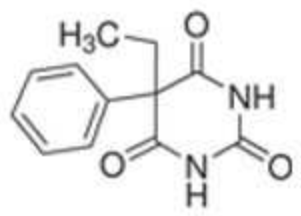
OROCHEM
Molecular Purification by Design

Drugs of Abuse: Barbiturates in Human Urine

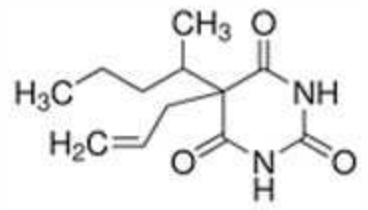
Application Note: SPCYD10002

CELERITY Deluxe SPE Cartridges

Compounds:



Phenobarbital



Secobarbital

SPE EXTRACTION METHOD:

(Celerity Deluxe cartridge, 30mg/1cc)
(Catalog # SYCY6030-01)

Condition:
1mL methanol, followed by 1mL of water

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Load:
200 µL spiked urine sample
(10 µg/mL Phenobarbital and 30 µg/mL secobarbital)

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Wash:
1mL 0.1% formic acid, followed by 1 mL of 5% methanol

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Elute:
1mL of methanol

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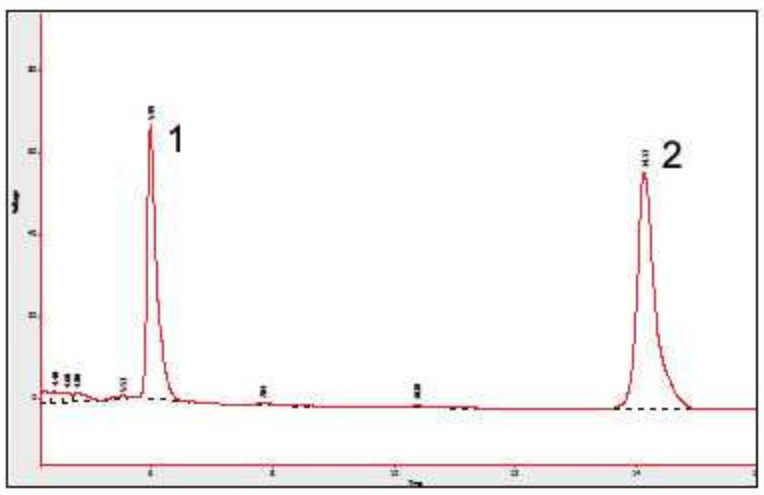
Evaporate and Reconstitute:
200µL of 35% acetonitrile

HPLC METHOD:

Column:	Orochem Reliasil C18 HPLC Column 4.6x250mm, 5µm.
Part number:	R5HI-121
Mobile phase:	Water/acetonitrile 65:35
Flow rate:	1mL/min
Detection:	UV @214nm
Injection volume:	20µL
Retention time:	1. Phenobartital 5.9 min 2. Secobarbital 14.1 min



Compound	%Recovery (%CV)
Phenobarbital	88 (5.5)
Secobarbital	94 (5.3)