

Tricyclic Antidepressants Using LC-MS

Waters Corporation



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

Abstract

This application brief demonstrates analysis of tricyclic antidepressants using LC-MS.

Introduction

The compounds used in this study are -

1. Trimipramine
2. Triprolidine
3. Doxepin
4. Desipramine
5. Amitriptyline

Experimental

HPLC Conditions

Column:	SunFire C ₈ 2.1 x 20 mm <i>IS</i> , 3.5 μm
Part number:	186002697
Mobile phase A:	Water with 0.1% HCOOH
Mobile phase B:	Acetonitrile with 0.1% HCOOH
Flow rate:	0.63 mL/min
Injection volume:	2 μL
Sample concentration:	20 μg/mL in water
Temperature:	30 °C

Detection:	Waters Micromass ZQ
Instrument:	Alliance 2796 with 2487 Dual Wavelength Detector

MS Conditions

ESI+ capillary (kV):	3
Cone voltage (V):	30
Extractor (V):	3
RF lens (V):	0.3
Source temp. (°C):	150
Desolvation temp. (°C):	350
Cone gas flow (L/hr):	50
Desolvation flow (L/hr):	550

Results and Discussion

Featured Products

- [Alliance HPLC System <https://www.waters.com/534293>](https://www.waters.com/534293)

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