

URINE BARBITUATES

Specificity⁶

Non Interfering Substances

Each of the following compounds when added to urine containing secobarbital at +/- 25% concentration of the cutoff do not yield a false response relative to the 200 ng/mL cutoff:

Compound	Concentration
Acetone	1.0 g/dL
Ascorbic Acid	1.5 g/dL
Bilirubin	2.0 mg/dL
Creatinine	0.5 g/dL
Ethanol	1.0 g/dL
Gamma Globulin	0.5 g/dL
Glucose	2.0 g/dL
Hemoglobin	115 mg/dL
Human Serum Albumin	0.5 g/dL
Oxalic Acid	0.1 g/dL
Riboflavin	7.5 mg/dL
Sodium Chloride	6.0 g/dL
Urea	6.0 g/dL

Each of the following compounds was added to drug free urine and gave negative BARB results at the concentration listed for the 200 ng/mL cutoff. ‡

Compound	Concentration
Acetaminophen	1000 µg/mL
α-Acetyl-N,N-dinormethadol (dinor LAAM)	25 µg/mL
l-α-Acetylmethadol (LAAM)	25 µg/mL
N-Acetylprocainamide (NAPA)	400 µg/mL
Acetylsalicylic Acid	1000 µg/mL
Amitriptyline	1000 µg/mL
d-Amphetamine	1000 µg/mL
Benzoylcegonine	1000 µg/mL
Buprenorphine	100 µg/mL
Caffeine	1000 µg/mL
Cimetidine	1000 µg/mL
Clomipramine	2.5 µg/mL
Clonidine	1000 µg/mL
Codeine	500 µg/mL
Cotinine	100 µg/mL
Cyclobenzaprine	28 µg/mL
Desipramine	800 µg/mL
Diphenhydramine	1000 µg/mL
Doxepin	10 µg/mL

Compound	Concentration
2-Ethylidene-1.5-dimethyl-3.3-diphenylpyrrolidine (EDDP)	1000 µg/mL
Fluoxetine	500 µg/mL
Glutethimide	300 µg/mL
Ibuprofen	1000 µg/mL
Ketamine	100 µg/mL
Ketorolac Tromethamine	1000 µg/mL
Lormetazepam	1 µg/mL
LSD	10 ng/mL
Meperidine	1000 µg/mL
d-Methamphetamine	2 µg/mL
Methaqualone	1500 µg/mL
Morphine	1000 µg/mL
Naproxen	1000 µg/mL
Nortriptyline	750 µg/mL
Oxazepam	300 µg/mL
Phencyclidine	1000 µg/mL
Phenytoin	1000 µg/mL
Promethazine	1000 µg/mL
Propoxyphene	1000 µg/mL
Ranitidine	900 µg/mL
Scopolamine	500 µg/mL
11-nor- Δ^9 -THC-9-COOH	0.2 µg/mL
Thioridazine	100 µg/mL
Tramadol	100 µg/mL
Tyramine	100 µg/mL
Zidovudine (AZT)	2 mg/mL
Zolpidem	100 µg/mL

Cross-reactivity ‡

The table below gives the compounds this assay is designed to detect and the levels at which the compounds have been found to give a response approximately equivalent to that of the 200 ng/mL secobarbital cutoff. Each concentration represents the reactivity level for the stated compound when it is added to a negative urine specimen. If a sample contains more than one compound detected by the assay, lower concentrations than those listed below may combine to produce a rate approximately equivalent to or greater than that of the cutoff calibrator.

Compound	Concentration
Allobarbitol	345 ng/mL
Alphenal	284 ng/mL
Amobarbital	348 ng/mL
Aprobarbital	275 ng/mL
Barbital	1278 ng/mL
5-Ethyl-5-(4-hydroxyphenyl) barbituric acid	927 ng/mL

Compound	Concentration
Butabarbital	274 ng/mL
Butalbital	304 ng/mL
Butobarbital	349 ng/mL
Cyclopentobarbital	304 ng/mL
Pentobarbital	252 ng/mL
Phenobarbital	509–971 ng/mL
Talbutal	194 ng/mL
Thiopental	28200 ng/mL

Analytical Sensitivity

The sensitivity of the BARB method is 20 ng/mL for the 200 ng/mL cutoff and it represents the lowest concentration of BARB that can be distinguished from zero. Sensitivity is defined as the concentration at two standard deviations above 0 ng/mL using Drugs of Abuse Calibrator Level A (n=20).‡

The Dimension Vista® BARB method (REF K5096) and the Dimension® BARB (REF DF96A) method utilize the same reagents under equivalent reaction conditions. Interfering substances and cross-reactivity were tested using Dimension® BARB (REF DF96A) and the results are representative of both methods.