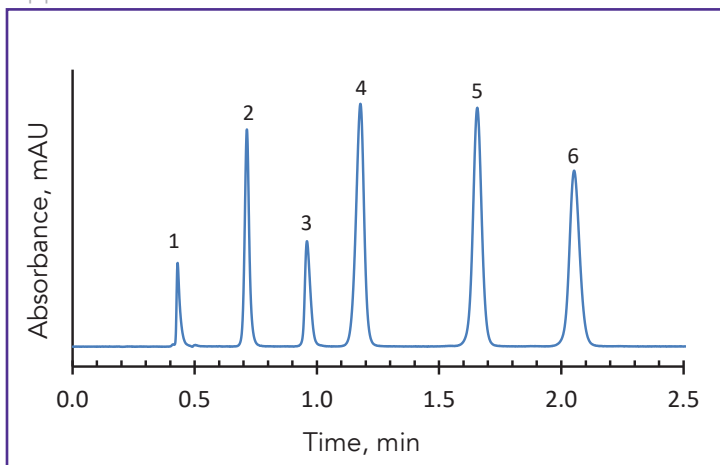




Separation of Biogenic Amines on HALO® Phenyl-Hexyl 5 µm by Ion-Pairing

Application Note 140-B



PEAK IDENTITIES:

1. System peak, t_0
2. L-Tyrosine
3. Octopamine
4. \pm Synephrine
5. Tyramine
6. Hordenine

These five biogenic amines can be rapidly separated with excellent peak shape on a HALO® Phenyl-Hexyl 5 µm column using a methanol/phosphate buffer mobile phase containing an ion-pairing reagent.

TEST CONDITIONS:

Column: HALO 90 Å Phenyl-Hexyl, 5 µm,
3.0 x 100 mm

Part Number: 95813-606

Mobile Phase: 78/22 - A/B

A: 0.05 M Phosphate buffer, (pH 3.0)
with 2.7 g/L of sodium hexanesulfonate

B: Methanol

Gradient:

Time (min)	% B
0.0	22
4.0	30

Flow Rate: 0.8 mL/min

Pressure: 170 bar

Temperature: 30 °C

Detection: UV 280 nm, VWD

Injection Volume: 2.0 µL

Sample Solvent: 90/10 water/methanol

Response Time: 0.02 sec

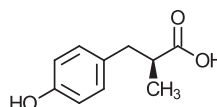
Data Rate: 25 Hz

Flow Cell: 2.5 µL semi-micro

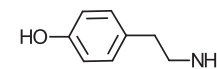
LC System: Shimadzu Prominence UFLC XR

Extra Column Volume: ~14 µL

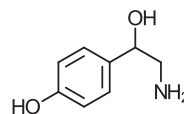
STRUCTURES:



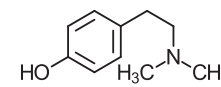
L-Tyrosine



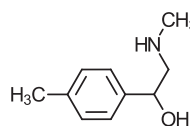
Tyramine



Octopamine



Hordenine



\pm Synephrine

