

Extraction of Synthetic Cannabinoids in Human Urine Using Strata-X-Drug B

Column: Kinetex® 2.6 µm C18 100 Å, LC Column 150 x 3 mm, Ea

Dimensions: 150 x 3 mm ID

Order No: 00F-4462-Y0

Elution Type: Gradient

Eluent A: 10mM ammonium formate

Eluent B: Acetonitrile

Gradient Profile:	Step No.	Time (min)	Pct A	Pct B
	1	0	55	45
	2	7	50	50
	3	7.01	5	95
	4	10	5	95

Flow Rate: 0.6 mL/min

Col. Temp.: ambient

Detection: Mass Spectrometer (MS) @ amu (ambient)

Detector Info: <a target="_blank"

Analyst Note: href="https://sciex.com/products/mass-spectrometers?utm_campaign=2019%20application%20search&utm_source=phenomenex&utm_medium=referral">SCIEX<

Polarity: Positive

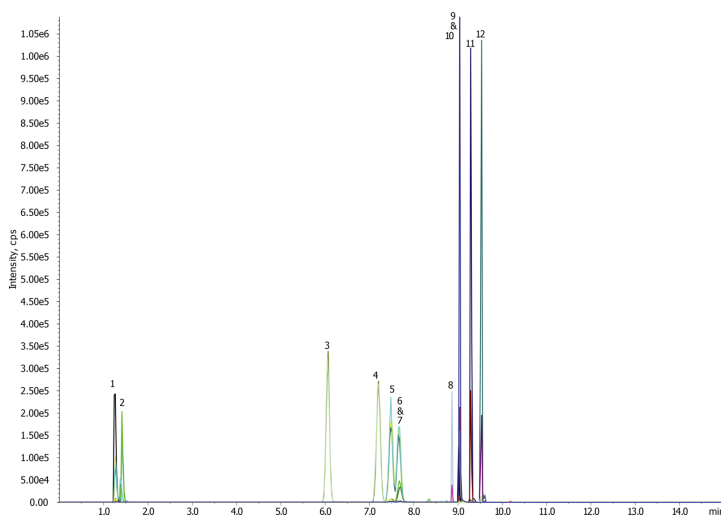
CAD: 7.00
CUR: 20.00
GS1: 50.00
GS2: 50.00
IS: 5500.00
TEM: 550.00
ihe: ON
EP 10.00



Products used in this application:



App ID 20925



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ANALYTES:

- 1** JWH-073-Butanoic acid metabolite
- 2** JWH-018-Pentanoic acid metabolite
- 3** JWH-073-4-Hydroxybutyl metabolite
- 4** JWH-073-3-Hydroxybutyl metabolite
- 5** JWH-018-5-Hydroxypentyl metabolite
- 6** JWH-018-4-Hydroxypentyl metabolite
- 7** AM2201-4Hydroxypentyl metabolite
- 8** AM694
- 9** AM2201-d5
- 10** AM2201
- 11** JWH-018-Pentanoic acid metabolite
- 12** JWH018



Sample Preparation Details

for HPLC Application ID No.: 20925

Extraction of Synthetic Cannabinoids in Human Urine Using Strata-X-Drug B

PRODUCT DESCRIPTION:

Strata™-X-Drug B 33 µm Polymeric Strong Cation, 60 mg / 3 mL, Tubes , 50/Pk

Order No.: 8B-S128-UBJ

SOLID PHASE EXTRACTION (SPE) PROCEDURE:

Note: The solvent volumes shown below are for a 60 mg bed mass.

The solvent volumes will need to be adjusted for a smaller or larger bed mass.

Condition:

Load:

Sample Hydrolysis: Combine 1 mL Human Urine sample (spiked with analytes at 50 ng/mL), 2 mL of 100 mM sodium acetate buffer, pH 5.0, 25 µL

-D-Glucuronidase (Patella Vulgata from Sigma, 100KU).

Vortex 10-15 secs, followed by incubation for 2 hours in a shaker at 55°C to complete hydrolysis of the glucuronides.

Wash:

Dry:

15 mins under 10-15" of Hg

Elute:

Final Prep and Analysis:

Extraction Protocol

(No need for conditioning or equilibration of the cartridge)

Inject: 10 µL on HPLC Mass Spectrometer (MS) @ amu (ambient)

ANALYTES:	Spiked Conc. (ng/mL)	Log P	pKa	% Rec	%RSC (n=0)
1 JWH-073-Butanoic acid metabolite	50			60	
2 JWH-018-Pentanoic acid metabolite	50			68	
3 JWH-073-4-Hydroxybutyl metabolite	50			90	
4 JWH-073-3-Hydroxybutyl metabolite	50			90	
5 JWH-018-5-Hydroxypentyl metabolite	50			80	
6 JWH-018-4-Hydroxypentyl metabolite	50			83	
7 AM2201-4-Hydroxypentyl metabolite	50			80	
8 AM694	50			101	
9 AM2201-d5	100				
10 AM2201	50			104	
11 JWH-018-Pentanoic acid metabolite	50			89	
12 JWH018	50			71	

Note: This method is designed as a convenient starting point for further investigation and can be tailored to meet your extraction goals.
Call your local Phenomenex Representative for assistance in method development and optimization techniques.

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For more information contact your Phenomenex Representative at info@phenomenex.com



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www.phenomenex.com.cn

info@phenomenex.com