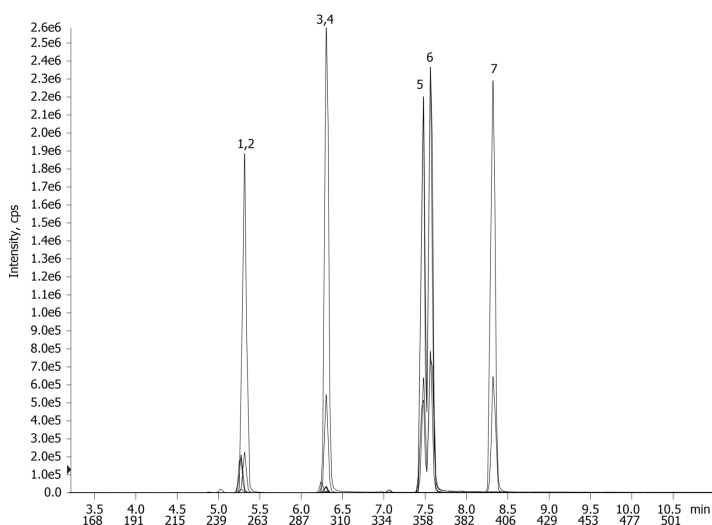


Barbiturates in urine using Strata-X-Drug N and Kinetex C18 2.6µm 100x2.1mm**Column:** Kinetex® 2.6 µm C18 100 Å, LC Column 100 x 2.1 mm, Ea**Dimensions:** 100 x 2.1 mm ID**Order No:** 00D-4462-AN**Elution Type:** Gradient**Eluent A:** 5mM Ammonium acetate**Eluent B:** Acetonitrile

Gradient	Step No.	Time (min)	Pct A	Pct B
Profile:	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"

19724

**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

**Products used in this application:**

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) PROCEDURE:

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 (50°C). 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.

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



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