

LC/MS/MS Analysis of Digoxin and Digitoxin in plasma (0.5 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

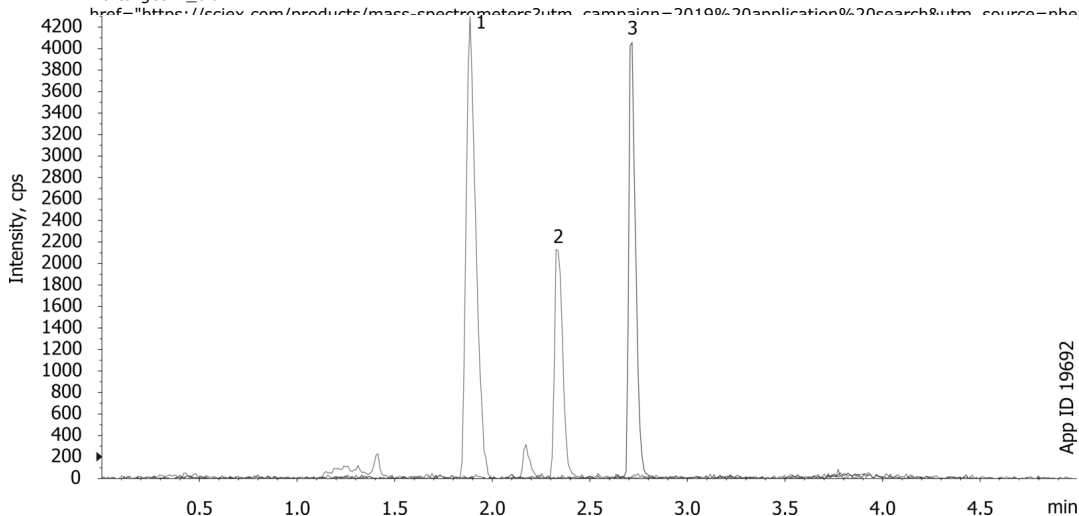
Gradient Profile:	Step No.	Time (min)	Pct A	Pct B
	1	0	50	50
	2	2.5	0	100
	3	2.51	50	50
	4	5	50	50

Flow Rate: 400 µL/min

Col. Temp.: ambient

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

Detector Info: <a target="_blank"



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.: 19692

LC/MS/MS Analysis of Digoxin and Digitoxin in plasma (0.5 ng/mL) using Strata-X and Kinetex C8

PRODUCT DESCRIPTION:

StrataTM-X 33 μ m 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: 0 μ L on HPLC Mass Spectrometer (MS) @ amu (350°C)

ANALYTES:	Spiked Conc. (ng/mL)	Log P	pKa	% Rec	%RSC (n=0)
1 Digoxin	0.5			87	
2 Oleandrin	0.5				
3 Digitoxin	0.5			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.

©2025 Phenomenex Inc. All rights reserved.

For more information contact your Phenomenex Representative at support@phenomenex.com



Phenomenex products are available worldwide.

www.phenomenex.com

support@phenomenex.com