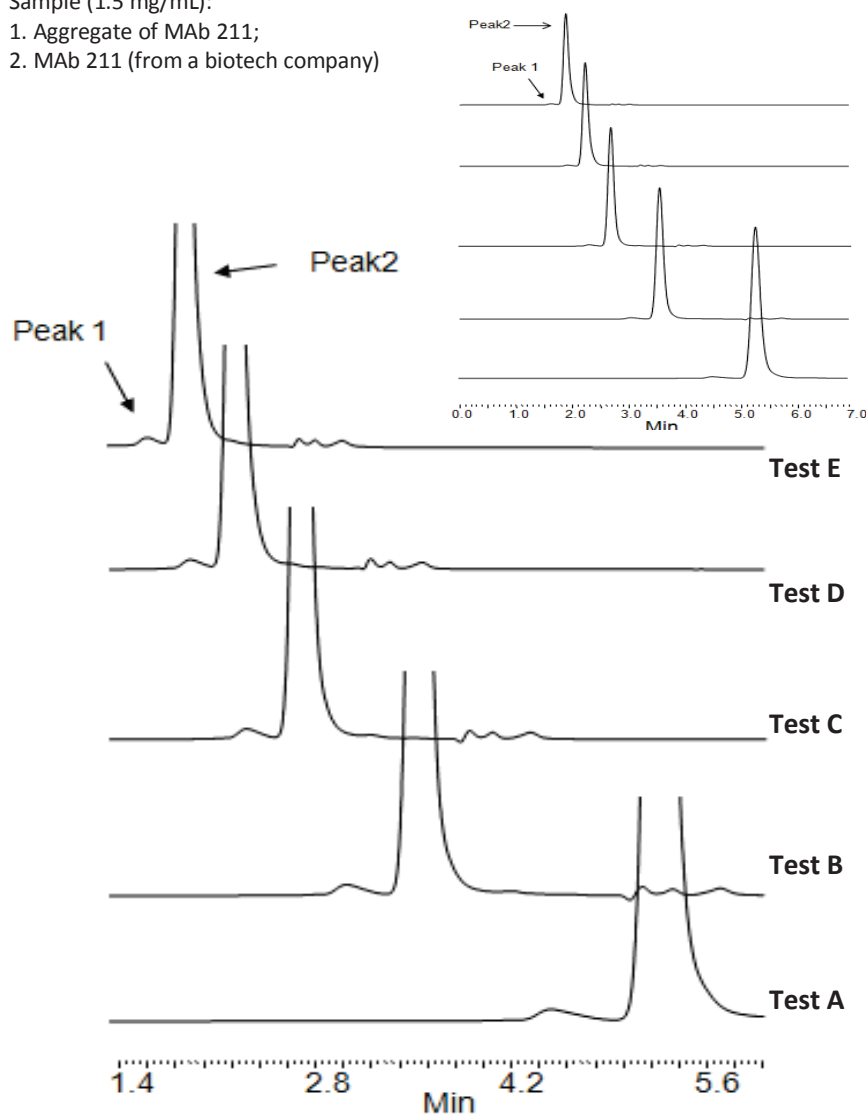
Lot-to-lot: same consistency you come to expect and rely on.

Versatility: compatible with regular conventional HPLC

Fast Separation of Mab & its Aggregates in Less Than 3 Minutes

Column: Zenix™ SEC-300 (3 μm, 7.8x200 mm); Mobile phase: 150mM sodium phosphate, pH 7.0; Flow rate: A/B/C/D/E = 1.0/1.5/2.0/2.5/3.0 mL/min
Injection volume: 10 μL; Detection: UV214 nm;
Temperature: Ambient (~23 °C)
Sample (1.5 mg/mL):

1. Aggregate of MAb 211;
2. MAb 211 (from a biotech company)



Separation results at various flow rates

Test	Flow rate (mL/min)	Backpressure (psi)	Retention time (min)		% Area		USP Resolution
			Peak 1	Peak 2	Peak 1	Peak 2	
A	1.0	550	4.51	5.28	1.38	97.92	1.9
B	1.5	1020	3.04	3.55	1.36	97.84	1.6
C	2.0	1550	2.23	2.71	1.31	97.20	1.6
D	2.5	2050	1.92	2.23	1.38	97.02	1.5
E	3.0	2450	1.62	1.89	1.26	96.92	1.3



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What is Zenix® SEC:

Sepax Zenix™ SEC (Size Exclusion):

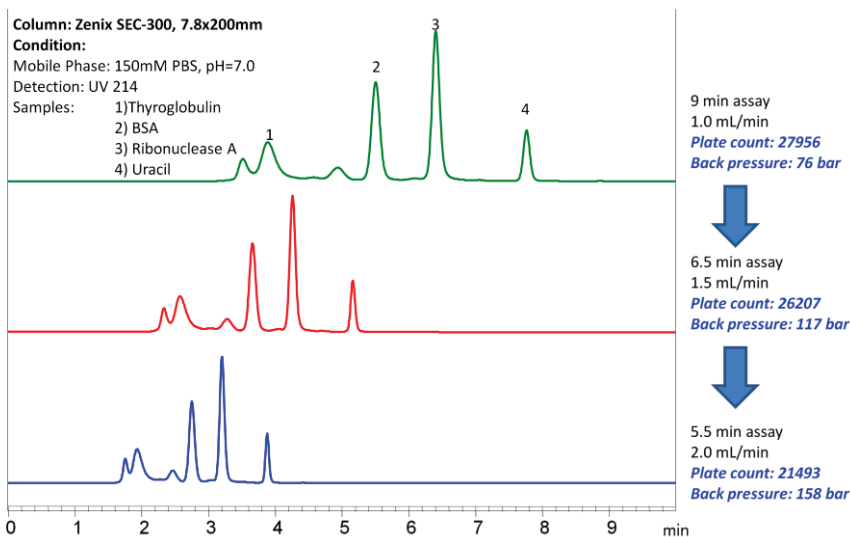
Ultra-high efficiency and resolution SEC column-Zenix™ SEC 3µm, available with 100, 150 or 300Å, smallest particle for Sizing in the market, delivers unrivaled resolving power and reproducibility. Ideal for fast assay and HTS lab applications. Made of uniform, hydrophilic, and neutral nanometer thick proprietary surface coating chemically bonded on silica, offers long column lifespan and negligible non-specific interactions.

Technical Specifications:

Phase	Zenix™ SEC-300
Material	Neutral, hydrophilic film bonded silica
Particle size (µm)	3
Pore size (Å)	~ 300
Protein MW range (native)	5,000 - 1,250,000
pH stability	2 – 8.5 (pH 8.5-9.5 can be tolerated temporarily)
Backpressure (psi) for 7.8x300 mm (1.0 mL/min)	~ 1,100
Backpressure (psi) for 4.6x300 mm(0.35 mL/min)	~ 1,000
Maximum backpressure	~ 3,500
Salt concentration range	20 mM - 2.0 M
Maximum temperature	~ 80 °C
Mobile phase compatibility	Aqueous and organic

Zenix SEC-300 Ordering Information

- Z777030 Zenix SEC-300, 3 µm, 15 cm x 7.8 mm
- Z777031 Zenix SEC-300, 3 µm, 20 cm x 7.8 mm
- Z777032 Zenix SEC-300, 3 µm, 25 cm x 7.8 mm
- Z777033 Zenix SEC-300, 3 µm, 30 cm x 7.8 mm



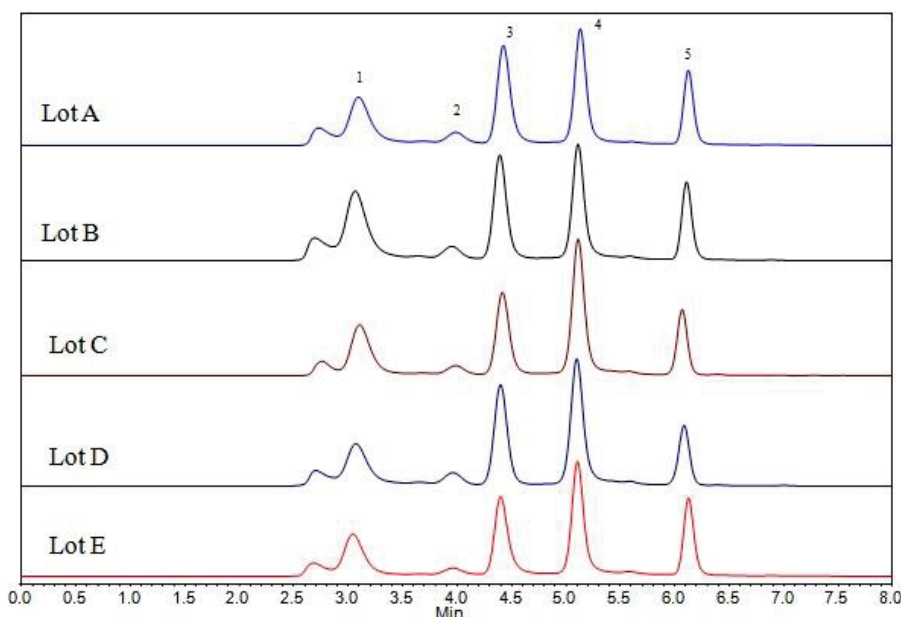
Column Condition:

Mobile phase: 150 mM PBS, pH 7;
 Detection: UV 214
 Sample: 1) Thyroglobulin
 2) BSA
 4) Ribonuclease A
 5) Uracil

Lot-to-Lot Reproducibility

Mobile phase: 150 mM PBS, pH 7;
 Flow rate: 1.0 mL/min; Detection: 214 nm;
 T=Ambient; Injection: 10 µL
 Sample: 1) Thyroglobulin
 2) BSA dimer
 3) BSA
 4) Ribonuclease A
 5) Uracil

Lot-to-Lot Reproducibility: Zenix SEC-300 (3µm, 7.8x150mm)



See: www.sigmaaldrich.com/sepax for a complete listing of these and other Sepax Technologies products