

# HPLC Application

ID No.: 19694

## LC/MS/MS Analysis of Digoxin and Digitoxin in plasma (10 ng/mL) using Strata-X and Kinetex C8

**Column:** Kinetex® 2.6 µm C8 100 Å, LC Column 50 x 2.1 mm, Ea

**Dimensions:** 50 x 2.1 mm ID

**Order No:** 00B-4497-AN

**Elution Type:** Gradient

**Eluent A:** 10mM Ammonium acetate

**Eluent B:** 10mM Ammonium acetate in methanol

<b>Gradient Profile:</b>	<b>Step No.</b>	<b>Time (min)</b>	<b>Pct A</b>	<b>Pct B</b>
	<b>1</b>	0	50	50
	<b>2</b>	2.5	0	100
	<b>3</b>	2.51	50	50
	<b>4</b>	5	50	50

**Flow Rate:** 400 µL/min

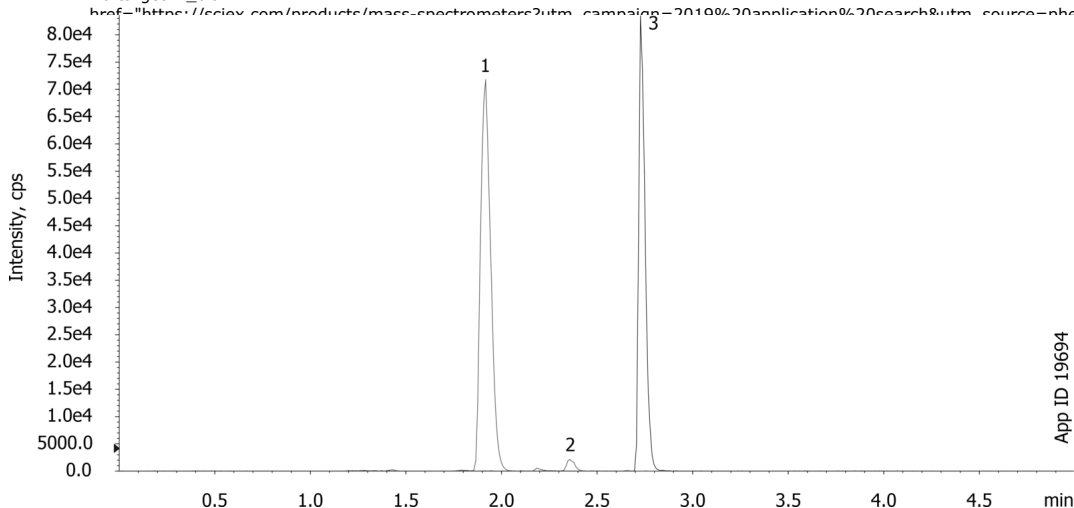
**Col. Temp.:** ambient

**Detection:** Mass Spectrometer (MS) @ amu (350 °C)

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



Products used in this application:



### ANALYTES:

- 1** Digoxin  
Retention Time: 1.9 min
- 2** Oleandrin  
Retention Time: 2.35 min
- 3** Digitoxin  
Retention Time: 2.75 min

# Sample Preparation Details

for HPLC Application ID No.: 19694

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### PRODUCT DESCRIPTION:

Strata™-X 33 µm Polymeric Reversed Phase, 30 mg / 3 mL, Tubes , 50/Pk

Order No.: 8B-S100-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:

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#### Load:

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#### Wash:

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#### Dry:

10min at full vacuum

#### Elute:

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#### Final Prep and Analysis:

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Inject: 0 µL on HPLC Mass Spectrometer (MS) @ amu (350°C)

<b>ANALYTES:</b>	<b>Spiked Conc. (ng/mL)</b>	<b>Log P</b>	<b>pKa</b>	<b>% Rec</b>	<b>%RSC (n=0)</b>
1 Digoxin	10			87	
2 Oleandrin	10				
3 Digitoxin	10			108	

**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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