

## LC/MS/MS Analysis of Digoxin and Digitoxin in plasma (0.25 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

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

**Flow Rate:** 400 µL/min

**Col. Temp.:** 30 °C

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

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

**Analyst Note:**

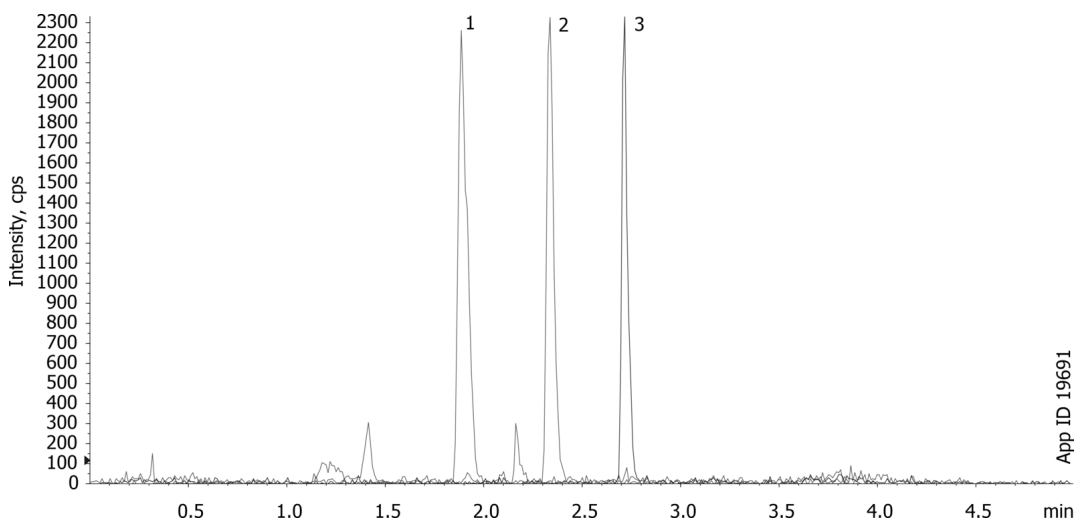
href="https://sciex.com/products/mass-spectrometers?utm\_campaign=2019%20application%20search&utm\_source=phenomenex&utm\_medium=referral">SCIEX< SecurityGuard™ ULTRA Guard Cartridge System extends column lifetime.

- SecurityGuard ULTRA Cartridges, UHPLC C8 for 2.1mm ID Columns, 3/Pk Part No.: AJ0-8784

- Holder Part No.: AJ0-9000



Products used in this application:



App ID 19691

### ANALYTES:

- 1 Digoxin (798.4>651.4)  
Retention Time: 1.9 min
- 2 Oleandrin (internal standard) 577.2>373.2  
Retention Time: 2.35 min
- 3 Digitoxin (782.4>635.4)  
Retention Time: 2.75 min



# Sample Preparation Details

for UHPLC Application ID No.: 19691

## LC/MS/MS Analysis of Digoxin and Digitoxin in plasma (0.25 ng/mL) using Strata-X and Kinetex C8

### PRODUCT DESCRIPTION:

Strata<sup>™</sup>-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:

---

#### Load:

---

#### Wash:

---

#### Dry:

10min at full vacuum

#### Elute:

---

#### Final Prep and Analysis:

---

Inject: 40 µL on HPLC Mass Spectrometer (MS) @ (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	0.25			87	
2 Oleandrin	0.25				
3 Digitoxin	0.25			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.

©2021 Phenomenex Inc. All rights reserved.

For more information contact your Phenomenex Representative at [info@phenomenex.com](mailto:info@phenomenex.com)



Phenomenex products are available worldwide.

[www.phenomenex.com](http://www.phenomenex.com)

[info@phenomenex.com](mailto:info@phenomenex.com)