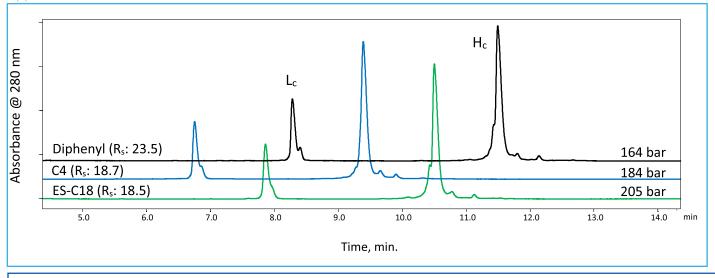


BIOPHARMACEUTICALS



Reduced IgG1 (Trastuzumab) Retention Comparison on Three HALO® 1000 Å Phases

Application Note 199-PR



Trastuzumab is a monoclonal antibody used to treat breast cancer. Enhanced resolution of trastuzumab's heavy and light chains is demonstrated in the chromatograms above using three different HALO® bonded phases. The 1000 Å pores of the HALO® Protein columns readily accommodate large biomolecules, and allow unrestricted pore assess, narrower peaks and superior separations at high temperatures.

TEST CONDITIONS:

Columns:

HALO 1000 Å Diphenyl, 2.7 μm, 2.1 x 150 mm

Part Number: 92712-726

HALO 1000 Å C4, 2.7 μm, 2.1 x 150 mm

Part Number: 92712-714

HALO 1000 Å ES-C18, 2.7 μm, 2.1 x 150 mm

Part Number: 92712-702

Mobile Phase A: Water/ 0.1% TFA Mobile Phase B: Acetonitrile/ 0.1% TFA

Gradient: Time (min.)

0.0 30

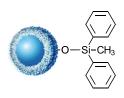
40 14.0 Flow Rate: 0.4 mL/min

Temperature: 80 °C Detection: 280 nm, PDA Injection Volume: 2 µL Sample Solvent: Water Data Rate: 12.5 Hz Response Time: 0.25 sec.

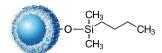
Flow Cell: 1 µL

LC System: Shimadzu Nexera X2

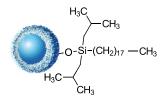
STRUCTURES:



HALO 1000 Å Diphenyl



HALO 1000 Å C4



HALO 1000 Å ES-C18