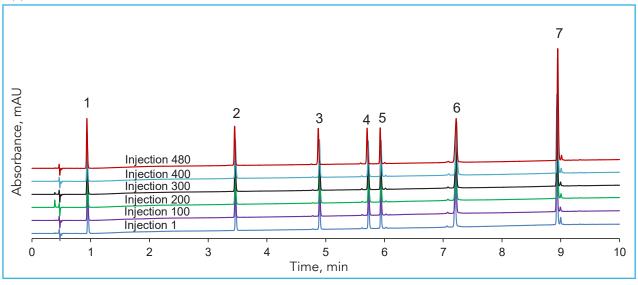


BIOPHARMACEUTICALS



High Temperature/Low pH Stability with HALO 160 Å ES-C18, 2.0 µm

Application Note 137-PE



The sterically-protected C18 phase on the HALO® 2.0 μ m 160 Å column enables high temperature stability with low pH mobile phases. The replicate injections were stopped at injection 480 (15,500 column volumes). The column is expected to have a lifetime of ~1000 injections, depending on the type of sample and conditions used.

PEAK IDENTITIES: MW (g/mol):

1. Gly-Tyr	238
2. Val-Tyr-Val	380
3. Met-enkephalin	574
4. Angiotensin II	1046
5. Leu-enkephalin	556
6. Ribonuclease A	13,700
7. Bovine insulin	5733

TEST CONDITIONS:

Column: HALO 160 Å ES-C18, 2.0 µm,

2.1 x 100 mm

Part Number: 91122-602

Mobile Phase:

A: 0.1% trifluoroacetic acid in water

B: 0.1% trifluoroacetic acid in 80/20 acetonitrile/

water

Gradient: 6% B to 54% B in 10 min

Flow Rate: 0.5 mL/min Initial Pressure: 395 bar Maximum Pressure: 417 bar

Temperature: 60 °C

Detection: UV 215 nm, PDA **Injection Volume:** 0.5 μL

Sample Solvent: Mobile phase A

Response Time: 0.025 sec

Data Rate: 40 Hz Flow Cell: 1.0 µL

LC System: Shimadzu Nexera X2

