

Application Report 339

LC-MS Analysis of Methadone and Metabolite Using Ascentis™ C8

Methadone and its metabolite (2Z)-2-ethylidene-1,5-dimethyl-3,3-diphenylpyrrolidine (EDDP) are separated on Ascentis C8 and detected by mass spectrometry.

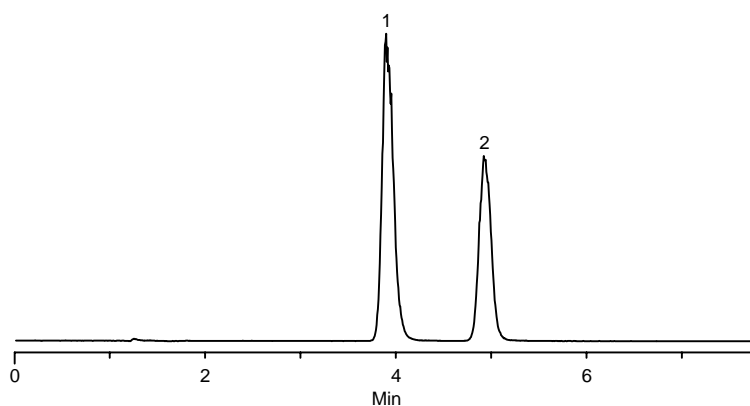
Key Words

LC-MS, Ascentis C8, drugs of abuse, 34967, 34674, M-3268, E-5264, 1095-90-5, 66729-78-0, methadone, metabolites, EDDP, drug treatment, 581424-U

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Acquisition System: W2795

Notebook Reference: 1549-91



G003304

Conditions

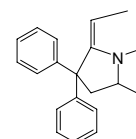
column: Ascentis C8, 15 cm x 4.6 mm I.D., 5 μ m particles (581424-U)
mobile phase: 50:50, 0.1% ammonium acetate ammonium acetate (pH 6.3 unadjusted), (cat. no. 34674):acetonitrile
flow rate: 1.0 mL/min., split to MS
temp.: 35 °C
det.: MS, ESI (+), Selected Ion Recording Mode
injection: 5 μ L
sample: 1 μ g/mL each in 50:50 water:methanol

Peak IDs

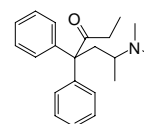
1. EDDP (M+H)⁺ = 278.18
2. Methadone (M+H)⁺ = 310.2

Structures

EDDP - G003303



Methadone - G003302



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