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アプリケーションノート

Morphine and Its Glucuronide Metabolites in Serum

Waters Corporation



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

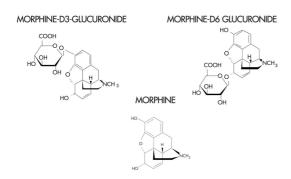
Abstract

This application brief highlights the analysis of morphine and its glucuronide metabolites using Oasis HLB extraction method.

Introduction

Compounds studied in this application brief are:

- 1. Morphine-D3-glucuronide
- 2. Morphine-D6-glucuronide
- 3. Morphine



Experimental

HPLC Method

Column: SymmetryShield RP₈, 3.9×150 mm, $5 \mu m$ (p/n:

WAT200655)

Mobile phase: 20 mM potassium phosphate, pH 6.4

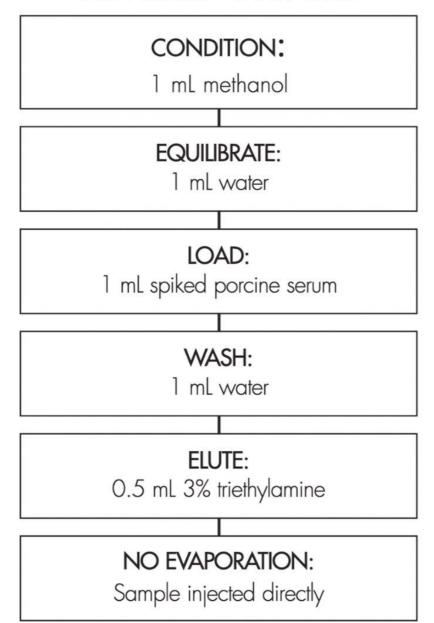
Flow rate: 1.0 mL/min

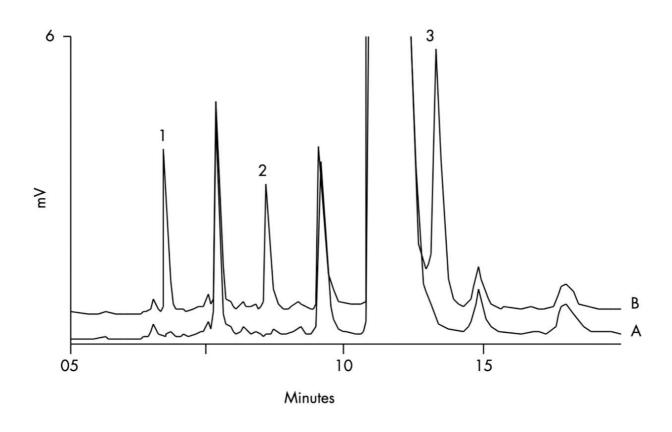
Injection volume: 100 µL of porcine serum extract

Detection: Fluorescence; ex 280 nm, em 355 nm

OASIS® HLB EXTRACTION METHOD

Oasis® HLB 1 cc/30 mg Extraction Cartridge Part Number WAT094225





Compound	Concentration µg/mL	% Recovery	%RSD (n=6)
Morphine-D3-glucuronide	0.48	90.7	2.0
	0.097	100	3.1
Morphine-D6-glucuronide	2.4	92.2	2.8
	0.49	93.1	2.5
Morphine	3.6	102	3.6
	0.73	102	3.2

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