

# HPLC Application

ID No.: 16344

## Morphine and Metabolites on Gemini 5 $\mu$ m C18

**Column:** Gemini<sup>®</sup> 5  $\mu$ m C18 110 Å, LC Column 100 x 2 mm, Ea

**Dimensions:** 100 x 2 mm ID

**Order No:** 00D-4435-B0

**Elution Type:** Gradient

**Eluent A:** Water with 0.1% v/v Formic Acid

**Eluent B:** Acetonitrile with 0.1% v/v Formic Acid

Gradient Profile:	Step No.	Time (min)	Pct A	Pct B
	1	0	97	3
	2	1	97	3
	3	3	70	30
	4	3.01	97	3
	5	5.5	97	3

**Flow Rate:** 0.4 mL/min

**Col. Temp.:** ambient

**Detection:** Mass Spectrometer (MS) @ amu (ambient)

**Detector Info:** <a target="\_blank"

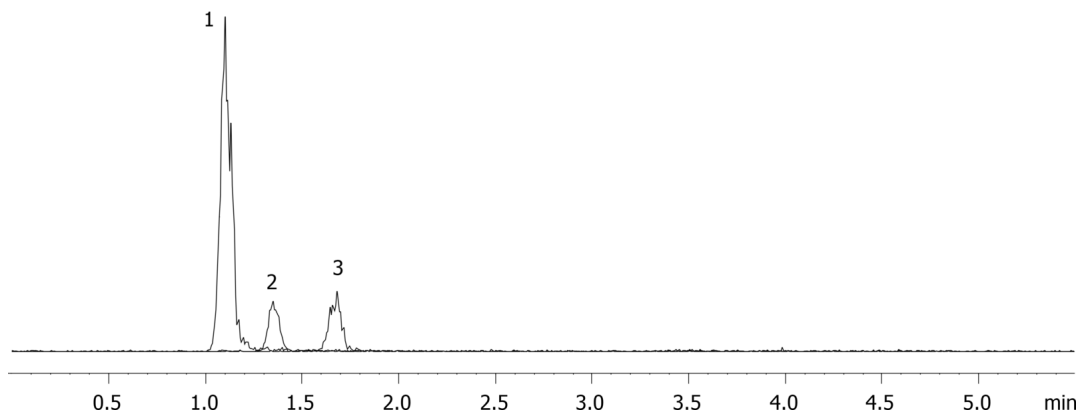
href="https://sciex.com/products/mass-spectrometers?utm\_campaign=2019%20application%20search&utm\_source=phenomenex&utm\_medium=referral"><a

**Analyst Note:** The pH of the aqueous acid is specified.

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Products used in this application:



### ANALYTES:

1 Morphine-3-beta-D-glucuronide

Retention Time: 1.1 min

2 Normorphine

Retention Time: 1.35 min

3 Morphine

Retention Time: 1.68 min

