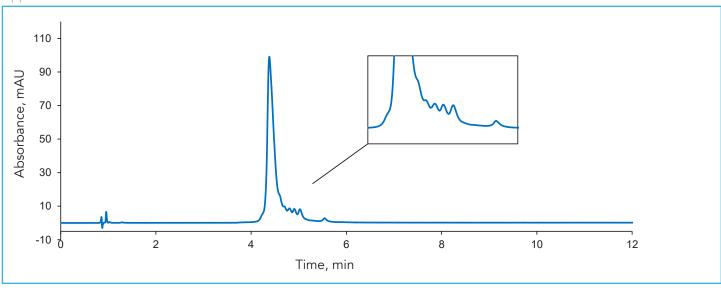


## **BIOPHARMACEUTICALS**

## HALO 1000 Å C4 Protein Column for High Resolution Separation of a Monoclonal Antibody

Application Note 149-PR



Trastuzumab (MW  $\sim$ 148 kDa) is a monoclonal antibody used to treat breast cancer. Enhanced resolution of trastuzumab and its variants is demonstrated in the chromatogram above. The pores of the HALO 1000 Å C4 Protein particles accommodate larger biomolecules enabling superior separations at high temperatures.

## **TEST CONDITIONS:**

**Column:** HALO 1000 Å C4, 2.7 μm,

2.1 x 100 mm **Part Number:** 92712-614

Mobile Phase:

A: Water, 0.1% TFA

B: 80/20 ACN/water, 0.085% TFA

**Gradient:** Time (min) % B

0.0 40.0 12.0 47.5

Flow Rate: 0.4 mL/min Pressure: 210 bar Temperature: 80 °C

**Detection:** UV 280 nm, PDA **Injection Volume:** 2.0 µL

Sample Solvent: 70/30 water/ACN

Response Time: 0.05 sec Data Rate: 12.5 Hz Flow Cell: 1.0 µL

LC System: Shimadzu Nexera X2

## **Trastuzumab Structure:**

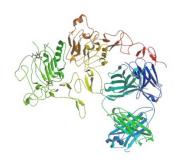


Image from the RCSB PDB (www.rcsb.org) of PDB ID 1N8Z Cho, H.-S., Mason, K., Ramyar, K.X., Stanley, A.M., Gabelli,

S.B., Denney Jr., D.W., Leahy, D.J.