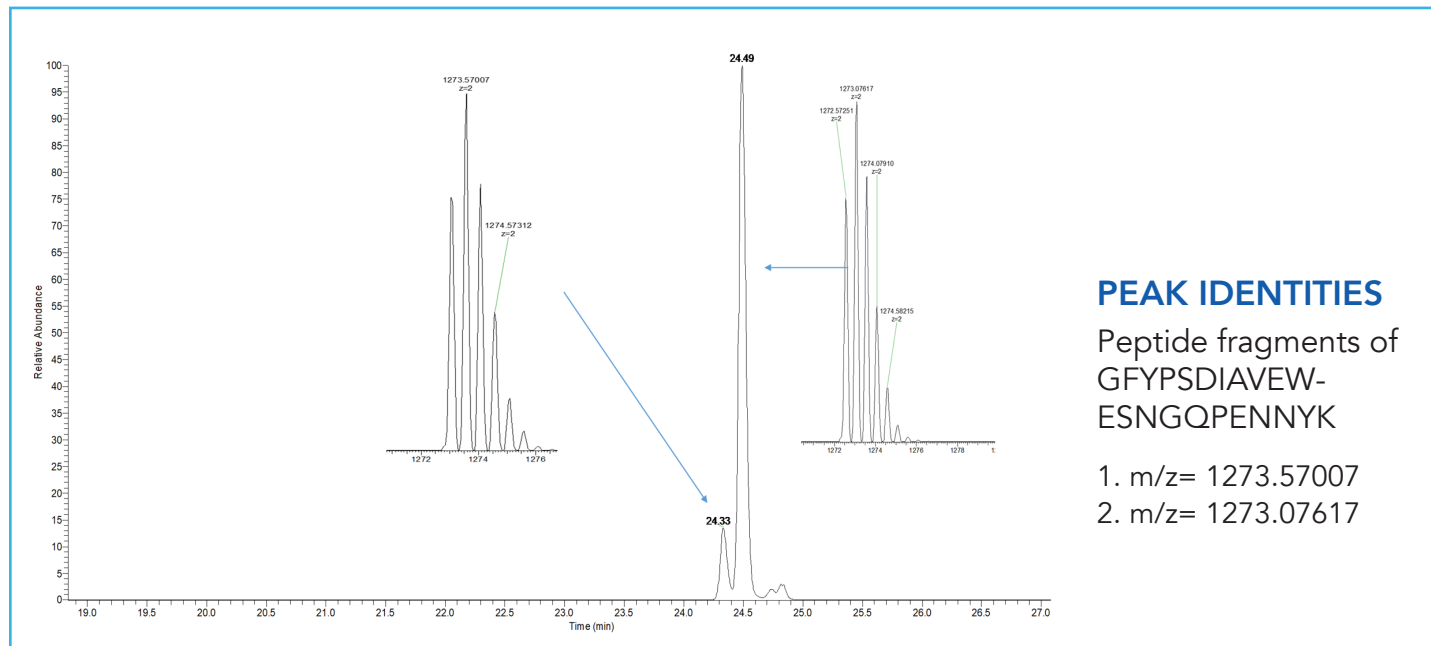




### Separation of Deamidation Products of the NIST mAb on HALO® ES-C18

264-PE



#### PEAK IDENTITIES

Peptide fragments of  
GFYPSDIAVEW-  
ESNGQPENNYK

1. m/z= 1273.57007
2. m/z= 1273.07617

Deamidation is a reaction in which an amide functional group in the side chain of the amino acids asparagine or glutamine is removed or converted to another functional group. Deamidation products are of increasing importance in proteomics because they can alter a protein's structure, or possibly its function and stability, resulting in degradation. This is especially of interest in monoclonal antibody (mAb) development as well. The HALO® ES-C18 has the high resolution necessary to separate the deamidation products of the NIST mAb.

#### TEST CONDITIONS:

**Column:** HALO 160 Å ES-C18, 2.7 µm 2.1 x 100mm

**Part Number:** 95814-902

**Mobile Phase A:** Water/0.1% Formic acid

**Mobile Phase B:** Acetonitrile/0.1% Formic acid

Gradient:	Time	%B
	0.0	2.0
	45.0	40
	45.5	80
	48.0	80
	48.5	2.0
	55.0	End

**Flow Rate:** 0.3 mL/min

**Pressure:** 124 bar

**Temperature:** 60 °C

**Detection:** ESI+

**Injection Volume:** 5 µL

**Sample Solvent:** 50 mM Tris-HCl /1.5M Guanidine-HCl, 0.5% formic acid

**LC System:** Shimadzu Nexera X2

**MS System:** Orbitrap Velos Pro

#### MS CONDITIONS:

**Spray Voltage (kV):** 4.0

**Capillary temperature:** 300 °C

**Sheath gas:** 40

**Aux gas:** 10

**RF lens:** 50

