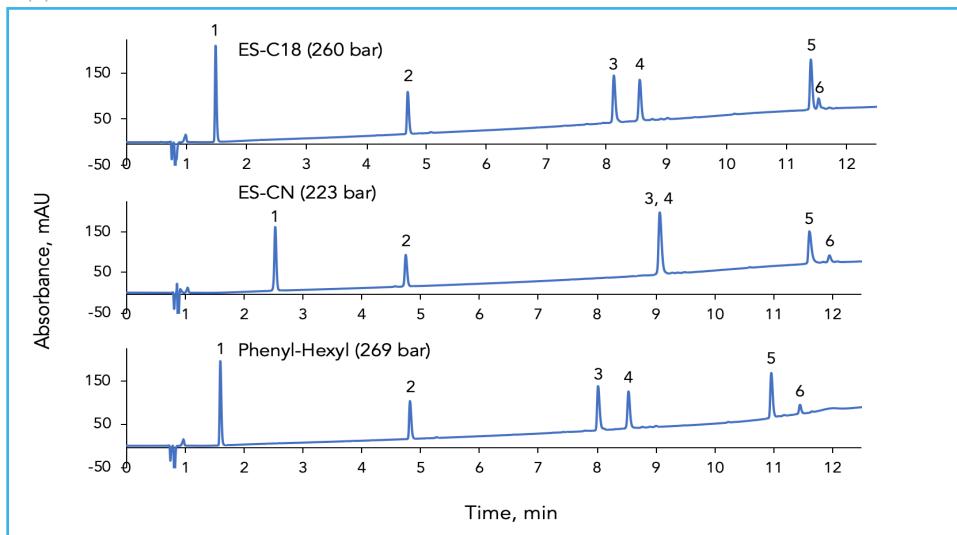




Enhanced Selectivity for the Separation of Peptides Comparing HALO 160 Å with Three Different Bonded Phases

Application Note 159-PE



PEAK IDENTITIES:

1. Tyr-Tyr-Tyr
2. Angiotensin II
3. Angiotensin 1-12
4. Melittin
5. Sauvagine
6. β -Endorphin

The initial separation using a HALO 160 Å ES-C18 column showed inadequate resolution of peaks 5 and 6. The same separation was attempted on a 160 Å ES-CN column which provided improved resolution of peaks 5 and 6, but resulted in coelution of peaks 3 and 4. The HALO 160 Å Phenyl-Hexyl column delivered excellent resolution between both peak pairs.

TEST CONDITIONS:

Columns:

- 1) HALO 160 Å ES-C18, 2.7 μ m, 2.1 x 150 mm
Part Number: 92122-702
- 2) HALO 160 Å ES-CN, 2.7 μ m, 2.1 x 150 mm
Part Number: 92122-704
- 3) HALO 160 Å Phenyl-Hexyl, 2.7 μ m, 2.1 x 150 mm
Part Number: 92112-706

Mobile Phase:

- A: 0.1% formic acid in water + 10mM ammonium formate
 B: 50/50 n-propanol/water + 0.1% formic acid + 10mM ammonium formate, pH 3.45

Gradient: 10-60% B in 15 min

Flow Rate: 0.4 mL/min

Temperature: 60 °C

Detection: UV 220 nm, PDA

Injection Volume: 2.0 μ L

Sample Solvent: Water, 0.1% TFA

Response Time: 0.24 sec

Data Rate: 12.5 Hz

Flow Cell: 1.0 μ L

LC System: Shimadzu Nexera

