

Drug Screen Analytical Specificity

Amphetamines

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 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.

Drug	1000 ng/mL Cutoff
d-Amphetamine	1286 ng/mL
d,1-Amphetamine	2139 ng/mL
l-Amphetamine	10407 ng/mL
4-Chloramphetamine	10 µg/mL
Benzphetamine	1 µg/mL
Bupropion	1038 µg/mL
Chloroquine	3741 µg/mL
l-Ephedrine	2242 µg/mL
Fenfluramine	105 µg/mL
Mephentermine	30 µg/mL
Methoxyphenamine	331 µg/mL
d,1-Methamphetamine	1564 ng/mL
l-Methamphetamine	2273 ng/mL
MDA (Methylenedioxyethamphetamine)	3537 ng/mL
MDEA (Methylenedioxyethylamphetamine)	18230 ng/mL
MDMA (Methylenedioxymethamphetamine)	20538 ng/mL
Nor-pseudoephedrine	188 µg/mL
Phenmetrazine	9 µg/mL
Phentermine	21 µg/mL
Phenylpropanolamine (PPA)	133 µg/mL
Propranolol	386 µg/mL
Pseudoephedrine	5889 µg/mL
Quinacrine	8293 µg/mL
Tranlycypromine	126 µg/mL
Tyramine	503 µg/mL

NOTES

*Benzphetamine metabolizes to amphetamine and methamphetamine.

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.

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

Barbiturates

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.

Drug	200 ng/mL Cutoff
Allobarbital	345 ng/mL
Alphenal	284 ng/mL
Amobarbital	555 ng/mL
Aprobarbital	275 ng/mL
Barbital	1278 ng/mL
5-Ethyl-5-(4-hydroxyphenol) barbituric acid	927 ng/mL
Butobarbital	274 ng/mL
Butalbital	304 ng/mL
Butobarbital	349 ng/mL
Cyclopentobarbital	304 ng/mL
Pentobarbital	252 ng/mL
Phenobarbital	1087-1631 ng/mL
Talbutal	194 ng/mL
Thiopental	1109 ng/mL

Benzodiazepines

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 lormetazepam 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.

Drug	200 ng/mL Cutoff
Alprazolam	65 ng/mL
7-aminoclonazepam	5300 ng/mL
7-aminoflunitrazepam	930 ng/mL
Bromazepam	630 ng/mL
Chlordiazepoxide	3300 ng/mL
Clobazam	260 ng/mL
Clonazepam	210 ng/mL
Clorazepate	
Clotiazepam	380 ng/mL
Demoxepam	1600 ng/mL
N-Desalkylflurazepam	130 ng/mL
N-Desmethyldiazepam	110 ng/mL
Diazepam	70 ng/mL
Estazolam	90 ng/mL
Flunitrazepam	140 ng/mL
Flurazepam	190 ng/mL
Halazepam	110 ng/mL
a-Hydroxyalprazolam	100 ng/mL
a-Hydroxyalprazolam Glucuronide	110 ng/mL
1-N-Hydroxyethylflurazepam	150 ng/mL
a-Hydroxytriazolam	130 ng/mL
Ketazolam	100 ng/mL
Lorazepam	600 ng/mL
Lorazepam Glucuronide	>20000 ng/mL
Medazepam	150 ng/mL
Midazolam	130 ng/mL
Nitrazepam	78 ng/mL
Norchlordiazepoxide	4500 ng/mL
Oxazepam	250 ng/mL
Oxazepam Glucuronide	>30000 ng/mL
Prazepam	90 ng/mL
Temazepam	140 ng/mL
Temazepam Glucuronide	>20000 ng/mL
Tetrazepam	70 ng/mL
Triazolam	130 ng/mL

NOTES

Clorazepate degrades rapidly in stomach acid to nordiazepam. Nordiazepam hydroxylates to oxazepam.

Glucuronide meatabolite of a-Hydroxyalprozam crossreact with this assay. Other glucuronide metabolites such as Lorazepam, and Temazepam crossreact to a limited extent. The crossreactivity of other glucuronide metabolites with this assay is not known.

Buprenorphine

The Drug Screen Test- BUP is for the detection of Buprenorphine in urine at a **cut-off concentration of 10 ng/mL**. Positive- The following are compounds that are positively detected using this test.

Compound	Concentration ng/mL
Buprenorphine	10
Norbuprenorphine	20
Buprenorphine 3-D-glucuronide	15
Norbuprenorphine 3-D-glucuronide	200

Cannabinoids (THC)

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 **50 ng/mL (11-nor- Δ^9 -THC-9-carboxylic acid) cannabinoids 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.

Drug	50 ng/mL Cutoff
8- β -11-Dihydroxy- Δ^9 -THC	58 ng/mL
8- β -11-Hydroxy- Δ^9 -THC	68 ng/mL
11-Hydroxy- Δ^8 -THC	67 ng/mL
11-Hydroxy- Δ^9 -THC	77 ng/mL
9-Carboxy-11-nor- Δ^9 -THC-glucuronide	95 ng/mL

Cocaine Metabolite

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 ng/mL benzoylecgonine (cocaine metabolite) cutoffs**. 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.

Drug	300 ng/mL Cutoff
Cocaine	40 – 119 μ g/mL
Ecgonine	7 – 20 μ g/mL

Methadone

The METH method detects methadone in human urine. This method does not detect the metabolite L- α -acetylmethadol (LAAM) in concentrations that would be found in urine of patients on LAAM therapy. The table below gives the compounds this assay is designed to detect and the level at which α -acetyl-N,N-dinormethadol (dinor LAAM) has been found to give a response approximately equivalent to **300 ng/mL methadone cutoff**.

Drug	300 ng/mL Cutoff
α -Acetyl-N,N-dinormethadol (dinor LAAM)	25 μ g/mL

Opiate

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 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.

Drug	300 ng/mL Cutoff
Codeine	102-306 ng/mL
Dihydrocodeine	291 ng/mL
Hydrocodone	247 ng/mL
Hydromorphone	498 ng/mL
Levallorphan	3740 ng/mL
Levorphanol	480 ng/mL
Meperidine	> 15000 ng/mL
6-Acetylmorphine	435 ng/mL
Morphine-3-Glucuronide	626 ng/mL
Nalorphine	2130 ng/mL
Naloxone	360000 ng/mL
Oxycodone	3340 ng/mL
Oxymorphone	> 9300 ng/mL

NOTES

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.

Oxycodone

The Drug Screen Test- OXY is for the detection of Oxycodone in urine at a **cut-off concentration of 100 ng/mL**. Positive- The following are compounds that are positively detected using this test.

Compound	Concentration ng/mL
Oxycodone	100
Oxymorphone	200
Hydrocodone	6250
Naloxone	37500
Naltrexone	37500
Levorphanol	50000
Hydrmorphone	50000

Tricyclic Anti-depressant (TCA)

The Drug Screen Test- TCA is for the detection of Nortriptyline in urine at a cut-off concentration of 1000 ng/mL. Positive- The following are compounds that are positively detected using this test.

Compound	Concentration ng/mL
Nortriptyline	1000
Nordoxepine	1000
Trimipramine	3000
Amitriptyline	1500
Promazine	1500
Desipramine	200
Imipramine	400
Clomipramine	12500
Doxepine	2000
Maprotiline	2000
Promethazine	25000