Application Report 117

LC-MS Analysis of Macrolide Antibiotics Using Ascentis™ C18

This application demonstrates efficient separation of macrolide antibiotics erythromycin C and clarithromycin.

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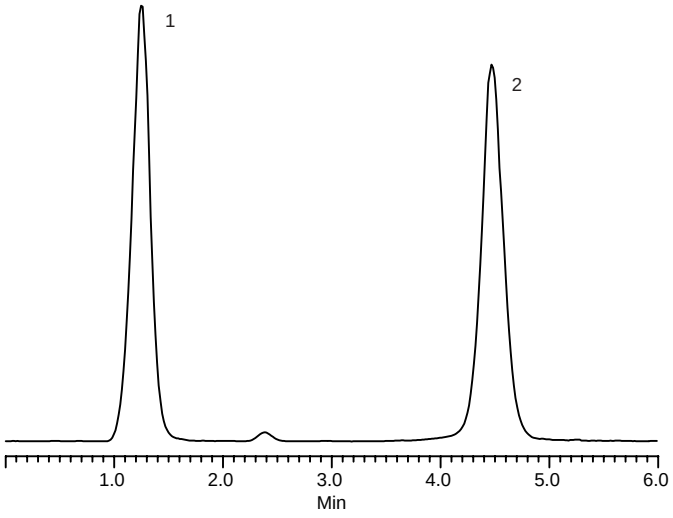
Acquisition System: Thermo Surveyor LC and LCQAdvantage

Notebook Reference: 1498

Key Words

clarithromycin, 81103-11-9; erythromycin C, 1675-02-01; macrolide antibiotic; LC-MS; Ascentis C18, 581303-U, mass spectrometry



G002438

Conditions

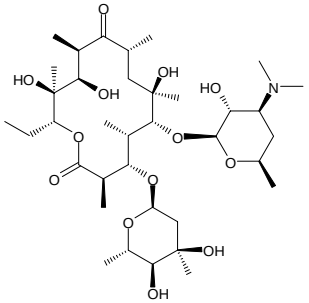
column:	Ascentis C18, 5 cm x 2.1 mm I.D., 5 µm particles (581303-U)
mobile phase A:	50:50, 25 mM formic acid (pH unadjusted)
mobile phase B:	90:10, methanol:acetonitrile
flow rate:	0.2 mL/min.
temp.:	ambient
det.:	ESI (+), full scan
injection:	2 µL
sample:	1 µg/mL in 50% methanol

Peak IDs

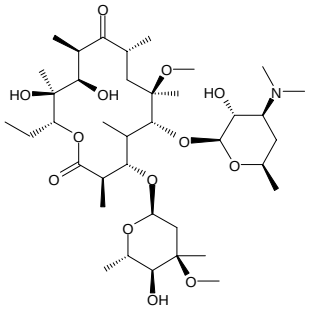
1. Erythromycin C (m/z 721)
2. Clarithromycin (m/z 748)

Structures

Erythromycin C - G002439



Clarithromycin - G002440



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