## Waters™

응용 자료

# Oxybutynin in Rat Plasma - Xterra MS C18 Column

Waters Corporation



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

Abstract

This application brief demonstrates analysis of oxybutynin in rat plasma.

### Introduction

The compound analyzed in this study is oxybutynin.

## Experimental

#### **HPLC Method**

Column:	Xterra MS $C_{18}$ 2.1 x 30 mm, 3.5 $\mu m$
Part number:	186000398
Mobile phase A:	100 mM NH <sub>4</sub> COOH
Mobile phase B:	ACN
Isocratic mobile phase composition:	45% A; 55% B
Flow rate:	0.2 mL/min
Injection volume:	30 μL
Detection:	MS ESI <sup>+</sup>
Instrument:	Alliance 2790, Quattro Ultima
lon source:	Electrospray Positive
Source temperature:	150 °C
Gas cell:	1.5e <sup>-3</sup> mbar, 25eV
Desolvation temperature:	350 °C
Cone gas flow:	150 L/hr
Drying gas flow:	600 L/hr
Cone voltage:	30 V

#### OASIS® MCX EXTRACTION METHOD

Oasis® MCX Extraction Plate, 10 mg/96 well Part Number 186000259

#### **CENTRIFUGE:**

25 mL of EDTA rat plasma at 10000 (RPM)

#### SPIKE:

5 mL of centrifuged plasma with drug (max 5% organic load) Add 100 μL H<sub>3</sub>PO<sub>4</sub> (Oxybutyninis base sensitive)

#### **CONDITION PLATE:**

500 µL methanol followed with 500 µL water

#### LOAD PLATE:

500 µL spiked rat plasma

#### WASH PLATE:

500 µL 2% HCl in water

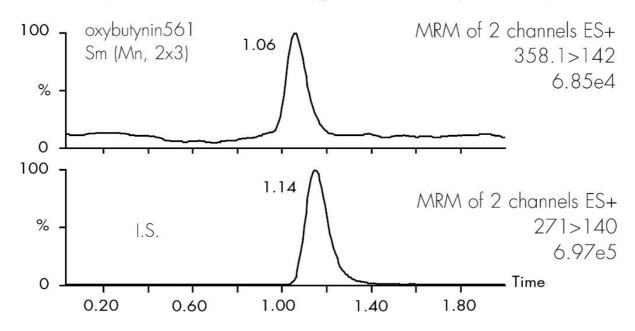
#### **ELUTE PLATE:**

 $300~\mu L~5\%~NH_{\rm A}OH~in~methanol$ 

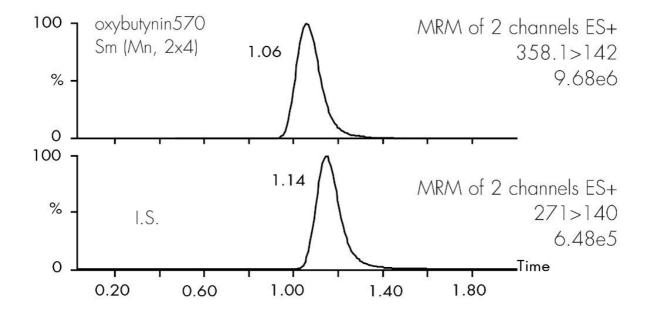
#### DILUTE:

 $200~\mu L$  water 10% Formic Acid in water

Spike 1 ng/mL, 55/45 ACN/ $H_2$ O 0.1 M NH $_4$  Formate pH 4



Spike 250 ng/mL, 55/45 ACN/ ${\rm H_2O}$  0.1 M NH $_{\rm 4}$  Formate pH 4



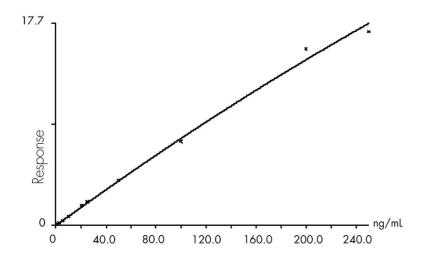
Compound name: Oxybutynin

Coefficient of Determination: 0.995732

Calibration curve:  $-3.59333e-5*x^2+0.0799116*x+0.000289979$ 

Response type: Internal Std (Ref 1), Area\* (IS Conc./IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting:  $1/x^2$ , Axis trans: None



#### **Featured Products**

Alliance HPLC System <a href="https://www.waters.com/534293">https://www.waters.com/534293</a>

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