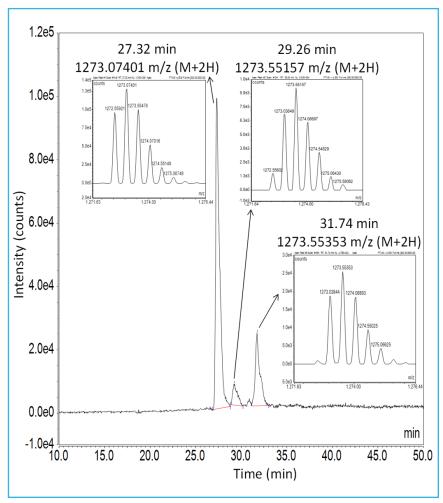


## **BIOPHARMACEUTICALS**

# Capillary scale HILIC Separation of Deamidation Products of Trastuzumab

263-PE



## **PEAK IDENTITIES**

Peptide fragments of GFYPSDIAVEWESNGQPENNYK

1. m/z= 1273.07401

2. m/z= 1273.55157

3. m/z= 1273.55353

The capillary HALO® Penta-HILIC column facilitated coupling of microflow LC conditions of 12 µL/min and a higher organic HILIC gradient separation. The column's high resolution capabilities resolved similar charged species required for examining peptide deamidation and isomerization products of Asn, Asp, and isoAsp forms of a peptide fragment of a trastuzumab tryptic digest.

### **TEST CONDITIONS:**

Column: HALO 90 Å Penta-HILIC, 2.7 µm 0.5 x 150mm

Part Number: 98215-705

Mobile Phase A: 50 mM ammonium formate in water

Mobile Phase B: Acetonitrile/0.1% Formic acid

Gradient: Time %B

0.0 80 4.0 80

64.0 48

Flow Rate: 12 µL/min Pressure: 123 bar Temperature: 60 °C Detection: ESI+ Injection Volume: 1 µL

Sample Solvent: 50 mM Tris-HCl /1.5M Guanidine-HCl,

0.5% formic acid

**LC System:** Thermo Ultimate 3000 **MS System:** Thermo Orbitrap Velos

#### **MS CONDITIONS:**

Spray Voltage (kV): 3.8 Aux gas: 10 Capillary temperature: 300 °C RF lens: 50

Sheath gas: 40



