# HPLC Application

## LC/MS/MS Analysis of Digoxin and Digitoxin in plasma (2.5 ng/mL) using Strata-X and Kinetex C8

Column:	Kinotov® 2 (	5 μm C8 100 Å, L0	$\Gamma$ Column 50 y	(2.1 mm E	<b></b> ,	<b>y</b>		
Dimensions:	50 x 2.1 mm			a				
Order No:	00B-4497-A			Kinetex <sup>®</sup>				
Elution Type:	Gradient	N						Ultra-High Performance on Any LC System
							off Any LC System	
Eluent A:		onium acetate						
Eluent B:		nium acetate in n						
Gradient	Step No.	Time (min)	Pct A	Pct B				
Profile:	1	0	50	50				
	2	2.5	0	100			Products	used in this application:
	3	2.51	50	50				
	4	5	50	50				
Flow Rate:	400 µL/min							KINETEX.
Col. Temp.:	ambient							
Detection:	Mass Spectro	ometer (MS) @ ai	mu (350 °C)					
Detector Info:	<a <="" target="_blar&lt;/th&gt;&lt;th&gt;ık" th=""><th></th><th></th><th></th><th></th><th></th><th></th></a>							
1.3 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4	De4   3e4   7e4   5e4   4e4   3e4   2e4   1e4   0e4   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0			2			App ID 19693	enex&utm_medium=referral">SCIEX<,
	0.5	1.0 1.5	2.0	2.5 3	.0 3.5	4.0	4.5 min	

#### **ANALYTES:**

1 Digoxin

Retention Time: 1.9 min

- 2 Oleandrin Retention Time: 2.35 min
- 3 Digitoxin

Retention Time: 2.75 min

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breaking with tradition

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for HPLC Application ID No.: 19693



#### LC/MS/MS Analysis of Digoxin and Digitoxin in plasma (2.5 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) PRODCEDURE:

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

ANALYTES:	Spiked Conc. (ng/mL)	Log P	рКа	% Rec	%RSC (n=0)
<b>1</b> Digoxin	2.5			87	(
2 Oleandrin	2.5				
3 Digitoxin	2.5			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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