# Waters<sup>™</sup>

#### 응용 자료

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

Waters Corporation

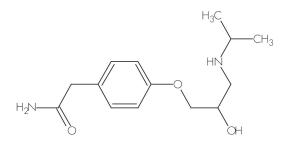
This is an Application Brief and does not contain a detailed Experimental section.

#### Abstract

This application brief demonstrates analysis of atenolol in urine 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 <sub>18</sub> 2.1 x 20 mm <i>IS</i> , 3.5 μm
Part number:	186001923
Mobile phase A:	10 mM NH <sub>4</sub> HCO <sub>3</sub> , pH 10
Mobile phase B:	MeOH with 10 mM NH <sub>4</sub> HCO <sub>3</sub> , pH 10
Flow rate:	0.4 mL/min
Injection volume:	10 µL
Column temperature:	Ambient
Instrument:	Waters 2777 Sample Manager and Waters 1525 $\mu$ 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

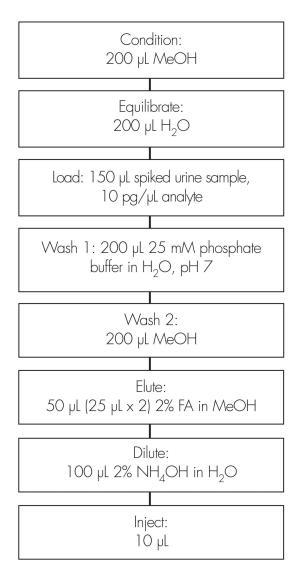
Desolvation temp.:

350 °C

Cone gas flow:	50 L/Hr
Desolvation gas flow:	550 L/Hr
Collision cell:	2.2e <sup>-3</sup> bar (Argon gas)
Cone voltage:	45 volts
CID:	25eV
MRM transition:	<i>m/z</i> 266.9 → 144.9

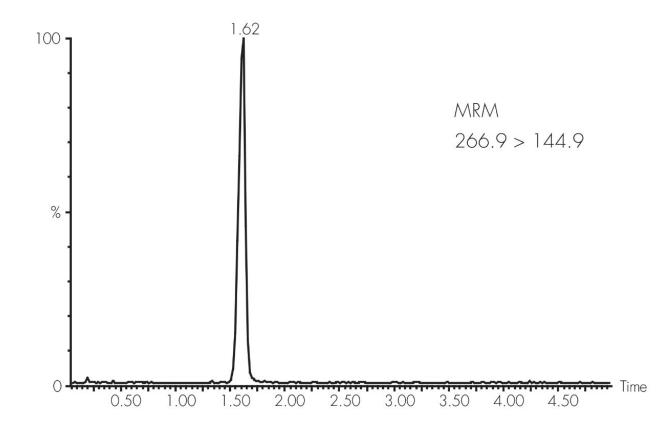
### **Oasis® WCX µElution Plate**

Part Number: 186002499



### **Results and Discussion**

## 106% Recovery



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