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アプリケーションノート

Atenolol in Rat Plasma by Mixed-Mode Weak Cation Exchange and LC-MS/MS

Waters Corporation

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

Abstract

This application brief demonstrates analysis of atenolol in rat plasma by mixed-mode weak cation exchange and LC-MS/MS.

Introduction

The compound analyzed in this study is Atenolol.

$$H_3C$$
 CH_3
 H_2N
 OH

Atenolol

Experimental

LC Conditions

Column: XTerra MS C_{18} 2.1 x 20 mm /S, 3.5 μm Part number: 186001923 Mobile phase A: 10 mM NH₄HCO₃, pH 10 Mobile phase B: MeOH with 10 mM $\mathrm{NH_4HCO_3}$, pH 10 Flow rate: 0.4 mL/min Injection volume: 10 μL Column temperature: Ambient Instrument: Waters 2777 Sample Manager and Waters 1525µ Binary HPLC Pump

Gradient

Time (min)	%A	%B
0.0	95	5
3.0	5	95
4.0	5	95
4.1	95	5
5.0	95	5

MS Conditions

Waters Micromass Quattro Ultima

ESI+

Source temp.: 150 °C

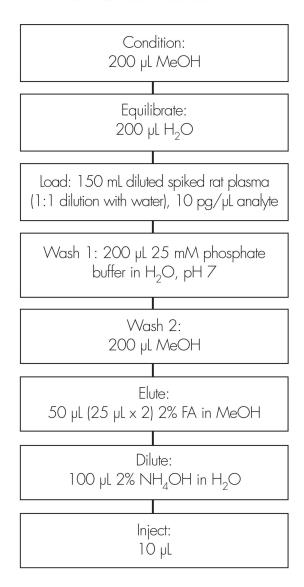
Desolvation temp.: 350 °C

Cone gas flow: 50 L/Hr

Desolvation gas flow:	550 L/Hr
Collision cell:	2.2e ⁻³ bar (Argon gas)
Cone voltage:	45 volts
CID:	25eV
MRM transition:	$m/z \ 266.9 \rightarrow 144.9$

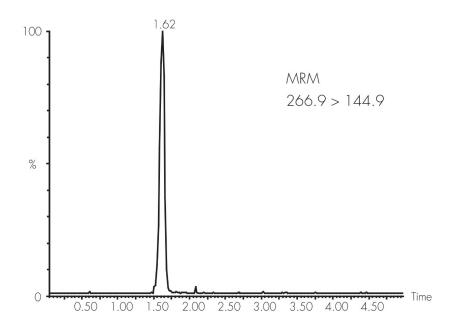
Oasis® WCX µElution Plate

Part Number: 186002499



Results and Discussion

101% Recovery



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WA31764.197, June 2003

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