

# Application Report 46

## Drugs of Abuse on Discovery HS F5

Separation of four common drugs of abuse on a Discovery HS F5 column with mass spectrometric detection.

### Key Words

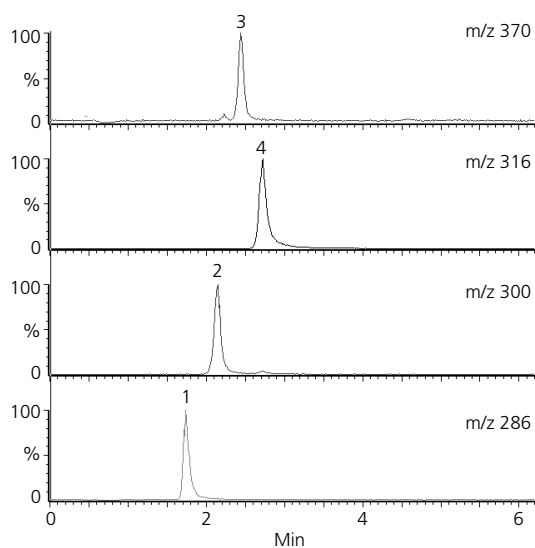
heroin hydrochloride, H-5144, 1502-95-0, oxycodone hydrochloride, O-2628, 124-90-3, codeine, C-1653, 76-57-3, morphine sulfate, 64-31-3, M-9524, Discovery HS F5, 567500-U, mass spectrometry, LC/MS

**Author:** Carmen T. Santasania and Christy Davis

**Raw Data File Name:** doa2

**Acquisition System:** w2790

**Notebook Reference:** 1468-51



G002152

### Conditions

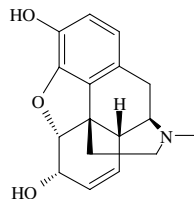
Column: Discovery HS F5, 5cm x 2.1mm ID, 3 $\mu$ m  
Cat. No.: 567500-U  
Mobile Phase: 40:60, 10mM ammonium acetate (pH 7.0):CH<sub>3</sub>CN  
Flow Rate: 0.2mL/min  
Temp.: 40°C  
Det.: ESI (+)  
Inj.: 10 $\mu$ L  
Sample: 1 $\mu$ g/mL in 50:50, 10mM ammonium acetate, pH 7:CH<sub>3</sub>CN

### Peak IDs

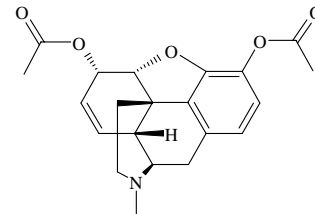
1. Morphine
2. Codeine
3. Heroin
4. Oxycodone

### Structures

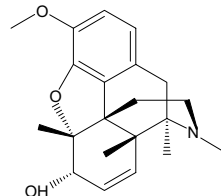
Morphine - G000556



Heroin - G002153



Codeine - G000222



Oxycodone - G002154

