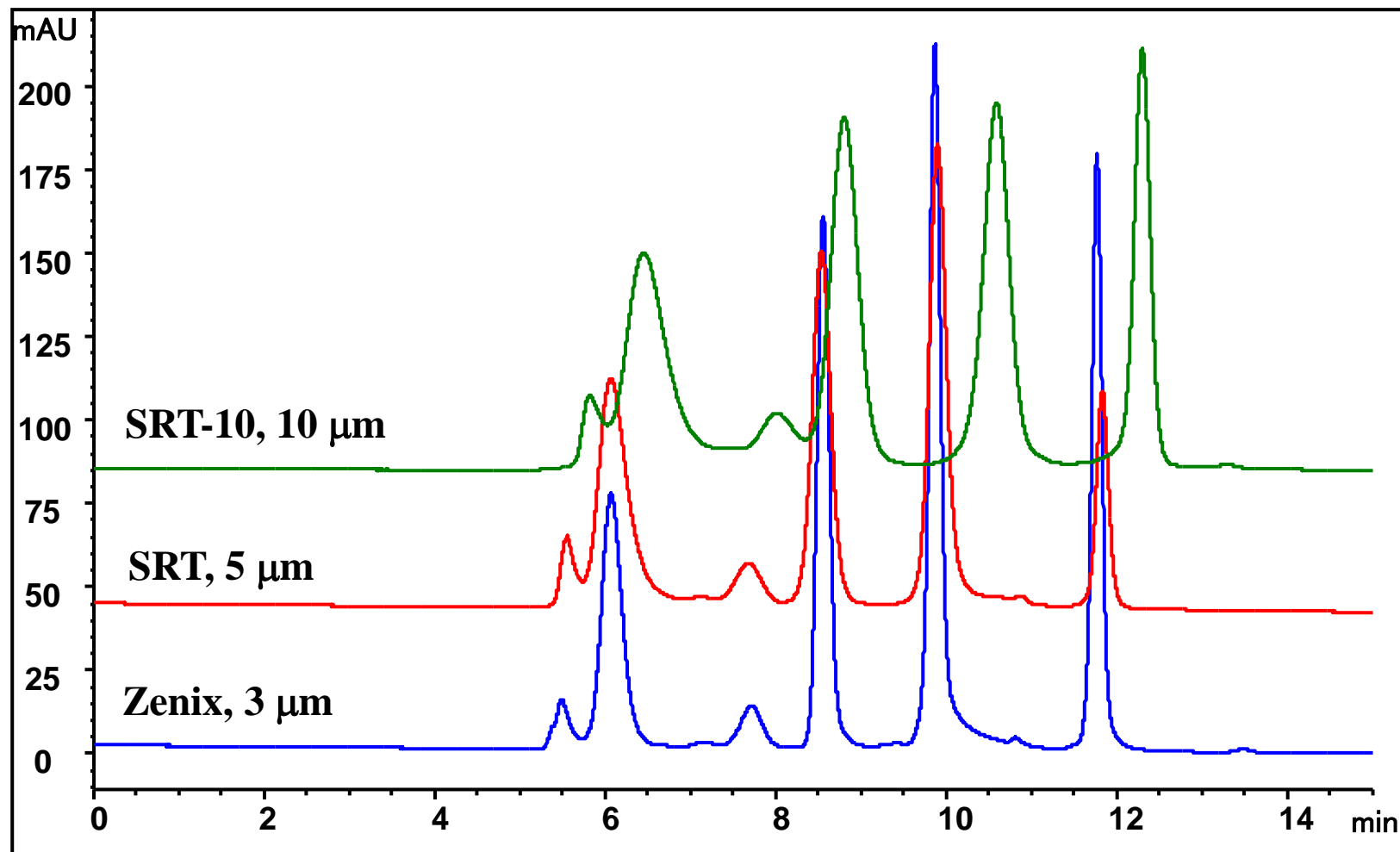


# QC standard overlays with 3, 5, 10 $\mu\text{m}$ SEC-300, 7.8x300 mm

## Highlight: Scalability and High Resolution



# SRT10 1030 vs. GE Superdex® 200 1030

MAb – SRT 300  
ADC - SRT-C 300

Flow rate (mL/min)	System Pressure (psi), 150mM PB	With column SEPAX 1030 (PSI)*	With column GE Superdex 1030 (PSI)*
0.75	40	120	186
1	48	150	240
1.5	62	210	
2	75	270	

\*System pressure + column pressure on AKTA explorer 100

GE column Superdex 1030 has a pressure limit of **218 PSI**. Sepax SRT10 1030 has a pressure limit of **3,500 PSI**.

AKTA explorer 100: flow rate up to 100 mL/min, 100 bar or 1450 PSI pressure limit

AKTA explorer 10: flow rate up to 10 mL/min, 250 bar or 3625 PSI pressure limit

New model:

AKTA Avant 25: 25 mL/min, 200 bar or 2900 PSI limit

AKTA Avant 150: 150 mL/min, 50 Bar or 725 PSI limit

Superdex® is registered trade mark of GE



[www.sepax-tech.com](http://www.sepax-tech.com)

Better Surface Chemistry for Better Separation © Sepax Technologies, Inc.

# Superdex vs. SRT 10 (column dimension, flow rate and pressure)

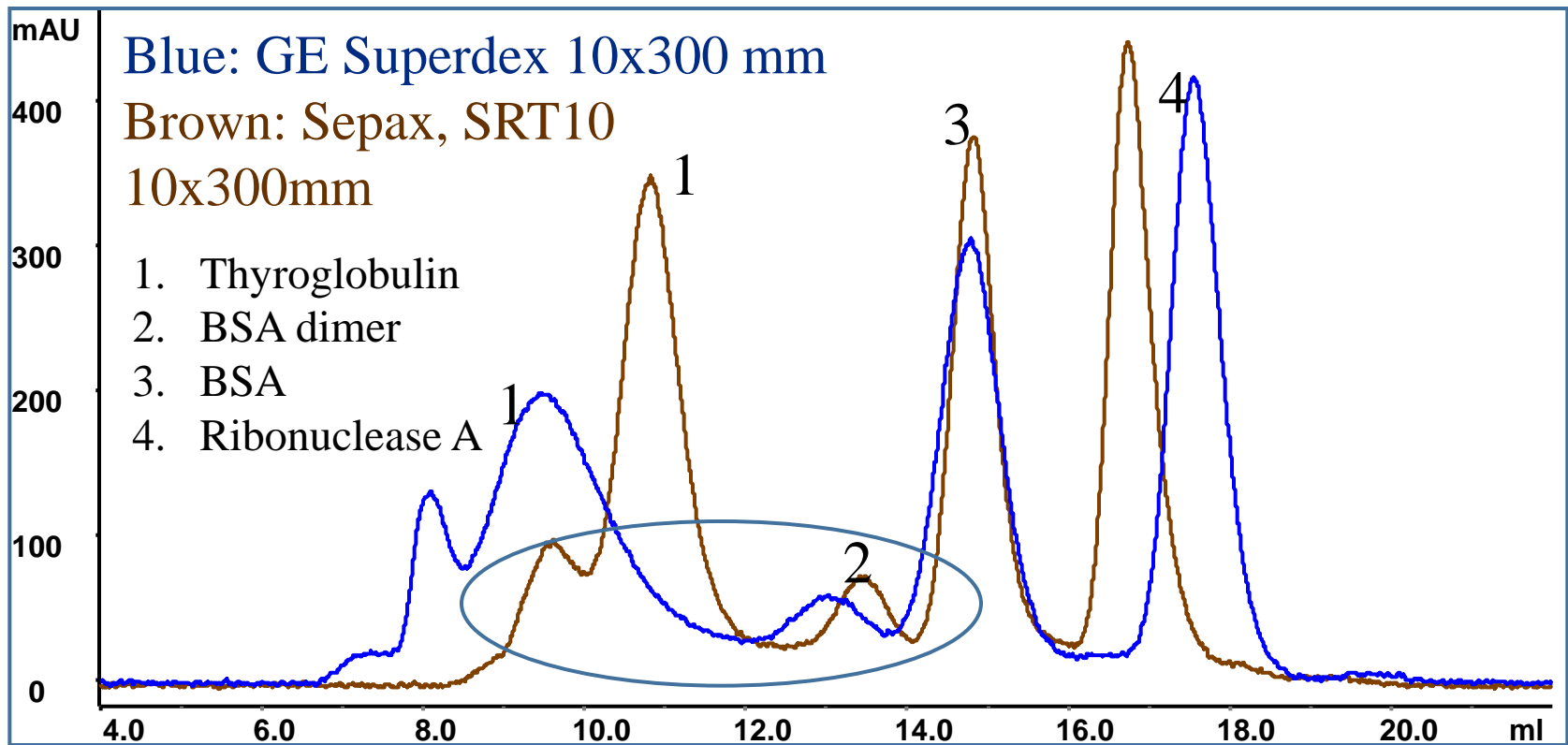
GE Superdex 200	Pressure (PSI)	Sepax SRT10 (300Å)	Flow rate range
10x300 (24mL)	218 (0.25- 0.75mL/min)	10x300 (24 mL)	1-2mL/min
16x600 (120mL)	72 (0.33- 1.7mL/min)	21.2x400 (141mL)	5-20mL/min
		21.2x600 (210 mL)	5-20mL/min
26x600 (320mL)	72 (0.88- 4.4mL/min)	30x450 (317mL)	15-50mL/min
		30x600 (424mL)	15-50mL/min

Note: GE column pressure is the maximum pressure the column can handle. Sepax columns have maximum pressure 3,500 PSI for SRT10 300



# GE and Sepax 10x300mm comparison

5mg/mL TBR, 500  $\mu$ L, 0.75mL/min, 150mM phosphate buffer, pH 7.0, UV280nm

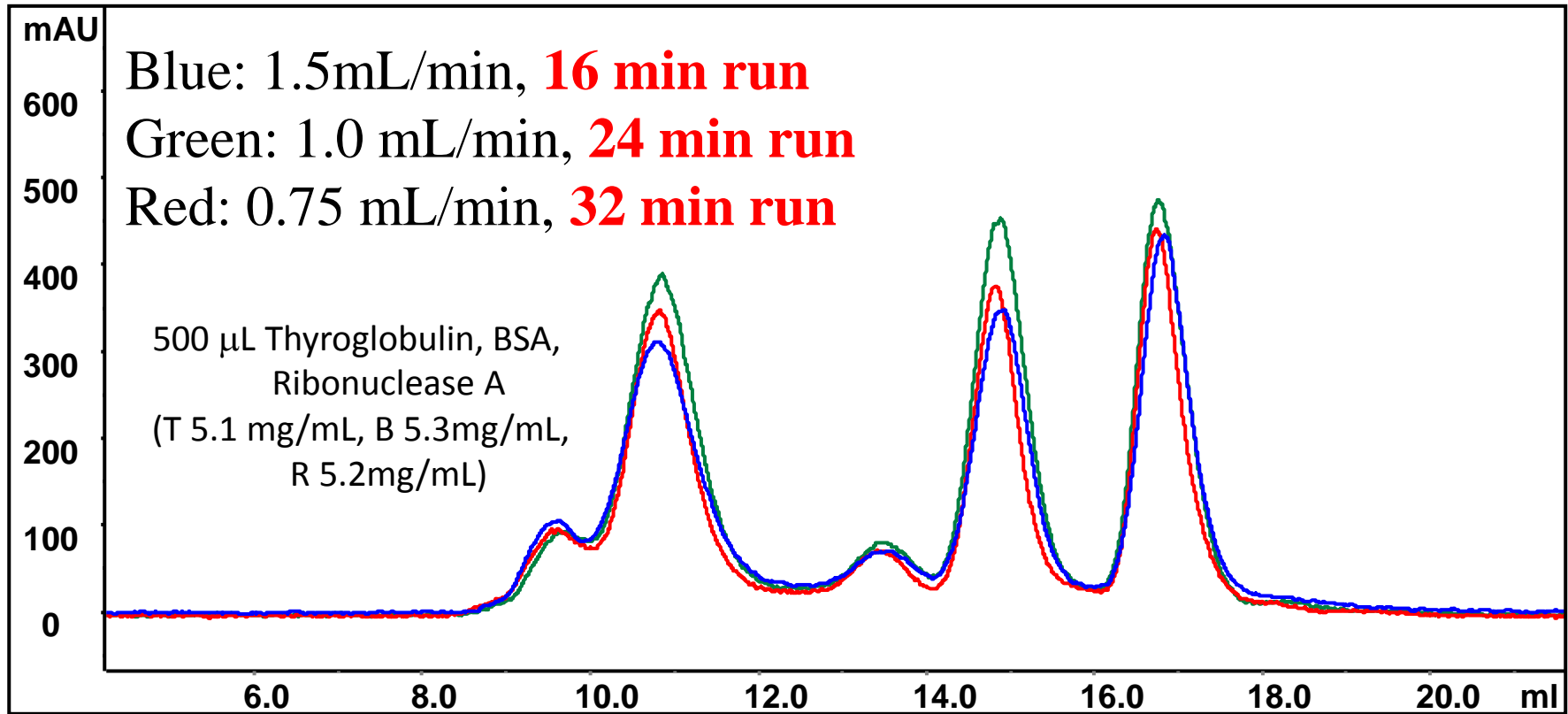


Sepax column has better separation between Thyroglobulin and BSA (circled area) while GE column has better separation between BSA and RA. If lower molecular weight protein separation is of interest, smaller pore size(150Å) SEC column is recommended.



# 'Fast Assay' Semi-Prep FPLC

Sepax SRT10 10x300, 300Å at 0.75, 1, 1.5 mL/min flow rate for faster assay



SRT 10 can be run under faster flow rate than GE column. On the current FPLC system, GE column only can be run at or below 0.75 mL/min (recommended flow rate by GE). With >0.75ml/min flow rate (1.5ml/min), SRT10 offers high resolution solution for faster assay.



# Assay Time Comparison

## GE Superdex 200 1030 vs. SRT10 1030\*

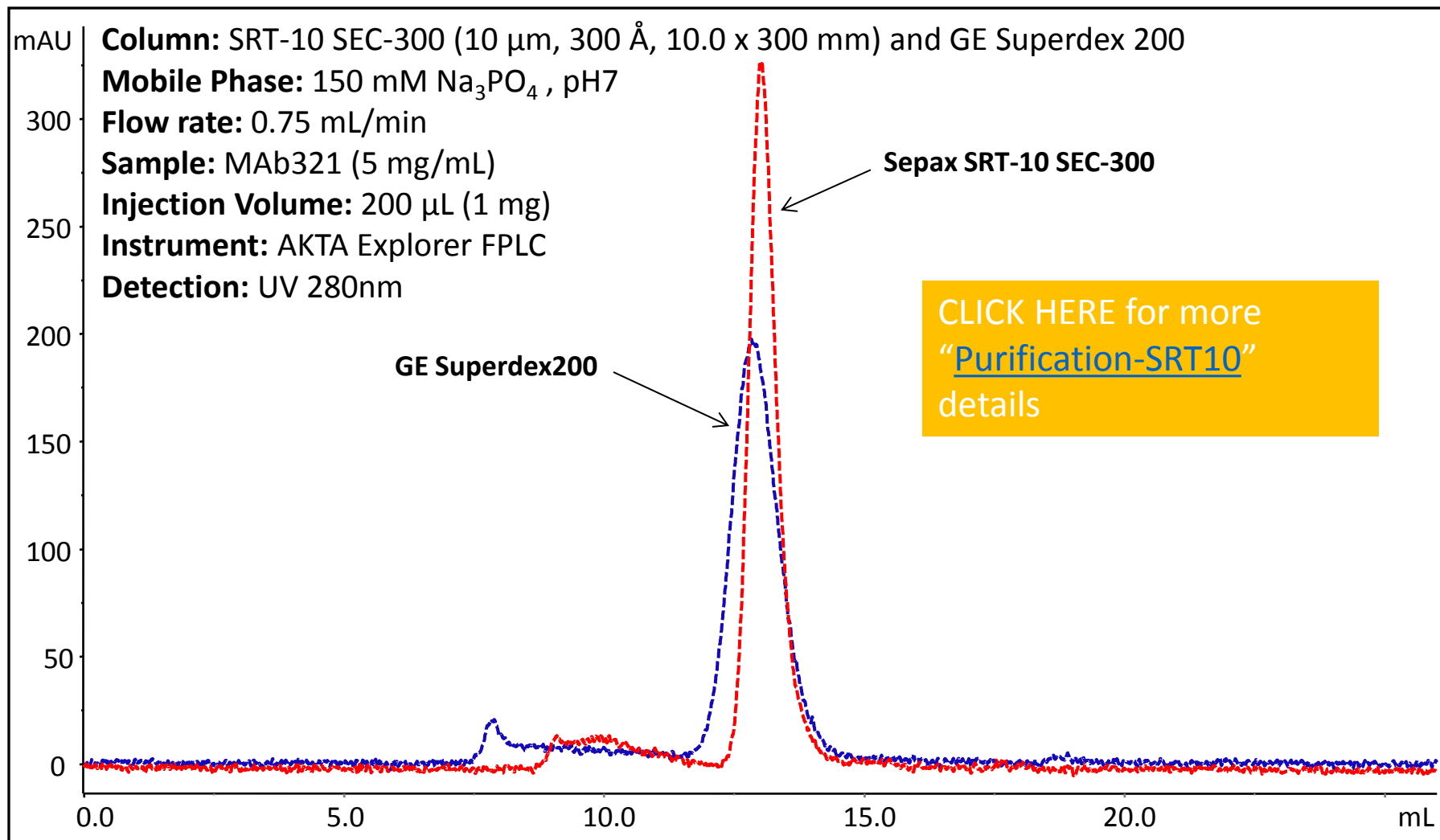
Flow rate (mL/min)	GE 1030 (min)	Sepax SRT10 1030 (min)
0.75	32	32
1	Not recommended	24
1.5	Not recommended	16
2	Not recommended	12

32 min vs. 12 min = 63% faster assay

\*Based on 1 cv (24mL) elution.



# Comparison of SRT-10 and GE Superdex 200



Sepax's SRT-10 SEC-300 gives much sharper and taller peaks than GE's Superdex 200, which displays much broader peaks.

