

Fast Monoclonal Antibody Titer Determination Followed by SEC Aggregation Analysis

For UPLC, HPLC and 2D-LC Solution

Protein A-Sil, 2.1 x 50 mm PEEK
(PN:010066P-2105)

Unix-C SEC-300, 1.8 μm 300Å, 4.6 x 150 mm
(PN: 231300-4615)



Summary

- Fast quantitation of monoclonal antibody (mAb) from CHO Cell media with a wide range of loading concentrations can be achieved in 1.2 minutes by Sepax Protein A-Sil 2.1 x 50 mm column
- The Fraction from Protein A elution can be further analyzed by a Sepax Unix-C SEC-300 4.6 x 150 mm column for aggregation determination
- Protein A-Sil followed by Unix-C SEC provides fast mAb capture and aggregates analysis within 9 minutes in 2D-LC format.
- The workflow is compatible with both UPLC and HPLC.

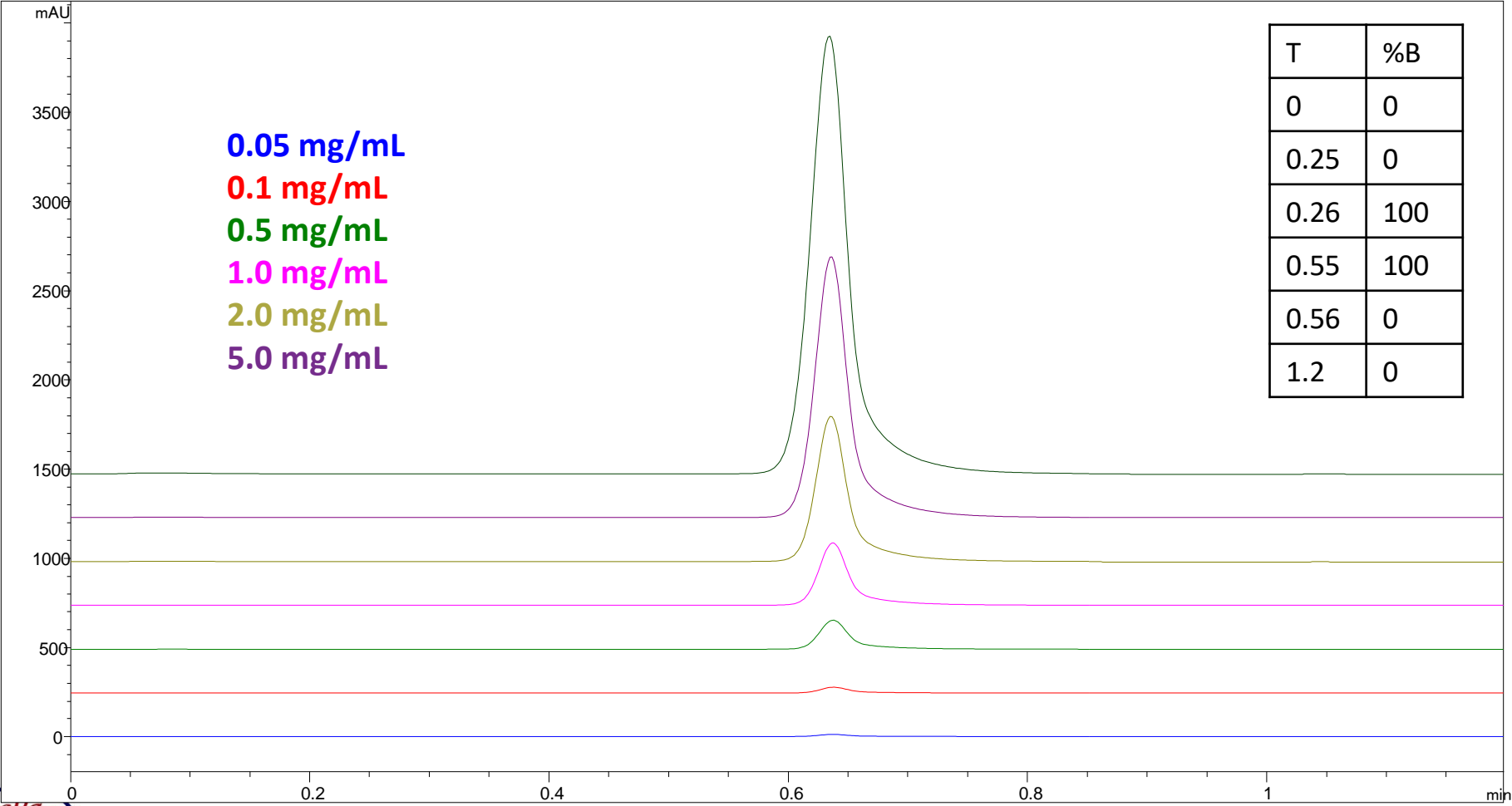


Wide Range of Purified MAb Loading Concentration by Sepax Protein A-Sil 2.1 x 50 mm Column

Column: Sepax Protein A-Sil, 2.1 x 50mm PEEK (PN:010066P-2105)

Mobile phase A: 20 mM phosphate buffer, 150 mM NaCl, pH 7.5; B: 0.1 M Glycine, pH 2.5 + 150mM NaCl

Flow Rate: 2.0 mL/min; System: UHPLC; Detection: UV 280 nm; Temperature: Ambient



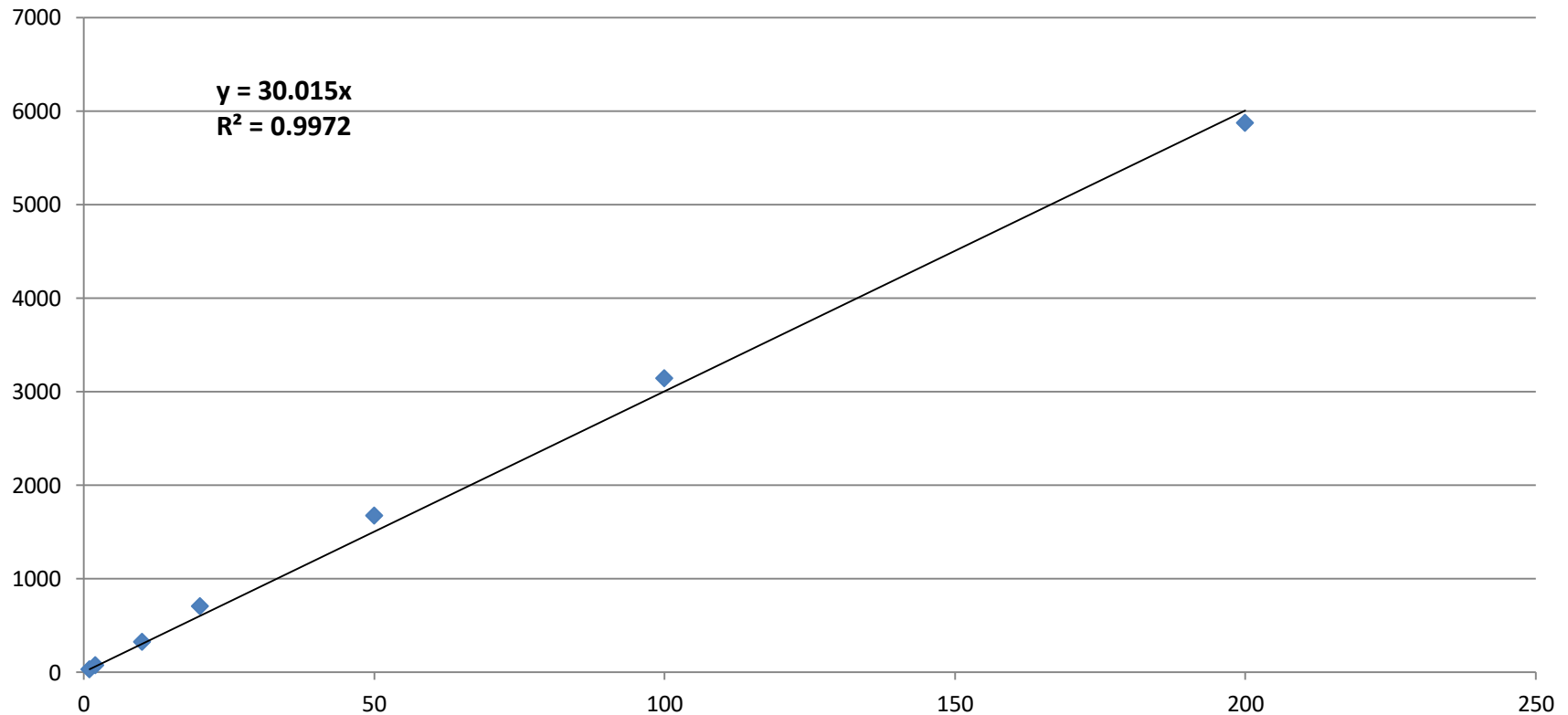
Purified MAb Loading Calibration Curve

Column: Sepax Protein A-Sil, 2.1 x 50mm PEEK (PN:010066P-2105)

Mobile phase A: 20 mM phosphate buffer, 150 mM NaCl, pH 7.5; B: 0.1 M Glycine, pH 2.5 + 150mM NaCl

Flow Rate: 2.0 mL/min; System: UHPLC; Detection: UV 280 nm; Temperature: Ambient

Mab 1 μ g to 200 μ g calibration curve (regression forced through zero)

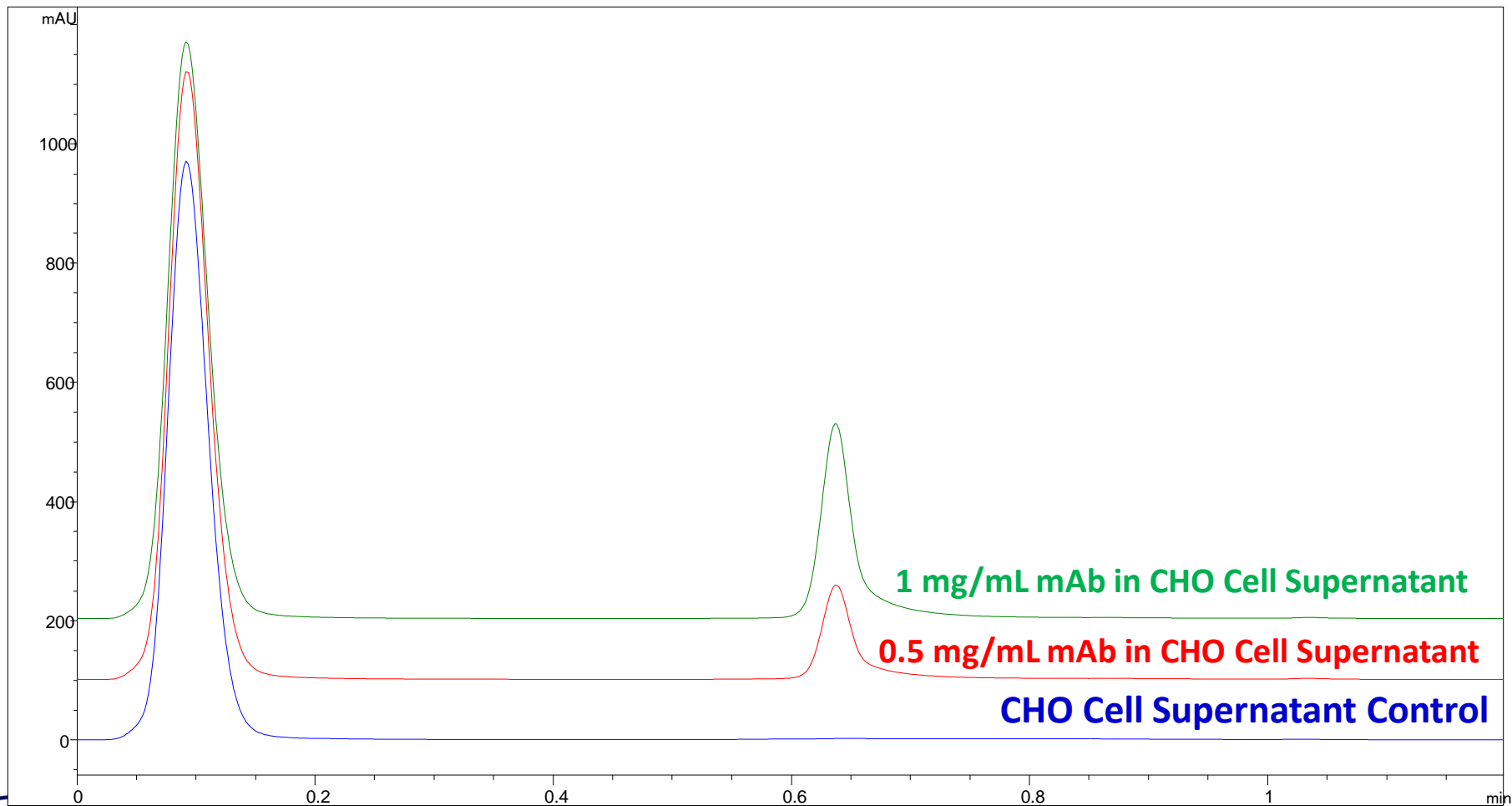


Fast MAb Capture Spiked in CHO Cell Supernatant by Protein A-Sil 2.1 x 50 mm Column in 1.2 minutes

Column: Sepax Protein A-Sil, 2.1 x 50 mm PEEK (PN:010066P-2105)

Mobile phase A: 20 mM phosphate buffer, 150 mM NaCl, pH 7.5; B: 0.1 M Glycine, pH 2.5 + 150mM NaCl

Flow Rate: 2.0 mL/min; System: UHPLC; Detection: UV 280 nm; Temperature: Ambient



Protein A Elution Fraction Analysis by Unix-C SEC-300

Column: Unix-C SEC-300, 1.8 μm , 300 \AA , 4.6 x 150 mm (PN: 231300-4615)

Mobile Phase: 150 mM sodium phosphate buffer, pH 7.0,

Flow Rate: 0.35 mL/min; System: UHPLC; Detection: UV 214 nm; Temperature: Ambient

