ECO™ Cup
One Step Drug Test

Package Insert for Multi Drug Screen Test Cup

This Instruction Sheet is for testing of any combination of Amphetamine, Barbiturates, Benzodiazepines, Cocaine, Marijuana, Methadone, Methamphetamine, Methylenedioxymethamphetamine, Morphine, Oxycodone, Phencyclidine and Tricyclic Antidepressants.
Including Adulterant Tests (Specimen Validity Tests) for:
Oxidants (OX), Specific Gravity (S.G) , pH, Creatinine (CRE), Nitrite (NIT) and Glutaraldehyde (GLU).

A rapid, one step screening test for the simultaneous, qualitative detection of multiple drugs and drug metabolites in human urine.

For Professional and *In Vitro* Diagnostic Use Only.

INTENDED USE

The ***ECO CUP™ One Step Drug Test*** is a lateral flow chromatographic immunoassay for the qualitative detection of multiple drugs and drug metabolites in urine at the following cut-off concentrations:

Test	Calibrator	Cut-off
Amphetamine (AMP)	D-Amphetamine	1,000 ng/mL
Barbiturates (BAR)	Secobarbital	300 ng/mL
Benzodiazepines (BZO)	Oxazepam	300 ng/mL
Cocaine (COC)	Benzoylecgonine	300 ng/mL
Marijuana (THC)	11-nor-Δ^9-THC-9 COOH	50 ng/mL
Methadone (MTD)	Methadone	300 ng/mL
Methamphetamine (mAMP)	D-Methamphetamine	1,000 ng/mL
Methylenedioxymethamphetamine (MDMA)	D,L-Methylenedioxymethamphetamine	500 ng/mL
Opiate 300 (OPI 300,MOP,MOR)	Morphine	300 ng/mL
Opiate 2000 (OPI 2000)	Morphine	2,000 ng/mL
Oxycodone (OXY)	Oxycodone	100 ng/mL
Phencyclidine (PCP)	Phencyclidine	25 ng/mL
Tricyclic Antidepressants (TCA)	Nortriptyline	1,000 ng/mL

Configurations of the ***ECO CUP™ One Step Drug Test*** can consist of any combination of the above listed drug analytes. This assay provides only a preliminary qualitative test result. Use a more specific alternate quantitative analytical method to obtain a confirmed analytical result. Gas chromatography/mass spectrometry (GC/MS) is the preferred confirmatory method.[1] Apply clinical and professional judgment to any drug of abuse test result, particularly when preliminary positive results are obtained.

SUMMARY AND EXPLANATION OF THE TEST

The ***ECO CUP™ One Step Drug Test*** is a competitive immunoassay utilizing highly specific reactions between antibodies and antigens for the detection of multiple drugs and drug metabolites in human urine.
The ***ECO CUP™ One Step Drug Test*** is a rapid urine screening test that utilizes monoclonal antibodies to selectively detect elevated levels of specific drugs in urine without the use of an instrument.

AMPHETAMINE (AMP)
Amphetamine is a Schedule II controlled substance available by prescription (Dexedrine®) and is also available on the illicit market. Amphetamines are a class of potent sympathomimetic agents with therapeutic applications. They are chemically related to the human body's natural catecholamines: epinephrine and norepinephrine. Acute higher doses lead to enhanced stimulation of the central nervous system and induce euphoria, alertness, reduced appetite, and a sense of increased energy and power. Cardiovascular responses to Amphetamines include increased blood pressure and cardiac arrhythmias. More acute responses produce anxiety, paranoia, hallucinations, and psychotic behavior. The effects of Amphetamines generally last 2-4 hours following use, and the drug has a half-life of 4-24 hours in the body. About 30% of Amphetamines are excreted in the urine in unchanged form, with the remainder as hydroxylated and deaminated derivatives.
The ***ECO II CUP™ One Step Drug Test*** yields a positive result when Amphetamines in urine exceed 1,000 ng/mL. This is the suggested screening cut-off for positive specimens set by the Substance Abuse and Mental Health Services Administration (SAMHSA, USA). [3]

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BARBITURATES (BAR)
Barbiturates are central nervous system depressants. They are used therapeutically as sedatives, hypnotics, and anticonvulsants. Barbiturates are almost always taken orally as capsules or tablets. The effects resemble those of intoxication with alcohol. Chronic use of barbiturates leads to tolerance and physical dependence. Short acting Barbiturates taken at 400 mg/day for 2-3 months can produce a clinically significant degree of physical dependence. Withdrawal symptoms experienced during periods of drug abstinence can be severe enough to cause death. Only a small amount (less than 5%) of most Barbiturates are excreted unaltered in the urine.
The approximate detection time limits for Barbiturates are:
Short acting (e.g. Secobarbital) 100 mg PO (oral) 4.5 days
Long acting (e.g. Phenobarbital) 400 mg PO (oral) 7 days[4]
The ***ECO CUP™ One Step Drug Test*** yields a positive result when the Barbiturates in urine exceed 300 ng/mL.

BENZODIAZEPINES (BZO)
Benzodiazepines are medications that are frequently prescribed for the symptomatic treatment of anxiety and sleep disorders. They produce their effects via specific receptors involving a neurochemical called gamma aminobutyric acid (GABA). Because they are safer and more effective, Benzodiazepines have replaced barbiturates in the treatment of both anxiety and insomnia. Benzodiazepines are also used as sedatives before some surgical and medical procedures, and for the treatment of seizure disorders and alcohol withdrawal.
Risk of physical dependence increases if Benzodiazepines are taken regularly (e.g., daily) for more than a few months, especially at higher than normal doses. Stopping abruptly can bring on such symptoms as trouble sleeping, gastrointestinal upset, feeling unwell, loss of appetite, sweating, trembling, weakness, anxiety and changes in perception.
Only trace amounts (less than 1%) of most Benzodiazepines are excreted unaltered in the urine; most of the concentration in urine is conjugated drug. The detection period for the Benzodiazepines in the urine is 3-7 days.
The ***ECO CUP™ One Step Drug Test*** yields a positive result when the Benzodiazepines in urine exceed 300 ng/mL.

COCAINE (COC)
Cocaine is a potent central nervous system (CNS) stimulant and a local anesthetic. Initially, it brings about extreme energy and restlessness while gradually resulting in tremors, over-sensitivity and spasms. In large amounts, cocaine causes fever, unresponsiveness, difficulty in breathing and unconsciousness.
Cocaine is often self-administered by nasal inhalation, intravenous injection and free-base smoking. It is excreted in the urine in a short time primarily as Benzoylecgonine.[1,2] Benzoylecgonine, a major metabolite of cocaine, has a longer biological half-life (5-8 hours) than cocaine (0.5-1.5 hours), and can generally be detected for 24-48 hours after cocaine exposure.[2]
The ***ECO CUP™ One Step Drug Test*** yields a positive result when the cocaine metabolite in urine exceeds 300 ng/mL. This is the suggested screening cut-off for positive specimens set by the Substance Abuse and Mental Health Services Administration (SAMHSA, USA). [3]

MARIJUANA (THC)
THC (Δ^9-tetrahydrocannabinol) is the primary active ingredient in cannabis (marijuana). When smoked or orally administered, THC produces euphoric effects. Users have impaired short term memory and slowed learning. They may also experience transient episodes of confusion and anxiety. Long-term, relatively heavy use may be associated with behavioral disorders. The peak effect of marijuana administered by smoking occurs in 20-30 minutes and the duration is 90-120 minutes after one cigarette. Elevated levels of urinary metabolites are found within hours of exposure and remain detectable for 3-10 days after smoking. The main metabolite excreted in the urine is 11-nor-Δ^9-tetrahydrocannabinol-9-carboxylic acid (Δ^9-THC-COOH).
The ***ECO CUP™ One Step Drug Test*** yields a positive result when the concentration of THC-COOH in urine exceeds 50 ng/mL. This is the suggested screening cut-off for positive specimens set by the Substance Abuse and Mental Health Services Administration (SAMHSA, USA). [3]

METHADONE (MTD)
Methadone is a narcotic analgesic prescribed for the management of moderate to severe pain and for the treatment of opiate dependence (heroin, Vicodin, Percocet, Morphine). The pharmacology of Oral Methadone is very different from IV Methadone. Oral Methadone is partially stored in the liver for later use. IV Methadone acts more like heroin. In most states you must go to a pain clinic or a Methadone maintenance clinic to be prescribed Methadone. Methadone is a long acting pain reliever producing effects that last from twelve to forty-eight hours. Ideally, Methadone frees the client from the pressures of obtaining illegal heroin, from the dangers of injection, and from the emotional roller coaster that most opiates produce. Methadone, if taken for long periods and at large doses, can lead to a very long withdrawal period. The withdrawals from Methadone are more prolonged and troublesome than those provoked by heroin cessation, yet the substitution and phased removal of methadone is an acceptable method of detoxification for patients and therapists.[4]
The ***ECO CUP™ One Step Drug Test*** yields a positive result when the Methadone in urine exceeds 300 ng/mL.

METHAMPHETAMINE (mAMP)
Methamphetamine is an addictive stimulant drug that strongly activates certain systems in the brain. Methamphetamine is closely related chemically to amphetamine, but the central nervous system effects of Methamphetamine are greater. Methamphetamine is made in illegal laboratories and has a high potential for abuse and dependence. The drug can be taken orally, injected, or inhaled. Acute higher doses lead to enhanced stimulation of the central nervous system and induce euphoria, alertness, reduced appetite, and a sense of increased energy and power. Cardiovascular responses to Methamphetamine include increased blood pressure and cardiac arrhythmias. More acute responses produce anxiety, paranoia, hallucinations, psychotic behavior, and eventually, depression and exhaustion. The effects of Methamphetamine generally last 2-4 hours and the drug has a half-life of 9-24 hours in the body. Methamphetamine is excreted in the urine as amphetamine and oxidized and delaminated derivatives. However, 10-20% of Methamphetamine is excreted unchanged. Thus, the presence of the parent compound in the urine indicates Methamphetamine use. Methamphetamine is generally detectable in the urine for 3-5 days, depending on urine pH level.
The ***ECO CUP™ One Step Drug Test*** yields a positive result when the Methamphetamine in urine exceeds 1,000 ng/mL.

METHYLENEDIOXYMETHAMPHETAMINE (MDMA)
Methylenedioxymethamphetamine (ecstasy) is a designer drug first synthesized in 1914 by a German drug company for the treatment of obesity.[8] Those who take the drug frequently report adverse effects, such as increased muscle tension and sweating. MDMA is not clearly a stimulant, although it has, in common with amphetamine drugs, a capacity to increase blood pressure and heart rate. MDMA does produce some perceptual changes in the form of increased sensitivity to light, difficulty in focusing, and blurred vision in some users. Its mechanism of action is thought to be via release of the neurotransmitter serotonin. MDMA may also release dopamine, although the general opinion is that this is a secondary effect of the drug (Nichols and Oberlender, 1990). The most pervasive effect of MDMA, occurring in virtually all people who took a reasonable dose of the drug, was to produce a clenching of the jaws.
The ***ECO CUP™ One Step Drug Test*** yields a positive result when the Methylenedioxymethamphetamine in urine exceeds 500 ng/mL.

OPIATE (OPI 300,MOP,MOR)
Opiate refers to any drug that is derived from the opium poppy, including the natural products, morphine and codeine, and the semi-synthetic drugs such as heroin. Opioid is more general, referring to any drug that acts on the opioid receptor. Opioid analgesics comprise a large group of substances which control pain by depressing the central nervous system. Large doses of morphine can produce higher tolerance levels, physiological dependency in users, and may lead to substance abuse. Morphine is excreted unmetabolized, and is also the major metabolic product of codeine and heroin. Morphine is detectable in the urine for several days after an opiate dose.[4]
The ***ECO CUP™ One Step Drug Test*** yields a positive result when the concentration of opiate exceeds the 300 ng/mL cut-off level.

OPIATE (OPI 2000)
Opiate refers to any drug that is derived from the opium poppy, including the natural products, morphine and codeine, and the semi-synthetic drugs such as heroin. Opioid is more general, referring to any drug that acts on the opioid receptor.
Opioid analgesics comprise a large group of substances which control pain by depressing the central nervous system. Large doses of morphine can produce higher tolerance levels, physiological dependency in users, and may lead to substance abuse. Morphine is excreted unmetabolized, and is also the major metabolic product of codeine and heroin. Morphine is detectable in the urine for several days after an opiate dose.[3]
The ***ECO CUP™ One Step Drug Test*** yields a positive result when the morphine in urine exceeds 2,000 ng/mL. This is the suggested screening cut-off for positive specimens set by the Substance Abuse and Mental Health Services Administration (SAMHSA, USA).

OXYCODONE (OXY)
Oxycodone,[4,5-epoxy-14-hydroxy-3-methoxy-17-methyl-morphinan-6-one, dihydrohydroxycodeinone] is a semi-synthetic opioid agonist derived from thebaine, a constituent of opium. Oxycodone is a Schedule II narcotic analgesic and is widely used in clinical medicine. The pharmacology of oxycodone is similar to that of morphine, in all respects, including its abuse

and dependence liabilities. Pharmacological effects include analgesia, euphoria, feelings of relaxation, respiratory depression, constipation, papillary constriction, and cough suppression.
Oxycodone is prescribed for the relief of moderate to high pain under pharmaceutical trade names as OxyContin® (controlled release), OxyIR®, OxyFast® (immediate release formulations), or Percodan® (aspirin) and Percocet® (acetaminophen) that are in combination with other nonnarcotic analgesics. Oxycodone's behavioral effects can last up to 5 hours. The controlled-release product, OxyContin®, has a longer duration of action (8-12 hours).
The ***ECO CUP™ One Step Drug Test*** yields a positive result when the Oxycodone in urine exceeds 100 ng/mL.

PHENCYCLIDINE (PCP)
Phencyclidine, also known as PCP or Angel Dust, is a hallucinogen that was first marketed as a surgical anesthetic in the 1950's. It was removed from the market because patients receiving it became delirious and experienced hallucinations.
Phencyclidine is used in powder, capsule, and tablet form. The powder is either snorted or smoked after mixing it with marijuana or vegetable matter. Phencyclidine is most commonly administered by inhalation but can be used intravenously, intra-nasally, and orally. After low doses, the user thinks and acts swiftly and experiences mood swings from euphoria to depression. Self-injurious behavior is one of the devastating effects of Phencyclidine.
PCP can be found in urine within 4 to 6 hours after use and will remain in urine for 7 to 14 days, depending on factors such as metabolic rate, user's age, weight, activity, and diet.[5] Phencyclidine is excreted in the urine as an unchanged drug (4% to 19%) and conjugated metabolites (25% to 30%).[6]
The ***ECO CUP™ One Step Drug Test*** yields a positive result when the phencyclidine level in urine exceeds 25 ng/mL. This is the suggested screening cut-off for positive specimens set by the Substance Abuse and Mental Health Services Administration (SAMHSA, USA).

TRICYCLIC ANTIDEPRESSANTS (TCA)
TCA (Tricyclic Antidepressants) are commonly used for the treatment of depressive disorders. TCA overdoses can result in profound central nervous system depression, cardiotoxicity and anticholinergic effects. TCA overdose is the most common cause of death from prescription drugs. TCAs are taken orally or sometimes by injection. TCAs are metabolized in the liver. Both TCAs and their metabolites are excreted in urine mostly in the form of metabolites for up to ten days.
The ***ECO CUP™ One Step Drug Test*** yields a positive result when the concentration of Tricyclic Antidepressants in urine exceeds 1,000 ng/mL.

ADULTERANT TESTS (SPECIMEN VALIDITY TESTS) SUMMARY

The Adulterant Test Strip contains chemically treated reagent pads. Observation of the color change on the strip compared to the color chart provides a semi-quantitative screen for oxidants, specific gravity, pH, creatinine, nitrite and glutaraldehyde in human urine which can help to assess the integrity of the urine specimen.

ADULTERATION

Adulteration is the tampering of a urine specimen with the intention of altering the test results. The use of adulterants in the urine specimen can cause false negative results by either interfering with the test and/or destroying the drugs present in the urine. Dilution may also be used to produce false negative drug test results. To determine certain urinary characteristics such as specific gravity and pH, and to detect the presence of oxidants, Nitrite, Glutaraldehyde and Creatinine in urine are considered to be the best ways to test for adulteration or dilution.

- Oxidants (OX): Tests for the presence of oxidizing agents such as bleach and peroxide in the urine.
- Specific Gravity (S.G.): Tests for sample dilution. Normal levels for specific gravity will range from 1.003 to 1.030. Specific gravity levels of less than 1.003 or higher than 1.030 may be an indication of adulteration or specimen dilution.
- pH: tests for the presence of acidic or alkaline adulterants in urine. Normal pH levels should be in the range of 4.0 to 9.0. Values below pH 4.0 or above pH 9.0 may indicate the sample has been altered.
- Nitrite (NIT): Tests for commercial adulterants such as Klear and Whizzies. Normal urine specimens should contain no trace of nitrite. Positive results for nitrite usually indicate the presence of an adulterant.
- Glutaraldehyde (GLU): Tests for the presence of an aldehyde. Glutaraldehyde is not normally found in a urine specimen. Detection of glutaraldehyde in a specimen is generally an indicator of adulteration.
- Creatinine (CRE): Creatinine is one way to check for dilution and flushing, which are the most common mechanisms used in an attempt to circumvent drug testing. Low creatinine may indicate dilute urine.

PRINCIPLE

The ***ECO CUP™ One Step Drug Test*** is an immunoassay based on the principle of competitive binding. Drugs which may be present in the urine specimen compete against their respective drug conjugate for binding sites on their specific antibody.

During testing, a urine specimen migrates upward by capillary action. A drug, if present in the urine specimen below its cut-off concentration, will not saturate the binding sites of its specific antibody. The antibody will then react with the drug-protein conjugate and a visible colored line will show up in the test line region of the specific drug strip. The presence of drug above the cut-off concentration will saturate all the binding sites of the antibody. Therefore, the colored line will not form in the test line region.

A drug-positive urine specimen will not generate a colored line in the specific test line region of the strip because of drug competition, while a drug-negative urine specimen will generate a line in the test line region because of the absence of drug competition.

To serve as a procedural control, a colored line will always appear at the control line region, indicating that proper volume of specimen has been added and membrane wicking has occurred.

REAGENTS

The test contains a membrane strip coated with drug-protein conjugates (purified bovine albumin) on the test line, a goat polyclonal antibody against gold-protein conjugate at the control line, and a dye pad which contains colloidal gold particles coated with mouse monoclonal antibody specific to individual drug on the list in the intended use section.

ADULTERANT TESTS (SPECIMEN VALIDITY TESTS) REAGENTS

Adulteration Pad	Reactive Indicator	Buffers and Non-reactive Ingredients
Oxidants (OX)	0.36%	99.64%
Specific Gravity (S.G.)	0.25%	99.75%
pH	0.06%	99.94%
Nitrite（NIT）	0.07%	99.93%
Glutaraldehyde（GLU）	0.02%	99.98%
Creatinine（CRE）	0.04%	99.96%

PRECAUTIONS

- For Professional Use Only.
- For *In Vitro* Diagnostic Use Only.
- Do not use after the expiration date.
- The test panel should remain in the sealed pouch until use.
- The test is for single use.
- While urine is not classified by OSHA or the CDC as a biological hazard unless visibly contaminated with blood[8,9], the use of gloves is recommended to avoid unnecessary contact with the specimen.
- The used test device and urine specimen should be discarded according to federal, state and local regulations.

STORAGE AND STABILITY

Store as packaged in the sealed pouch at 2-30°C (36-86°F). The test is stable through the expiration date printed on the sealed pouch. The test device must remain in the sealed pouch until use. DO NOT FREEZE. Do not use beyond the expiration date.

SPECIMEN COLLECTION AND PREPARATION

Urine Assay
The urine specimen should be collected directly into the test cup. Urine collected at any time of the day may be used. If the urine specimen is collected for later testing, another dry and clean container should be used to collect the specimen.

SPECIMEN STORAGE

Urine specimen collected for later testing may be stored at 2-8°C（36-46°F）for up to 48 hours. For prolonged storage, specimens may be frozen and stored below -20°C. Frozen specimens should be thawed and mixed well before testing.

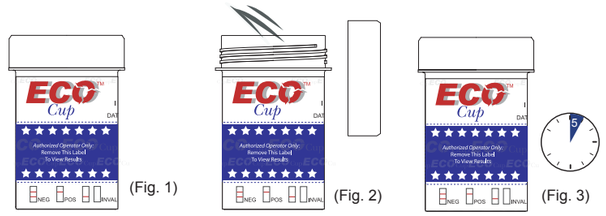
MATERIALS

Materials Provided
• Test cup • Disposable gloves • Security seal label • Package insert • Procedure card
• Color chart card for adulterant interpretation (when applicable)
Materials Required But Not Provided
· Timer

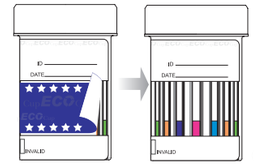
DIRECTIONS FOR USE

Allow the test cup to come to room temperature [15-30°C (59-86°F)] prior to testing.

1) Tear the foil bag open, remove test cup and disposable gloves provided for donor. Label the device with donor information.(Fig. 1)
2) Wear disposable gloves to collect urine specimen. Open test cup lid. Urinate directly into the test cup. Be sure to fill up the test cup with the urine specimen between minimum 30ml to maximum 90ml (marked on the cup).(Fig. 2)
3) After urine specimen has been collected, close the lid securely and return cup to collection official.(Fig. 3)
4) Collection official use glove provided. Peel off label to reveal test result. Read test result at 5 minutes. DO NOT INTERPRET RESULT AFTER 10 MINUTES.(Fig. 4)



(Fig. 1) (Fig. 2) (Fig. 3)


(Fig. 4)

NEGATIVE POSITIVE INVALID

INTERPRETATION OF RESULTS

(Please refer to the previous illustration)
NEGATIVE: Two lines appear. * One color line should be in the control region (C), and another apparent color line adjacent should be in the test region (T). This negative result indicates that the drug concentration is below the detectable level.
*NOTE: The shade of color in the test line region (T) will vary, but it should be considered negative whenever there is even a faint distinguishable color line.

POSITIVE: One color line appears in the control region (C). No line appears in the test region (T). This positive result indicates that the drug concentration is above the detectable level.

INVALID: Control line fails to appear. Insufficient specimen volume or incorrect procedural techniques are the most likely reasons for control line failure. Review the procedure and repeat the test using a new test device. If the problem persists, discontinue using the lot immediately and contact your supplier.

ADULTERANT TESTS (SPECIMEN VALIDITY TESTS) INTERPRETATION

(Please refer to the color chart)
Semi-quantitative results are obtained by visually comparing the reacted color blocks on the strip to the printed color indicator on the color chart. No instrumentation is required.

ADULTERANT TESTS (SPECIMEN VALIDITY TESTS) LIMITATIONS

1. The adulterant tests included with the product are meant to aid in the determination of abnormal specimens, but may not cover all the possible adulterants.
2. Oxidants: Normal human urine should not contain oxidants. The presence of high level of antioxidants in the specimen, such as ascorbic acid, may result in false negative results for the oxidants pad.
3. Specific Gravity: Elevated levels of protein in urine may cause abnormally high specific gravity values.
4. Nitrite: Nitrite is not a normal component of human urine. However, nitrite found in urine may indicate urinary tract infections or bacterial infections. Nitrite levels of > 20 mg/dL may produce false positive glutaraldehyde results.
5. Glutaraldehyde: Is not normally found in a urine specimen. However certain metabolic abnormalities such as ketoacidosis (fasting, uncontrolled diabetes or high-protein diets) may interfere with the test results.
6. Creatinine: Tests for the specimen for dilution and flushing. Normal creatinine levels are between 20 and 350 mg/dL. Under rare conditions, certain kidney diseases may show dilute urine.

QUALITY CONTROL

A procedural control is included in the test. A color line appearing in the control region (C) is considered an internal procedural control. It confirms sufficient specimen volume, adequate membrane wicking and correct procedural technique.

LIMITATIONS

1. The ***ECO CUP™ One Step Drug Test*** provides only a qualitative, preliminary analytical result. A secondary analytical method must be used to obtain a confirmed result. Gas chromatography/mass spectrometry (GC/MS) is the preferred confirmatory method.
2. There is a possibility that technical or procedural errors, as well as other interfering substances in the urine specimen may cause erroneous results.
3. Adulterants, such as bleach and/or alum, in urine specimens may produce erroneous results regardless of the analytical method used. If adulteration is suspected, the test should be repeated with another urine specimen and a new test device.
4. A Positive result does not indicate intoxication of the donor, the concentration of drug in the urine, or the route of drug administration.
5. A Negative result may not necessarily indicate drug-free urine. Negative results can be obtained when drug is present but below the cut-off level of the test.
6. Test does not distinguish between drugs of abuse and certain medications.
7. A positive test result may be obtained from certain foods or food supplements.

PERFORMANCE CHARACTERISTICS

Accuracy

Testing on accuracy of the test strips was performed on clinical specimens collected for each of the following drug types. All clinical specimens were quantified by GC/MS analysis before testing. The quantity of the following compounds were analyzed by GC/MS and contributed to the total amount of drugs found in the positive specimens tested.

Test	Compounds Contributed to the Totals of GC/MS
AMP	Amphetamine
BAR	Secobarbital
BZO	Oxazepam
COC	Benzoylecgornine
THC	11-nor-Δ^9-tetrahydrocannabinol-9-carboxylic acid
MTD	Methadone
mAMP	Methamphetamine
MDMA	D,L-Methylenedioxymethamphetamine, Methylenedioxymethamphetamine
OPI	Morphine, Codeine
OXY	Oxycodone
PCP	Phencyclidine
TCA	Nortriptyline

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The following results are tabulated from these clinical studies:

% Agreement with GC/MS (HPLC for TCA)

	AMP	mAMP	OPI 2000	OPI 300	COC	PCP	THC
Positive Agreement	95%	96%	>99%	96%	96%	95%	96%
Negative Agreement	>99%	>99%	97%	>99%	>99%	>99%	>99%
Overall Agreement	98%	98%	98%	98%	98%	95%	98%

	BAR	TCA	MDMA	BZO	MTD	OXY
Positive Agreement	97%	98%	93%	96%	94%	95%
Negative Agreement	98%	>99%	>99%	>99%	98%	>99%
Overall Agreement	98%	99%	96%	98%	96%	98%

Analyte	BAR		MDMA		BZO		MTD		OXY		TCA		THC		PCP		mAMP		OPI300		OPI2000		COC		AMP	
	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg
Negative Samples	0	4	0	4	0	5	0	3	0	4	0	4	0	0	0	1	0	4	0	3	0	17	0	0	0	0
Near Cut-off Negative Samples [between 50% of cut-off and cut-off]	1	37	0	36	0	28	1	44	0	36	0	36	0	15	0	0	0	10	0	11	1	13	0	13	0	19
Near Cut-off Positive Samples [between cut-off and 150% of cut-off]	34	1	33	3	27	2	27	2	34	2	35	1	23	1	7	2	3	1	18	1	3	0	26	1	7	1
Positive Samples [>150% of cut-off]	3	0	4	0	18	0	3	0	4	0	4	0	1	0	28	0	22	0	7	0	6	0	0	0	13	0
Agreement with GC/MS	97%	98%	93%	>99%	96%	>99%	94%	98%	95%	>99%	98%	>99%	96%	>99%	95%	>99%	96%	>99%	96%	>99%	>99%	97%	96%	>99%	95%	>99%

Reproducibility

Reproducibility studies were carried out using diluted solutions of the commercially available stock solutions of the drug analytes listed. Dilutions were made from the stock solution of each drug to the concentrations specified in the following tables. A total of 40 determinations were made at each concentration. The results are listed in the following tables.

Amphetamine (AMP)

Amphetamine(AMP) conc.(ng/mL)	Total number of Determinations	Result	Precision
No drug present	40	40 negative	>99%
500	40	40 negative	>99%
750	40	40 negative	>99%
1,000	40	40 positive	>99%
1,500	40	40 positive	>99%

Barbiturates (BAR)

Secobarbital conc.(ng/mL)	Total number of Determinations	Result	Precision
No drug present	40	40 negative	>99%
150	40	40 negative	>99%
225	40	40 negative	>99%
300	40	40 positive	>99%
450	40	40 positive	>99%

Benzodiazepines (BZO)

Oxazepam conc.(ng/mL)	Total number of Determinations	Result	Precision
No drug present	40	40 negative	>99%
150	40	40 negative	>99%
225	40	40 negative	>99%
300	40	40 positive	>99%
450	40	40 positive	>99%

Cocaine (COC)

Benzoylecgonine conc.(ng/mL)	Total number of Determinations	Result	Precision
No drug present	40	40 negative	>99%
150	40	40 negative	>99%
225	40	40 negative	>99%
375	40	40 positive	>99%
450	40	40 positive	>99%

Marijuana (THC)

11-nor-Δ^9-THC-9-COOH conc.(ng/mL)	Total number of Determinations	Result	Precision
No drug present	40	40 negative	>99%
25	40	40 negative	>99%
37.5	40	40 negative	>99%
50	40	40 positive	>99%
75	40	40 positive	>99%

Methadone (MTD)

Methadone conc.(ng/mL)	Total number of Determinations	Result	Precision
No drug present	40	40 negative	>99%
150	40	40 negative	>99%
225	40	40 negative	>99%
300	40	40 positive	>99%
450	40	40 positive	>99%

Methamphetamine (mAMP)

Methamphetamine conc.(ng/mL)	Total number of Determinations	Result	Precision
No drug present	40	40 negative	>99%
500	40	40 negative	>99%
750	40	40 negative	>99%
1,000	40	40 positive	>99%
1,500	40	40 positive	>99%

Methylenedioxymethamphetamine (MDMA)

Methylenedioxymeth-amphetamine conc.(ng/mL)	Total number of Determinations	Result	Precision
No drug present	40	40 negative	>99%
250	40	40 negative	>99%
375	40	40 negative	>99%
500	40	40 positive	>99%
750	40	40 positive	>99%

Opiate 300 (OPI 300,MOP,MOR)

Morphine conc.(ng/mL)	Total number of Determinations	Result	Precision
No drug present	40	40 negative	>99%
150	40	40 negative	>99%
225	40	40 negative	>99%
300	40	40 positive	>99%
375	40	40 positive	>99%

Opiate 2000 (OPI 2000)

Morphine conc.(ng/mL)	Total number of Determinations	Result	Precision
No drug present	40	40 negative	>99%
1,000	40	40 negative	>99%
1,500	40	40 negative	>99%
2,000	40	40 positive	>99%
3,000	40	40 positive	>99%

Oxycodone (OXY)

Oxycodone conc.(ng/mL)	Total number of Determinations	Result	Precision
No drug present	40	40 negative	>99%
50	40	40 negative	>99%
75	40	40 negative	>99%
100	40	40 positive	>99%
150	40	40 positive	>99%

Phencyclidine (PCP)

Phencyclidine conc.(ng/mL)	Total number of Determinations	Result	Precision
No drug present	40	40 negative	>99%
12.5	40	40 negative	>99%
19	40	40 negative	>99%
25	40	40 positive	>99%
37.5	40	40 positive	>99%

Tricyclic Antidepressants (TCA)

Nortiptyline conc.(ng/mL)	Total number of Determinations	Result	Precision
No drug present	40	40 negative	>99%
500	40	40 negative	>99%
750	40	40 negative	>99%
1,000	40	40 positive	>99%
1,500	40	40 positive	>99%

Analytical Sensitivity

A drug-free urine pool was spiked with drugs at concentrations listed. The results are summarized below

Drug concentration Cut-off Range	n	AMP		BAR		BZO		COC		MOP	
		-	+	-	+	-	+	-	+	-	+
0% Cut-off	10	10	0	10	0	10	0	10	0	10	0
-50% Cut-off	10	10	0	10	0	10	0	10	0	10	0
-25% Cut-off	10	10	0	10	0	10	0	10	0	10	0
Cut-off	10	0	10	0	10	0	10	0	10	0	10
+25% Cut-off	10	0	10	0	10	0	10	0	10	0	10
+50% Cut-off	10	0	10	0	10	0	10	0	10	0	10

Drug concentration Cut-off Range	n	THC		MTD		mAMP		MDMA	
		-	+	-	+	-	+	-	+
0% Cut-off	10	10	0	10	0	10	0	10	0
-50% Cut-off	10	10	0	10	0	10	0	10	0
-25% Cut-off	10	10	0	10	0	10	0	10	0
Cut-off	10	0	10	0	10	0	10	0	10
+25% Cut-off	10	0	10	0	10	0	10	0	10
+50% Cut-off	10	0	10	0	10	0	10	0	10

Drug concentration Cut-off Range	n	OPI		OXY		PCP		TCA	
		-	+	-	+	-	+	-	+
0% Cut-off	10	10	0	10	0	10	0	10	0
-50% Cut-off	10	10	0	10	0	10	0	10	0
-25% Cut-off	10	10	0	10	0	10	0	10	0
Cut-off	10	0	10	0	10	0	10	0	10
+25% Cut-off	10	0	10	0	10	0	10	0	10
+50% Cut-off	10	0	10	0	10	0	10	0	10

Analytical Specificity

The following table lists the concentration of compounds (ng/mL) that were detected positive in urine by The ***ECO CUP™ One Step Drug Test*** at a read time of 5 minutes

Drug	Concentration(ng/ml)
AMPHETAMINE (AMP)	
d-amphetamine	1,000
D,l-amphetamine	1,000
l-amphetamine	20,000
Phentermine	1,250
(+/-)- Methylenedioxyamphetamine (MDA)	1,500
BARBITURATES (BAR)	
Secobarbital	300
Amobarbital	300
Alphenal	150
Aprobarbital	200
Butabarbital	75
Butalbital	2,500
Butethal	100
Cyclopentobarbital	600
Pentobarbital	300
Phenobarbital	100
BENZODIAZEPINE (BZO)	
Oxazepam	300
a-Hydroxyalprazolam	1,260
Alprazalam	200
Bromazepam	1,560
Chlordiazepoxide	1,565
Chlordiazepoxide HCl	780
Clobazam	100
Clonazepam	785
Clorazepate Dipotassium	195
Delorazepam	1,560
Desalkylflurazepam	390
Diazepam	195
Estazolam	2,500
Flunitrazepam	385
(±) Lorazepam	1,560
RS-Lorazepam glucuronide	160
Midazolam	12,500
Nitrazepam	95
Norchlordiazepoxide	200
Nordiazepam	390
Temazepam	100
Triazolam	2,500
COCAINE (COC)	
Benzoylecogonine	300
Cocaethylene	300
Cocaine	300
Metoclopromide	80,000
Procaine	75,000

MARIJUANA (THC)	
11-Nor-Δ^9-Tetrahydrocannabinol	50
11-Hydroxy-Δ^9-Tetrahydrocannabinol	5,000
11-Nor-Δ^8-Tetrahydrocannabinol	50
11-Nor-Δ^9-Tetrahydrocannabinol-9 Carboxylic Glucuronide	2,500
Δ^8-Tetrahydrocannabinol	20,000
Δ^9 –Tetrahydrocannabinol	20,000
METHADONE (MTD)	
Methadone	300
Doxylamine	50,000
METHAMPHETAMINE (mAMP)	
(+/-) 3,4-Methylenedioxy-n-ethylamphetamine(MDEA)	20,000
Procaine (Novocaine)	60,000
Trimethobenzamide	20,000
+/-methamphetamine	1,000
+methamphetamine	500
Ranitidine (Zantac)	50,000
(+/-) 3,4-Methylenedioxymethamphetamine (MDMA)	2,500
METHYLENEDIOXY-METHAMPHETAMINE (MDMA)	
D,L-3,4-Methylenedioxymethamphetamine (MDMA)	500
3,4-Methylenedioxyamphetamine HCl (MDA)	3,000
3,4-Methylenedioxyethyl-amphetamine (MDEA)	300
OPIATES (OPI 300,MOR,MOP)	
6-acetylmorphine	500
Codeine	100
Eserine (Physosotigmine)	15,000
Ethylmorphine	100
Heroin	500
Hydromorphone	2,000
Hydrocodone	1,250
Morphine	300
Morphine-3-glucuronide	75
Oxycodone	75,000
Thebaine	13,000
OPIATES (OPI 2000)	
6-acetylmorphine	1,000
Codeine	800
Ethylmorphine	400
Heroin	10,000
Hydromorphone	2,000
Hydrocodone	5,000
Morphine	1,600
Morphine-3-glucuronide	1,000
Oxycodone	50,000
Thebaine	26,000
OXYCODONE (OXY)	
Oxycodone	100
Codeine	50,000
Dihydrocodeine	12,500
Ethylmorphine	25,000
Hydrocodone	1,580
Hydromorphone	12,500
Oxymorphone	1,580
Thebaine	50,000
PHENCYCLIDINE (PCP)	
Phencyclidine	25
4-Hydroxy PCP	90

PCP Morpholine	625
TRICYCLIC ANTIDEPRESSANTS (TCA)	
Notriptyline	1,000
Amitriptyline	1,500
Clomipramine	12,500
Desipramine	200
Doxepine	2,000
Imipramine	400
Maprotiline	2,000
Nordoxepine	1,000
Promazine	1,500
Promethazine	2,500
Trimipramine	3,000

EFFECT OF URINARY SPECIFIC GRAVITY

Fifteen (15) urine samples of normal, high, and low specific gravity ranges (1.005, 1.015, 1.03) were spiked with drugs at 50% below and 50% above cut-off levels respectively. The ***ECO CUP™ One Step Drug Test*** was tested in duplicate using ten drug-free urine and spiked urine samples. The results demonstrate that varying ranges of urinary specific gravity do not affect the test results.

EFFECT OF THE URINARY PH

The pH of an aliquoted negative urine pool was adjusted to pH ranges of 4.0 ,4.5, 5.0, 6.0 and 9.0,and spiked with drugs at 50% below and 50% above cut-off levels. The spiked, pH-adjusted urine was tested with the ***ECO CUP™ One Step Drug Test*** . The results demonstrate that varying ranges of pH do not interfere with the performance of the test.

CROSS-REACTIVITY

A study was conducted to determine the cross-reactivity of the test with compounds in either drug-free urine or drug positive urine containing Cocaine, Barbiturates, Benzodiazepines, Amphetamine, Methamphetamine, Marijuana, Methadone, MDMA (Ecstasy), Opiates, Oxycodone, Phencyclidine or Tricyclic Antidepressants. The following compounds show no cross-reactivity when tested with The ***ECO CUP™ One Step Drug Test*** at concentrations of 100µg/mL.

NON CROSS-REACTING COMPOUNDS

Cocaine, Benzodiazepines, Amphetamine, Methamphetamine, Marijuana, Opiates, Oxycodone, Phencyclidine, Barbiturates Non Cross-Reacting Compound
*Parent compound only:

Acebutolol
Acetaldehyde
Acetaminophen
Acetamidophenol(N-Acetyl-p-aminophenol)
Acetazolamide
Acetone
Acetophenetidin
Acetopromazine
N-Acetyl-L-cysteine
N-Acetylprocainamide (Acedainide)
Acetylsalicylic Acid (Aspirin
Albumin, standard
Allobarbital (Diallybarbituric Acid)
Allopurinol (4-Hydroxypyrazole(3,4- pyrimidine)
Alprenolol
Amantadine (Adamantan-1-amine)
Amcinonide
Amikacin
Amiloride
p-Aminobenzoic Acid
DL-Aminoglutethimide
Amiodarone
Amitryptyline
Ammonium Chloride
Amoxicillin
Amphotericin B
Ampicillin
Aniline
Antipyrine
Apomorphine
L-Ascorbic Acid
ASP-PHE-Methyl-Ester (Aspartame)
D-Aspartic Acid
DL-Aspartic Acid
L–Aspartic Acid
Baclofen
Barbituric Acid
Beclomethasone
Beclomethasone Dipropionate
Bendroflumethiazide
Benzidine
Benzilic Acid diethylaminoethyl ester
Benzocaine
Benzoic Acid
Benzphetamine
Benzthiazide
Benztropine
Benzyl alcohol
Benzylamine
Berberine
Betamethasone
Bilirubin
Bromopheniramine
Bumetanide
Bupivacaine
Buprenorphine
Buspirone
Butacaine
Butyrophenone
Caffeine
Camphor
Canrenoic Acid
Captopril
Carbamazepine
Carbamyl-Carboplatin
Carisoprodol
Cefaclor
Cefadroxil
Cefotaxime
Cefoxitin
Ceftriaxone
Cefuroxime
Cephalexin
Cephaloridine
Cephradine
Chloramphenicol
Chlorcyclizine
Chloroquine
Chlorothiazide
Chlorotrianisene
Chlorpheniramine
Chlorpromazine
Chlorpropamide
Chlorprothixene
Chlorthalidone
Chlorzoxazone
Cholesterol
Cimetidine
Cinchonidine
Cinoxacin
Clemastine
Clenbuterol
Clindamycin
Clobetasone Butyrate
Clomipramine
Clonidine
Cloxacillin
Clozapine
Colchicine
Cortisone
Cortol
Creatinine
Cromolyn
Cyclobenzaprine
Cyclophosphamide
Cyclosporin A
Cyproheptadine
Dantrolene
Deferoxamine Mesylate
Deoxyepinephrine
Desipramine
Desmethyldiazepam
Desoximetasone
Dexamethasone
Dextromethorphan
Diazoxide
Dichloromethane
Dichlorphenamide
Diclofenac
Dicyclomine
Dieldrin
Diflorasone Diacetate
Diflucortolone pivalate
Diflunisal
Digitoxin
Digoxin
Dihydroxymandelic Acid
Theophylline
Dimenhydrinate
Dimercaprol
Dimethylaminoantipyrin
Dimethyl Isosorbide
Dimethyl Sulfoxide
Diphenhydramine
Dipyridamole
Dipyrone
Disopyramide
Dobutamine
Doxepin
Doxycycline
Doxylamine
Droperidol
Ecgonine
Ecgonine Methyl Ester
Emetine
Ephedrine
Epinephrine
Erythromycin
Eserine
Estradial
Estriol
Estron
Glucuronide
Estrone-3-Sulfate
Ethacrynic Acid
Ethambutol
Ethamivan
Ethanol, Standard
Ethopropazine
Ethosuximide Phenylnalonamide
Ethylene Glycol
Ethylenediamine Tetraacetic Acid
Etodolac
Etoposide
Famotidine
Fenfluramine
Fenoprofen
Fentanyl
Ferrous Sulfate
Flufenamic Acid
Flunisolide
Fluphenazine
Flurandrenolide
Flurazepam
Flurbiprofen
Formaldehyde
Furosemide
Gemfibrozil
Gentamicin Sulfate
Gentisic Acid
Glucose
Glybenclamide
Griseofulvin
Guaiacol Glyceryl Ether
Guanethidine
Halcinonide
Haloperidol
Hemoglobin
Hexachlorocyclohexane
Hexachlorophene
Hexobarbital
Hippuric Acid
Histamine
DL-Homatropine
Hydrastine
Hydrochlorothiazide
Hydrocortisone
Hydrocarbalamine
Hydroflumethiazide
Hydroxyhippuric Acid
Hydroxyzine
Ibuprofen
Indapamide
Indomethacin
Ipratropium Bromide
Iproniazid
Isonicotinic Acid
Isopropamide
Isoxsuprine
Kanamycin
Ketamine
Ketoprofen
Kynurenic Acid
Labetalol
Levorphanol
Lidocaine
Lisinopril
Lithium Carbonate
Loperamide
Lormetazepam
Lysergic Acid Diethylamide (LSD)
Mebendazole
Meclizine
Meclofenamic Acid
Medazepam
Mefenamic Acid
Melanin
Melphalan
Menthol
Meperidine
Mephenesin
Mephentermine
Meprobamate
Metaproterenol
Metaraminol
Methadone
Methanol, Absolute
Methaqualone
Methazolamide
Methotrimeprazine
Methoxamine
Naphthalene Acetic Acid
Naproxen
Methoxyamine
Methoxyphenamine
Hydroxyprogesterone
Methylene Blue
Methylphenidate (Ritalin)
Methyl Salicylate
Meticrane
Metronidazole
Mianserin
Milrinone
Minaprine
Nabumetone
Nadolol
Nafcillin
Nalbuphine
Nalidixic Acid
Nalmefene
Nalorphine
Naloxone
Naltrexone
Naphazoline-
Naphthalene Acetic Acid
Naphthol
Neomycin Sulfate
Niacinamide
Nialamide
(+/-) Nicotine
Nicotinic Acid
Nifedipine
Nitrofurantoin
Nomifensine
Norclomipramine
Norcocaine
Norcodeine
Nordoxepin
Norethindrone
Norfloxacin
Normorphine
Noscapine
Nylidrin
Orphenadrine
Oxalic Acid
Oxolinic Acid
Oxprenolol
Oxymetazoline
Oxyphenbutazone
Oxypurinol
Paclitaxel
Pancuronium Bromide
Papaverine
Pargyline
Penicillin
Pentachlorophenoll
Pentoxifylline
Pentylenetetrazole
p-Phenylenediamine
Phenelzine
Phenformin
Pheniramine
Phenol
Phenolphthalien
Phenothiazine
Phenoxymethyl
Penicillinic acid (Penicillin V)
Phentolamine
Phenylbutazone
Phenylethylamine
Phenylpropanolamine
Phenyltoloxamine
Picrotoxin
Pilocarpine
Pimozide
Pinacidil
Pindolol
Pipecolic Acid
Pipedemic Acid
Piroxicam
Potassium Chloride
Potassium Iodide
Prazepam
Prazosin
Prednisone
Prilocaine
Primaquine
Primidone
Proadifen
Probenecid
Procainamide
Prochlorperazine
Procyclidine
Promazine
Promethazine
Propionylpromazine
Protriptyline
Pseudoephedrine
Pyridine-2-Aldoxime
Pyridoxine
Pyrilamine
Quinidine
Quinine
Quinolinic Acid
Ranitidine
Rescinnamine
Reserpine
Riboflavin
Ritodrine
Salbutamol (Albuterol)
Salicylic Acid
Sodium Chloride
Sodium Formate
Sulfamethazine
Sulfamethoxazole
Sulfanilamide
Sulfathiazole
Sulfisoxazole
Sulindac
Talbutal
Tannic Acid
Terbutaline
Terfenadine
Tetracycline
Theobromine
Theophylline
Thiamine
Thioridazine
Tobramycin
Tolazamide
Tolbutamide
Tolmetin
Toluene
Trazodone
Triamcinolone
Triamterene
Trichlormethiazide
Trichloroacetic acid
Trifluoperazine
Triflupromazine
Trimethoprim
Trimipramine
Triprolidine
Tropic Acid
Tropine
Tryptamine
Tyramine
Urea (Carbamide)
Uric Acid
Vancomycin
Vincamine
Xylometazoline
Yohimbine
Zearalenone
Zomepirac
Zopiclone

Methadone
Non Cross-Reacting Compound
*Parent compound only:

Acebutolol
Acetaldehyde
Acetaminophen Acetazolamide
Acetone
Acetophenetidin
N-Acetylprocainamide (Acedainide)
Acetylsalicylic Acid (Aspirin)
Aminopyrine
Amitryptyline
Ammonium Chloride
Amobarbital
Amoxicillin
Amphotericin B
Ampicillin
Aniline
Antipyrine
DL-Amphetamine sulfate
DL-Aspartic Acid
L–Aspartic Acid
Apomorphine
Aprobarbital
Aspartame
Atropine
Barbituric Acid
Benzidine
Benzilic Acid Benzocaine
Benzoic Acid
Benzoylecgonine
Benzphetamine
Benzthiazide
Bilirubin
Bisacodyl
Bromazepam
2-Bromo-a -ergocryptine
Brompheniramine
Caffeine
Cannabidiol
Cannabino
Chloramphenicol
Chlorcyclizine
Chlordiazepoxide
Chloroquine
Chlorothiazide
Chlorotrianisene
Chlorpheniramine
Chlorpromazine
Dimercaprol
Dimethylaminoantipyrin
Dimethyl Isosorbide
Dimethyl Sulfoxide
Disopyramide
Dobutamine
Doxepin
Doxycycline
Ecgonine
Ecgonine Methyl Ester
Emetine
Ephedrine
Epinephrine
Erythromycin
Estriol
Estrone
Ethyl-p-aminobenzoate
Etodolac
Etoposide
Famotidine
Fenfluramine
Ferrous Sulfate
Flufenamic Acid
Flunisolide
Formaldehyde
Furosemide
Gemfibrozil
Gentamicin Sulfate
Gentisic Acid
Glucose
Hemoglobin
Hydralazine
Hydrastine
Hydrochlorothiazide
Hydrocodone
Hydrocortisone
Hydrocarbalamine
Hydroflumethiazide
Hydroxyhippuric Acid
p-Hydroxyamphetamine
Hydroxyzine
Ibuprofen
Imipramine
Indapamide
Indomethacin
Ipratropium Bromide
Iproniazid
Isonicotinic Acid
Isopropamide
Isoxsuprine
Kanamycin
Ketamine
Ketoprofen
Kynurenic Acid
Labetalol
Levorphanol
Loperamide
Meperidine
Mephentermine
Methoxyphenamine

Hydroxyprogesterone
Methylphenidate (Ritalin)
Methyl Salicylate
Nabumetone
Nadolol
Nafcillin
Nalidixic Acid
Nalmefene
(+/-) Nicotine
Nicotinic Acid
Nifedipine
Nitrazepam
Noscapine
Oxycodone
Oxymetazoline
Oxyphenbutazone
Oxypurinol
Paclitaxel
Pancuronium Bromide
Papaverine
Pargyline
Penicillin
Pentachlorophenol
Pentobarbital
Pentoxifylline
Pentylenetetrazole
p-Phenylenediamine
Phenelzine
Phenformin
Pheniramine
Phenobarbital
Phenol
Phenolphthalien
Phenothiazine
Phenoxymethyl
Penicillinic acid (Penicillin V)
Phentolamine
Phenylbutazone
Phenylethylamine
Phenylpropanolamine
Phenyltoloxamine
Picrotoxin
Pilocarpine
Pimozide
Pinacidil
Pindolol
Pipecolic Acid
Pipedemic Acid
Piroxicam
Potassium Chloride
Potassium Iodide
Prazepam
Prazosin
Prednisone
Prilocaine
Primaquine
Primidone
Proadifen
Probenecid
Procainamide
Prochlorperazine
Procyclidine
Promazine
Promethazine
Propionylpromazine
Protriptyline
Pseudoephedrine
Pyridine-2-Aldoxime
Pyridoxine
Pyrilamine
Quinidine
Quinine
Quinolinic Acid

Oxazepam
Ranitidine
Rescinnamine
Reserpine
Riboflavin
Ritodrine
Salbutamol (Albuterol)
Salicylic Acid
Secobarbital
Sodium Chloride
Sodium Formate
Sulfamethazine
Sulfamethoxazole
Sulfanilamide
Sulfathiazole
Sulfisoxazole
Sulindac
Talbutal
Tamoxifen
Tannic Acid
Tenoxicam
Terbutaline
Terfenadine
Tetracycline
Tetraethylthiuram
Tetrahydrozoline
Theobromine
Theophylline
Thiamine
Thioridazine
Tobramycin
Tolazamide
Tolbutamide
Tolmetin
Toluene
Trazodone
Triamcinolone
Triamterene
Triazolam
Trichlormethiazide
Trichloroacetic acid
Trifluoperazine
Triflupromazine
Trimethobenzamide
Trimethoprim
Trimipramine
Triprolidine
Tropic Acid
Tropine
Tryptamine
Tyramine
Urea (Carbamide)
Uric Acid
Vancomycin
Vincamine
Xylometazoline
Yohimbine
Zearalenone
Zomepirac
Zopiclone

Tricyclic Antidepressants Non Cross-Reacting Compound
*Parent compound only:

4-Acetamidophenol
Acetophenetidin
N-Acetylprocainamide
Acetylsalicylic acid
Aminopyrine
Amobarbital

Amoxicillin
DL-Amphetamine
Ampicillin
Ascorbic acid
Apomorphine
Aspartame
Atropine
Benzilic acid
Benzoic acid
Benzoylecgonine
Benzphetamine
Bilirubin
Brompheniramine
Caffeine
Cannabidiol
Cannabinol
Chloralhydrate
Chloramphenicol
Chlordiazepoxide
Chlorothiazide
(±) Chlorpheniramine
Chlorpromazine
Chlorquine
Cholesterol
Clonidine
Cocaine hydrochloride
Codeine
Cortisone
(-) Cotinine
Creatinine
Deoxycorticosterone
Dextromethorphan
Diazepam
Diclofenac
Diflunisal
Digoxin
Diphenhydramine
Doxylamine
Ecgonine hydrochloride
Ecgonine methylester
(IR,2S)-(-)-Ephedrine
L-Ephedrine
(-) Y Ephedrine
Erythromycin
β-Estradiol
Estrone-3-sulfate
Ethyl-p-aminobenzoate
Fenoprofen
Furosemide
Gentisic
Hemoglobin
Hydralazine
Hydrochlorothiazide
Hydrocodone
Hydrocortisone
p-Hydroxyamphetamine
O-Hydroxyhippuric
p-Hydroxy-methamphetamine
3-Hydroxytyramine
Ibuprofen
Iproniazid
(-) Isoproterenol
Isoxsuprine
Ketamine
Ketoprofen
Labetalol
Levorphanol
Loperamide
Meperidine
Meprobamate
Methadone
D-methamphetamine
Methoxyphenamine

3,4-Methylene-dioxyethylamphetamine
(+)3,4-Methylene-dioxymethamphetamine
Methylphenidate
Morphine-3-β-D-glucuronide
Morphine sulfate
Nalidixic acid
Naloxone
Naltrexone
Naproxen
Niacinamide
Nifedipine
Norcodein
Norethindrone
D-Norpropoxyphene
Noscapine
D,L-Octopamine
Oxalic acid
Oxazepam
Oxolinic acid
Oxycodone
Oxymetazoline
Papaverine
Penicillin-G
Pentazocine
Pentobarbital
Perphenazine
Phencyclidine
Phenelzine
Phenobarbital
Phentermine
Trans-2-Phenyl-cylopropylamine-hydrochloride
β-Phenylethlamine
Phenylpropanolamine
Prednisolone
Prednisone
Procaine
Promethazine
D,L-Propanolol
D-Propoxyphene
D-Pseudoephedrine
Quinidine
Quinine
Ranitidine
Salicylic acid
Secobarbital
Serotonin (5-Hydroxytyramine)
Sulfamethazine
Sulindac
Temazepam
Tetracycline
Tetrahydrocortisone, 3 Acetate
Tetrahydrocortisone 3 (β-D-glucuronide)
Tetrahydrozoline
Thiamine
Thioridazine
Tolbutamine
Triamterene
Trifluoperazine
Trimethoprim
D, L-Tryptophan
Tyramine
D, L-Tyrosine
Uric acid
Verapamil
Zomepirac

Methylenedioxymethampheamine Non Cross-Reacting Compound
*Parent compound only:

acetaldehyde
acetaminophen
acetazolamide

acetone
albumin
albuterol
ammonium
amphotericin B
ampicillin
amtriptyline
apomorphine
ascorbic acid
aspartate
aspirin
atenolol
atropine
beclomethasone
benzocaine
benzoic acid
bilirubin
bupropion
buspirone
caffeine
captopril
carbamazepine
cefaclor
cemetidine
chloramphenicol
chlordiazepoxide
chloroquine
chlorothiazide
chlorpheniramine
chlorpromazine
chlorpropamide
cholesterol
clindamycin
clonidine
clozapine
colchicine
cortisone
creatinine
deoxycorticosterone
desipramine
dextromethorphan
diazepam
digoxin
diphenhydramine
dipyridamole
doxycycline
erythromycin
estradiol
estriol
estrone
ethanol
ethylene glycol
epinepherine
ferrous sulfate
furosemide
gentamycin
glucose
haloperidol
hemoglobin
hydralazine
hydrocortisone
hydroxycarbalamine
hydroxyprogesterone
hydroxyzine
ibuprofen
indomethacin
lidocaine
lisinopril
lithium
loperamide
lorazepam
LSD
metronidazole
naproxen

niacinamide
nicotine
nifedipine
nitrofurantoin
nortriptyline
ofloxacin
oxalic acid
penicillin G
pentobarbital
phenobarbital
prednisolone
prednisone
prochloperazine
promethazine
propoxyphen
propranolol
prozac(fluoxetin)
pseudoephedrine
pyroxidine
quinidine
ranitidine
riboflavin
salicylic acid
sidenafil(viagra)
sodium chloride
sulfamethoxazole
sulindac
temazepam
tetracycline
tetrahydrocortisone
theophyline
thiamine
thioridazine
thyroxine
tobutamide
trazodone
trimethoprim
tryptophan
tyrosine
urea
uric acid
valproic acid
verapamil
Zoloft

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