Waters™

Application Note

Analysis of Morphine and Its Polar Metabolites Using Atlantis T3 Columns

Waters Corporation

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

Abstract

This application brief demonstrates analysis of morphine and its polar metabolites using Atlantis T3 Columns.

Introduction

The compunds used in this study are -

1. 10-Hydroxymorphine
2. Morphine-3ß-D-glucuronide
3. Morphine-6ß-D-glucuronide
4. Morphine
5. Morphine N-oxide
6. 6-Acetylmorphine

Experimental

Test Conditions

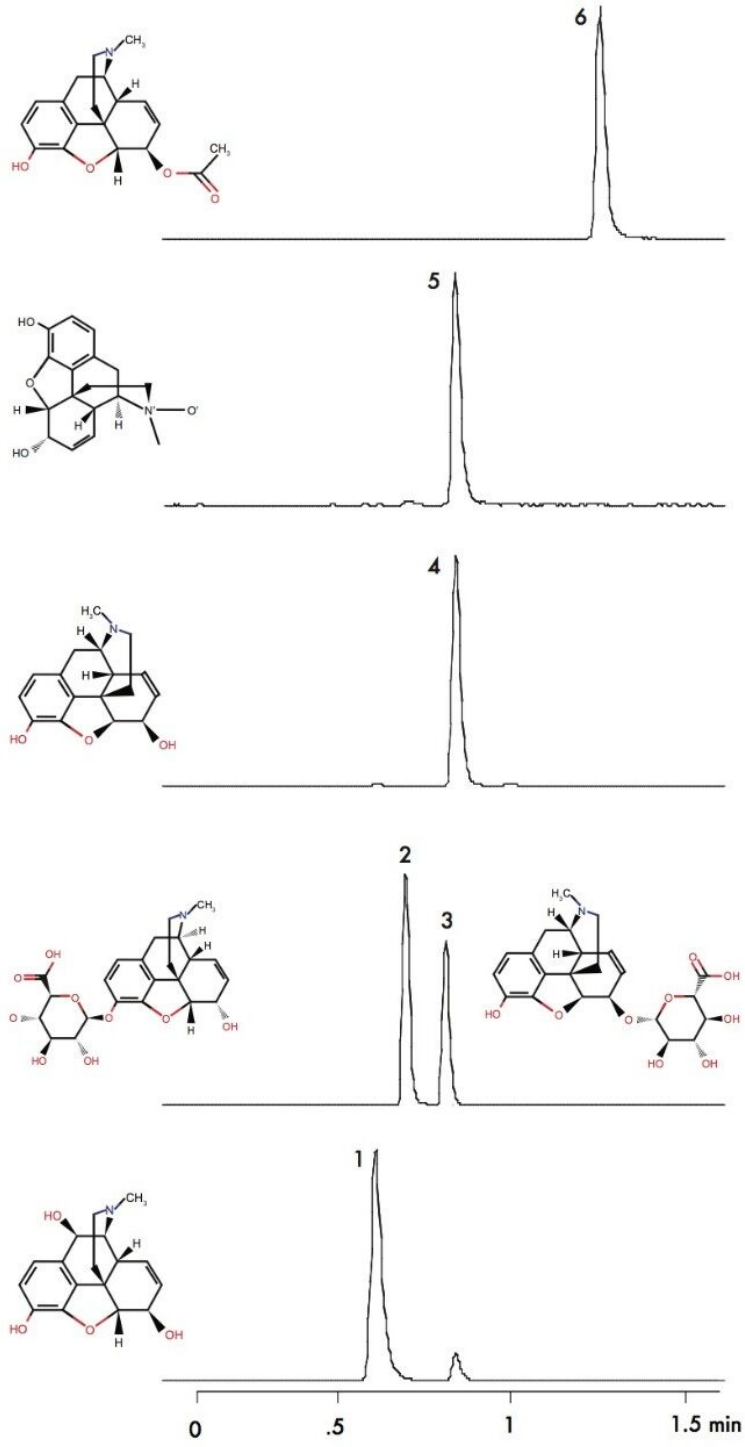
Column:	Atlantis T3, 2.1 x 50 mm, 3 µm
Part number:	186003717
Mobile phase A:	0.1% FA in water
Mobile phase B:	ACN
Flow rate:	0.5 mL/min

Injection volume:	15 µL
Column temperature:	45 °C
MRM:	morphine 286 > 201 morphine-3ß-D-glucuronide 462 > 286 morphine-6ß-D-glucuronide 462 > 286 morphine N-oxide 302 > 162 6-acetylmorphine 328 > 165 10-hydroxymorphine 302 > 58
Instrument:	Waters ACQUITY UPLC System

Gradient

Time (min)	Profile	
	%A	%B
0.00	98	2
5.00	2	98

Results and Discussion



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