

# Sepax June Newsletter

- Sepax size exclusion chromatographic columns can be successfully applied to biological sample separation such as monoclonal antibody, biospecific antibody, fusion proteins, membrane proteins.
- Sepax SEC columns are suitable for protein separation with varieties of detergents as additives in the mobile phase.
- Different pore sizes of Sepax SEC offers a wide range of separation for different protein molecular weights.



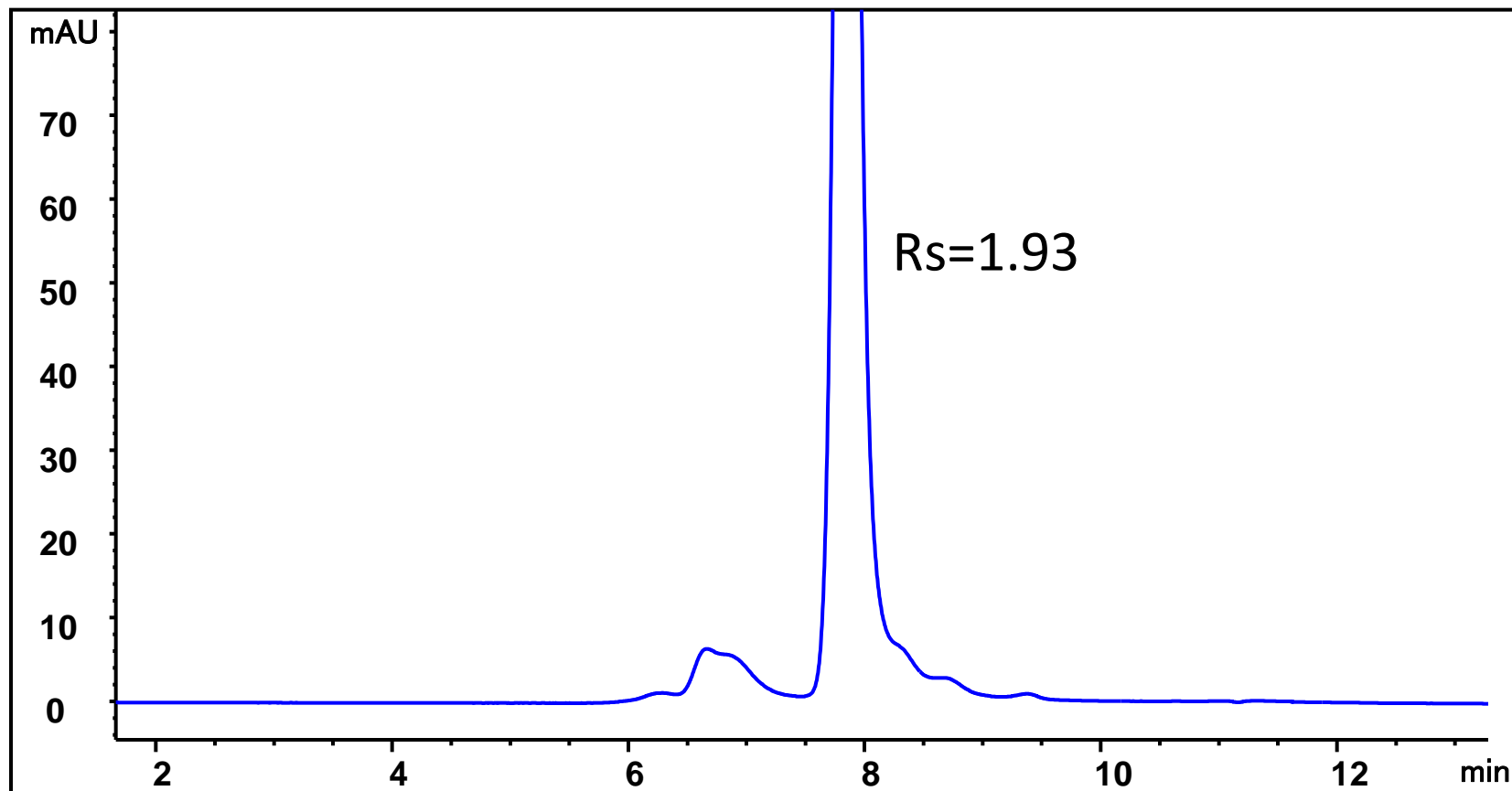
# Herceptin Analysis on Zenix<sup>®</sup> SEC-300 ( 7830 )

Column: Zenix<sup>®</sup> SEC-300, ( 3  $\mu$ m, 300 Å, 7.8 x 300 mm)

Mobile phase: 150 mM phosphate buffer

Flow rate: 1 mL/min; Detector: UV 280 nm; Column temperature: 25 °C

Injection volume: 10  $\mu$ L; Samples: Herceptin 2.34 mg/mL

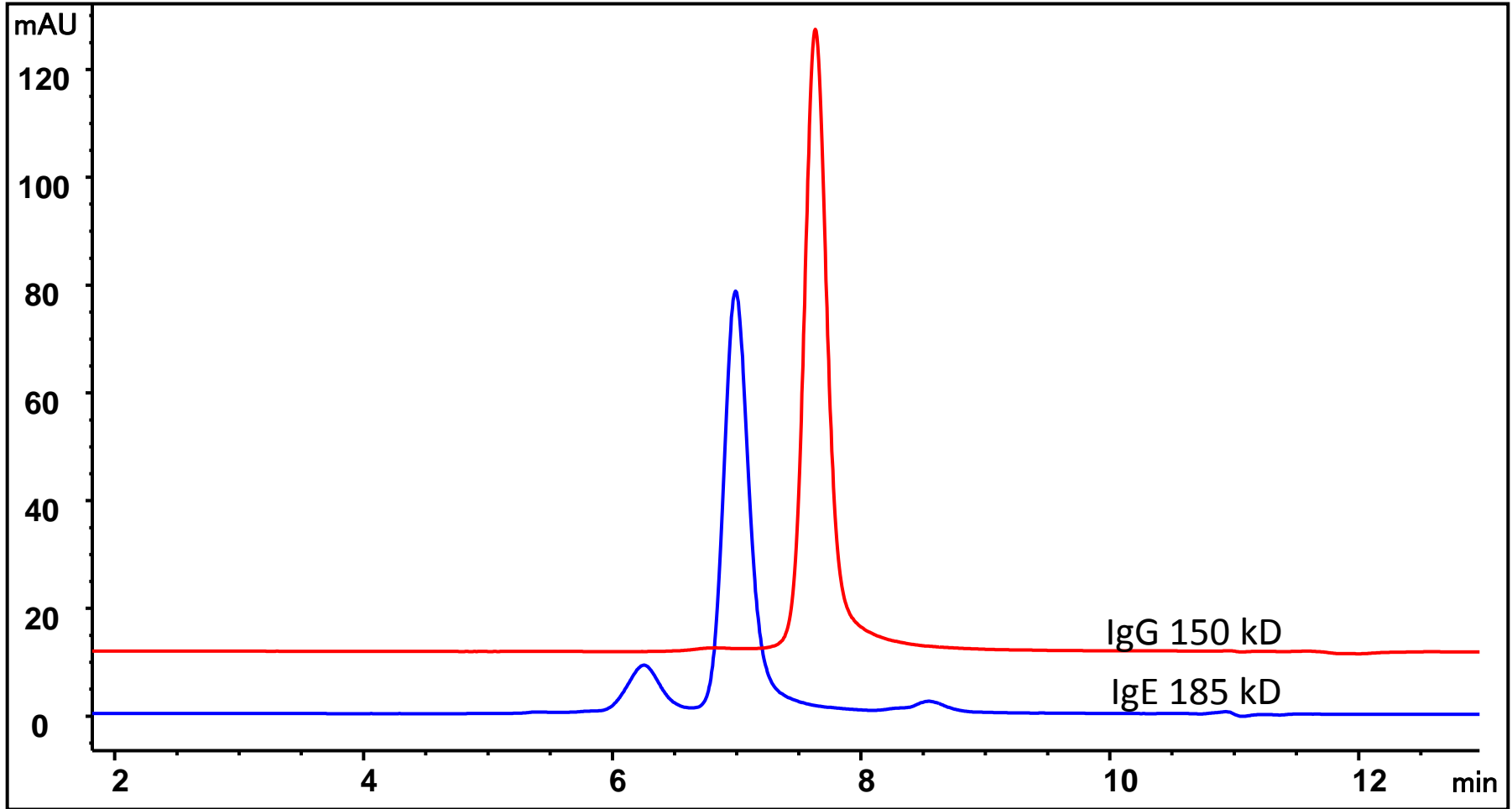


# IgE and IgG separation on Zenix SEC-300

Column: Zenix<sup>®</sup> SEC-300 (3  $\mu\text{m}$ , 300  $\text{\AA}$ , 7.8 x 300 mm)

Mobile phase: 150 mM Sodium Phosphate Buffer pH 7.0, Column temperature: 25  $^{\circ}\text{C}$

Flow rate: 1.0 mL/min; Sample injection: Human IgE (from Abcam), mouse IgG 20  $\mu\text{g}$  each



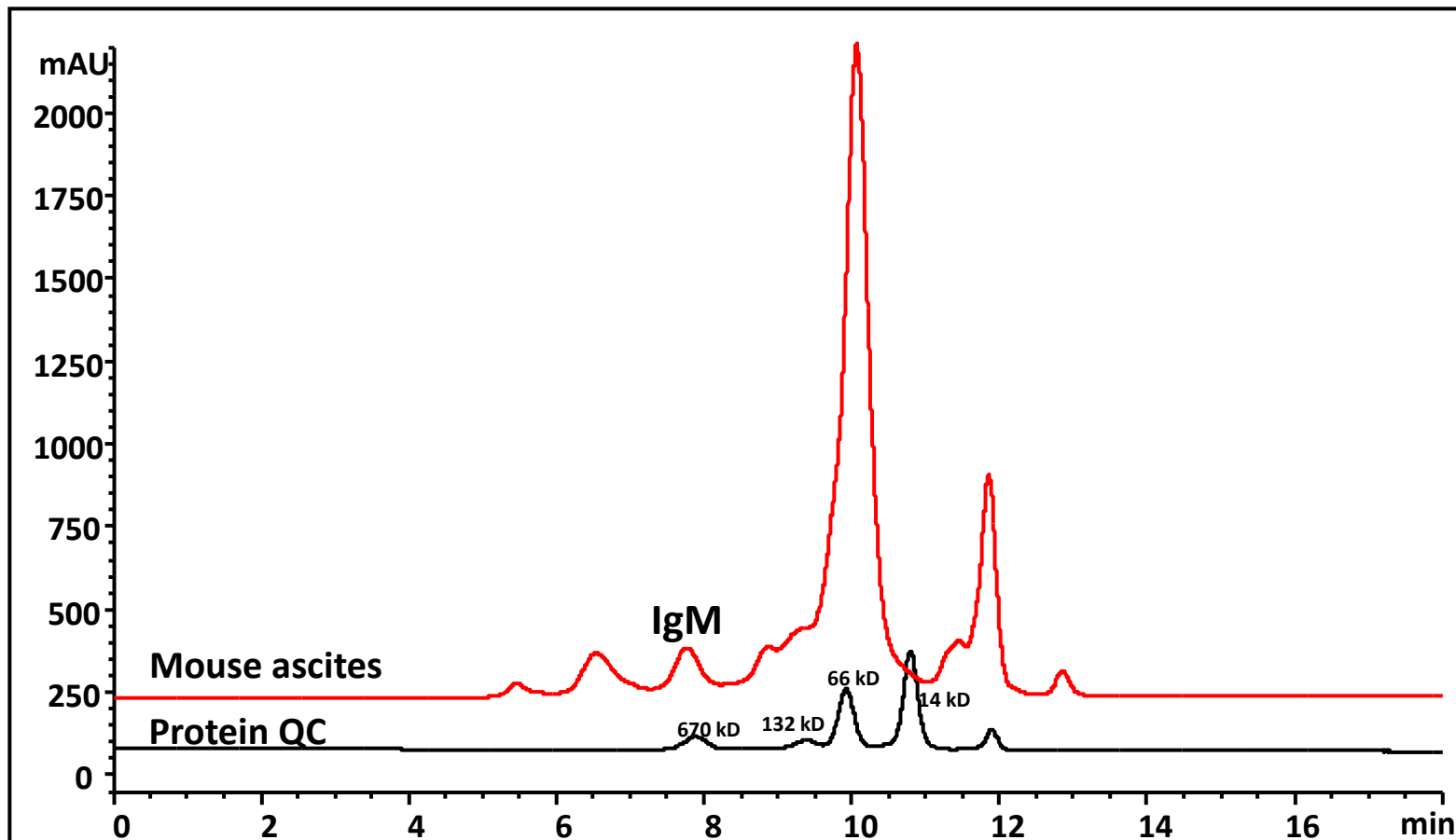
# IgM from mouse ascites analysis on SRT SEC-500

Column: **SRT SEC-500** (5  $\mu\text{m}$ , 500  $\text{\AA}$ , 7.8 x 300 mm)

Mobile phase: 150 mM sodium phosphate buffer, pH 7.0

Flow rate: 1 mL/min; Detector: UV 280 nm; Column temperature: 25  $^{\circ}\text{C}$

Injection: 50  $\mu\text{L}$  mouse ascitic fluid (1mg/mL IgM)



# Fc Fusion Protein separation on Zenix SEC-300

Column: Zenix<sup>®</sup> SEC-300 ( 3  $\mu\text{m}$ , 300  $\text{\AA}$ , 7.8 x 300 mm)

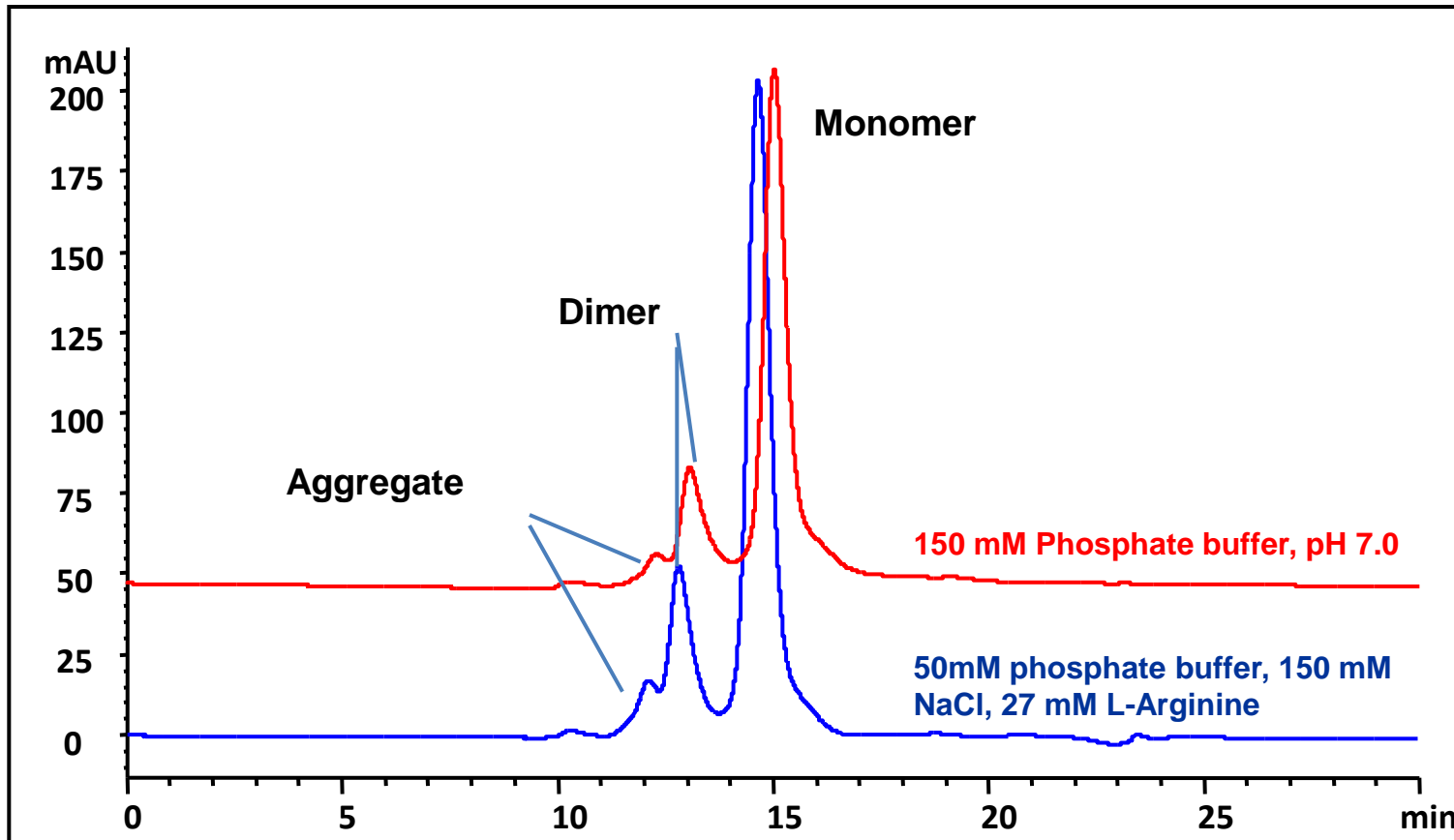
Mobile phase 1: 150 mM Phosphate buffer, pH 7.0

Mobile phase 2: 50mM phosphate buffer, 150 mM NaCl, 27 mM L-Arginine, pH 7.0

Flow rate: **0.5 mL/min**; Detector: UV 280 nm; Column temperature: Room temperature

Injection volume: 50  $\mu\text{L}$ ; Pressure: 50 bar;

Sample: CHO cell expressed Fc-fusion protein 160 kD ( 2.0 mg/mL )



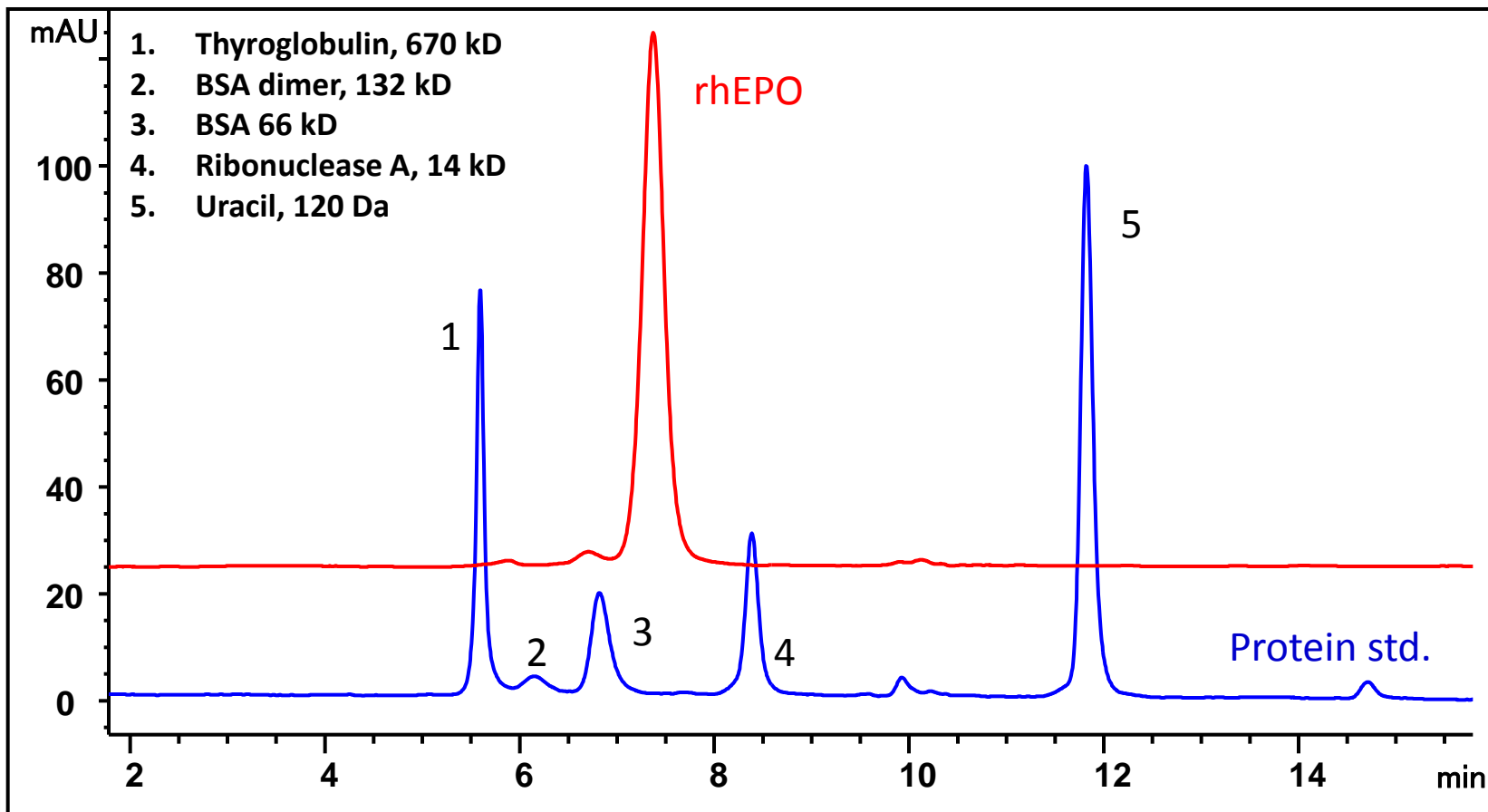
# Recombinant Human Erythropoietin (CHO cell) rhEPO separation on Zenix<sup>®</sup> SEC-150

Column: Zenix<sup>®</sup> SEC-150 (3  $\mu$ m, 150  $\text{\AA}$ , 7.8 x 300 mm)

Mobile phase: 150 mM phosphate buffer, pH 7.0, Flow rate: 1 mL/min,

Detector: 280 nm, Column temperature: 25  $^{\circ}$ C,

Sample injection: 10  $\mu$ L rhEPO 3 mg/mL in 100 mM NaCl, 0.3 mM citric acid and 23 mM sodium citrate



# Bacterial ABC transporter, MsbA (65 kD homodimer) in 0.1% UDM

Column: SRT<sup>®</sup> SEC-300 (5 μm, 300 Å, 4.6 x 300 mm) and SRT<sup>®</sup> SEC-500 (5 μm, 500 Å, 4.6 x 300 mm)

Mobile phase: 20 mM Tris pH 7.5, 20 mM NaCl, 0.1% UDM (β-undecylmaltoside),

Detection: 280 nm, Flow rate: 0.35 mL/min, AKTA FPLC system

