MAb Purification and Aggregates Removal on Generik MC30-HIC Butyl

http://www.sepax-tech.com/Generik-HIC.php

• Generik MC-HIC 30µm Butyl resin provides high recovery and resolution purification of mAb, ADC, Proteins, Oligo, and various biomolecules .

• It is recommended for mAb aggregates isolation and removal, which has been confirmed by SEC chromatography.

• It can tolerate high-pressure, operation up to 100 bars, translating into higher flow rate and shorter run time without compromising separation resolution

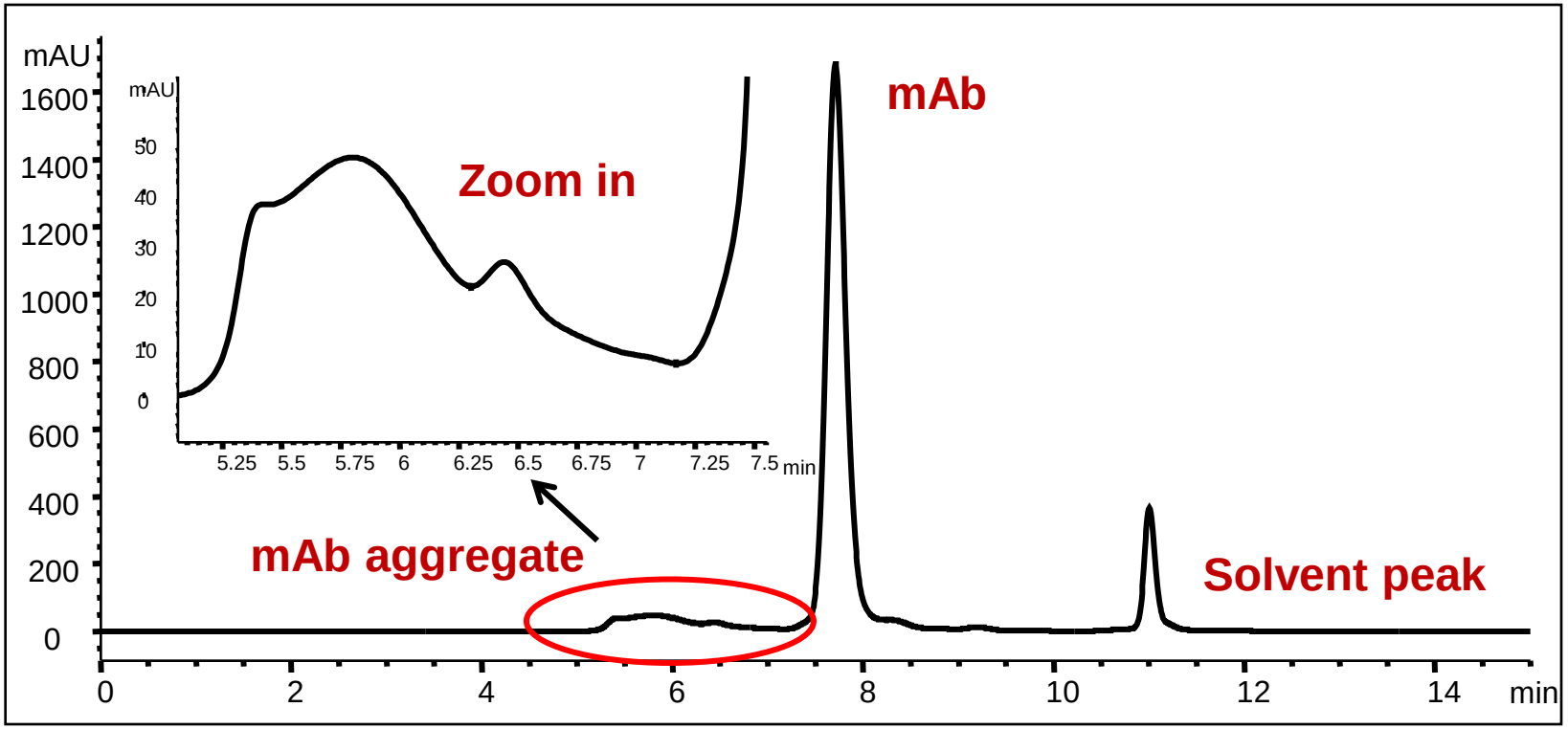
• It is applicable for different stages of purification needs, from laboratory discovery, pilot-scale purification to industrial process chromatography.

• Available in prepack columns in plastic cartridge, stainless steel, glass tubing as well as loose resin.

Before HIC Purification

Semi-purified mAb Analysis on Zenix SEC-300

Column: Zenix SEC-300 (3 µm, 7.8 x 300 mm, PN: 213300-7830)
Mobile phase: 150 mM sodium phosphate buffer (pH7.0)
Flow rate: 1.0 mL/min, Detector: UV 214 nm, Column temperature: Ambient
Injection volume: 5 µL, Sample: mAb (5 mg/mL)



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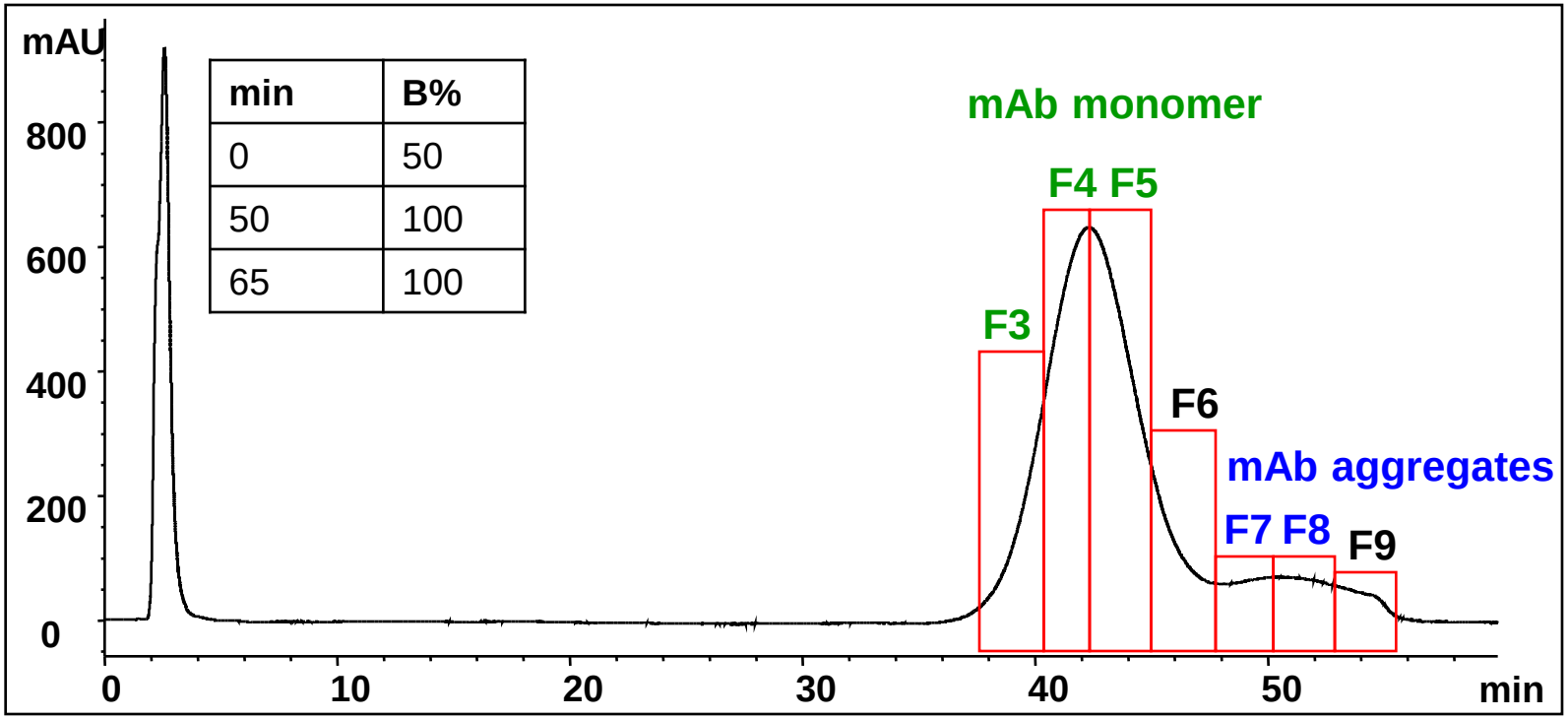
HIC Purification

mAb Purification on Generic MC 30-HIC Butyl

Column: Generic MC 30-HIC Butyl (1 mL, plastic cartridge, PN:248030-70025)
Start buffer (A): 20 mM Na_2HPO_4 , 1.7 M $(NH_4)_2SO_4$, pH 7.0
Elution buffer (B): 20 mM Na_2HPO_4 , pH 7.0
Flow rate: 0.4 mL/min, Gradient: 50-100% Elution buffer in 50 min,
Detector: UV 214 nm, Column temperature: Ambient
Injection volume: 50 µL, Sample: mAb (5 mg/mL) in start buffer; Pressure: 13.7 bar



min	B%
0	50
50	100
65	100

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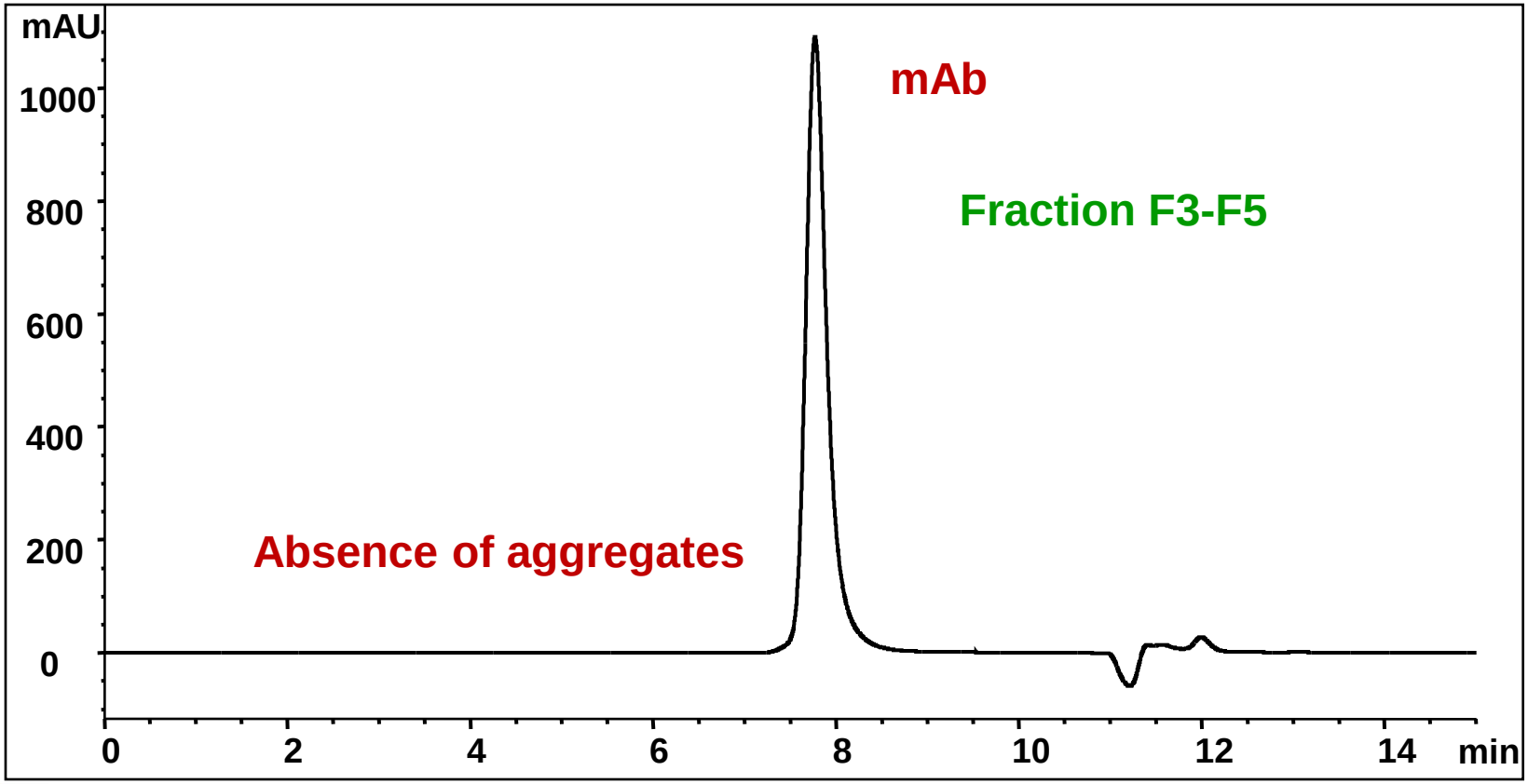
Post HIC Purification – SEC Confirmation

mAb Fraction Analysis on Zenix SEC-300

Column: Zenix SEC-300 (3 µm, 7.8 x 300 mm, PN: 213300-7830)
Mobile phase: 150 mM sodium phosphate buffer (pH7.0)
Flow rate: 1.0 mL/min, Detector: UV 214 nm, Column temperature: Ambient
Injection volume: 100 µL, Sample: Fractions F3-F5



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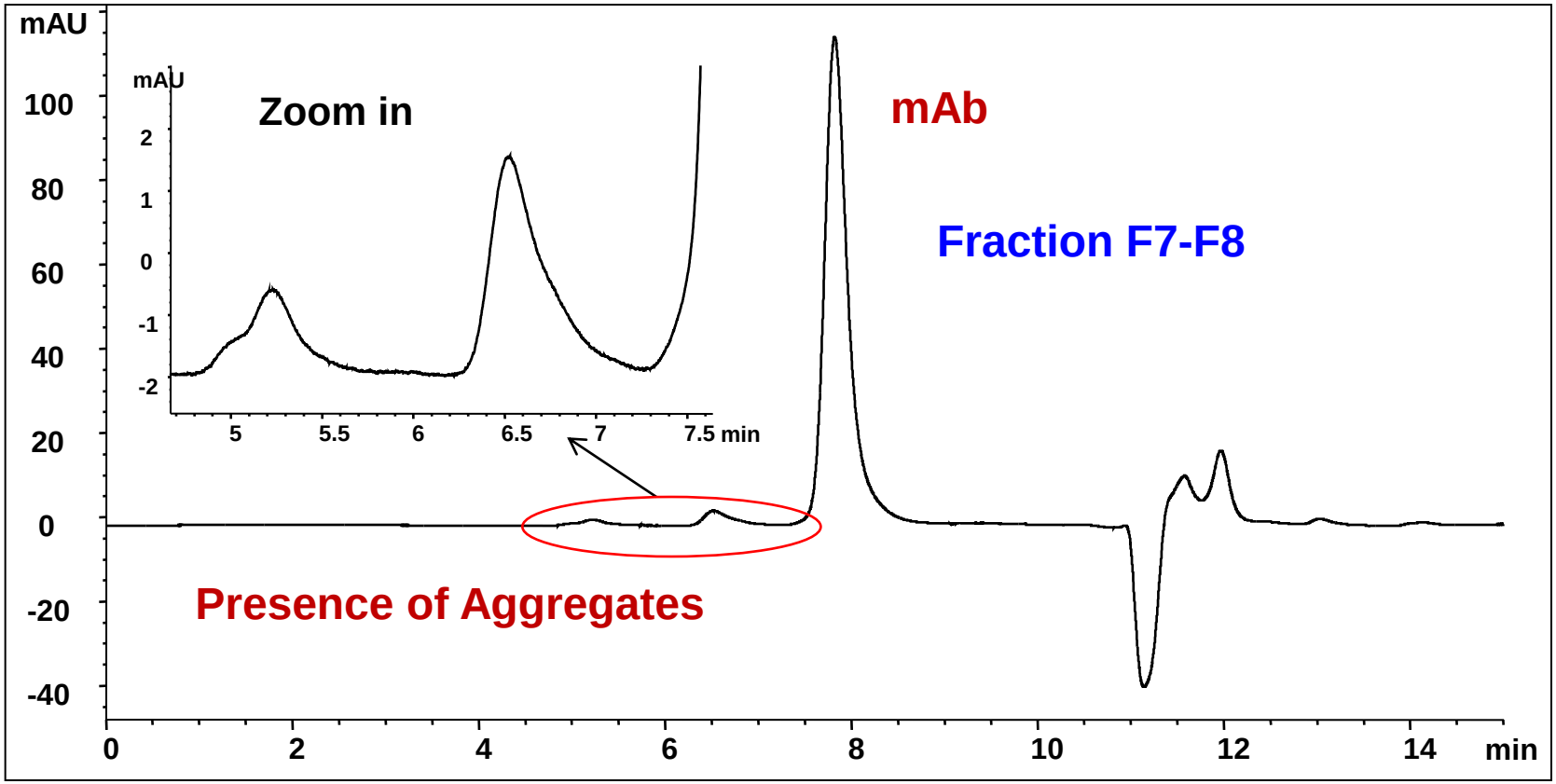
Post HIC Purification – SEC Confirmation

mAb Fraction Analysis on Zenix SEC-300

Column: Zenix SEC-300 (3 µm, 7.8 x 300 mm, PN: 213300-7830)
Mobile phase: 150 mM sodium phosphate buffer (pH7.0)
Flow rate: 1.0 mL/min, Detector: UV 214 nm, Column temperature: Ambient
Injection volume: 100 µL, Sample: Fraction F7 and F8