

URINE OPIATES

Specificity⁶

Non Interfering Substances

Each of the following compounds when added to urine containing morphine at +/-25% concentration of the cutoff do not yield a false response relative to the 300 and 2000 ng/mL cutoff levels:

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 OPI results at the 300 and 2000 ng/mL cutoff levels: ‡

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	500 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
Cotinine	100 µg/mL
Cyclobenzaprine	28 µg/mL
Desipramine	800 µg/mL
Diphenhydramine	1000 µg/mL
Doxepin	10 µg/mL
2-Ethylidene-1,5-dimethyl-3,3-	1000 µg/mL

Compound	Concentration
diphenylpyrrolidine (EDDP)	
Fluoxetine	500 µg/mL
Glutethimide	500 µg/mL
Ibuprofen	1000 µg/mL
Ketamine	100 µg/mL
Ketorolac Tromethamine	1000 µg/mL
Lormetazepam	1 µg/mL
LSD	10 ng/mL
D-Methamphetamine	2 µg/mL
Methaqualone	1500 µg/mL
Nalbuphine	1000 µg/mL
Naproxen	1000 µg/mL
Nortriptyline	750 µg/mL
Oxazepam	300 µg/mL
Phencyclidine	1000 µg/mL
Phenytoin	1000 µg/mL
Promethazine	143 µg/mL
Propoxyphene	1000 µg/mL
Ranitidine	900 µg/mL
Scopolamine	500 µg/mL
Secobarbital	1000 µg/mL
Tapentadol	250 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 300 and 2000 ng/mL morphine cutoff levels. 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 (ng/mL) at 300 ng/mL cutoff level	Concentration (ng/mL) at 2000 ng/mL cutoff level
Codeine	102-306	660–1980
Dihydrocodeine	291	1872
Hydrocodone	247	1545
Hydromorphone	498	5349
Levallorphan ^g	>5000	>120,000

Levorphanol	1048	7680
Meperidine ^h	>15000	>800,000
6-Acetylmorphine	435	2100
Morphine-3-Glucuronide	626	6167
Nalorphine ^g	5540	>100,000
Naloxone	360,000	>3,500,000
Oxycodone	1500	23,000
Oxymorphone	>9300	>100,000

g. Therapeutic or toxic urinary levels of levallorphan and nalorphine are not reported in the literature.

h. Meperidine urinary concentrations of 150,000 ng/mL have been measured in cases of fatal meperidine overdose.

Therapeutic doses of Ofloxacin (Floxin®) or Levofloxacin (Levaquin®), non-opiates, may produce positive results with this assay. A positive result from an individual taking Ofloxacin or Levofloxacin should be interpreted with caution and confirmed by another method.

Analytical Sensitivity

The sensitivity of the OPI method is 50 ng/mL at the 300 ng/mL cutoff level. It represents the lowest concentration of OPI that can be distinguished from zero. This sensitivity is defined as the concentration at two standard deviations above 0.0 ng/mL using Drugs of Abuse Calibrator Level A (n=20).

‡ The Dimension Vista® OPI method (REF K5093) and the Dimension® OPI (REF DF93A) method utilize the same reagents under equivalent reaction conditions. Interfering substances and Cross-reactivity were tested using Dimension® OPI (REF DF93A) and the results are representative of both methods.