

MORPHINE AND ITS GLUCURONIDE METABOLITES IN SERUM

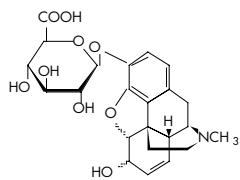
HPLC METHOD

COLUMN: SymmetryShield™ RP₈, 3.9 x 150 mm, 5 µm
 PART NUMBER: 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

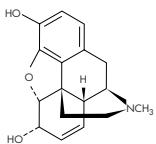
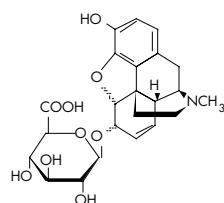
COMPOUNDS:

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

MORPHINE-D3-GLUCURONIDE

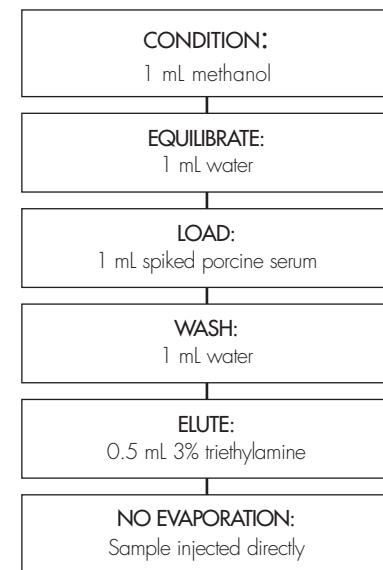


MORPHINE-D6 GLUCURONIDE

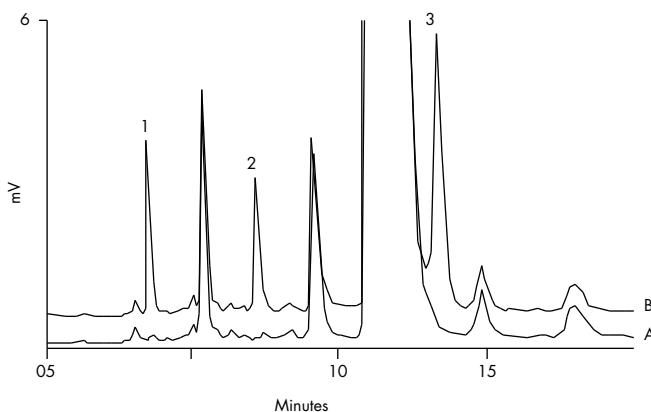


OASIS® HLB EXTRACTION METHOD

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



CHROMATOGRAM OF SERUM EXTRACTS: A) BLANK B) SPIKED SAMPLE



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