

URINE AMPHETAMINES

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 AMPH results at the concentration listed for either the 300, 500, or 1000 ng/mL cutoff. ‡

Compound	Concentration (µg/mL)
Acetaminophen	1000
α-Acetyl-N,N-dinormethadol (dinor LAAM)	25
l-α-Acetylmethadol (LAAM)	25
N-Acetylprocainamide (NAPA)	400
Acetylsalicylic Acid	1000
Albuterol	1000
p-Aminobenzoic Acid (PABA)	1000
Amitriptyline	1000
Amoxicillin	100
Atenolol	1000
Benzoyllecgonine	1000
Buprenorphine	100
Caffeine	1000
Carbamazepine	250
Carisoprodol	1000
Chlorpheniramine	100
Chlorpromazine	200
Cimetidine	1000
Clomipramine	2.5
Clonidine	1000
Codeine	500
l-Cotinine	100
Cyclobenzaprine	28
Desipramine	300
Dextromethorphan	1000

Compound	Concentration (µg/mL)
Dextrorphan	280
Diphenhydramine	1000
Doxepin	10
Doxylamine	500
1-Epinephrine	1000
2-Ethylidene-1,5-dimethyl-3,3-diphenylpyrrolidine (EDDP)	1000
Fenoprofen	150
Fluoxetine	500
Furosemide	1000
Glutethimide	500
Haloperidol	500
Ibuprofen	1000
Imipramine	750
Isoxsuprine	300
Ketamine	100
Ketoprofen	1000
Ketorolac Tromethamine	1000
Labetalol	750
Lidocaine	100
LSD	2.5
Meperidine	1000
Mescaline	1000
Methadone	1000
Methaqualone	1500
d,l-Methyldopa	1000
l-Methyldopa	1000
Monoethylglycinexylidide (MEGX)	1000
Morphine	1000
Nalmefene	20
Naloxone	500
Naproxen	1000
Nicotinic Acid	500
Noracetylmethadol (nor LAAM)	25
11-nor- ⁹ -THC-9-COOH	100
Nortriptyline	750
Nylidrin	750
Ofloxacin	100
Oxazepam	300
Phencyclidine	1000
Phenelzine	50
1-Phenylcyclohexylamine (PCA)	50
Phenytoin (DPH)	1000
Phthalic Acid	1000
1-Piperidinocyclohexane Carbonitrile (PCC)	50

Compound	Concentration (µg/mL)
Procainamide	1000
Promethazine	1000
Propoxyphene	1000
Ranitidine	900
Scopolamine	500
Secobarbital	1000
Thioridazine	100
Tolmetin Sodium	2000
Tramadol	100
Trazodone	1000
Trifluoperazine	100
Trimethobenzamide	500
Trimethoprim	500
Verapamil	1000
Zidovudine (AZT)	2000
Zolpidem	100

Sympathomimetic Amines	Concentration (µg/mL)
Diethylpropion	1000
d,l-Isoproterenol	1000
Metaproterenol	500
Methylphenidate (Ritalin®)	1000
Phenethylamine	15
Phenylephrine	1000
Propylhexedrine	20
3-OH-Tyramine (dopamine)	300

Cross-reactivity ‡

The tables below give 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 selected cutoff (300, 500, or 1000 ng/mL d-methamphetamine). 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.

Concentration of Amphetamines Producing a Result Approximately Equivalent to the selected cutoff (300, 500, or 1000 ng/mL d-methamphetamine)

Compound	Concentration(ng/mL) Giving a Response Approximately Equivalent to the Cutoff		
	300 ng/mL cutoff	500 ng/mL cutoff	1000 ng/mL cutoff
d-Amphetamine	329	529	1286
d,l-Amphetamine	528	1058	2139

d,l-Methamphetamine	491	818	1564
l-Amphetamine	2509	4996	10407
l-Methamphetamine	526	1049	2273
Methylenedioxyamphetamine (MDA)	1515	2410	3537
Methylenedioxymethamphetamine (MDMA)	3729	9594	20538
Methylenedioxyethylamphetamine (MDEA)	3286	8359	18230

Compound	Concentration (µg/mL)		
	300 ng/mL cutoff	500 ng/mL cutoff	1000 ng/mL cutoff
4-Chloramphetamine	2	5	10
Benzphetamine*	1	1	1
Bupropion	175	510	1038
Chloroquine	608	1687	3741
l-Ephedrine	355	1109	2242
Fenfluramine	17	45	105
Mephentermine	6	15	30
Methoxyphenamine	61	153	331
Nor-pseudoephedrine	40	93	188
Phenmetrazine	2	4	9
Phentermine	4	10	21
Phenylpropanolamine (PPA)	26	61	133
Propranolol	64	175	386
Pseudoephedrine	987	2834	5889
Quinacrine	1303	3776	8293
Tranlycypromine	28	59	126
			503
Tyramine	98	232	

*Benzphetamine metabolizes to amphetamine and methamphetamine.

Note: Selegiline, a prescription medication used in the treatment of Parkinson's disease, metabolizes to l-amphetamine and l-methamphetamine. Therefore, patients taking Selegiline may test positive by amphetamine assays.

Note: Specimens from patients taking chlorpromazine (Thorazine®) may produce positive results with this assay.

Analytical Sensitivity

The sensitivity of the AMPH method is 125 ng/mL for the 1000 ng/mL cutoff and it represents the lowest concentration of AMPH that can be distinguished from zero. The sensitivity of the AMPH method is 95 ng/mL for the 300 and 500 ng/mL cutoffs. 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® AMPH method (REF K5091) and the Dimension® AMPH (REF DF91B) method utilize the same reagents under equivalent reaction conditions. Interfering substances and cross-reactivity were tested using Dimension® AMPH (REF DF91B) and results are representative of both methods.