

## Nicotine using SPE with Gemini NX-C18, LC-MSMS (Fig.3a)

**Column:** Gemini® 3 µm NX-C18 110 Å, LC Column 50 x 2 mm, Ea

**Dimensions:** 50 x 2 mm ID

**Order No:** 00B-4453-B0

**Elution Type:** Gradient

**Eluent A:** 20mM Ammonium Bicarbonate

**Eluent B:** 100% Acetonitrile

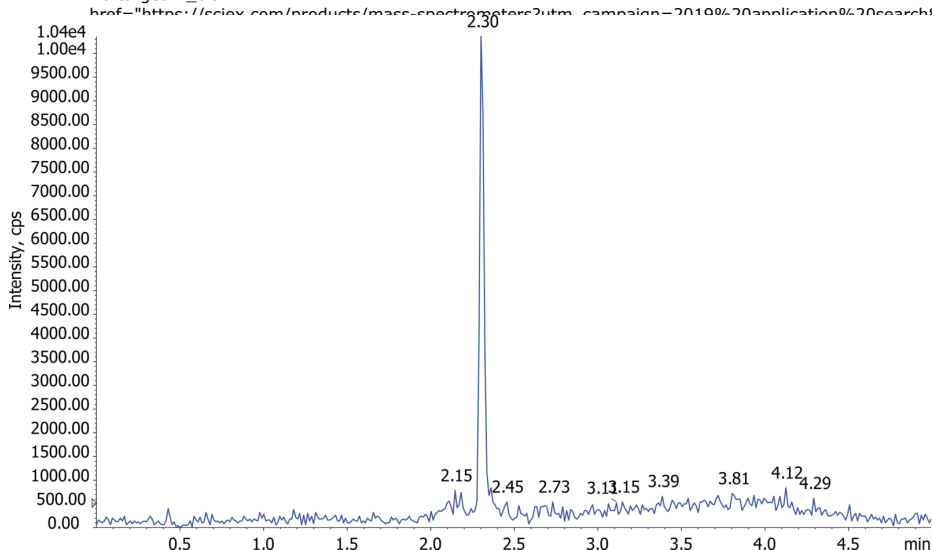
| Gradient Profile: | Step No. | Time (min) | Pct A | Pct B |
|-------------------|----------|------------|-------|-------|
|                   | 1        | 0          | 90    | 10    |
|                   | 2        | 3          | 25    | 75    |
|                   | 3        | 3.1        | 90    | 10    |
|                   | 4        | 5          | 90    | 10    |

**Flow Rate:** 500 µL/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<



### ANALYTES:

- 1 Nornicotine  
Retention Time: 1.09 min
- 2 3-OH-Cotinine  
Retention Time: 1.16 min
- 3 Anabasine  
Retention Time: 1.71 min
- 4 Cotinine  
Retention Time: 1.73 min
- 5 Nicotine  
Retention Time: 2.31 min



Products used in this application:



# Sample Preparation Details

for HPLC Application ID No.: 22036

## Nicotine using SPE with Gemini NX-C18, LC-MSMS (Fig.3a)

### PRODUCT DESCRIPTION:

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

Order No.: 8B-S029-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:

---

#### Wash:

---

#### Dry:

---

> 10" Hg for 5 min to remove residual water

#### Elute:

---

### Final Prep and Analysis:

---

Reconstitution Solvent: 500µL Acetonitrile/20mM Ammonium bicarbonate (10:90)

Inject: 10 µL on HPLC Tandem Mass Spec (MS-MS) @ (ambient)

| ANALYTES:       | Spiked Conc.<br>(ng/mL) | Log P | pKa | % Rec | %RSC<br>(n=0) |
|-----------------|-------------------------|-------|-----|-------|---------------|
| 1 Nornicotine   | 0                       |       |     |       |               |
| 2 3-OH-Cotinine | 0                       |       |     |       |               |
| 3 Anabasine     | 0                       |       |     |       |               |
| 4 Cotinine      | 0                       |       |     |       |               |
| 5 Nicotine      | 0                       |       |     |       |               |

**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.

©2024 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)