

## Extraction of COOH-THC from Urine Using Novum SLE & Kinetex 2.6u C8

**Column:** Kinetex® 2.6 µm C8 100 Å, LC Column 50 x 2.1 mm, Ea

**Dimensions:** 50 x 2.1 mm ID

**Order No:** 00B-4497-AN

**Elution Type:** Gradient

**Eluent A:** 0.1% formic acid

**Eluent B:** Methanol/acetonitrile(50:50)

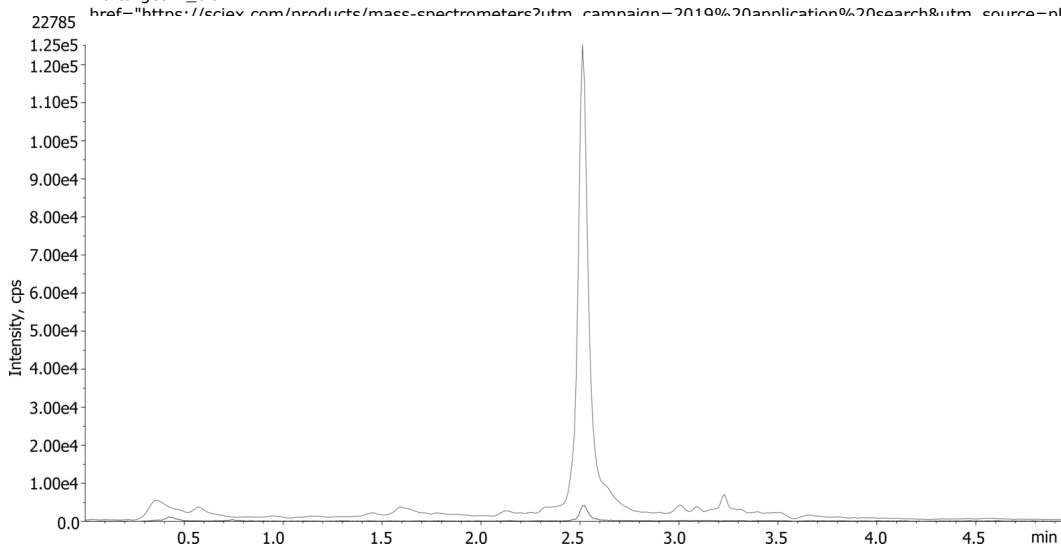
| Gradient Profile: | Step No. | Time (min) | Pct A | Pct B |
|-------------------|----------|------------|-------|-------|
|                   | 1        | 0          | 50    | 50    |
|                   | 2        | 2.5        | 5     | 95    |
|                   | 3        | 3.5        | 5     | 95    |
|                   | 4        | 5          | 50    | 50    |

**Flow Rate:** 0.5 mL/min

**Col. Temp.:** 25 °C

**Detection:** Tandem Mass Spec (MS-MS) @ (ambient)

**Detector Info:** <a target="\_blank" href="https://sciex.com/products/mass-spectrometers?utm\_campaign=2019%20application%20search&utm\_source=phenomenex&utm\_medium=referral">SCIEX</a>



### ANALYTES:

- 1** 11-nor-9-carboxy-delta9-THC  
Retention Time: 2.51 min
- 2** 11-nor-9-carboxy-delta9-THC-d3 (IS)  
Retention Time: 2.51 min



Products used in this application:



# Sample Preparation Details

for HPLC Application ID No.: 22786

## Extraction of COOH-THC from Urine Using Novum SLE & Kinetex 2.6u C8

### PRODUCT DESCRIPTION:

Novum SLE MAX 96-Well Plate, 1/Pk

Order No.: 8E-S138-5GA

### SOLID PHASE EXTRACTION (SPE) PROCEDURE:

**Note:** The solvent volumes shown below are for a 400 mg bed mass.

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

### Condition:

---

### Load:

---

Enzymatic Hydrolysis: To 300 uL urine add 75 uL of 300 mM ammonium acetate (pH 4.0) and 25 uL of -Glucuronidase solution (100,000 units/mL (www.campbellscience.com, DR2100).

Mix and vortex for 30 secs.

Incubate at 37- 40°C for 60 minutes. (Gentle shaking during this step is recommended).

After incubation, bring samples to room temperature prior to extraction.

### Wash:

---

### Dry:

---

### Elute:

---

### Final Prep and Analysis:

---

Sample Pretreatment Step

Enzymatic Hydrolysis: To 300 uL urine add 75 uL of 300 mM ammonium acetate (pH 4.0) and 25

Inject: 20 uL on HPLC Tandem Mass Spec (MS-MS) @ (ambient)

| ANALYTES:  | Spiked Conc.<br>(ng/mL) | Log P | pKa | % Rec | %RSC<br>(n=0) |
|--|-------------------------|-------|-----|-------|---------------|
| 1 11-nor-9-carboxy-delta9-THC                      | 20                      |       |     | 83    |               |
| 2 11-nor-9-carboxy-delta9-THC-d3 ( <del>15</del> ) |                         |       |     |       |               |

**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.

©2025 Phenomenex Inc. All rights reserved.

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



Phenomenex products are available worldwide.

[www.phenomenex.com](http://www.phenomenex.com)

[support@phenomenex.com](mailto:support@phenomenex.com)