

Barbiturates from urine by Strata X (60mg/3cc) (TIC)**Column:** Zebron[™] ZB-Drug-1, GC Cap. Column 10 m x 0.18 mm x 0.18 μ m, Ea**Phase:** Proprietary Drug Phase**Dimensions:** 10 meters x 0.18 mm x 0.18 μ m**Order No:** 7CD-G023-08**Oven Profile:** 145 °C to 300 °C @ 25 °C/min**Carrier Gas:** Constant Flow Helium, 0.6 mL/min**Injection:** Split 10:1 1 μ L @ 280°C**Detection:** Mass Selective (MSD) (320°C)**Analyst Note:** Analytes are 300ng/mL in urine derivatized with TMPAH

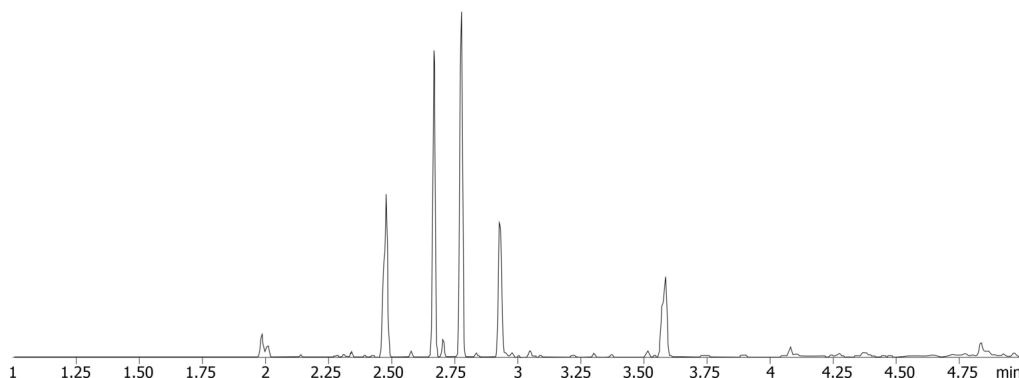
Sim ions:

(Quant ion*) D5-Butalbital (*201,184,214): Butalbital (*196,181,138): Amobarbital (*169,184,225):

Pentobarbital (*169,184,225): Secobarbital (*196,181,138): D5-Phenobarbital (*233,151,122): Phenobarbital

**Products used in this application:**

23895

**ANALYTES:**

- 1 Butalbital-d5
- 2 Butalbital
- 3 Amobarbital
- 4 Pentobarbital
- 5 Secobarbital
- 6 Phenobarbital-d5
- 7 Phenobarbital



Sample Preparation Details

for GC Application ID No.: 23895

Barbiturates from urine by Strata X (60mg/3cc) (TIC)

PRODUCT DESCRIPTION:

Strata™-X 33 µm Polymeric Reversed Phase, 60 mg / 3 mL, Tubes , 50/Pk

Order No.: 8B-S100-UBJ

SOLID PHASE EXTRACTION (SPE) PROCEDURE:

Note: The solvent volumes shown below are for a 60 mg bed mass.

The solvent volumes will need to be adjusted for a smaller or larger bed mass.

Condition:

Load:

1mL of Urine + 1mL 20mM Potassium Phosphate pH 2.7

Wash:

Dry:

Dry column (5 minutes at > 10 inches Hg)

Elute:

Final Prep and Analysis:

Reconstitute with 100uL Acetonitrile and 50uL of Thermo Scientific MethElute Reagent (TS49301)

Inject: 1 µL on HPLC Mass Selective (MSD) @ _ (320°C)

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

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 info@phenomenex.com



Phenomenex products are available worldwide.

www.phenomenex.com.cn

info@phenomenex.com