



# Cannabinoids

## Analysis of cannabinoids as methyl esters in serum

### Application Note

Forensics & Drug Testing

#### Authors

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#### Introduction

An Agilent VF-5ms GC column analyzes cannabinoids in a serum sample as six methyl esters, with GC/MS/MS, in 16 minutes.



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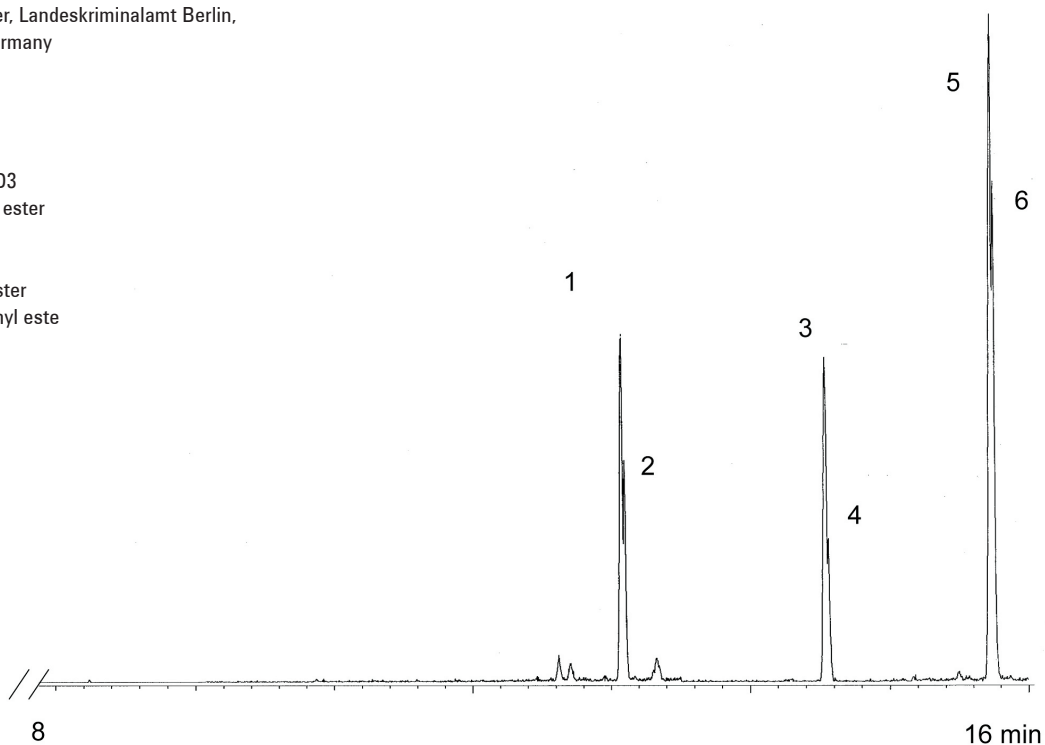
## Conditions

Technique : GC-capillary  
Column : Agilent VF-5ms, 0.25 mm x 30 m (df = 0.25 µm)  
(Part no. CP8944)  
Temperature : 70 °C, (1 min) → 200 °C, 20 °C/min, → 300 °C,  
10 °C/min, → 300 °C, 2 min  
Carrier Gas : Helium, ca 1.0 mL/min  
Injector : Splitless  
Detector : MS/MS  
Sample Size : 1 µL  
Concentration Range : 50 pg/µL

Courtesy : Ms. Kruger, Landeskriminalamt Berlin,  
Berlin, Germany

## Peak identification

1. tetra hydro cannabinol -(THC) D3
2. tetra hydro cannabinol -methyl ester
3. 11-hydroxy-THC -D3 ester
4. 11-hydroxy-THC -Methyl ester
5. 11-nor-9-carboxy- $\Delta$ 9-THC D3-ester
6. 11-nor-9-carboxy- $\Delta$ 9-THC -methyl este



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This information is subject to change without notice.

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