

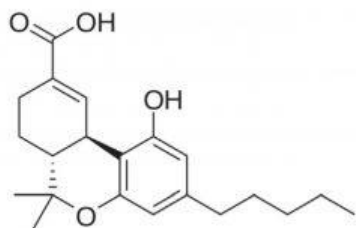
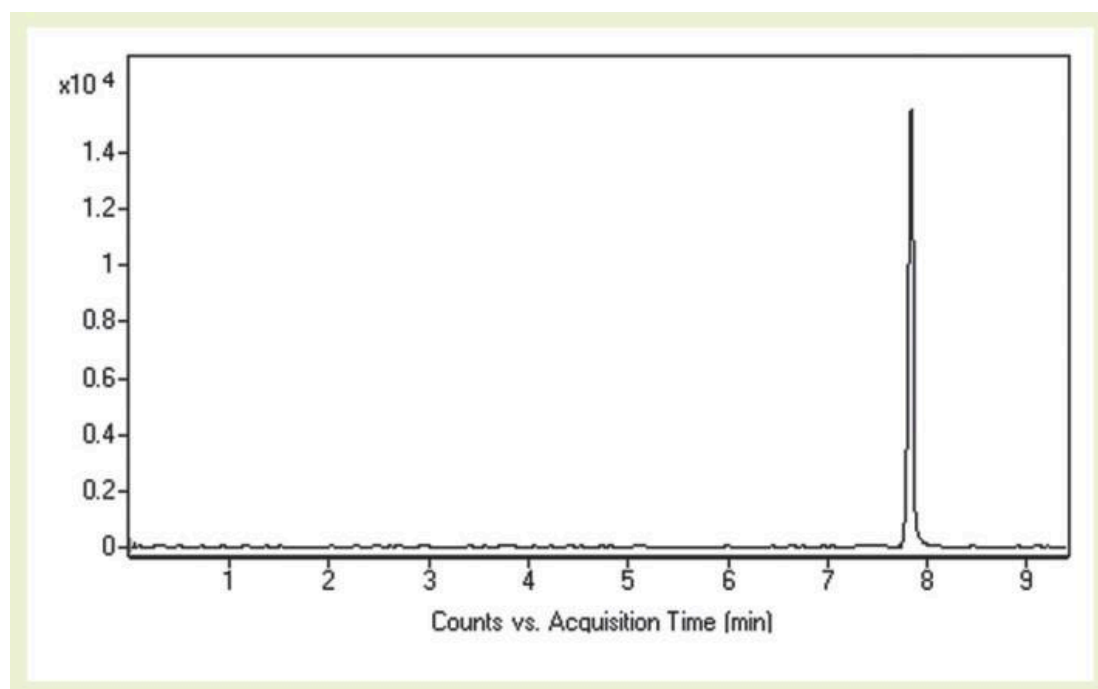
A Cannabis Metabolite in Urine Matrix Analyzed With LCMS - AppNote INTERNAL

THIS IS A DUPLICATE

Retention, Detection and Quantitation of a Cannabis Metabolite from Urine Samples

Using the SPE technique in "Sample Preparation" section of this AppNote, successful MS detection of a Cannabis Metabolite using the Cogent Phenyl Hydride™ HPLC Column is described.

It is worth noting that the retention of this compound was achieved using Methanol rather than Acetonitrile as the organic component in the Mobile Phase.



(1)-9-Carboxy-11-Nor-Delta-9- tetrahydrocannabinol

Peak:

(l)-9-Carboxy-11-Nor-Delta-9- THC, m/z 345.2060 [M+H]⁺

Method Conditions:

Column: Cogent Phenyl Hydride™ 4um, 100A

Catalog No.: [69020-05P-2](#)

Dimensions: 2.1 50mm

Mobile Phase:

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

B. Methanol / 0.1% Formic Acid (v/v)

Gradient:

Time (Minutes)	%B
0	10
3	10
7	80
8	10

Post Time: 3 minutes

Injection Volume: 1ul

Flow Rate: 0.4ml / minute

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

t_o: 0.9 minutes

Sample Preparation: Urine sample was loaded into an SPE cartridge II (Clean Screen Xcel, UCT Bristol, PA, USA) and eluted with 1mL of Acetonitrile, 2-Propanol, Formic Acid (50/50/1). After elution, the sample was dried under Nitrogen gas and dissolved in 100 uL of 50% Methanol / 50% DI Water / 0.1% Formic Acid. The solution was filtered through a 0.45µm AQ™ brand Nylon Syringe Filter (MicroSolv Technology Corp.)

Note: (l)-9-Carboxy-11-Nor-Delta-9- THC is the main metabolite of Tetrahydrocannabinol (THC), formed in the body after consumption of Cannabis. The compound stays in the body for a significant time, making it useful as a test compound for Cannabis use. In the U.S., Cannabis is a controlled substance at the Federal level, although many states have recently enacted laws legalizing it.

**Attachment**

I-9-Carboxy-11-Nor-Delta-9- tetrahydrocannabinol.pdf 0.2 Mb [Download File](#)

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