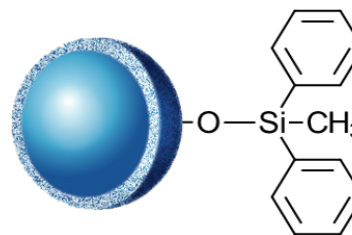
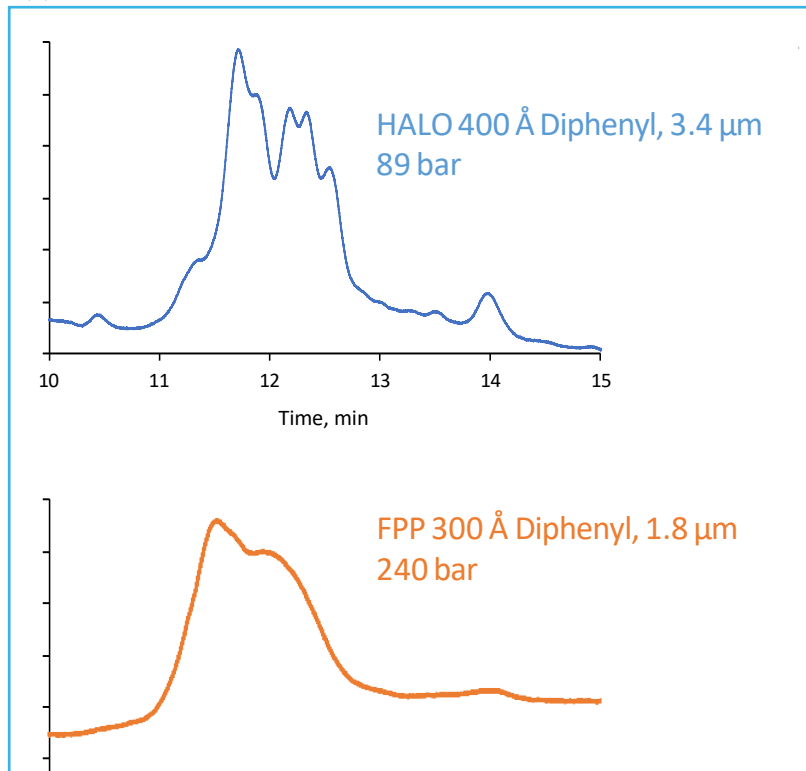




Increased Resolution with HALO 400 Å Diphenyl Compared to FPP 300 Å Diphenyl

Application Note: 207-PR



HALO 400 Å Diphenyl, 3.4 µm Particle
Shell with 400 Å pores

Denosumab, a human IgG2 monoclonal antibody that is used to treat cancer in the bones was analyzed on two different types of HPLC columns. The HALO 400 Å column outperformed the 300 Å fully porous diphenyl column by providing much better resolution at 2.5-fold lower back pressure along with a quicker run time.

TEST CONDITIONS:

Columns: HALO 400 Å Diphenyl, 3.4 µm, 2.1x150 mm

Part Number: 93412-726

FPP 300 Å Diphenyl, 1.8 µm, 2.1x150 mm

Mobile Phase A: 88/10/2: Water/Acetonitrile/**n-Prop/
0.1% *DFA

Mobile Phase B: 70/20/10: **nProp/Acetonitrile/Water/
0.1% *DFA

Gradient:	Time (min.)	%B
	0.0	18
	20.0	28

Flow Rate: 0.2 mL/min.

HALO® SPP Initial Back Pressure: 89 bar

FPP Initial Back Pressure: 240 bar

Temperature: 60 °C

Detection: 220 nm, PDA

Injection Volume: 2 µL

Sample Solvent: Water/ 0.1% DFA

Data Rate: 100 Hz

Response Time: 0.025 sec.

Flow Cell: 1 µL

LC System: Shimadzu Nexera X2

*DFA = difluoroacetic acid

**nProp = n- propanol

