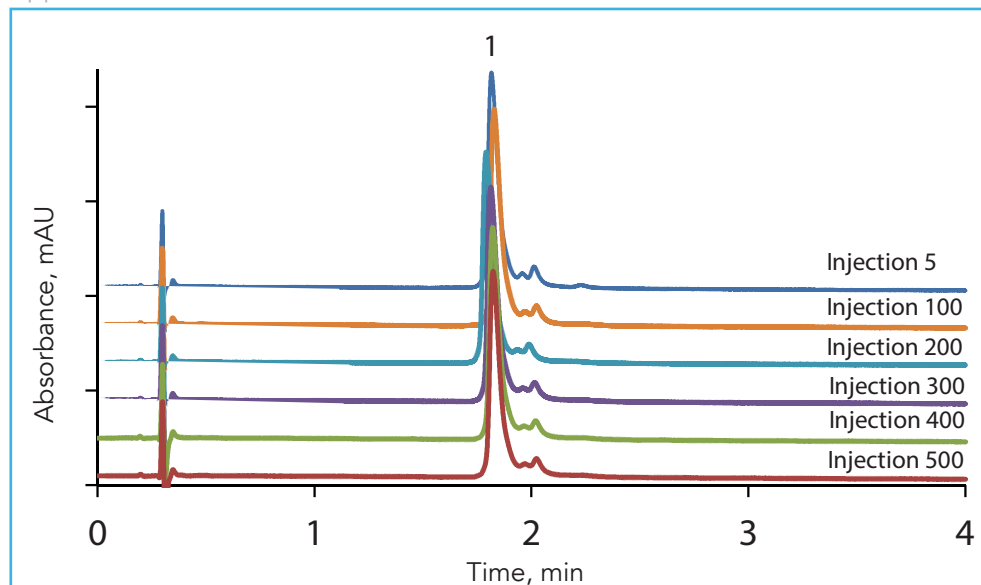




## High Temperature/Low pH Stability with HALO 1000 Å ES-C18, 2.7 μm

Application Note 178-PR



### PEAK IDENTITIES:

1. Trastuzumab

Trastuzumab (MW ~148 kDa) is a monoclonal antibody used to treat breast cancer. A stability experiment using a HALO 1000 Å ES-C18 column shows excellent reproducibility for 500 injections of trastuzumab. The sterically protected C18 bonded phase enables rugged stability at the elevated temperature and low pH conditions that are typically used for protein analysis.

### TEST CONDITIONS:

**Column:** HALO 1000 Å ES-C18, 2.7 μm,  
2.1 x 50 mm

**Part Number:** 92712-402

#### Mobile Phase:

A: Water/0.1% TFA

B: Acetonitrile/0.1% TFA

Gradient:	Time (min)	% B
	0.0	32
	4.0	38

**Flow Rate:** 0.4 mL/min

**Pressure:** 81 bar

**Temperature:** 80 °C

**Detection:** UV 280 nm, PDA

**Injection Volume:** 1.2 μL

**Sample Solvent:** Water

**Response Time:** 0.025 sec

**Data Rate:** 40 Hz

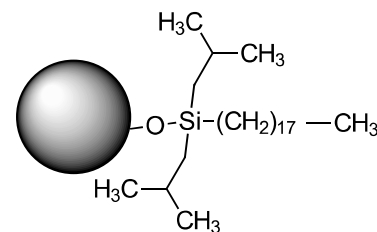
**Flow Cell:** 1.0 μL

**LC System:** Shimadzu Nexera X2

### STRUCTURES:



1000 Å 2.7 μm particle



ES-C18 bonded phase

