

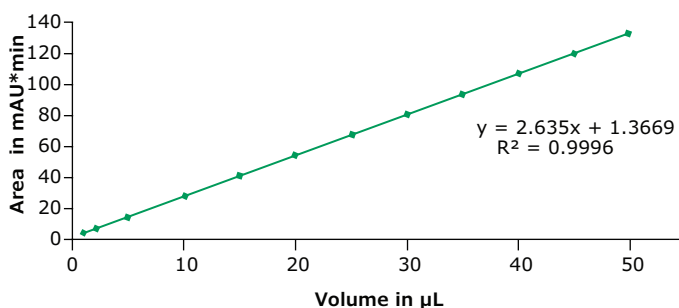
Rapid and Robust Antibody Quantitation

Chromolith® WP 300 Protein A HPLC columns

Affinity chromatography is a selective technique which takes advantage of specific molecular interactions, for example antigen and antibody. The Chromolith® WP 300 Protein A HPLC column is designed to monitor monoclonal antibody titer and yield determination from cell-culture supernatants. This analytical scale procedure helps to optimize the titer of monoclonal antibody for the optimal time for harvest of the monoclonal antibody products.

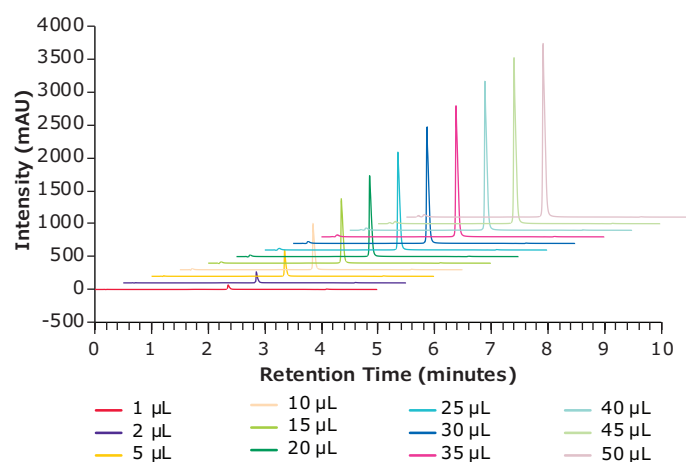
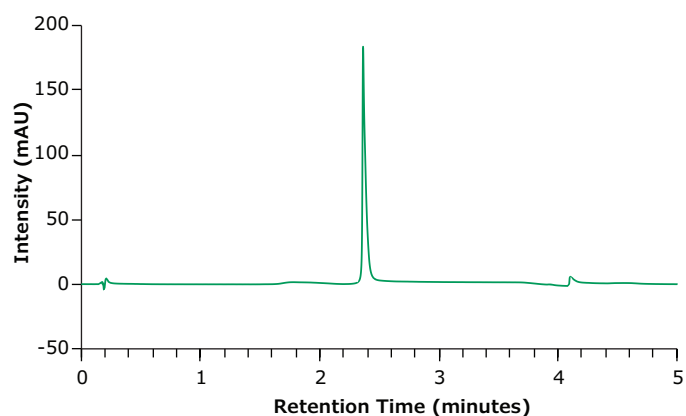
Demonstrated Linearity Across Injection Volumes

Columns:	Chromolith® WP 300 Protein A, 2.5 cm x 2.0 mm I.D.		
Mobile phase:	[A] 100 mM Disodium hydrogen phosphate, pH 7.4; [B] 100 mM Disodium hydrogen phosphate, pH 2.5		
Gradient:	Time	%A	%B
	0.00	100	0
	0.50	100	0
	0.55	0	100
	2.60	0	100
	2.65	100	0
	5.00	100	0
Flow rate:	0.38 mL/min		
Detection:	UV, 280 nm		
Column temperature:	25 °C		
Injection volume:	2.0 µL		
Sample:	Gammanorm, 1 mg/mL, water		



Key Benefits:

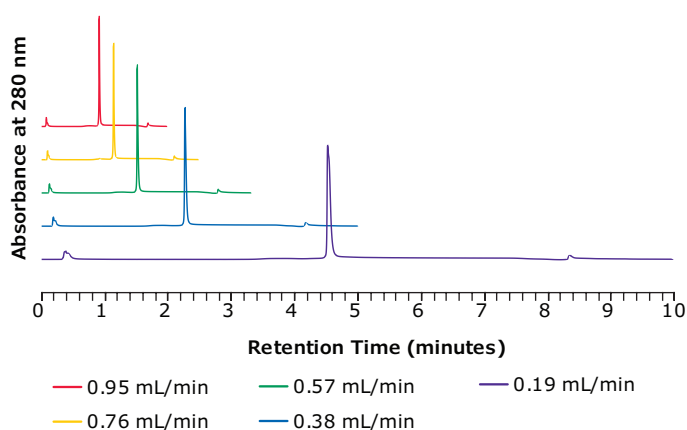
- Rapid and accurate titer determination across a wide range of injection volumes
- Consistent binding efficiencies even at high flow rates
- Expanded column lifetimes



Constant Binding Efficiency at Elevated Flow Rates

- High-speed separation at high flow rate due to excellent mass transfer properties of the monolithic skeleton
- At 1 mL/min on a 2 mm I.D. column, the total analysis time is less than 1 minute and the net column backpressure is only 24 bar
- Antibody binding is not affected by flow rate

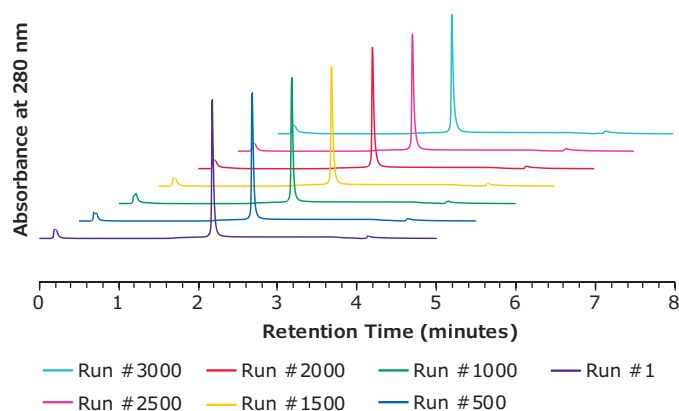
Flow Rate	Unbound area	IgG area	Pressure
0.19 mL/min	11%	89%	5 bar
0.38 mL/min	11%	89%	10 bar
0.57 mL/min	11%	89%	15 bar
0.76 mL/min	11%	89%	19 bar
0.95 mL/min	11%	89%	24 bar



Expanded Column Lifetimes

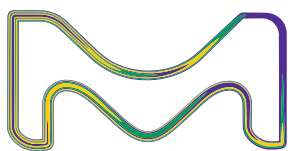
Chromolith® WP 300 Protein A column offers excellent reproducibility and stability for the long-term. In the below example, more than 3000 injections (> 80,000 column volumes, 6000 pH shifts) were performed on the same column, with no change in chromatographic performance.

Parameter	RSD
Retention time	< 0.3%
Peak Area	< 3.2%



Ordering Information

Cat. No.	Description	Length (mm)	I.D. (mm)
11-010-276	Chromolith WP 300 Protein A Column	25	2
11-010-267	Chromolith WP 300 Protein A Column	25	4.6



MilliporeSigma is the U.S. and Canada Life Science business of Merck KGaA, Darmstadt, Germany.

© 2022 Merck KGaA, Darmstadt, Germany and/or its affiliates. All Rights Reserved. MilliporeSigma, the vibrant M, Chromolith and Supelco are trademarks of Merck KGaA, Darmstadt, Germany or its affiliates. All other trademarks are the property of their respective owners. Detailed information on trademarks is available via publicly accessible resources.

Lit. No. MS_FL9094EN Ver. 1.0 39752 02/2022

Distributed by Fisher Scientific. Contact us today:

In the United States

Order online: fishersci.com
Call customer service: 1-800-766-7000

In Canada

Order online: fishersci.ca
Call customer service: 1-800-234-7437

