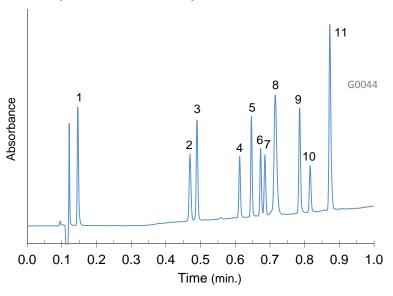
# HALO: | Fused-Core® Particle Technology

Application Note: 62-PT

# Separation of Peptides and Small Proteins on HALO Peptide ES-C18



## **PEAK IDENTITIES:**

- 1. Gly-Tyr
- 2. Val-Tyr-Val
- 3. Angiotensin (1-7) amide
- 4. Met-Enk
- 5. Angiotensin (1-8) amide
- 6. Angiotensin II
- 7. Leu-Enk
- 8. Ribonuclease A
- 9. Angiotensin (1-12) (human)
- 10. Angiotensin (1-12) (mouse)
- 11. Porcine insulin

### **TEST CONDITIONS:**

Column: 4.6 x 50 mm, HALO Peptide ES-C18

Part Number: 92124-402

Mobile Phase:

A= 90%(0.1% TFA in water)/10% acetonitrile B= 30% (0.1% TFA in water)/70% acetonitrile

Gradient: 0% B to 87% B in 1 minute

Flow Rate: 5.0 mL/min. Pressure: 330 Bar Temperature: 60°C

Detection: UV 220 nm, VWD Injection Volume: 1.0 μL

Sample Solvent: Mobile Phase A Response Time: < 0.12 sec. Flow Cell: 5 µL semi-micro

LC System: Quaternary Agilent 1100 Gradient dwell volume is 0.88 mL

#### **DISCUSSION:**

This separation shows the utility of the HALO Fused-Core Peptide ES-C18 stationary phase for the separation of peptides by HPLC. An average pore size of about 160 Angstroms enhances the mass transfer of peptides and small proteins of up to a molecular weight of approximately 15 kD, depending on the molecular configuration. Also, the stationary phase is a sterically protected C18 bonded silane to increase resistance to low pH mobile phases and elevated temperatures (up to 100 °C.) that are commonly used in the separation of many biological materials.

