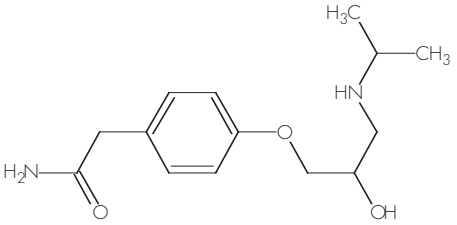
Waters OASIS®
SAMPLE EXTRACTION PRODUCTS

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



Atenolol

Oasis® WCX µElution Plate
Part Number: 186002499

Condition:
200 µL MeOH

Equilibrate:
200 µL H_2O

Load: 150 mL diluted spiked rat plasma (1:1 dilution with water), 10 pg/µL analyte

Wash 1: 200 µL 25 mM phosphate buffer in H_2O, pH 7

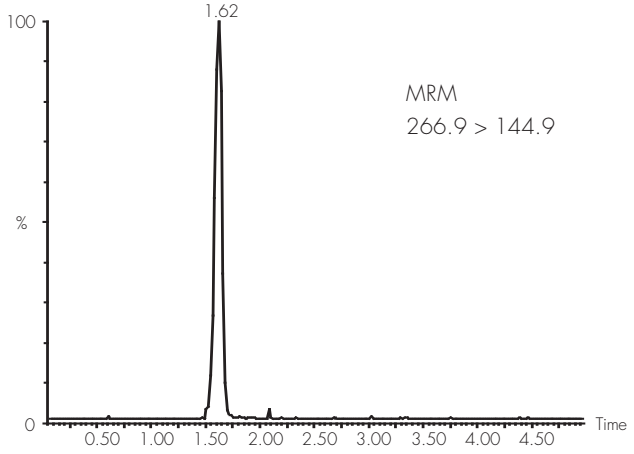
Wash 2:
200 µL MeOH

Elute:
50 µL (25 µL x 2) 2% FA in MeOH

Dilute:
100 µL 2% NH_4OH in H_2O

Inject:
10 µL

101% Recovery



LC/MS Method

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, pH10
Flow Rate: 0.4 mL/min
Gradient:

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

Injection Volume: 10 µL
Column Temperature: Ambient
Instrument: Waters 2777 Sample Manager and Waters 1525µ Binary HPLC Pump

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: 25 eV
MRM Transition: m/z 266.9 → 144.9

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