# **HPLC Application**

ID No.: 22036



#### Nicotine using SPE with Gemini NX-C18, LC-MSMS (Fig.3a) Gemini® 3 µm NX-C18 110 Å, LC Column 50 x 2 mm, Ea Column: 50 x 2 mm ID **Dimensions:** Gemini **Order No:** 00B-4453-B0 Elution Type: Gradient Eluent A: 20mM Ammonium Bicarbonate Eluent B: 100% Acetonitrile Time (min) Pct B Gradient Step No. Pct A **Profile:** 0 90 10 1 75 2 3 25 Products used in this application: 3 3.1 90 10 5 4 90 10 Gemini<sup>®</sup> Flow Rate: 500 µL/min Col. Temp.: 25 °C **Detection:** Tandem Mass Spec (MS-MS) @ (ambient) **Detector Info:** <a target="\_blank" /products/mass-spactsgmters2utm\_campaign=2010%20application%20aparch&utm\_source=phenomenex&utm\_medium=referral">SCIEX< 1.04e4 1.00e4 9500.00 9000.00 8500.00 8000.00 7500.00 7000.00 6500.00 6000.00 5500.00 5000.00 4500.00 4000.00 3500.00 3000.00 2500.00 2000.00 1500.00 1000.00 2.15 3.81 4.12 2.45 2.73 3.13.15 3.39 500.00 Myram warman with Much M, mmm mmm 0.00 2.5 3.0 4.0 4.5 0.5 1.0 1.5 2.0 3.5 min **ANALYTES:** 1 Nornicotine Retention Time: 1.09 min 2 3-OH-Cotinine Retention Time: 1.16 min Anabasine 3

Retention Time: 1.71 min

- 4 Cotinine Retention Time: 1.73 min
- 5 Nicotine Retention Time: 2.31 min

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

#### **PRODUCT DESCRIPTION:**

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

Order No.: 8B-S029-UBJ

### SOLID PHASE EXTRACTION (SPE) PRODCEDURE:

**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: 500uL Acetonitrile/20mM Ammonium bicarbonate (10:90) Inject: 10 µL on HPLC Tandem Mass Spec (MS-MS) @ (ambient)

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

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