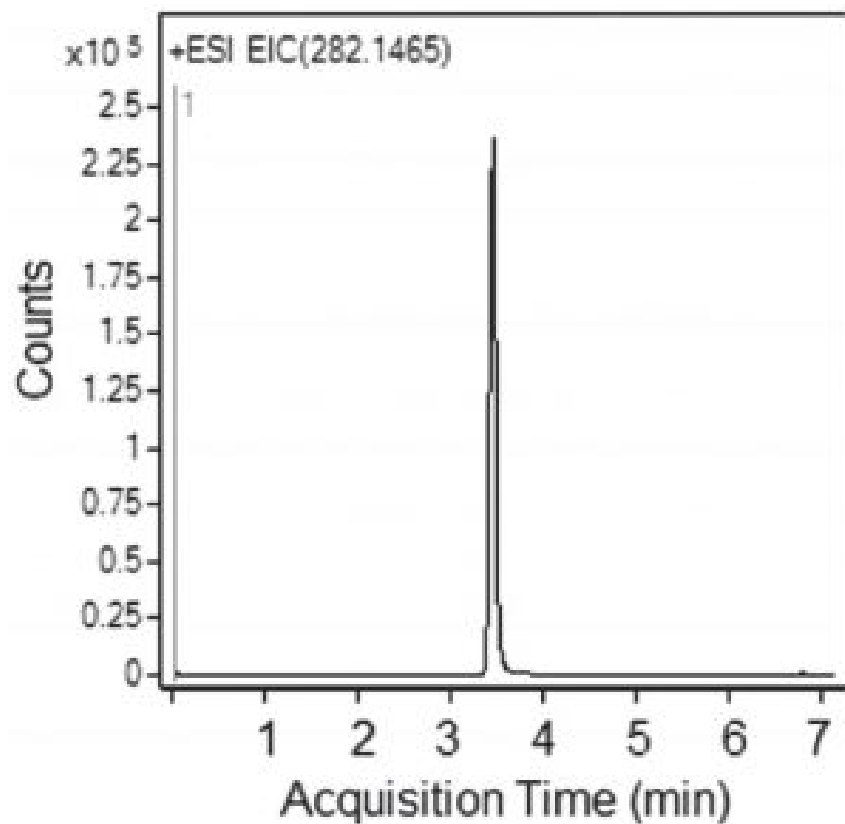
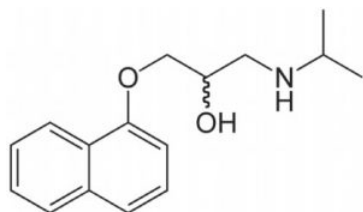


Propranolol in urine analyzed by LCMS - AppNote

Excellent peak shape for basic compound

The developed method permitted analysis of Propranolol in urine after simple sample preparation. The analysis is performed at a high concentration of Acetonitrile (*Acetone may be used as well*). The peak shape obtained for this basic compound was excellent. The method could be easily applied to analysis of Propranolol in blood samples after appropriate sample treatment.





Peak:

Propranolol 260.1645 m/z [M+H]⁺

Method Conditions

Column: Cogent Diamond Hydride 2.0™, 2.2μm, 120Å

Catalog No.: 70200-05P-2

Dimensions: 2.1 x 50mm

Mobile Phase:

A: DI Water / 0.1% Formic Acid (v/v)

B: Acetonitrile / 0.1% Formic Acid (v/v)

Gradient:

Time (minutes)	%B
0	90
4	30



6	30
7	90

Post time: 3 minutes

Injection vol.: 1 μ L

Flow rate: 0.4 mL / minute

Detection: ESI – POS – Agilent 6210 MSD TOF Mass Spectrometer

Sample Preparation: A urine specimen from a volunteer taking Propranolol was collected in 10mL of 6.0 mol/L Hydrochloric Acid over a 24 hr. period. 400 μ L of Acetonitrile was added to 100 μ L of urine, and the sample was centrifuged (3000 g). Next, 20 μ L of the supernatant was mixed with 10 μ L of 50% Acetonitrile / 50% DI Water / 0.1% Formic Acid. The sample was filtered using a MicroSolv Tech Corp. Filter and injected into the LC-MS.

t₀: 0.3 minutes

Note: Propranolol is a non-selective beta adrenergic receptor blocker used in treatment of hypertension, angina pectoris, cardiac arrhythmia, and sometimes as a doping agent in sports. It is also used as a preventive drug in migraine.



Attachment

Propranolol in Urine pdf [Download File](#)