

URINE METHADONE

The EMIT II Plus Methadone Assay detects methadone. The assay does not detect the metabolite L- α -acetylmethadol (LAAM) at concentrations that would be found in the human urine of patients on LAAM therapy.

Non-Interfering Substances

Each of the following compounds, when added to urine at +/- 25% concentration of the cutoff, do not yield a false response relative to the 300 ng/mL cutoff level.

Compound	Concentration
Acetone	1.0 g/dL
Ascorbic Acid	1.5 g/dL
Bilirubin	0.25 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

Specificity

The table below lists concentrations ($\mu\text{g/mL}$) of compounds that show a negative response to the EMIT II Plus Methadone Assay at a 150 ng/mL cutoff level.

Compound	Conc. At 150 ng/mL cutoff
Acetaminophen	1000 $\mu\text{g/mL}$
α -Acetyl- <i>N,N</i> -dinormethadol (dinor LAAM)	25 $\mu\text{g/mL}$
L- α -Acetylmethadol (LAAM)	2 $\mu\text{g/mL}$
N-Acetylprocainamide (NAPA)	400 $\mu\text{g/mL}$
Acid	1000 $\mu\text{g/mL}$
Amitriptyline	25 $\mu\text{g/mL}$
D-Amphetamine	1000 $\mu\text{g/mL}$
Benzoyllecgonine	1000 $\mu\text{g/mL}$
Buprenorphine	1000 $\mu\text{g/mL}$
Caffeine	1000 $\mu\text{g/mL}$
Cimetidine	1000 $\mu\text{g/mL}$
Clomipramine	2.5 $\mu\text{g/mL}$
Clonidine	1000 $\mu\text{g/mL}$
Codeine	500 $\mu\text{g/mL}$
Cotinine	100 $\mu\text{g/mL}$
Cyclobenzaprine	62.5 $\mu\text{g/mL}$
Desipramine	800 $\mu\text{g/mL}$
Diphenhydramine	250 $\mu\text{g/mL}$
Doxepin	125 $\mu\text{g/mL}$
Doxylamine	250 $\mu\text{g/mL}$
2-Ethylidene-1,5-dimethyl-3,3-diphenylpyrrolidine (EDDP)	1000 $\mu\text{g/mL}$
Fluoxetine	500 $\mu\text{g/mL}$

Glutethimid	500 µg/mL
Ibuprofen	1000 µg/mL
Ketamine	100 µg/mL
Ketorolac Tromethamine	1000 µg/mL
Lormetazepam	1 µg/mL
LSD	10 ng/mL
Meperidine	250 µg/mL
d-Methamphetamine	35 µg/mL
L-α-Methadol	> 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	37 µg/mL

Compound	Conc. At 150 ng/mL cutoff
Propoxyphene	1000 µg/mL
Ranitidine	1000 µg/mL
Scopolamine	500 µg/mL
Secobarbital	1000 µg/mL
11-nor- ⁹ -THC-9-COOH	100 µg/mL
Thioridazine	100 µg/mL
Tramadol	1000 µg/mL
Tyramine	100 µg/mL
Zidovudine (AZT)	2 mg/mL
Zolpidem	100 µg/mL

Sensitivity

The sensitivity level (minimum detectable limit) of the Emit II Plus Methadone Assay is 30 ng/mL. This level represents the lowest concentration of methadone that can be distinguished from 0 ng/mL with a confidence level of 95%.

CAMC laboratories use the 300 ng/mL cutoff for the methadone assay.

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