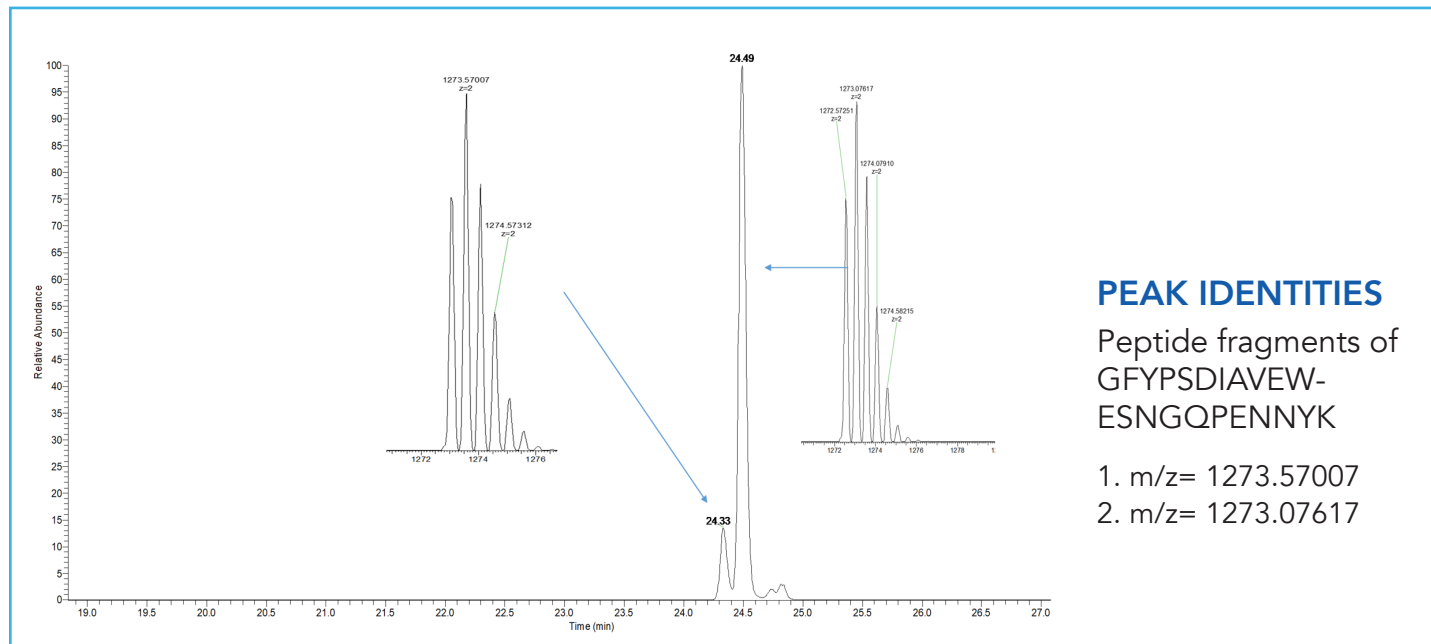




Separation of Deamidation Products of the NIST mAb on HALO® ES-C18

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: 92122-602

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



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