

Application Report 239

Analysis of Tricyclic Antidepressants Using Ascentis™ C18

This application demonstrates the suitability of the Ascentis C18 for the analysis of eight tricyclic antidepressants. Structures along with the optimized chromatogram obtained on the Ascentis C18 are presented.

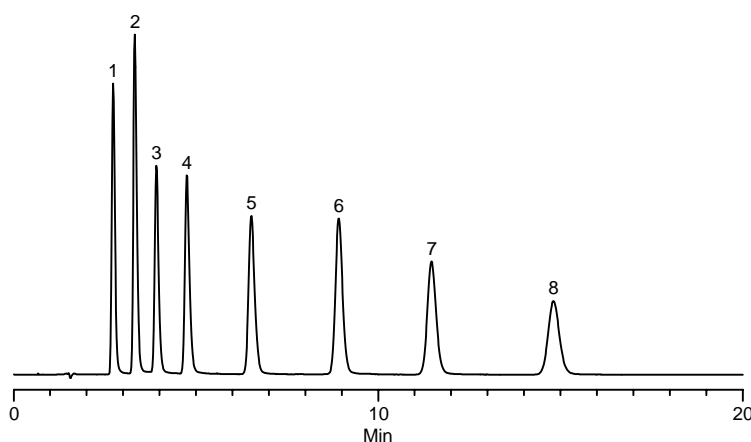
Key Words

nordoxepin, 2887-91-4, N0392, desipramine, 58-28-6, D9786, nortriptyline, 894-71-3, N7261, doxepin, 1229-29-4, D4526, norclomipramine, 303-48-0, N1280, imipramine, 113-52-0, I2638, amitriptyline, 549-18-8, A8404, clomipramine, 17321-77-6, C7291, Ascentis C18, 581324-U

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Acquisition System: Cinnabar
Waters 2690

Notebook Reference: 1551



G002934

Conditions

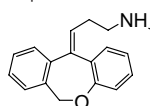
column: Ascentis C18, 15 cm x 4.6 mm I.D., 5 µm particles (581324-U)
mobile phase: 25:75, 25 mM ammonium phosphate dibasic (pH 7.0 with phosphoric acid): methanol
flow rate: 1.0 mL/min.
temp.: 35 °C
det.: UV at 254 nm
injection: 10 µL
sample: as indicated in 60:40 water:methanol

Peak IDs

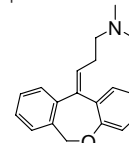
1. Nordoxepin (50 µg/mL)
2. Desipramine (50 µg/mL)
3. Nortriptyline (50 µg/mL)
4. Norclomipramine (50 µg/mL)
5. Doxepin (50 µg/mL)
6. Imipramine (50 µg/mL)
7. Amitriptyline (50 µg/mL)
8. Clomipramine (50 µg/mL)

Structures

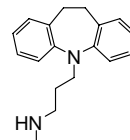
Nordoxepin - G002706



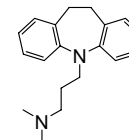
Doxepin - G002705



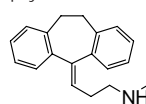
Desipramine - G002931



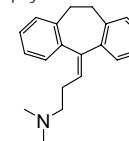
Imipramine - G002930



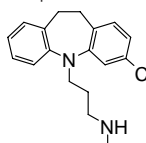
Nortriptyline - G002933



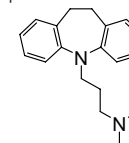
Amitriptyline - G002932



Norclomipramine - G002668



Clomipramine - G002667



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