

Application Note

Chlorzoxazone in Rat Plasma

Waters Corporation

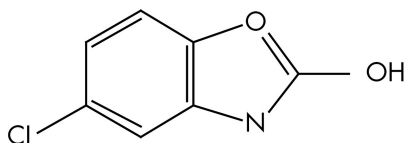
This is an Application Brief and does not contain a detailed Experimental section.

Abstract

This application brief highlights the analysis of chlorzoxazone in rat plasma using Oasis MAX extraction method.

Introduction

Chlorzoxazone is analyzed in this application brief.



CHLORZOXAZONE

Experimental

HPLC Method

Column:	XTerra MS C ₁₈ 4.6 x 30 mm, 3.5 µm (p/n: 186000398)
Mobile phase A:	0.2% HCOOH
Mobile phase B:	ACN
Isocratic mobile phase composition:	45% A; 55% B
Flow rate:	0.2 mL/min
Injection volume:	20 µL
Temperature:	60 °C
Detection:	MS ESI-
Instrument:	Alliance 2790, Micromass Quattro Ultima

MS Conditions

Ion source:	ESI-
Source temp.:	150 °C
Gas cell:	1.5e ⁻³ mbar, 20 eV
Desolvation temp.:	350 °C

Cone gas flow: 150 L/hr

Drying gas flow: 600 L/hr

Cone voltage: 30 V

OASIS® MAX EXTRACTION METHOD

Oasis® MAX Extraction Plate, 10 mg/96-well

Part Number 186000375

CENTRIFUGE:

25 mL of EDTA rat plasma
at 10 000 (RPM)

SPIKE:

5 mL of centrifuged plasma with drug
(max 5% organic load)
Add 100 μL H_3PO_4

CONDITION PLATE:

500 μL methanol followed
with 500 μL water

LOAD PLATE:

500 μL spiked rat plasma

WASH PLATE:

500 μL 2% NH_4OH in water

ELUTE PLATE:

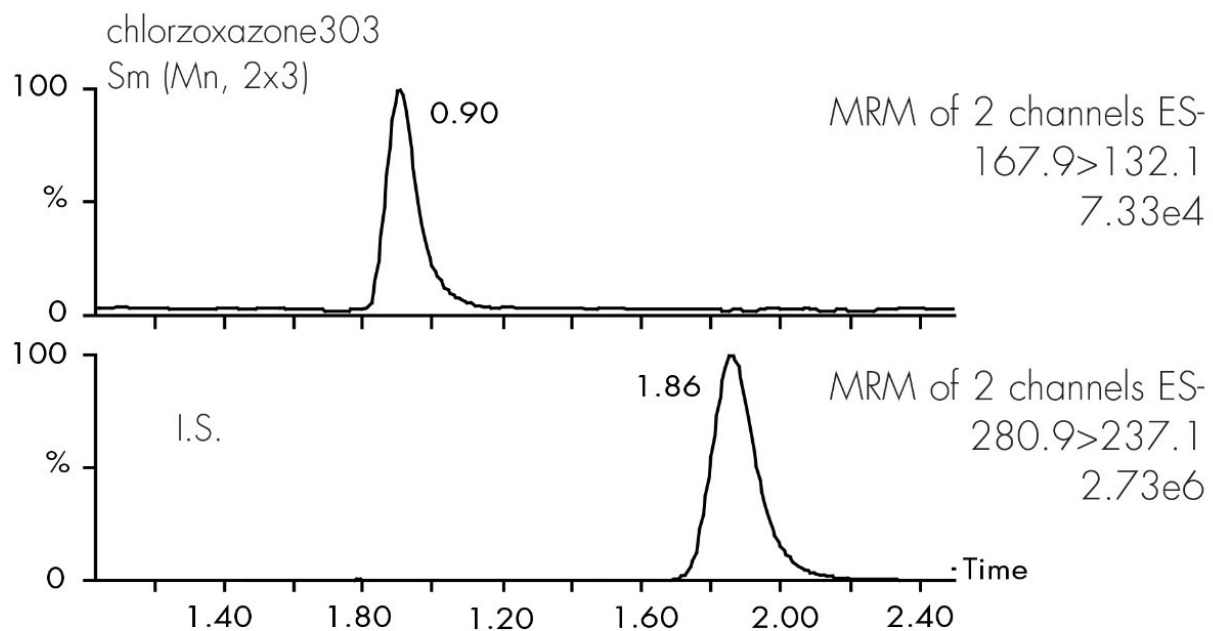
300 μL 5% HCOOH in methanol

DILUTE:

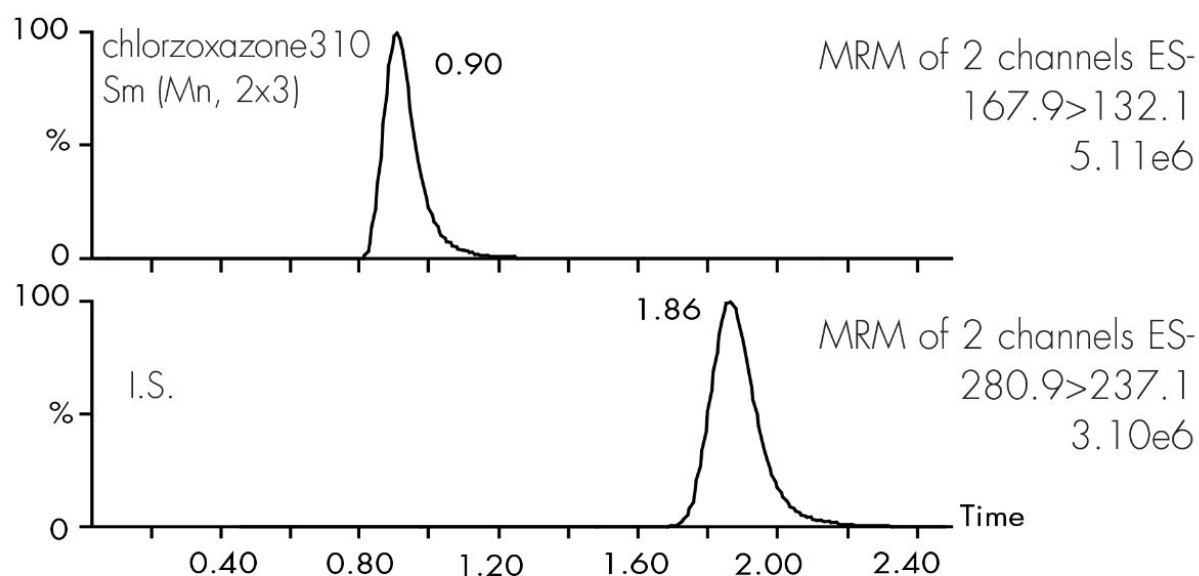
200 μL water

Results and Discussion

Plasma 5 ng/mL, 55/45 ACN/H₂O 0.2 % Formic Acid



Plasma 250 ng/mL, 55/45 ACN/H₂O 0.2 % Formic Acid



Chlorzoxazone (ng/mL)	Mean	Standard deviation	Coefficient of variation (%)	Recovery (%)
5	4.93	0.076	1.5	99
10	10.4	0.38	3.7	104
25	24.96	1.43	5.7	99
100	99.85 (5)	3.53	3.5	99
250	245.91	8.31	3.3	98

Featured Products

Alliance HPLC <<https://www.waters.com/514248>>

WA31764.53, June 2003

© 2022 Waters Corporation. All Rights Reserved.