

Extraction and Analysis of Metronidazole in Facial Cleansers

Column: Kinetex® 2.6 µm XB-C18 100 Å, LC Column 50 x 2.1 mm, Ea

Dimensions: 50 x 2.1 mm ID

Order No: 00B-4496-AN

Elution Type: Gradient

Eluent A: 0.1% Formic Acid

Eluent B: MeOH

Gradient Profile:	Step No.	Time (min)	Pct A	Pct B
	1	0	95	5
	2	2	60	40
	3	3	60	40
	4	3.1	95	5
	5	5	95	5

Flow Rate: 300 µL/min

Col. Temp.: 25 °C

Detection: Mass Spectrometer (MS) @ amu (650 °C)

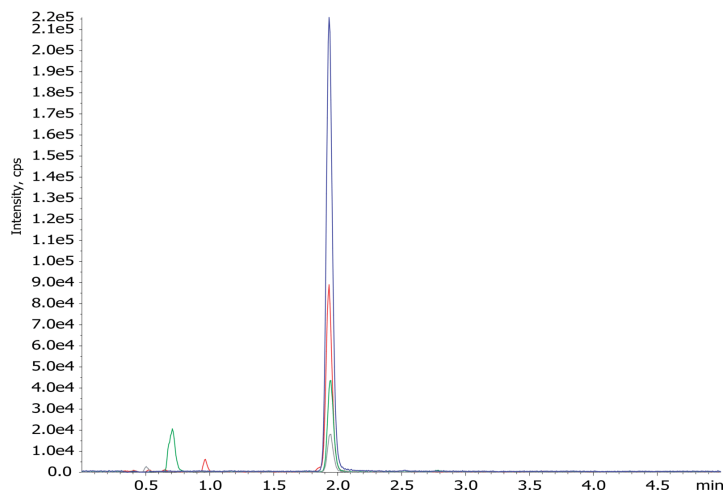
Detector Info: <a target="_blank"

Analyst Note: href="https://sciex.com/products/mass-spectrometers?utm_campaign=2019%20application%20search&utm_source=phenomenex&utm_medium=referral">SCIEX
SecurityGuard™ ULTRA Guard Cartridge System extends column lifetime.

- SecurityGuard ULTRA Cartridges, UHPLC C18 for 2.1mm ID Columns, 3/Pk Part No.: AJ0-8782

- Holder Part No.: AJ0-9000

20631



ANALYTES:

1 Metronidazole

Retention Time: 1.94 min

2 13-C2 15-N-Metronidazole

Retention Time: 1.93 min



Products used in this application:



Sample Preparation Details

for HPLC Application ID No.: 20631

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PRODUCT DESCRIPTION:

Strata[™]-X-C 33 µm Polymeric Strong Cation, 30 mg / 3 mL, Tubes , 50/Pk

Order No.: 8B-S029-TBJ

SOLID PHASE EXTRACTION (SPE) PROCEDURE:

Note: The solvent volumes shown below are for a 30 mg bed mass.

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

Condition:

Load:

- 1) Dissolve 0.250g of Neutrogena Foaming Face Cleaner With Microclear Technology in 10mLs of 0.1N HCL
- 2) Vortex to achieve homogenous mixture
- 3) Centrifuge for 5 minutes at 5000g
- 4) Load
3mL aliquot of sample

Wash:

Dry:

5 min under full vacuum

Elute:

Final Prep and Analysis:

Evaporate to dryness at 50 C. Reconstitute in 200 µL of 10:90 MeOH:0.1% Formic Acid

Inject: 10 µL on HPLC Mass Spectrometer (MS) @ amu (650°C)

ANALYTES:	Spiked Conc. (ng/mL)	Log P	pKa	% Rec	%RSC (n=0)
1 Metronidazole	100				
2 13-C2 15-N-Metronidazole	1000				

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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