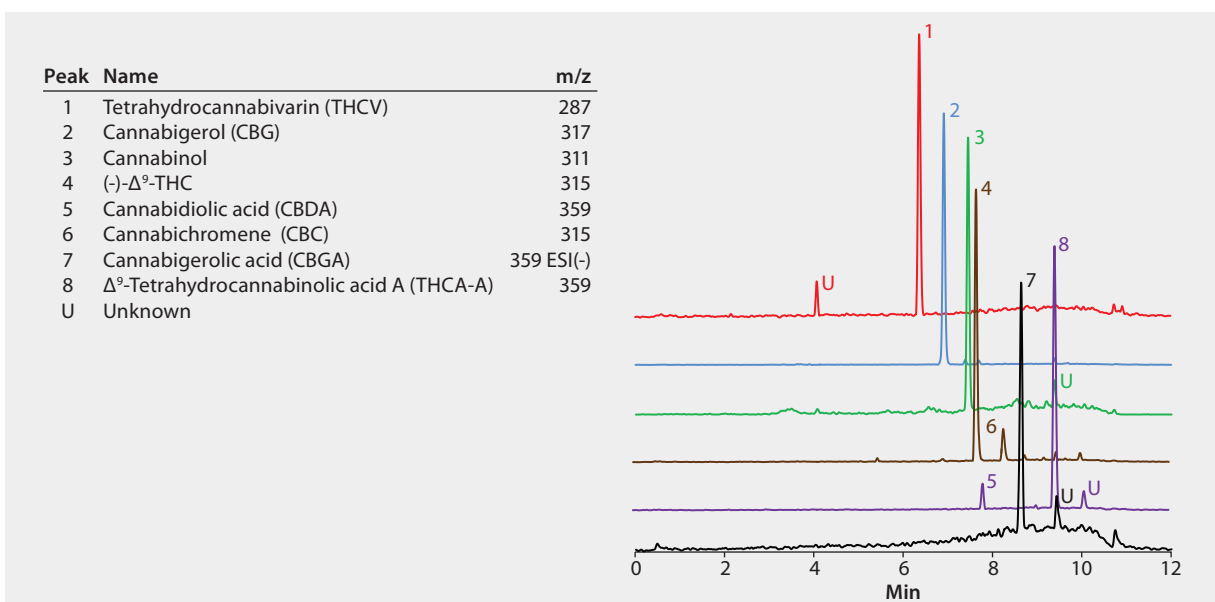


## UHPLC/MS Analysis of Cannabinoids Extracted from Raw Cannabis Sativa (Marijuana) on Ascentis® Express RP-Amide

Cannabis compounds reportedly have therapeutic efficacy in the treatment of pain, mood disorders, inflammatory diseases, and other health conditions. Shown here is a raw cannabis sample extracted using a simple procedure followed by LC/MS/MS analysis. Eight major cannabis compounds were detected. Reversed-phase HPLC separation was achieved on an Ascentis Express RP-Amide column. Dried cannabis sample was obtained courtesy of Dr. Hari H. Singh, Program Director at the Chemistry & Physiological Systems Research Branch of the National Institute on Drug Abuse at the US National Institute of Health. The extract strain of the sample was not known.

market focus ..... Food and Beverages; Forensics and Toxicology; Vitamins, Nutraceuticals, and Natural Products  
 sample preparation ... A 100 mg sample of dried cannabis sativa leaves was extracted with 50 mL of ethanol:water (50:50, v/v) for 15 mins in an ultrasonic bath. (The sample was then filtered through a 0.45 µm Millex LH filter prior to LC/MS analysis.)  
 column ..... Ascentis Express RP-Amide, 10 cm x 2.1 mm I.D., 2.0 µm particles (53913-U)  
 mobile phase ..... [A] 0.1% formic acid; [B] 0.1% formic acid in acetonitrile  
 gradient ..... 60% B to 100% B in 10 min  
 flow rate ..... 0.4 mL/min  
 pressure ..... 7600 psi (524 bar)  
 column temp. .... 35 °C  
 detector ..... MS, ESI(+), ESI(-), MRM  
 injection ..... 1 µL  
 Application No. .... G1006679



**Related Products**

- analytical column**  
 Ascentis® Express RP-Amide, 2.7 Micron HPLC Column ([Supelco 53913-U](#))
- standard**  
 Cannabichromene solution ([Cerilliant C-143](#))  
 Cannabidiol solution ([Cerilliant C-045](#))  
 Cannabidiolic acid solution ([Cerilliant C-144](#))  
 Cannabidivarin solution ([Cerilliant C-140](#))  
 Cannabigerol solution ([Cerilliant C-141](#))  
 Cannabigerolic acid solution ([Cerilliant C-142](#))  
 Cannabinol solution ([Cerilliant C-046](#))  
 (-)-Δ<sup>9</sup>-THC solution ([Cerilliant T-005](#))  
 Tetrahydrocannabivarin (THCV) solution ([Cerilliant T-094](#))  
 Δ<sup>9</sup>-Tetrahydrocannabinolic acid A (THCA-A) solution ([Cerilliant T-093](#))