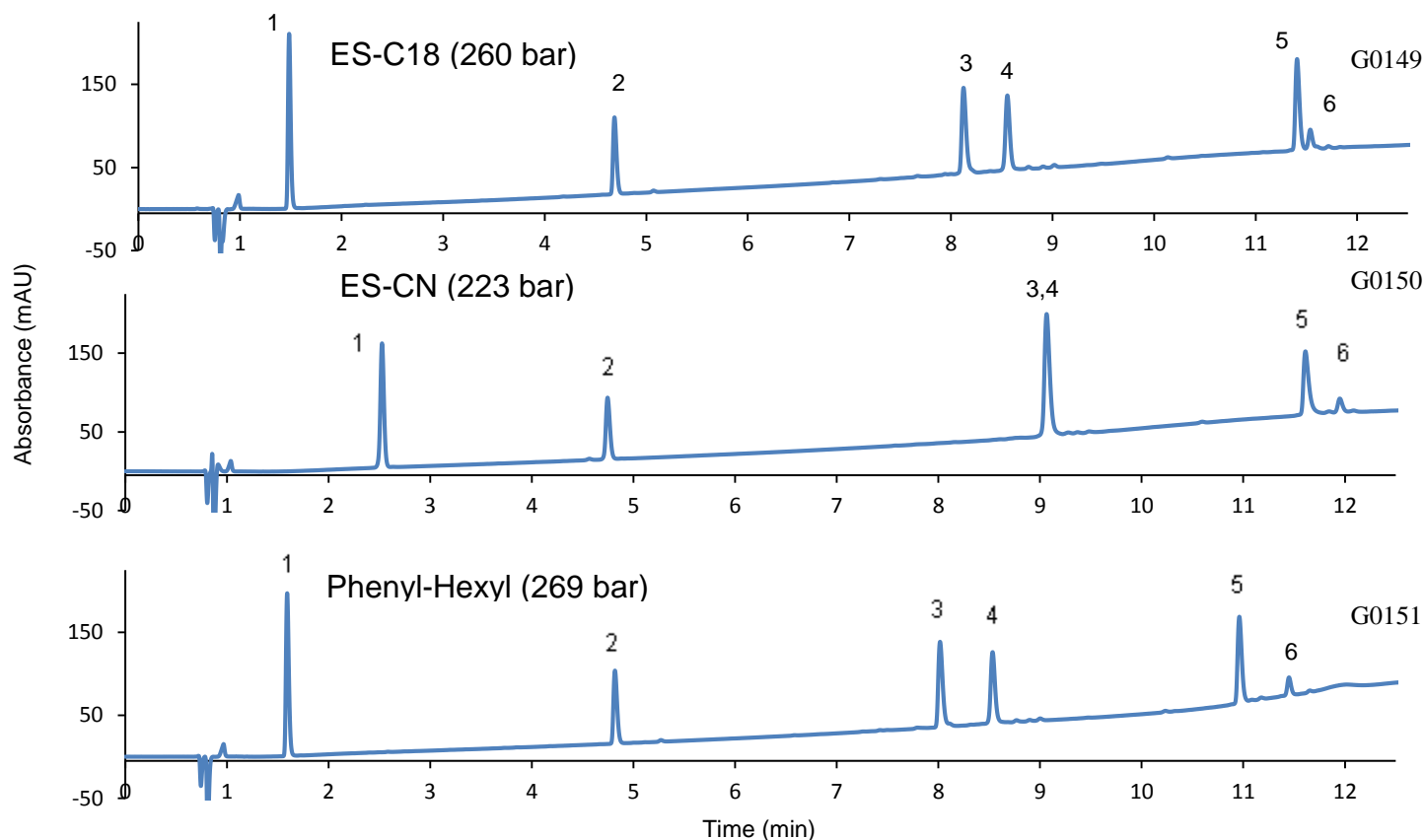


HALO® | Fused-Core® Particle Technology

Application Note: 159-PE

Enhanced Selectivity of Peptide Phenyl-Hexyl Compared to ES-C18 and ES-CN



TEST CONDITIONS:

Columns:

HALO 160Å Peptide ES-C18, 2.7 μ m, 2.1x150mm

Part Number: 92122-702

HALO 160Å Peptide ES-CN, 2.7 μ m, 2.1x150mm

Part Number: 92122-704

HALO 160Å Peptide Phenyl-Hexyl, 2.7 μ m, 2.1x150mm

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)

Flow Rate: 0.4 mL/min.

Gradient: 10-60%B in 15 min.

Temperature: 60 °C

Detection: UV 220 nm, PDA

Injection Volume: 2 μ L

Sample Solvent: water, 0.1% TFA

Response Time: 0.025 sec.

Data Rate: 12.5 Hz

LC System: Shimadzu Nexera

Flow Cell: 1 μ L

PEAK IDENTITIES

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

The initial separation using ES-C18 showed inadequate resolution of peaks 5, 6. The same separation was attempted on a ES-CN column which improved resolution of peaks 5,6 but resulted in coelution of peaks 3,4. The Phenyl Hexyl column showed excellent resolution between peaks 3,4 along with peaks 5,6.

