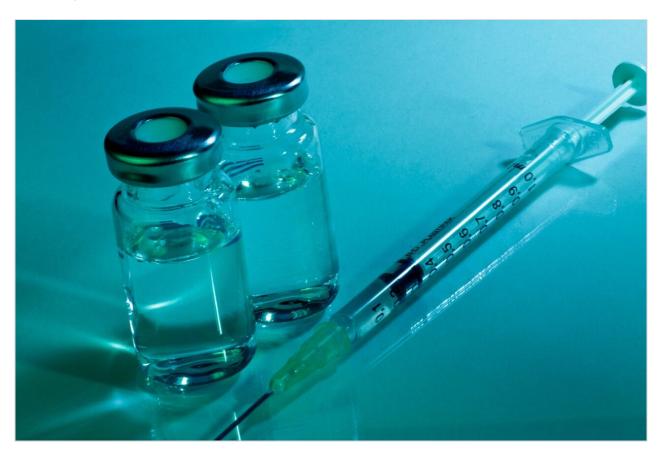
## Waters™

Application Note

# Gradient Separation of Morphine and Morphine-3-β-Glucuronide on ACQUITY UPLC BEH HILIC

Waters Corporation



This is an Application Brief and does not contain a detailed Experimental section.

#### **Abstract**

This application brief demonstrates gradient separation of morphine and morphine-3- $\beta$ -glucuronide on ACQUITY UPLC BEH HILIC Columns.

#### Introduction

The compounds used in this study are:

- 1. Morphine
- 2. Morphine-3-β-Glucuronide

## Morphine

## Morphine-3-β-Glucuronide

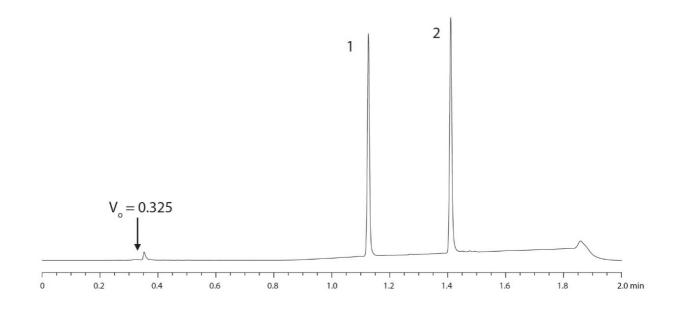
## Experimental

#### **Test Conditions**

Column:		ACQUITY UPLC BEH HILIC, 2.1 x 100 mm, 1.7 $\mu$ m
Part Number:		186003461
Mobile Phase A:		10 mM NH <sub>4</sub> COOH, 0.2% HCOOH in 50:50 ACN: $\rm H_2O$
Mobile Phase B:		10 mM NH <sub>4</sub> COOH, 0.2% HCOOH in 90:10 ACN:H $_2\mathrm{O}$
Flow Rate:		0.788 mL/min
Injection Volume:		2.1 µL
Sample Concentration:		125 μg/mL
Sample Diluent:		75:25 ACN:MeOH with 0.2% HCOOH
Temperature:		30 °C
Detection:		UV @ 280 nm
Sampling Rate:		20 pts/sec
Time Constant:		0.1
Instrument:		Waters ACQUITY UPLC with ACQUITY TUV
Gradient:		
Time (min)	Profile	

Time (min)	Profile
0.00	0.1
0.37	0.1
1.46	99.9
1.50	0.1
2.00	0.1

#### Results and Discussion



#### Featured Products

ACQUITY UPLC Tunable UV Detector <a href="https://www.waters.com/514228">https://www.waters.com/514228</a>

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