

# Application Report 39

## Analysis of Biogenic Amines on Discovery HS F5

This application demonstrates the suitability of Discovery HS F5 for the analysis of biogenic amines. These compounds are found in the metabolic pathway for the major catecholamine synthesis from tyrosine to epinephrine (J. Bergquist et al *J. Neurosci. Meth.* 113, 2002, 1-13). Structures along with the optimized chromatogram obtained on Discovery HS F5 are presented below.

### Key Words

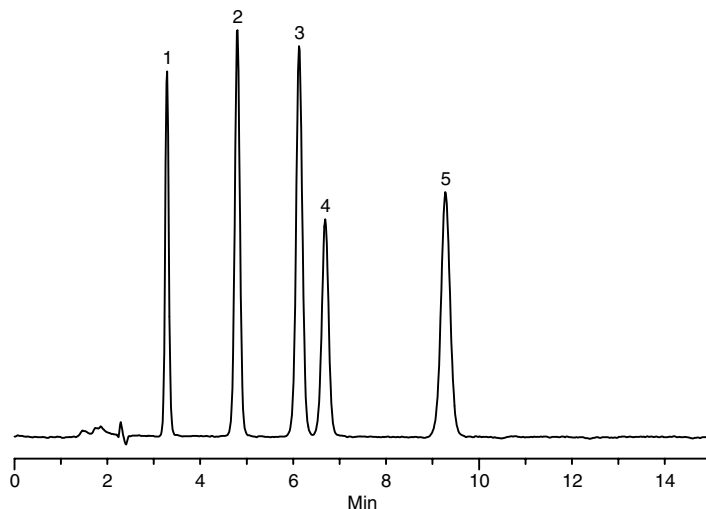
Norepinephrine, NE, N-5785, levodopa, L-dopa, D-9628, epinephrine, E-1635, tyrosine, T-3754, dopamine, DA, H-8502, catecholamine, biogenic amine, Discovery HS F5, 567516-U

**Author:** Shawn R. Wyatt

**Raw Data File Name:** Project "s\_wyatt", Result ID #4587

**Acquisition System:** Lab 35, Waters Alliance

**Notebook Reference:** 1445-41



G002135

### Conditions

Column: Discovery HS F5, 15cm x 4.6mm ID, 5µm  
Cat. No.: 567516-U  
Mobile Phase: 50mM ammonium formate, pH 3 with formic acid  
Temperature: 35°C  
Flow Rate: 1.0mL/min  
Detection: UV, 266nm  
Injection Volume: 10µL  
Sample: 50µg/mL each (biogenic amines) in mobile phase

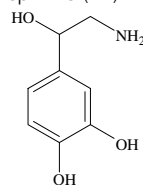
### Peak IDs

1. Norepinephrine (NE)
2. Levodopa (L-dopa)

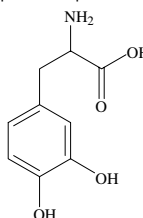
3. Epinephrine (E)
4. Tyrosine
5. Dopamine (DA)

### Structures

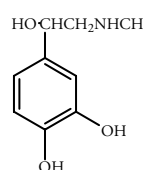
Norepinephrine (NE) - G000559



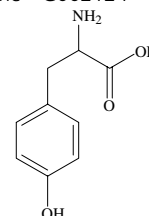
Levodopa (L-dopa) - G002123



Epinephrine (E) - G001262



Tyrosine - G002124



Dopamine (DA) - G001264

