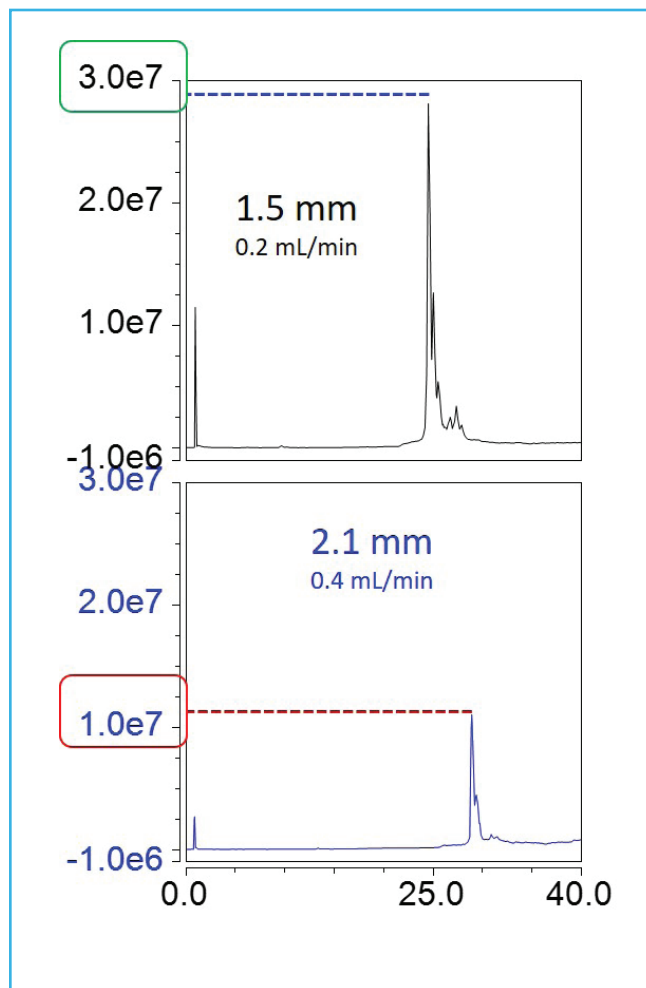




Increased Sensitivity of Intact Trastuzumab Using a 1.5 mm ID Column

285-BIO



TEST CONDITIONS:

Column: HALO 1000 Å Diphenyl, 2.7 μm , 1.5 x 150 mm
Part Number: 9212X-702

Column: HALO 1000 Å Diphenyl, 2.7 μm , 2.1 x 150 mm
Mobile Phase A: Water/0.1% DFA

B: 50% Acetonitrile/50% n-propanol/0.1%
DFA

Gradient: 27-36 %B in 40 min

Flow Rate: 0.2 mL/min for 1.5 mm ID
0.4 mL/min for 2.1 mm ID

Back Pressure: 252 bar (1.5 mm)
272 bar (2.1 mm)

Temperature: 60 °C

Injection Volume: 3 μL of 1.0 mg/mL trastuzumab

Sample Solvent: 100 mM ammonium bicarbonate

LC System: Shimadzu Nexera X2

MS System: ThermoFisher Q Exactive

MS CONDITIONS:

Spray Voltage (kV): 3.8

Capillary temperature: 320 °C

Sheath gas: 35

Aux gas: 10

RF lens: 50

A separation of intact Trastuzumab was performed on a HALO 1000 Å Diphenyl column. The switch from a 2.1 mm ID column to a 1.5 mm ID allows for an increase in sensitivity and reduces overall solvent consumption. In this example both peak intensity and area are increased. This sensitivity was achieved by optimizing the post-column tubing. The 1.5 mm ID column is ideal for achieving more performance from a UHPLC system saving on the investment of a specialized low flow HPLC.

