

Nicotine and Metabolites by SPE using Gemini NX-C18, LC-MSMS (Fig.1)

Column: Gemini® 3 µm NX-C18 110 Å, LC Column 100 x 2 mm, Ea

Dimensions: 100 x 2 mm ID

Order No: 00D-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

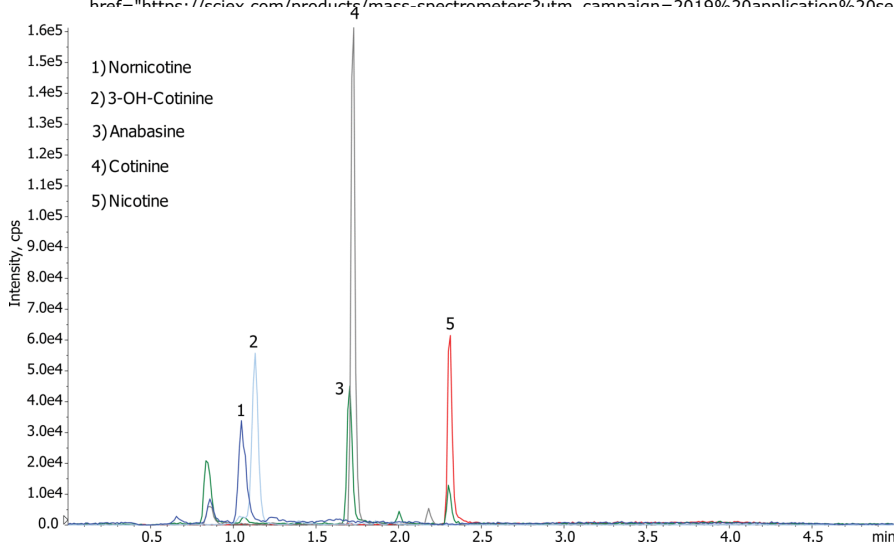
Detection: Tandem Mass Spec (MS-MS) @ (ambient)

Detector Info: <a target="_blank"

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



Products used in this application:



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



Sample Preparation Details

for HPLC Application ID No.: 22022

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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. (ng/mL)	Log P	pKa	% Rec	%RSC (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.

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



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www.phenomenex.com

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