

Propranolol in Human Urine

Waters Corporation



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

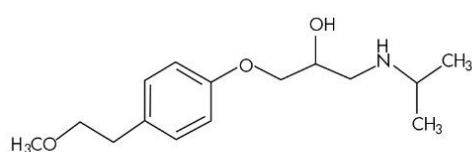
Abstract

This application brief highlights the analysis of propranolol in human urine using SymmetryShield columns.

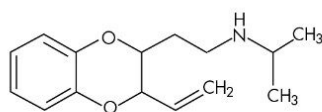
Introduction

Compounds used in this study are:

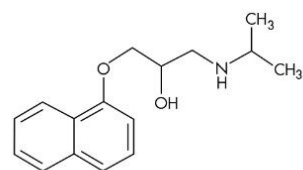
1. Metoprolol
2. Oxprenolol (I.S.)
3. Propranolol



1. Metoprolol



2. Oxprenolol (I.S.)



3. Propranolol

Experimental

HPLC Method

Column:	SymmetryShield RP ₁₈ , 3.9 x 150 mm, 5 µm (p/n: 186000108)
Guard Column:	Sentry guard column RP ₁₈ 3.9 x 20 mm, 5 µm (p/n: 186000107)
Mobile phase:	0.1% TFA in water/Acetonitrile 80:20
Flow rate:	1.0 mL/min
Injection volume:	50 µL

Temperature:

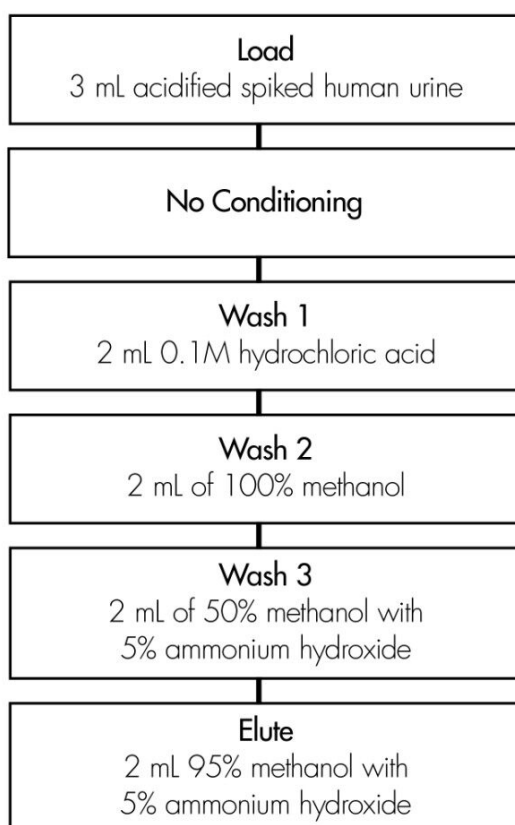
30° C

Detection:

UV @ 275 nm

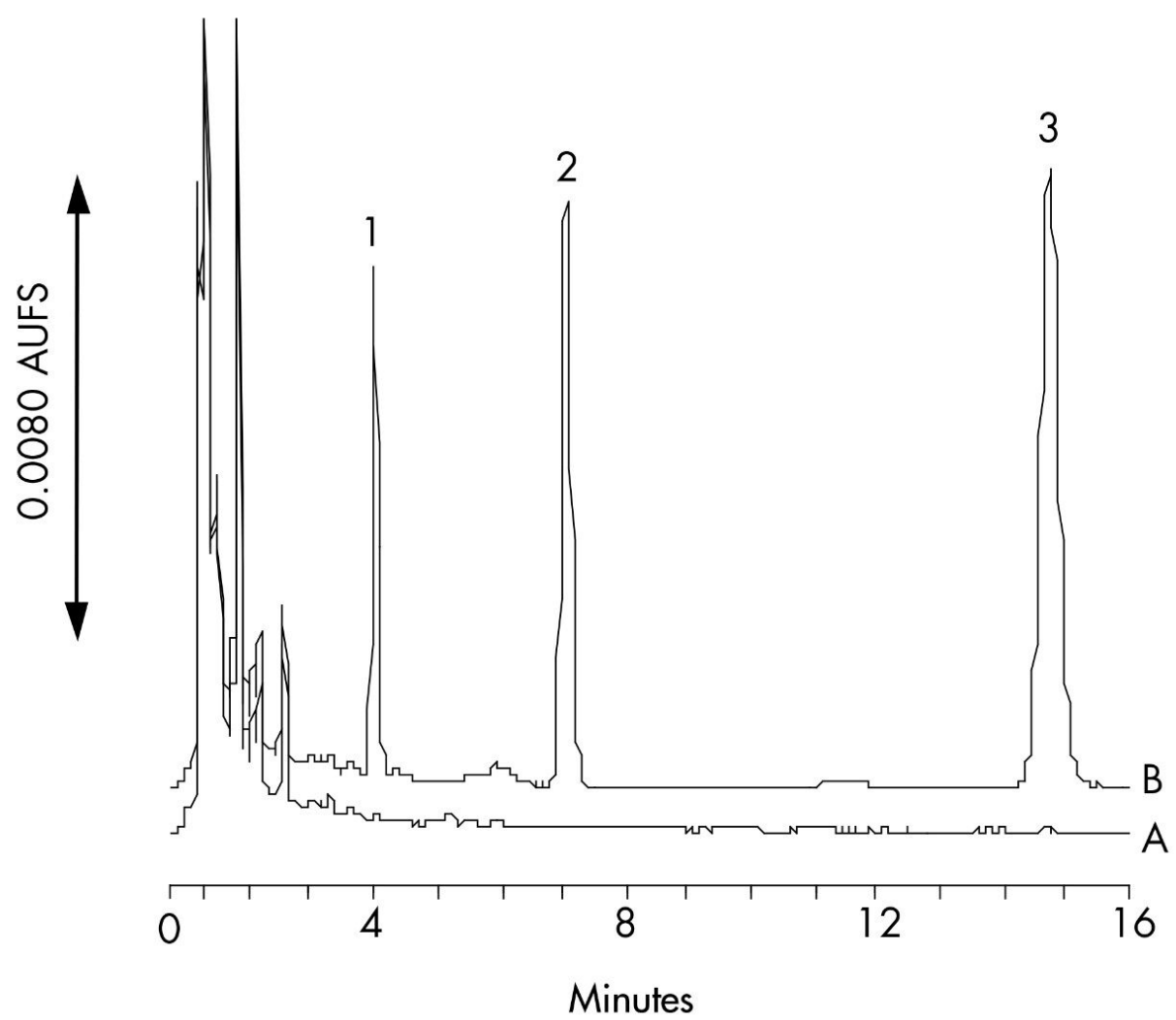
Oasis® MCX Extraction Method

Oasis® MCX Extraction Cartridge, 3 cc/60 mg
Part Number 186000254



Neutralize each elution with 100 µL of acetic acid. Evaporate under N₂ at 40 °C and reconstitute with 300 µL of water

Results and Discussion



Compound	% Recovery 0.08 µg/mL	(%RSD) 0.4 µg/mL
Propranolol (n=3)	105.8 (2.7)	98.5 (0.7)
Metoprolol (n=3)	101.0 (3.4)	99.6 (0.4)
Propranolol Interday (n=6)		99.0 (0.9)
Propranolol Interperson (n=9)		100.4 (6.4)
Metoprolol (n=6)		100.3 (0.9)
Metoprolol (n=9)		97.3 (2.6)
Oxprenolol (I.S.)		91.1 (3.2)

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WA31763.134, June 2003