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

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

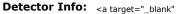
Kinetex*
Ultra-High Performance
on Any LC System

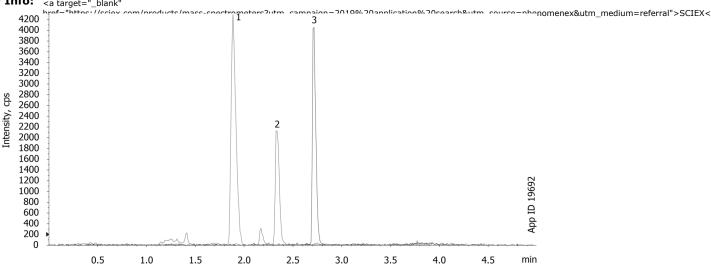
Products used in this application:



Flow Rate: $400 \mu L/min$ Col. Temp.: ambient

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





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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www.phenomenex.com.cn

info@phenomenex.com

Sample Preparation Details

for **HPLC** Application ID No.: **19692**



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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) 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 ul on HPI C Mass Spectrometer (MS) @ amu (350°C)

LYTES:	Spiked Conc.	Log P	рКа	% Rec	%RSC
	(ng/mL)				(n=0)
Digoxin	0.5			87	
Oleandrin	0.5				
Digitoxin	0.5			108	
	Digoxin Oleandrin	(ng/mL) Digoxin 0.5 Oleandrin 0.5	(ng/mL) Digoxin 0.5 Oleandrin 0.5	(ng/mL) Digoxin 0.5 Oleandrin 0.5	(ng/mL) Digoxin 0.5 87 Oleandrin 0.5

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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