

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

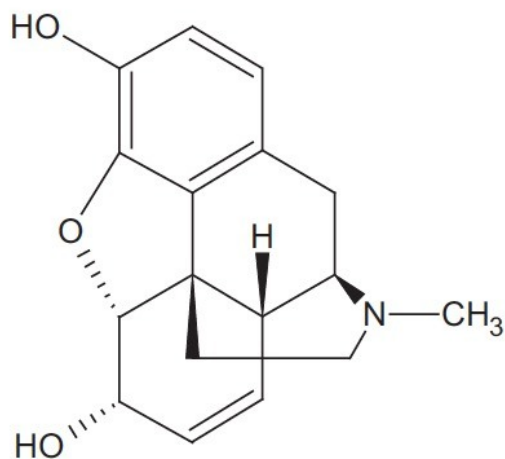
This application brief demonstrates gradient separation of morphine and morphine-3- β -glucuronide on ACQUITY UPLC BEH HILIC Columns.

Introduction

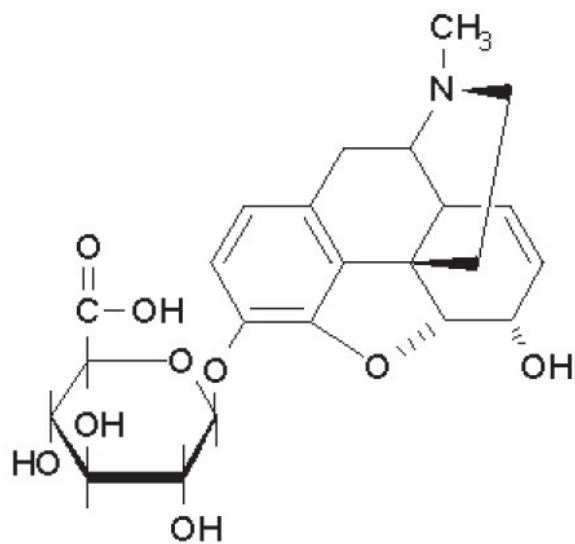
The compounds used in this study are:

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 μ m

Part Number: 186003461

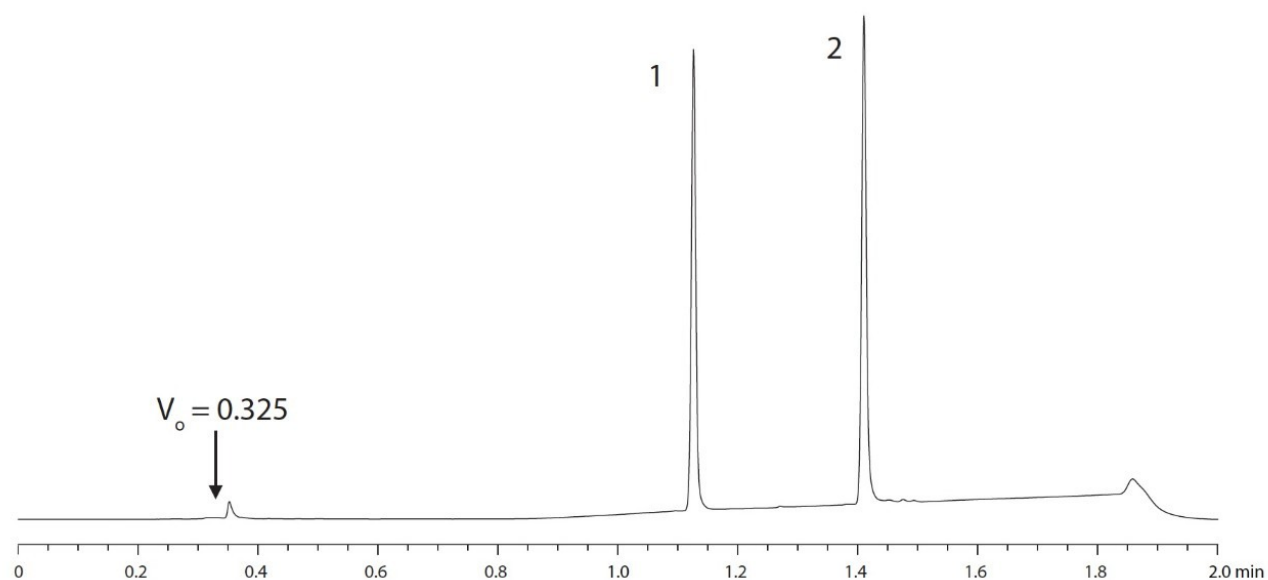
| | |
|-----------------------|--|
| Mobile Phase A: | 10 mM NH ₄ COOH, 0.2% HCOOH in 50:50 ACN:H ₂ O |
| Mobile Phase B: | 10 mM NH ₄ COOH, 0.2% HCOOH in 90:10 ACN:H ₂ O |
| Flow Rate: | 0.788 mL/min |
| Injection Volume: | 2.1 µL |
| Sample Concentration: | 125 µg/mL |
| Sample Diluent: | 75:25 ACN:MeOH 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 |
|------------|---------|
| | %A |
| 0.00 | 0.1 |
| 0.37 | 0.1 |

| Time (min) | Profile |
|------------|---------|
| 1.46 | 99.9 |
| 1.50 | 0.1 |
| 2.00 | 0.1 |

Results and Discussion



Featured Products

- [ACQUITY UPLC System <https://www.waters.com/514207>](https://www.waters.com/514207)
- [ACQUITY UPLC Tunable UV Detector <https://www.waters.com/514228>](https://www.waters.com/514228)

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