

## Application Note

# Analysis of Tricyclic Antidepressants using XBridge Phenyl

---

Waters Corporation



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

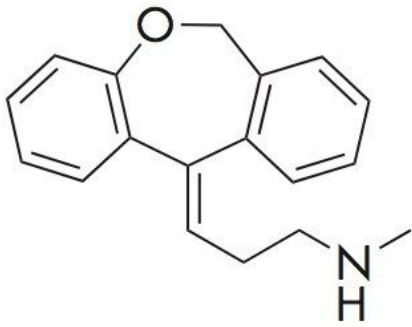
---

## Abstract

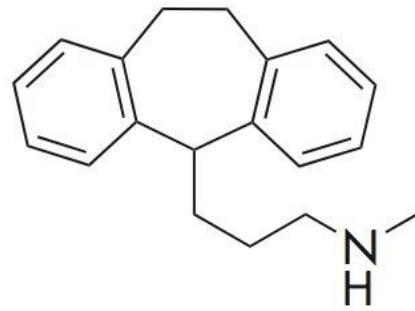
This application brief highlights the analysis of tricyclic antidepressants using XBridge Phenyl columns.

---

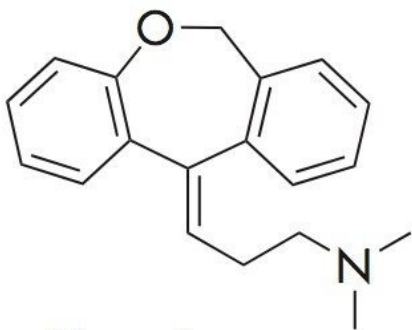
## Introduction



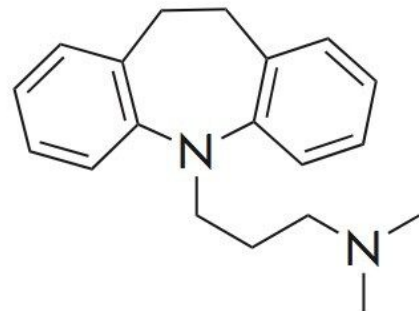
1. Nordoxepin



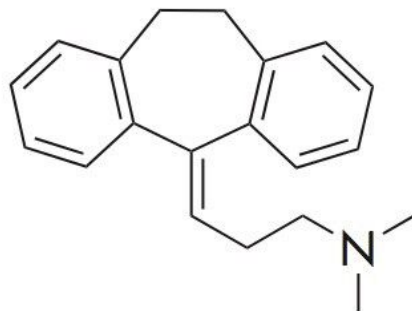
2. Desipramine



3. Doxepin



4. Imipramine



5. Amitriptyline

---

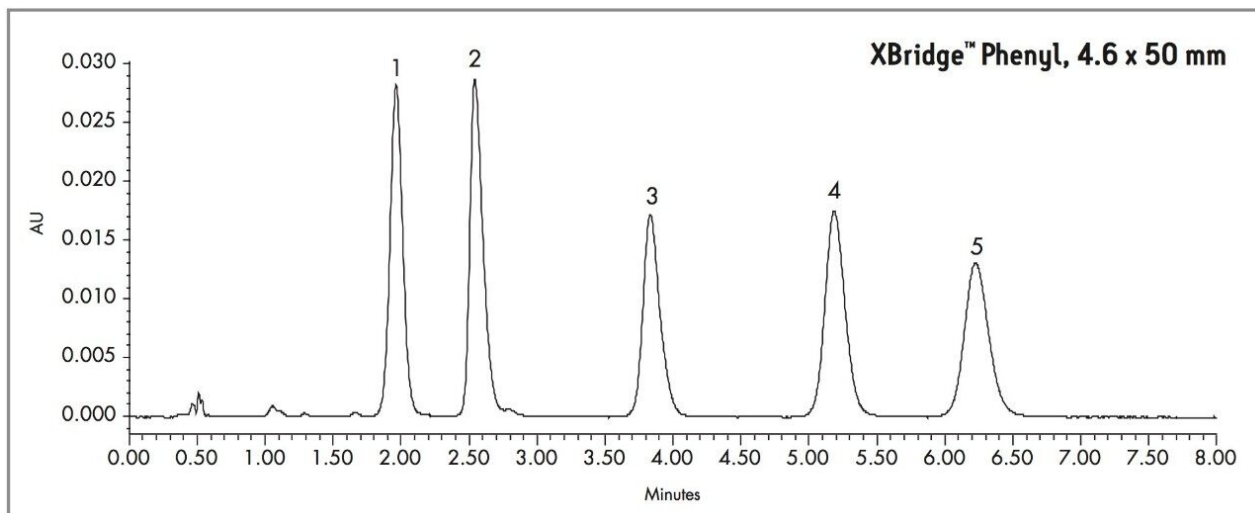
Experimental

## Test Conditions

Columns:	XBridge Phenyl, 4.6 x 50 mm, 3.5 µm p/n: 186003332
Mobile phase A:	H <sub>2</sub> O
Mobile phase B:	ACN
Mobile phase C:	100 mM NH <sub>4</sub> HCO <sub>3</sub>
Flow rate:	1.2 mL/min
Isocratic Mobile Phase Composition:	48% A; 42% B; 10% C
Injection volume:	10 µL
Sample:	Nordoxepin (10 µg/mL), Desipramine (10 µg/mL), Doxepin (10 µg/mL), Imipramine (10 µg/mL), Amitriptyline (10 µg/mL) in H <sub>2</sub> O/ACN (50/50)
Column temp.:	30 °C
Sample temp.:	15 °C
Detection:	UV @ 254 nm
Sampling Rate:	5 points/sec
Filter Response:	0.2
Instrument:	Alliance 2695 with 2996 PDA

---

## Results and Discussion



*Compounds: 1. Nordoxepin 2. Desipramine 3. Doxepin 4. Imipramine 5. Amitriptyline.*

---

## Featured Products

Alliance HPLC <<https://www.waters.com/514248>>

WA60188, June 2007