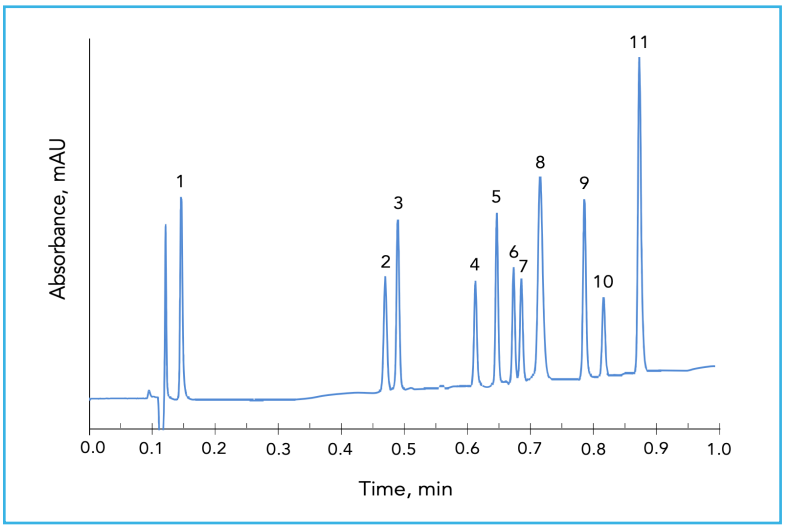
HALO®

BIOPHARMACEUTICALS

Separation of Peptides and Small Proteins on HALO 160 Å ES-C18

Application Note 62-PT



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

This separation shows the utility of the HALO® Fused-Core® 160 Å 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.

TEST CONDITIONS:

Column: HALO 160 Å ES-C18, 2.7 µm, 4.6 x 50 mm
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 min
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: 5.0 µL semi-micro
Gradient Dwell Volume: 0.88 mL
LC System: Quaternary Agilent 1100