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Nota de aplicación

Clozapine on Oasis MCX

Waters Corporation



Abstract

This application note highlights the separation of clozapine on Oasis MCX.

Introduction

Clozapine is used to treat schizophrenia in patients who have not been helped by or are unable to take other medicines. The analyte is basic and therefore an Oasis MCX product was selected.

Clozapine

MW 326.83

pKa1 = 3.7

pKa2 = 7.6

Experimental

Test Conditions

Oasis MCX 10-mg 96-Well Plate

Condition: 500 µL MeOH

Equilibrate: 500 μ L H₂O

Load:	1 mL sample (500 μ L human plasma diluted 1:1 with 4% $\rm H_3PO_4$ in $\rm H_2O)$
Wash 1:	500 μL 2% HCOOH in H ₂ O
Wash 2:	500 μL MeOH
Elute:	300 μ L (150 μ L x 2) 5% NH ₄ OH in MeOH Dry and reconstitute w/100 μ L 0.1% FA in H ₂ O
Inject:	50 μL
Column:	SunFire C ₁₈ 2.1 x 50 mm, 3.5 μm
Mobile Phase A:	0.1% FA in H ₂ O
Mobile Phase B:	0.1% FA in MeOH
Flow Rate:	0.4 mL /min
Injection Volume:	50 μL
Instrument:	2777 Sample Manager and 1525µ Binary HPLC Pump

Gradient

Time	Profile		
(min)	%A	%B	
0.0	95	5	
5.0	5	95	
7.0	5	95	
7.5	95	5	
10.0	95	5	

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Quatt	ro Pi	em	Iel	1

ESI+

Source Temp.: 150 °C

Desolvation Temp.: 350 °C

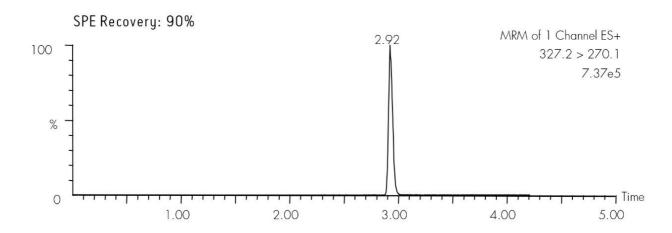
Cone Gas Flow: 50 L /Hr

Desolvation Gas Flow: 600 L /Hr

Collision Cell: 2.2e⁻³ bar (Ar gas)

MRM transition		Cone (V)	CID (eV)
Clozapine	m/z 327.2 \rightarrow 270.1	30	20

Results and Discussion



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