HPLC Application

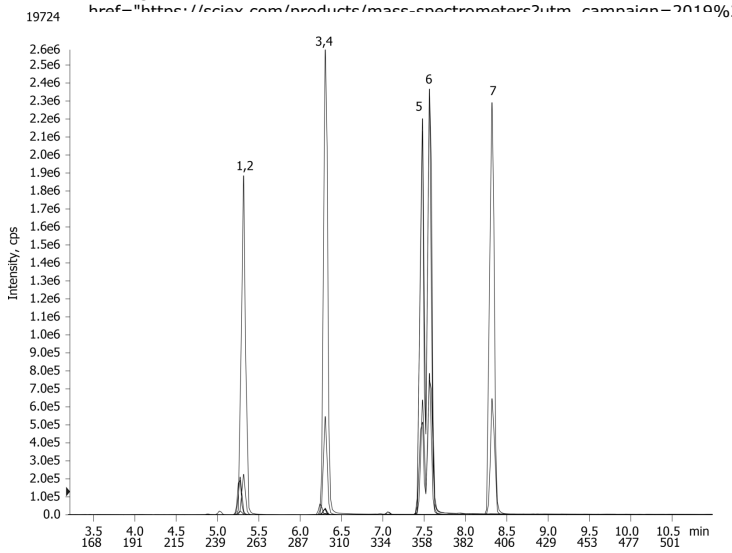
ID No.: **19724**

Barbiturates in urine using Strata-X-Drug N and Kinetex C18 2.6µm 100x2.1mm

Column: Kinetex® 2.6 µm C18 100 Å, LC Column 100 x 2.1 mm, Ea
Dimensions: 100 x 2.1 mm ID
Order No: 00D-4462-AN
Elution Type: Gradient
Eluent A: 5mM Ammonium acetate
Eluent B: Acetonitrile

Gradient Profile:	Step No.	Time (min)	Pct A	Pct B
	2	0	90	10
	3	10	55	45
	4	10.01	10	90
	5	12	10	90
	6	12.01	90	10
	7	16	90	10

Flow Rate: 400 µL/min
Col. Temp.: ambient
Detection: Mass Spectrometer (MS) @ amu (ambient)
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. Phenobarbital-d5
   Retention Time: 7.25 min
2. Phenobarbital
   Retention Time: 7.25 min
3. Butalbital-d5
   Retention Time: 9.25 min
4. Butalbital
   Retention Time: 9.25 min
5. Pentobarbital
   Retention Time: 11.75 min
6. Amobarbital
   Retention Time: 12 min
7. Secobarbital
   Retention Time: 13.65 min

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

Phenomenex products are available worldwide.

Sample Preparation Details

for **HPLC** Application ID No.: **19724**

Barbiturates in urine using Strata-X-Drug N and Kinetex C18 2.6µm 100x2.1mm

PRODUCT DESCRIPTION:

Strata™-X-Drug N 100 µm Polymeric Reversed Phase, 100 mg / 6 mL, Tubes , 30/Pk

Order No.: 8B-S129-ECH

SOLID PHASE EXTRACTION (SPE) PRODCEDURE:

Note: The solvent volumes shown below are for a 100 mg bed mass.
The solvent volumes will need to be adjusted for a smaller or larger bed mass.

Condition:

Load:

Wash:

Dry:

10 min under full vacuum

Elute:

Final Prep and Analysis:

Evaporate eluant to dryness under stream of N2 (50ºC). Reconstitute samples with 1mL of 10% acetonitrile

Inject: 0 µL on HPLC Mass Spectrometer (MS) @ amu (ambient)

ANALYTES:		Spiked Conc. (ng/mL)	Log P	pKa	% Rec	%RSC (n=0)
1	Phenobarbital-d5	300			100	
2	Phenobarbital	300			99.64	
3	Butalbital-d5	300			100	
4	Butalbital	300			95.71	
5	Pentobarbital	300			96.81	
6	Amobarbital	300			96.38	
7	Secobarbital	300			95.56	

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.*