Waters™

Applikationsbericht

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

Waters Corporation

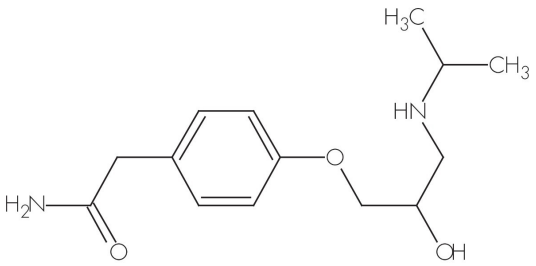
This is an Application Brief and does not contain a detailed Experimental section.

## 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.




**Atenolol**

# Experimental

## LC Conditions

| | |
|---|---|
| Column: | XTerra MS $C_{18}$ 2.1 x 20 mm *IS*, 3.5 µm |
| Part number: | 186001923 |
| Mobile phase A: | 10 mM $NH_4HCO_3$, pH 10 |
| Mobile phase B: | MeOH with 10 mM $NH_4HCO_3$, 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

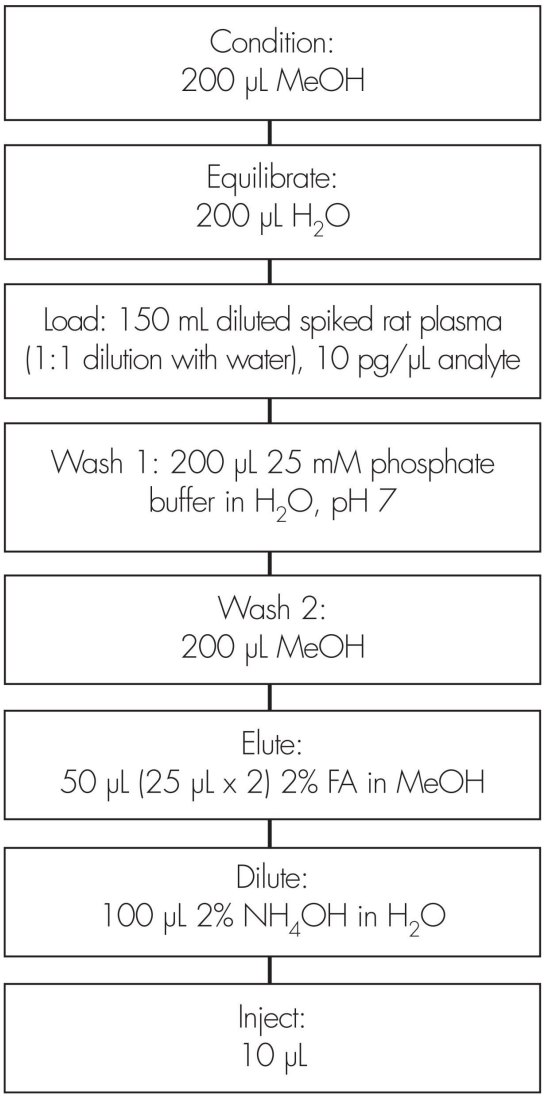
Waters Micromass Quattro Ultima

ESI+

| | |
|---|---|
| Source temp.: | 150 °C |
| Desolvation temp.: | 350 °C |

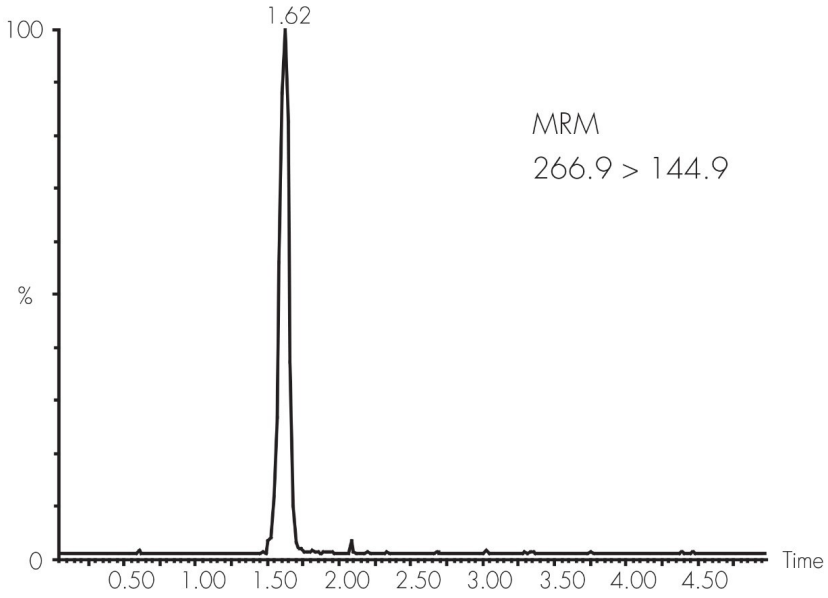
| | |
|---|---|
| Cone gas flow: | 50 L/Hr |
| Desolvation gas flow: | 550 L/Hr |
| Collision cell: | $2.2e^{-3}$ bar (Argon gas) |
| Cone voltage: | 45 volts |
| CID: | 25eV |
| MRM transition: | *m/z* 266.9 → 144.9 |

**Oasis® WCX µElution Plate**
Part Number: 186002499




## Results and Discussion

**101% Recovery**

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