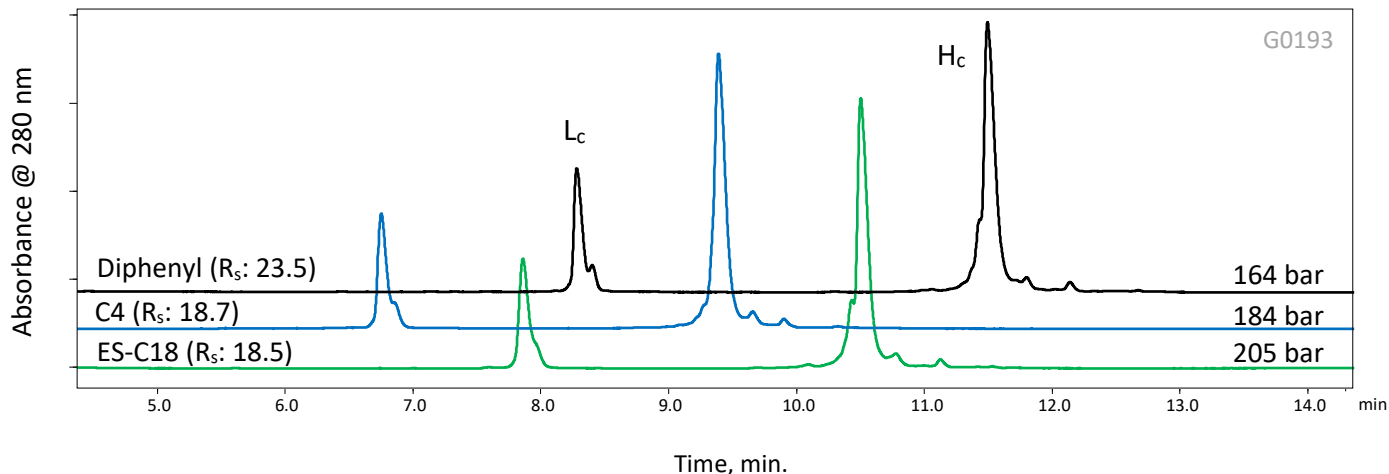


Reduced IgG1 (Trastuzumab) Retention Comparison on Three HALO® 1000 Å Phases



TEST CONDITIONS:

Columns: HALO 1000 Å Diphenyl, 2.7 μm, 2.1 x 150mm
 Part Number: 92712-726
 HALO 1000 Å C4, 2.7 μm, 2.1 x 150mm
 Part Number: 92712-714
 HALO 1000 Å ES-C18, 2.7 μm, 2.1 x 150mm
 Part Number: 92712-702

Mobile Phase A: Water/ 0.1% TFA

Mobile Phase B: Acetonitrile/ 0.1% TFA

Gradient: Time (min.)	%B
0.0	30
14.0	40

Flow Rate: 0.4 mL/min

Temperature: 80°C

Detection: 280 nm, PDA

Injection Volume: 2 μL

Sample Solvent: Water

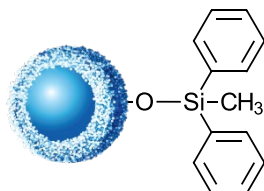
Data Rate: 12.5 Hz

Response Time: 0.25 sec.

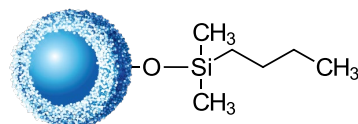
Flow Cell: 1 μL

LC System: Shimadzu Nexera X2

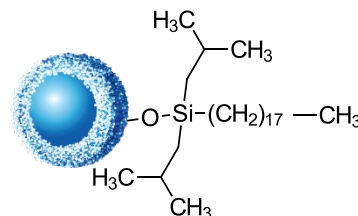
STRUCTURES



HALO 1000 Å Diphenyl



HALO 1000 Å C4



HALO 1000 Å ES-C18

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 access, narrower peaks and superior separations at high temperatures.