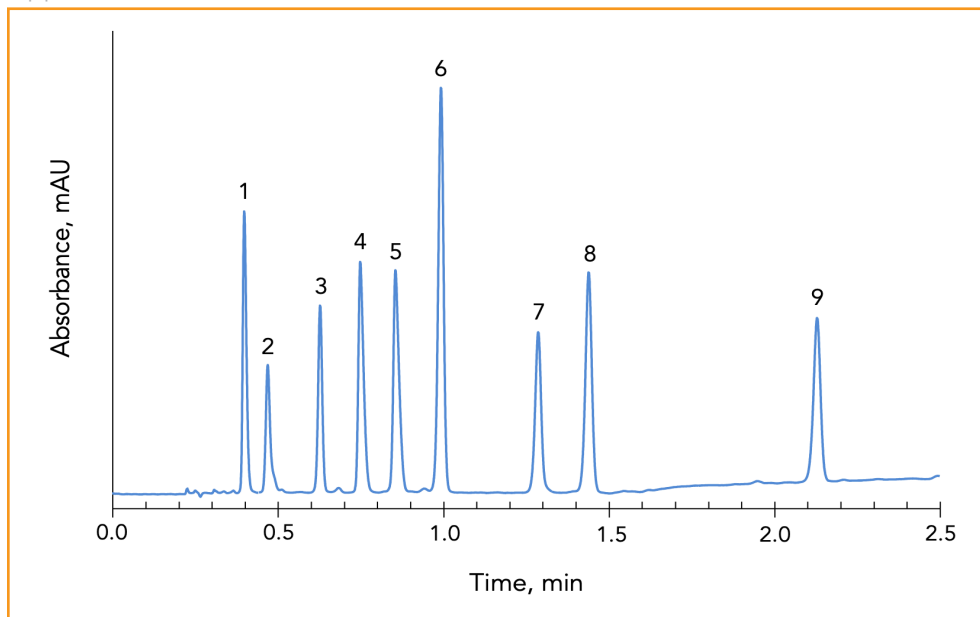




Separation of Cephalosporins on HALO® Phenyl-Hexyl

Application Note 70-AB



PEAK IDENTITIES:

1. Cefadroxil
2. Ceftazidime
3. Cefaclor
4. Cephalexin
5. Cephadrine
6. Cefotaxime
7. Cefazolin
8. Cefoxitin
9. Cephalothin

Cephalosporins are a class of β -lactam drugs. These cephalosporins can be rapidly analyzed by reversed-phase HPLC on a HALO® Fused-Core® Phenyl-Hexyl bonded phase column.

TEST CONDITIONS:

Column: HALO 90 Å Phenyl-Hexyl, 2.7 μ m,
4.6 x 50 mm

Part Number: 92814-406

Mobile Phase:

A: 0.1% formic acid

B: 50/50 acetonitrile/methanol

Gradient: 18% B to 45% B in 2.0 min,
hold for 1 min

Flow Rate: 2.0 mL/min

Initial Pressure: 225 bar

Temperature: 40 °C

Detection: UV 254 nm, VWD

Injection Volume: 1.0 μ L

Sample Solvent: 70/30 water/methanol

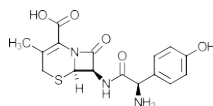
Response Time: 0.02 sec

Flow Cell: 2.5 μ L semi-micro

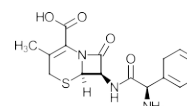
LC System: Shimadzu Prominence UFLC XR

Extra column volume: ~14 μ L

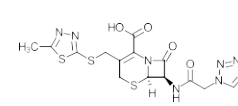
STRUCTURES:



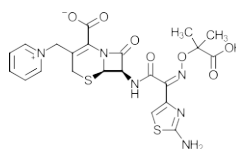
Cefadroxil



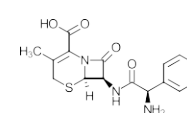
Cephalexin



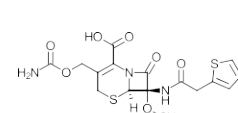
Cefazolin



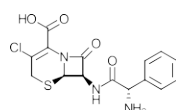
Ceftazidime



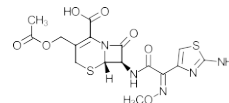
Cephadrine



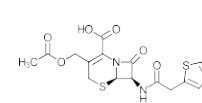
Cefoxitin



Cefaclor



Cefotaxime



Cephalothin

