

# Intact and Oxidized MAb Analysis on Proteomix HIC Butyl 1.7 $\mu\text{m}$

*Proteomix*<sup>®</sup> HIC Butyl NP1.7  $\mu\text{m}$  (1.7  $\mu\text{m}$ , 4.6 x 35 mm), PN: 431NP2-4603

*Proteomix*<sup>®</sup> HIC Butyl NP1.7  $\mu\text{m}$  (1.7  $\mu\text{m}$ , 4.6 x 100 mm), PN: 431NP2-4610



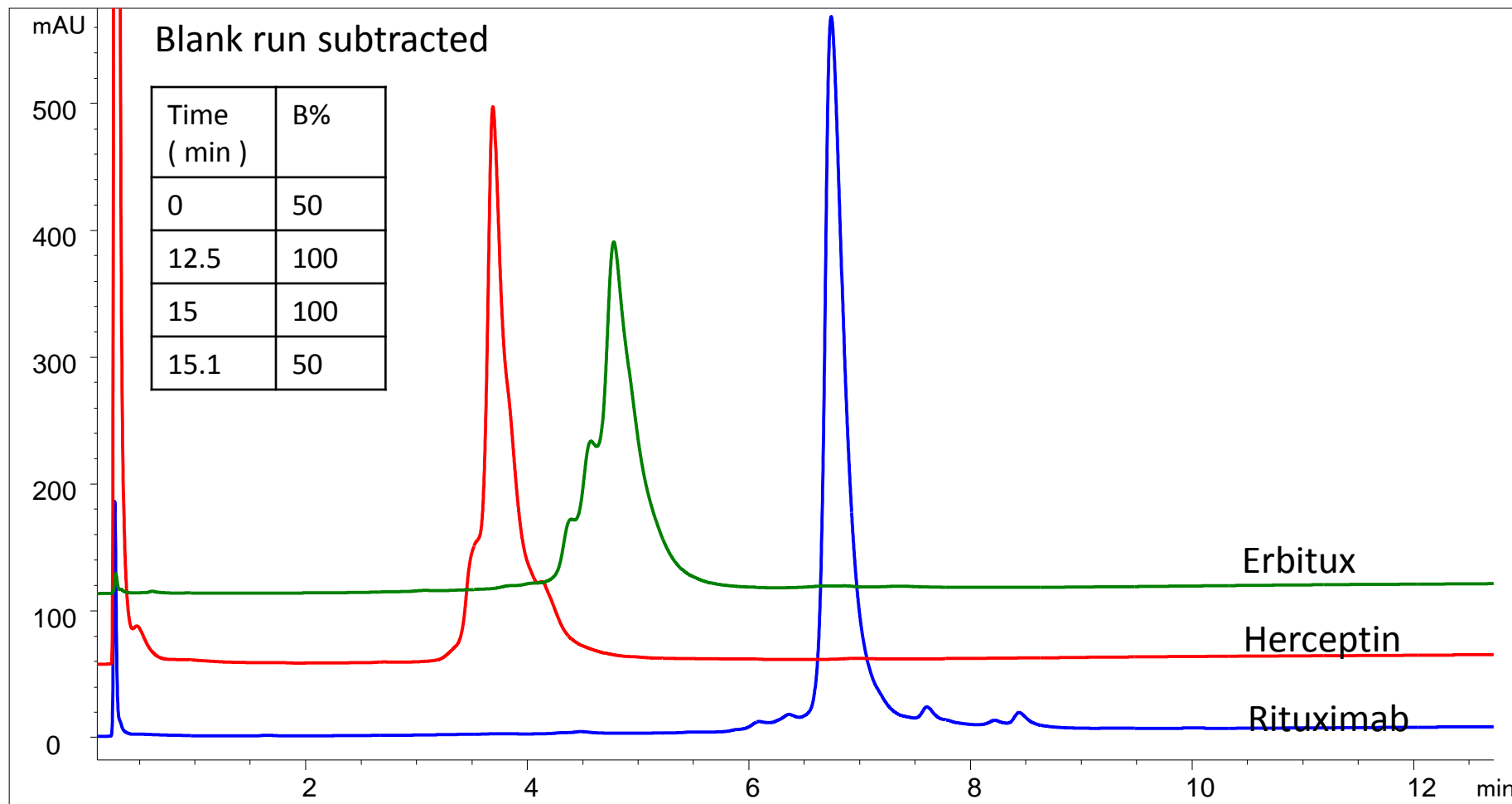
# MAb (Erbitux, Herceptin and Rituximab) Separation on HICM1008 Proteomix® HIC Butyl NP1.7

Column: Proteomix® HIC Butyl NP1.7  $\mu\text{m}$  (1.7  $\mu\text{m}$ , 4.6 x 35 mm), PN: 431NP2-4603

Mobile phase: A: 100 mM sodium phosphate buffer, 2 M ammonium sulfate, pH 7.0, B: 100 mM sodium phosphate buffer, pH 7.0;

Flow rate: 0.8 mL/min, Detector: UV 214 nm, Column temperature: 25°C

Injection: 10  $\mu\text{g}$  mAb samples, 1 mg/mL Erbitux, 0.5 mg/mL Herceptin in 1 M ammonium sulfate, 50 mM phosphate buffer, 2.5 mg/mL rituximab in 500 mM ammonium sulfate, 25 mM phosphate buffer



# RituximAb oxidation-NP1.7

HICM1008

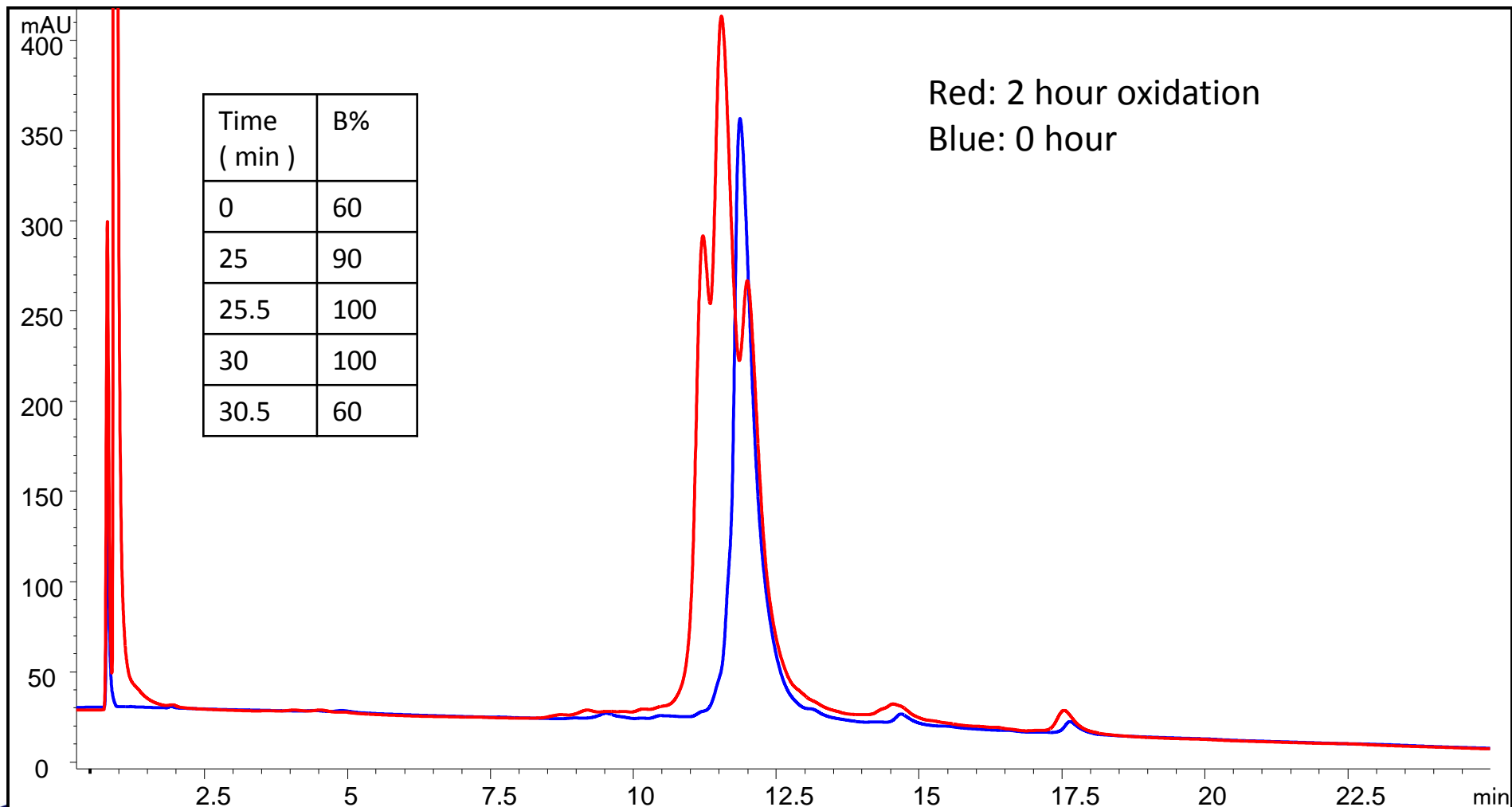
Column: Proteomix® HIC Butyl NP1.7  $\mu\text{m}$ , (1.7  $\mu\text{m}$ , 4.6 x 100 mm), PN: 431NP2-4610

Mobile phase: A: 100 mM sodium phosphate buffer, 2 M ammonium sulfate, pH 7.0,

B: 100 mM sodium phosphate buffer, pH 7.0

Flow rate: 0.8 mL/min, Detector: UV 214 nm, Column temperature: 25°C; Pressure: 560 bar

Injection: 12.5  $\mu\text{g}$  mAb sample, 25  $\mu\text{g}$  oxidized mAb



mAb oxidation: 10 mg/mL was diluted to 2.5 mg/mL with water and 70% t-BHP was added to a final 5% concentration, incubate in dark and take time point, dilute to 2.5 mg/mL in 500 mM ammonium sulfate, 25 mM phosphate buffer

# RituximAb oxidation-NP1.7

HICM1008

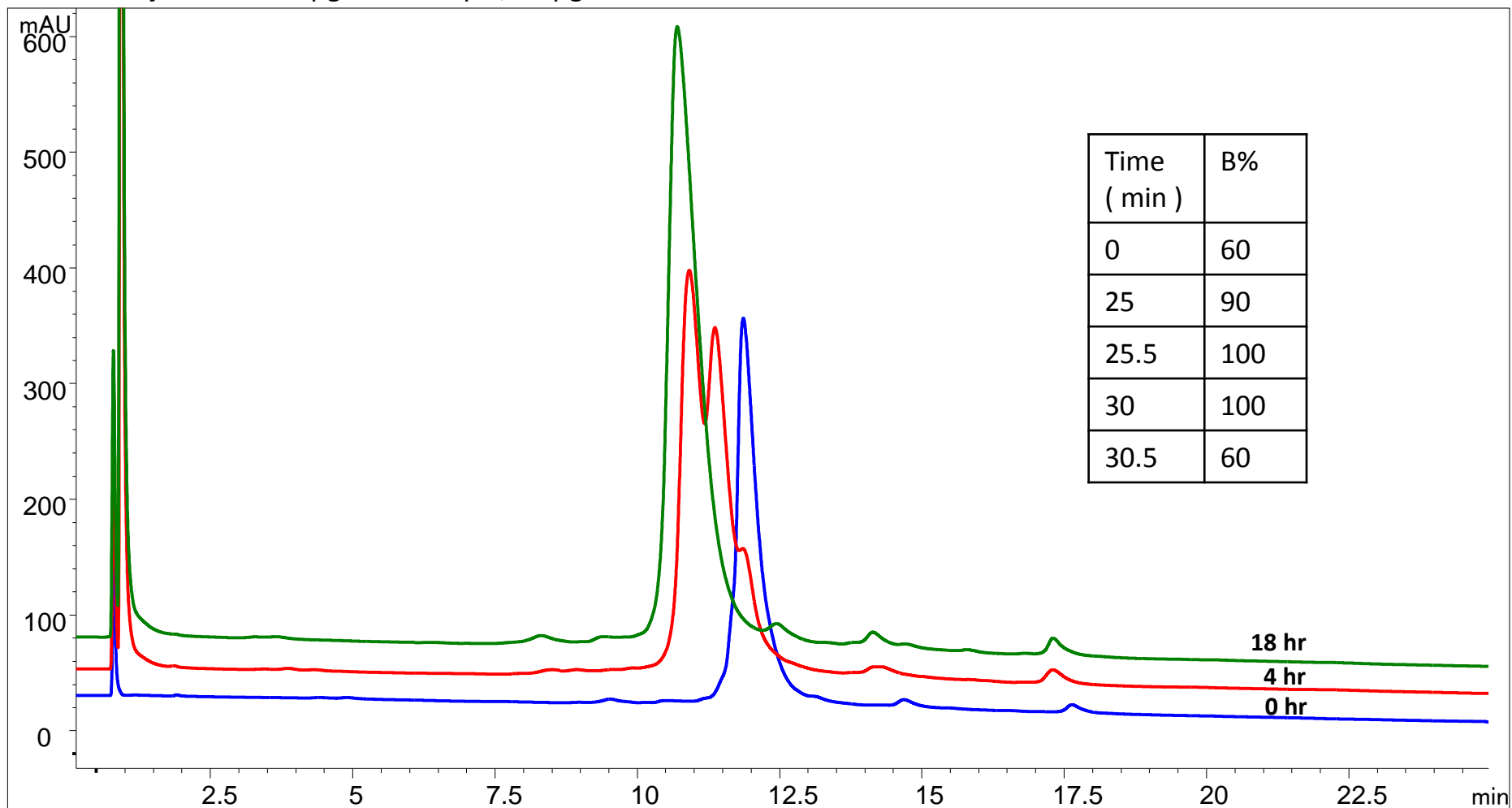
Column: Proteomix® HIC Butyl NP1.7  $\mu\text{m}$  (1.7  $\mu\text{m}$ , 4.6 x 100 mm), PN: 431NP2-4610

Mobile phase: A: 100 mM sodium phosphate buffer, 2 M ammonium sulfate, pH 7.0,

B: 100 mM sodium phosphate buffer, pH 7.0;

Flow rate: 0.8 mL/min, Detector: UV 214 nm, Column temperature: 25°C; Pressure: 560 bar

Injection: 12.5  $\mu\text{g}$  mAb sample, 25  $\mu\text{g}$  oxidized mAb



# Comparison

Proteomix HIC-butyl NP1.7 vs. NP5  
vs. other vendor



# RituximAb oxidation-NP5 and 1.7 um- 2 hr oxidation HICM1008

Column: Proteomix® HIC Butyl NP1.7 µm (1.7 µm, 4.6 x 100 mm), PN: 431NP2-4610

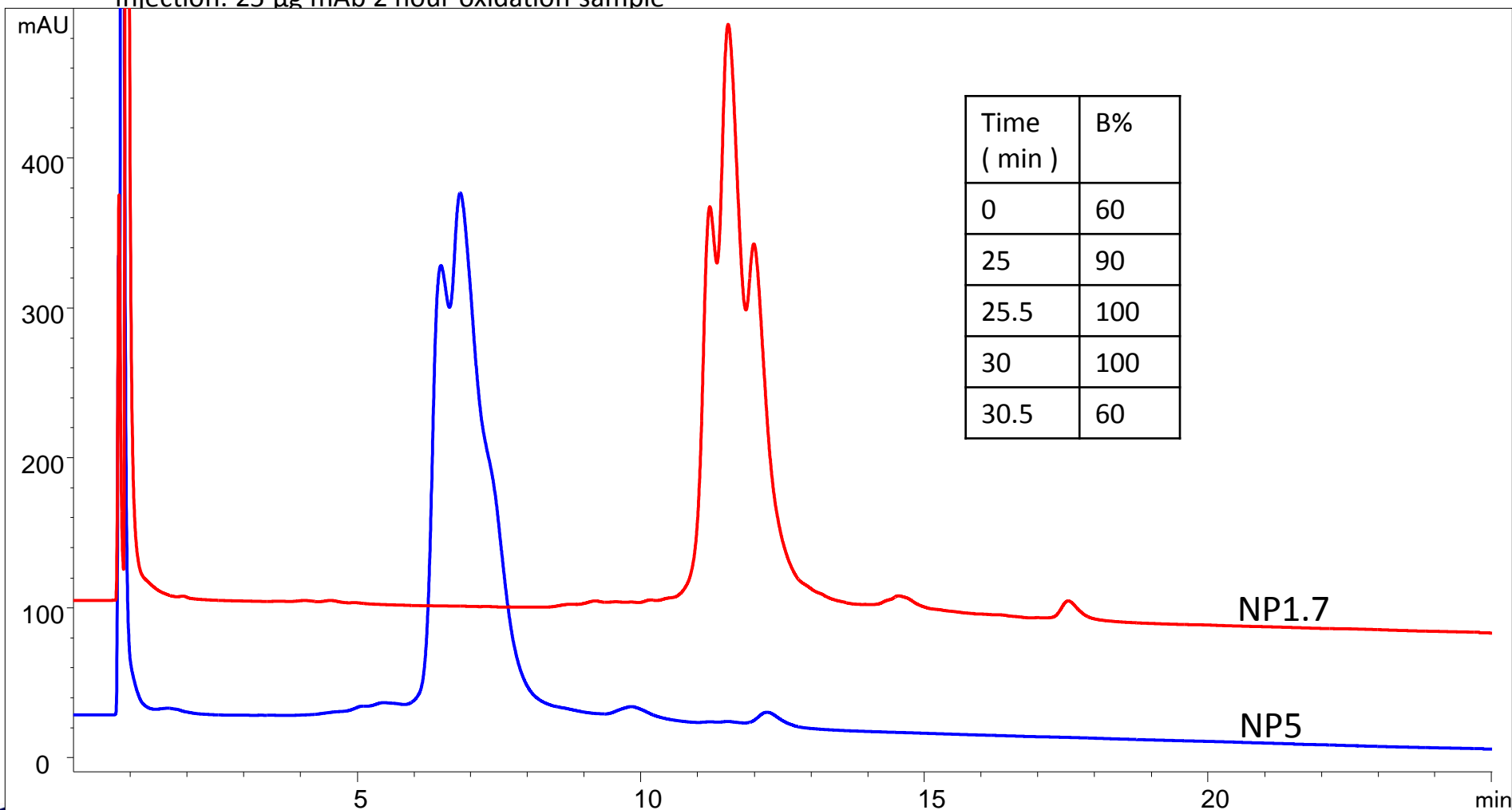
Proteomix® HIC Butyl-NP5 µm (5 µm, 4.6 x 100 mm), PN: 431NP5-4610

Mobile phase: A: 100 mM sodium phosphate buffer, 2 M ammonium sulfate, pH 7.0,

B: 100 mM sodium phosphate buffer, pH 7.0;

Flow rate: 0.8 mL/min, Detector: UV 214 nm, Column temperature: 25°C;

Injection: 25 µg mAb 2 hour oxidation sample



# RituximAb separation - NP5 and 1.7 $\mu\text{m}$

HICM1008

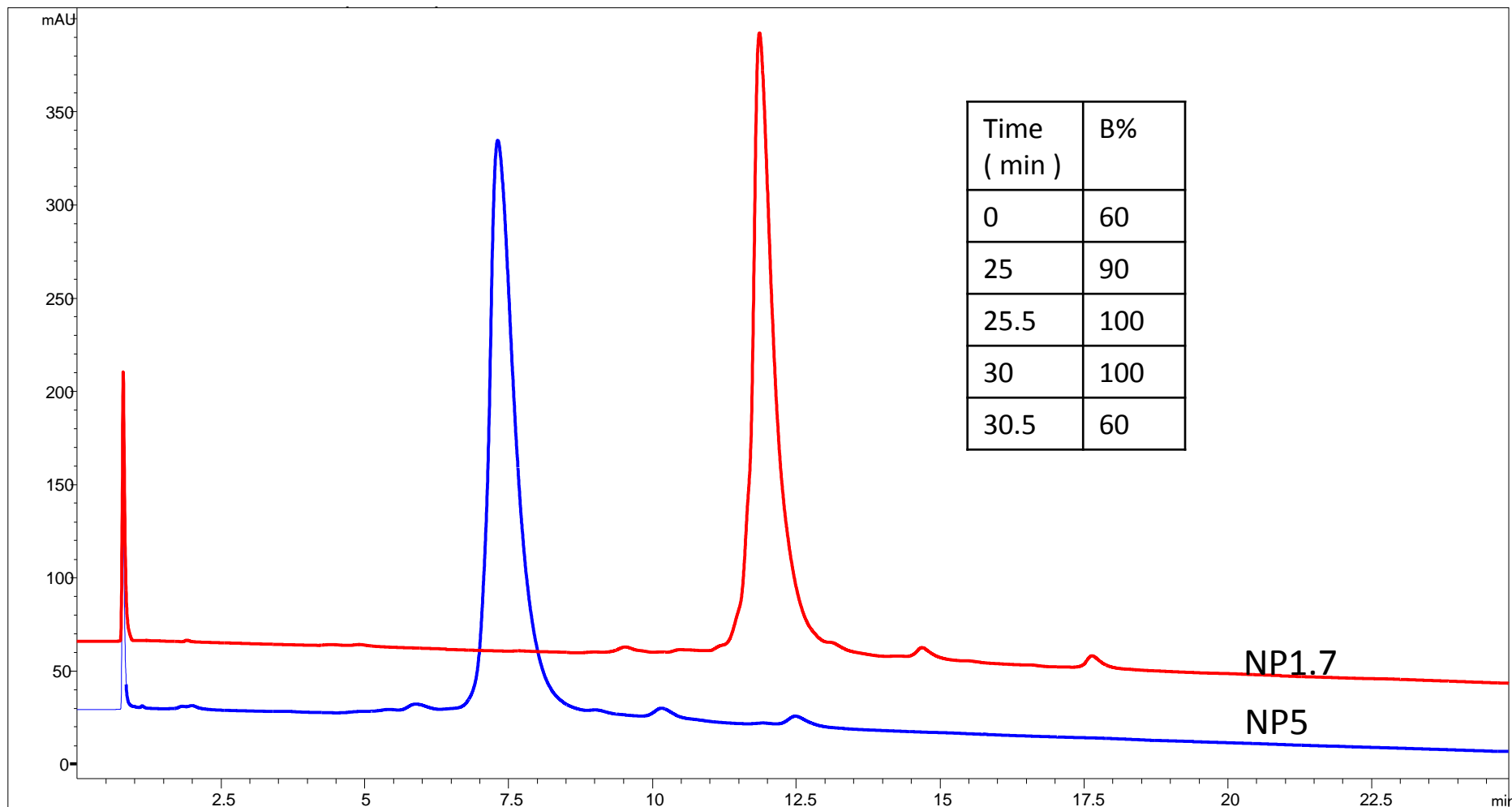
Column: : Proteomix<sup>®</sup> HIC Butyl NP1.7  $\mu\text{m}$  (1.7  $\mu\text{m}$ , 4.6 x 100 mm), PN: 431NP2-4610

Proteomix<sup>®</sup> HIC Butyl-NP5  $\mu\text{m}$  (5  $\mu\text{m}$ , 4.6 x 100 mm), PN: 431NP5-4610

Mobile phase: A: 100 mM sodium phosphate buffer, 2 M ammonium sulfate, pH 7.0,

B: 100 mM sodium phosphate buffer, pH 7.0;

Flow rate: 0.8 mL/min, Detector: UV 214 nm, Column temperature: 25°C;



# RituximAb – Sepax vs. Other Vendor

HICM1008

Column: Proteomix® HIC Butyl NP1.7  $\mu\text{m}$  (1.7  $\mu\text{m}$ , 4.6 x 35 mm), PN: 431NP2-4603

Vendor X butyl NPR, 2.5  $\mu\text{m}$ , 4.6 x 35 mm

Mobile phase: A: 100 mM sodium phosphate buffer, 2 M ammonium sulfate, pH 7.0,

B: 100 mM sodium phosphate buffer, pH 7.0;

Flow rate: 0.8 mL/min, Detector: UV 214 nm, Column temperature: 25°C

