

Oral Fluid Drug Test Package Insert

For Forensic Use Only

A rapid test for the simultaneous, qualitative detection of multiple drugs or drug metabolites in human oral fluid.

(INTENDED USE)

The Oral Fluid Drug Test for AMP / MET / COC / OPI / THC / PCP / MTD / MDMA / OXY / COT / BAR / BZO / BUP / PPX / ALC is a lateral flow chromatographic immunoassay for the qualitative detection of multiple drugs or metabolities in oral fluid at the following cut-off concentrations:

Test	Calibrator	Cut-off (ng/mL)
Amphetamine (AMP)	d-Amphetamine	50
Amphetamine (AMP)	d-Amphetamine	25
Methamphetamine (MET)	d-Methamphetamine	50
Methamphetamine (MET)	d-Methamphetamine	25
Phencyclidine (PCP)	Phencyclidine	10
Phencyclidine (PCP)	Phencyclidine	3
Cocaine (COC)	Cocaine	15
Cocaine (COC)	Cocaine	20
Opiates (OPI)	Morphine	40
Opiates (OPI)	Morphine	30
Methadone (MTD)	Methadone	30
Oxycodone (OXY)	Oxycodone	20
Cotinine (COT)	Cotinine	30
Cotinine (COT)	Cotinine	50
Methylenedioxymethamphetamine (MDMA)	d,l-Methylenedioxymethamphetamine	50
Barbiturates (BAR)	Secobarbital	50
Benzodiazepines (BZO)	Oxazepam	10
Buprenorphine (BUP)	Buprenorphine	5
Propoxyphene (PPX)	d-Propoxyphene	50
Marijuana (THC)	Δ9-THC	50
Alcohol (ALC)	Alcohol	0.02%(20mg/dL)

This assay provides only a preliminary analytical test result. A more specific alternate chemical method should be used to confirm a preliminary positive analytical result. Gas chromatography/mass spectrometry (GC/MS), gas chromatography/landem mass spectrometry (GC/MS), liquid chromatography/mass spectrometry (LC/MS) or liquid chromatography/landem mass spectrometry (LC/MS) are the preferred confirmatory methods. Professional judgment should be applied to any drug of abuse test result, particularly when preliminary positive results are indicated.

(SUMMARY)

The Oral Fluid Drug Test for AMP/MET/COC/OPI/THC/PCP/MTD/MDMA/OXY/COT/BAR/BZO/

BUP/PX/ALC or their metabolites is a rapid, oral fluid screening test that can be performed without the use of an instrument. The test utilizes monoclonal antibodies to selectively detect elevated levels of specific drugs in human oral fluid.

Amphetamine (AMP25)

Amphetamine is a sympathomimetic amine with therapeutic indications, especially for use in treating Attention Deficit Disorders. The drug is often self-administered by nasal inhalation or oral ingestion. Depending on the route of administration, amphetamine can be detected in oral fluid as early as 5-10 minutes following use and for as long as 72 hours after use.

The AMP assay contained within the Oral Fluid Drug Test yields a positive result when the amphetamine concentration in oral fluid exceeds 25ng/mL.

Amphetamine (AMP50)

Amphetamine is a sympathomimetic amine with therapeutic indications, especially for use in treating Attention Deficit Disorders. The drug is often self-administered by nasal inhalation or oral ingestion. Depending on the route of administration, amphetamine can be detected in oral fluid as early as 5-10 minutes following use and for as long as 72 hours after use.

The AMP assay contained within the Oral Fluid Drug Test yields a positive result when the amphetamine concentration in oral fluid exceeds 50ng/mL.

Methamphetamine (MET25)

Methamphetamine is a potent stimulant chemically related to amphetamine but with greater CNS stimulation properties. The drug is often self-administered by nasal inhalation, smoking or oral ingestion. Depending on the route of administration, methamphetamine can be detected in oral fluid as early as 5-10 minutes following use and for as long as 72 hours after use. ¹

The MET assay contained within the Oral Fluid Drug Test yields a positive result when the methamphetamine concentration in oral fluid exceeds 25ng/mL.

Methamphetamine (MET50)

Methamphetamine is a potent stimulant chemically related to amphetamine but with greater CNS stimulation properties. The drug is often self-administered by nasal inhalation, smoking or oral ingestion. Depending on the route of administration, methamphetamine can be detected in oral fluid as early as 5-10 minutes following use and for as long as 72 hours after use. ¹

The MET assay contained within the Oral Fluid Drug Test yields a positive result when the methamphetamine concentration in oral fluid exceeds 50ng/mL.

Cocaine (COC15)

Cocaine is a potent central nervous system (CNS) stimulant and a local anesthetic derived from the coca plant (erythroxylum coca). The drug is often self-administered by nasal inhalation, intravenous injection and free-base smoking. Depending on the route of administration, cocaine and metabolites benzoylecgonine and ecgonine methyl ester can be detected in oral fluid as early as 5-10 minutes following use. Cocaine and benzoylecgonine can be detected in oral fluid sor up to 24 hours after use. The COC assay contained within the Oral Fluid Drug Test yields a positive result when the cocaine in

oral fluid exceeds 15ng/mL.

Cocaine (COC20)

Cocaine is a potent central nervous system (CNS) stimulant and a local anesthetic derived from the coca plant (erythroxylum coca). The drug is often self-administered by nasal inhalation, intravenous injection and free-base smoking. Depending on the route of administration, cocaine and metabolites benzoylecgonine and ecgonine methyl ester can be detected in oral fluid as early as 5-10 minutes following use. Cocaine and benzoylecgonine can be detected in oral fluids for up to 24 hours after use.² The COC assay contained within the Oral Fluid Drug Test yields a positive result when the cocaine in oral fluid exceeds 20ng/mL.

Opiates (OPI30)

The drug class opiates refer to any drug that is derived from the opium poppy, including naturally occurring compounds such as morphine and codeine and semi-synthetic drugs such as heroin. Opiates act to control pain by depressing the central nervous system. The drugs demonstrate addictive properties when used for sustained periods of time; symptoms of withdrawal may include sweating, shaking, nausea and irritability. Opiates can be taken orally or by injection routes including intravenous, intramuscular and subcutaneous; illegal users may also take the intravenously or by nasal inhalation. Using an immunoassay cutoff level of 40 ng/mL, codeine can be detected in the oral fluid within 1 hour following a single oral dose and can remain detectable for 7-21 hours after the dose. Heroin metabolite 6-monoacety/morphine (6-MAM) is found more prevalently in oral fluid than urine.

The OPI assay contained within the Oral Fluid Drug Test yields a positive result when the morphine concentration in oral fluid exceeds 30ng/mL.

Opiates (OPI40)

The drug class opiates refer to any drug that is derived from the opium poppy, including naturally occurring compounds such as morphine and codeine and semi-synthetic drugs such as heroin. Opiates act to control pain by depressing the central nervous system. The drugs demonstrate addictive properties when used for sustained periods of time; symptoms of withdrawal may include sweating, shaking, nausea and irritability. Opiates can be taken orally or by injection routes including intravenous, intramuscular and subcutaneous; illegal users may also take the intravenously or by nasal inhalation. Using an immunoassay cutoff level of 40 ng/mL, codeine can be detected in the oral fluid within 1 hour following a single oral dose and can remain detectable for 7-21 hours after the dose. Heroin metabolite 6-monoacety/morphine (6-MAM) is found more prevalently in oral fluid than urine.

The OPI assay contained within the Oral Fluid Drug Test yields a positive result when the morphine concentration in oral fluid exceeds 40ng/mL...

Marijuana (THC50)

THC (\(\)\(\)9-\(\)etrahydrocannabinol\) 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 parent THC also known as A9-THC is present in oral fluid after use.

The THC assay contained within the Oral Fluid Drug Test yields a positive result when the Δ9-THC concentration in oral fluid exceeds 50ng/mL.

Phencyclidine (PCP10)

Phencyclidine, the hallucinogen commonly referred to as Angel Dust, can be detected in saliva as a result of the exchange of the drug between the circulatory system and the oral cavity. In a paired serum and saliva sample collection of 100 patients in an Emergency Department, PCP was detected in the saliva of 79 patients at levels as low as 2 ng/mL and as high as 600 ng/mL.

The PCP assay contained within the Oral Fluid Drug Test yields a positive result when the PCP concentration in oral fluids exceeds 10ng/mL.

Phencyclidine (PCP3)

Phencyclidine, the hallucinogen commonly referred to as Angel Dust, can be detected in saliva as a result of the exchange of the drug between the circulatory system and the oral cavity. In a paired serum and saliva sample collection of 100 patients in an Emergency Department, PCP was detected in the saliva of 79 patients at levels as low as 2 ng/mL and as high as 600 ng/mL.

The PCP assay contained within the Oral Fluid Drug Test yields a positive result when the PCP concentration in oral fluids exceeds 3ng/mL

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).

Methadone is a long-acting pain reliever producing effects that last from 12-48hours. 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. A study 414 specimens collected from 16 donors taking therapeutic methadone at doses between 30-100 mg/day all showed saliva methadone concentrations exceeding 20 ng/mL. §

The MTD assay contained within the Oral Fluid Drug Test yields a positive result when the MTD concentration in saliva exceeds 30ng/mL.

Oxycodone (OXY)

Oxycodone is a semi-synthetic opioid with a structural similarity to codeine. The drug is manufactured by modifying thebaine, an alkaloid found in the opium poppy. Oxycodone, like all opiate agonists, provides pain relief by acting on opioid receptors in the spinal cord, brain, and possibly directly in the affected tissues. Oxycodone is prescribed for the relief of moderate to high pain under the well-known pharmaceutical trade names of OxyContine, Tylox®, Percodan® and Percocet®. While Tylox®, Percodan® and Percocet® contain only small doses of oxycodone hydrochloride combined with other analgesics such as acetaminophen or aspirin, OxyContin consists solely of oxycodone hydrochloride in a time-release form. Oxycodone is known to metabolize by demethylation into oxymorphone and proroxycodone.

The ÓXY assay contained within the Oral Fluid Drug Test yields a positive result when the OXY concentration in saliva exceeds 20ng/mL.

Cotinine (COT 30)

Cotinine is the first-stage metabolite of nicotine, a toxic alkaloid that produces stimulation of the autonomic ganglia and central nervous system when in humans. Nicotine is a drug to which virtually every member of a tobacco-smoking society is exposed whether through direct contact or second-hand inhalation. In addition to tobacco, nicotine is also commercially available as the active ingredient in smoking replacement therapies such as nicotine qum. transdermal patches and nasal sorarsy.

Although nicotine is excreted in saliva, the relatively short half-life of the drug makes if an unreliable maker for tobacco use. Cotinine, however, demonstrates a substantially longer half-life than nicotine bears a high correlation with plasma cotinine levels and has been found to be the best maker for smoking status compared with saliva nicotine measurement, breath carbon monoxide testing and plasma thiocyanate testing.

The window of detection for cotinine in saliva at a cutoff level of 30 ng/mL is expected to be up to 1-2 days after nicotine use.

Cotinine (COT 50)

Cotinine is the first-stage metabolite of nicotine, a toxic alkaloid that produces stimulation of the autonomic ganglia and central nervous system when in humans. Nicotine is a drug to which virtually every member of a tobacco-smoking society is exposed whether through direct contact or second-hand inhalation. In addition to tobacco, nicotine is also commercially available as the active ingredient in smoking replacement therapies such as nicotine gum, transdermal patches and nasal sprays.

Although nicotine is excreted in saliva, the relatively short half-life of the drug makes it an unreliable maker for tobacco use. Cotinine, however, demonstrates a substantially longer half-life than nicotine bears a high correlation with plasma cotinine levels and has been found to be the best maker for smoking status compared with saliva nicotine measurement, breath carbon monoxide testing and plasma

thiocyanate testing.

The window of detection for cotinine in saliva at a cutoff level of 50 ng/mL is expected to be up to 1-2 days after nicotine use.

Methylenedioxymethamphetamine (MDMA)

Methylenedioxymethamphetamine (ecstasy) is a designer drug first synthesized in 1914 by a German drug company for the treatment of obesity. 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 Oberfender, 1990.

The MDMA assay contained within the Oral Fluid Drug Test yields a positive result when the MDMA concentration in saliva exceeds 50ng/mL.

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 loterance and physical dependence. Short acting Barbiturates taken at 400 mg/day for 2-3 months produce a clinically significant degree of physical dependence. A study of a single oral dose of one barbiturate: butalbital, phenobarbital or secobarbital showed the drug is detectable in oral fluid with 15-60 minutes of dosing and remained detectable in oral fluid for 52 hours. ⁶

The Barbiturates (BAR) assay contained within the Oral Fluid Drug Test yields a positive result when the Secobarbital concentration in saliva exceeds 50ng/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, and loss of appetite, sweating, trembling, weakness, anxiety and changes in perception.

The BZO assay contained within the Oral Fluid Drug Test yields a positive result when the Oxazepam concentration in saliva exceeds 10ng/mL.

Buprenorphine (Buprenorphine)

Buprenorphine is a potent analgesic often used in the treatment of opioid addiction. The drug is sold under the trade names Subutex.[™] Buprenex.[™] Imprensex.[™] Imprens

Substantial abuse of Buprenorphine has also been reported in many countries where various forms of the drug are available. The drug has been diverted from legitimate channels through theft, doctor shopping and fraudulent prescriptions, and been abused via intravenous, sublingual, intranasal and inhalation routes.

The BUP assay contained within the Oral Fluid Drug Test yields a positive result when Buprenorphine in saliva exceeds 5 ng/mL.

Propoxyphene (PPX)

Propoxyphene (PPX) is a narcotic analgesic compound bearing structural similarity to methadone. As an analgesic, propoxyphene can be from 50-75% as potent as oral codeine. Darvocet™, one of the most common brand names for the drug, contains 50-100 mg of propoxyphene napsylate and 325-650 mg of acetaminophen. Peak plasma concentrations of propoxyphene are achieved from 1 to 2 hours post dose. In the case of overdose, propoxyphene blood concentrations can reach significantly higher levels.

In humans, propoxyphene is metabolized by N-demethylation to yieldinorpropoxyphene. Norpropoxyphene has a longer half-life (30 to 36 hours) than parent propoxyphene (6 to 12 hours). The accumulation of norpropoxyphene seen with repeated doses may be largely responsible for resultant toxicity.

The PPX assay contained within the Oral Fluid Drug Test yields a positive result when propoxyphene in

The PPX assay contained within the Oral Fluid Drug Test yields a positive result when propoxyphene in saliva exceeds 50ng/mL.

Alcohol (ALC)

Two-thirds of all adults drink alcohol. However, alcohol intoxication can lead to loss of alertness, coma, death and birth defects. The blood alcohol concentration (BAC) at which a person becomes impaired is variable. The United States Department of Transportation (DOT) has established a BAC of 0.02%(20mg/dL) as the cut-off level at which an individual is considered positive for the presence of alcohol. Determination of ethyl alcohol in urine, blood and saliva is commonly used for measuring legal impairment, alcohol poisoning, etc. Gas chromatography techniques and enzymatic methods are commercially available for the determination of ethyl alcohol in human fluids.

The ALC assay contained within the Oral Fluid Drug Test yields a positive result when ethyl alcohol in saliva exceeds 0.02%(20mg/dL).

[ASSAY PRINCIPLE]

The Oral Fluid Drug Test for AMP/MET/COC/OPI/THC/PCP/MTD/MDMA/OXY /COT/BZO/BUP/PPX/ALC is an immunoassay based on the principle of competitive binding. Drugs that may be present in the oral fluid specimen compete against their respective drug conjugate for binding sites on their specific antibody.

During festing, a portion of the oral fluid specimen migrates upward by capillary action. A drug, if present in the oral fluid 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 in the oral fluid specimen will saturate all the binding sites of the antibody. Therefore, the colored line will not form in the test line region.

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

The Alcohol Strip (Saliva) is based on the high specificity of alcohol oxidase (ALOx) /peroxidase act on ethyl alcohol and enzyme substrate such as tetramethylbenzidine (TMB). The principle is showed below: ALOx/Peroxidase

EtOH + TMB CH3CHO + Colored TMB.

[REAGENTS]

The test contains membrane strips 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 Amphetamine, Methamphetamine, Cocaine, Morphine, Δ9-THC, Phencyclidine, Methadone, Oxycodone, Cotinine, Methylenedioxymethamphetamine, Oxazepam, Secobarbital, Buprenorphine and Propoxyphene,

For alcohol strip, the reagents contain Tetramethylbenzidine (TMB), Alcohol Oxidase, Peroxidase Alcohol

[PRECAUTIONS]

- 1. Do not use after the expiration date.
- The test should remain in the sealed pouch until use.
- Saliva is not classified as biological hazard unless derived from a dental procedure
- The used collector and cup should be discarded according to federal, state and local regulations. **[STORAGE AND STABILITY]**

Store as packaged in the sealed pouch at 2-30°C. The test is stable through the expiration date printed

on the sealed pouch. The test cups must remain in the sealed pouch until use. DO NOT FREEZE. Do not use beyond the expiration date

SPECIMEN COLLECTION AND PREPARATION

The oral fluid specimen should be collected using the collector provided with the kit. Follow the detailed Directions for Use below. No other collection cups should be used with this assay. Oral fluid collected at any time of the day may be used.

(MATERIALS) Procedure Card

Test cups

Materials Provided

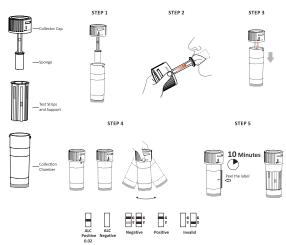
Collectors Color card (for alcohol strip) Package insert

Materials Required but Not Provided

Timer [DIRECTIONS FOR USE]

Allow the test cup, specimen, and/or controls to reach room temperature (15-30°C) prior to testing Instruct the donor to not place anything in the mouth including food, drink, gum or tobacco products for at least 10 minutes prior to collection.

- 1. Bring the pouch to room temperature before opening it. Remove the test from the sealed pouch and use it within one hour of opening
- 2. Remove the test cup from the sealed pouch and insert the sponge end of the collector into the mouth. Actively swab the inside of the mouth and tongue to collect oral fluid for approximately 3 minutes until the sponge becomes fully saturated. At the same time, the color of indicator will be changed from colorless to pink. Gentle pressing the sponge between the tongue and teeth will assist saturation. No hard spots should be felt on the sponge when saturated.



- 3. Remove the collector from the mouth. Place saturated oral fluid collector into chamber and press sponge fully against the strainer to collect oral fluid.
- 4. Secure the cap, shake three times, and start the timer.
- See illustration below 5. Wait for the colored line(s) to appear. Read results at 10 minutes. Do not read results after 20 minutes.
- 6. For alcohol strip, read the result at two (2) minutes, compare the color of the reaction pad with the color card to determine the relative saliva alcohol level.

[INTERPRETATION OF RESULTS]

(Please refer to the previous illustration)

NEGATIVE:* Two lines appear. One colored line should be in the control region (C), and another apparent colored line adjacent should be in the test region (Drug/T). This negative result indicates that the drug concentration is below the detectable level.

*NOTE: The shade of color in the test line region (Drug/T) will vary, but it should be considered negative whenever there is even a faint line.

POSITIVE: One colored line appears in the control region (C). No line appears in the test region (Drug/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 panel. If the problem persists, discontinue using the lot immediately and contact the manufacturer. Alcohol Strip:

Positive: Alcohol Strip (Saliva) produce a color change based on the presence of saliva alcohol. The color range from light blue color (0.02%(20mg/dL)) to dark blue(0.30%).

NOTE: Alcohol Strip (Saliva) is very sensitive to the presence of alcohol. A blue color that is lighter than

the 0.02% color pad should be interpreted as positive but less than 0.02%(20mg/dL).

Negative: Alcohol Strip (Saliva) shows no color change. It means alcohol is not detected. Invalid: If the color pad has a blue color before applying saliva sample, do not use the test.

[QUALITY CONTROL]

A procedural control is included in the test. A colored line appearing in the control region (C) is considered an internal procedural control. It confirms adequate membrane wicking [LIMITATIONS]

- The Oral Fluid Drug Test provides only a qualitative, preliminary analytical result. A secondary analytical method should be used to obtain a confirmed result. Gas chromatography/mass spectrometry (GC/MS), gas chromatography/tandem mass spectrometry (GC/MS/MS), liquid chromatography/mass spectrometry (LC/MS) or liquid chromatography/tandem mass spectrometry (LC/MS/MS) are the preferred confirmatory methods. A positive test result does not indicate the concentration of drug in the specimen or the route of administration.
- 2. A negative result may not necessarily indicate a drug-free specimen. Drug may be present in the specimen below the cutoff level of the assay. Alcohol Strip
- The saliva sample should be collected 15 minutes after in taking food, drink, or other materials (including smoking), the residual may affect the test results.
- Some household products, such as disinfectant, deodorizers, perfumes, and glass cleaners, contain alcohol, these factors should be excluded before testing.
- 3. Ingestion or general use of over-the-counter medications and products containing alcohol can produce positive results.

[EXPECTED VALUES]

This negative result indicates that the drug concentration is below the detectable level. Positive result means the concentration of drug is above the detectable level.

[PERFORMANCE CHARACTERISTICS]

Accuracy

Assemble each single test into the cup before testing, and evaluate the cup with approximately 210-280 specimens per drug type previously collected from subjects presenting for Drug Testing which were confirmed by GC/MS. These specimens were randomized and tested using the Multi-Drug Rapid Test. Specimens were rated as either positive or negative at 10 minutes. The test results are shown in table

Table: Specimen Correlation

Oral Fluid Drug Test Positive Negative with GC/MS GC/MS AMP50 Positive 90 6 94.7% 94.8% AMP 25 Positive 56 2 96.6% 97.5% Negative 2 100 98.0% 97.5% BAR50 Positive 80 6 96.4% Negative 3 121 95.3% 95.7% BUP5 Positive 86 5 95.6% 95.7% Negative 4 115 95.8% 95.7% COC20 Positive 3 107 98.2% 96.7% Negative 41 0 >99% >99% THC50 Positive 75 5 96.2% 96.8% MET50 Positive 1 149 97.4% 98.2% MET50 Positive 43 2 95.6% 96.4% MET25 Positive 3 92 96.6% 96.4% <tr< th=""><th colspan="2">Method</th><th>GC</th><th>/MS</th><th>% agreement</th><th>% Total agreement with</th></tr<>	Method		GC	/MS	% agreement	% Total agreement with
AMP50 Negative 5 109 94.8% Positive 56 2 96.6% Negative 2 100 98.0% BAR50 Positive 80 6 96.4% Negative 3 121 95.3% BUP5 Positive 86 5 95.6% Negative 4 115 95.8% Positive 38 2 92.7% Negative 3 107 98.2% COC20 Positive 41 0 >999% Negative 4 10 >999% Negative 4 10 >999% Negative 75 5 96.2% Negative 75 5 96.2% Negative 1 149 97.4% MET50 Negative 1 149 97.4% MET50 Positive 43 2 95.6% Negative 3 92 96.8% MDMA50 Negative 3 130 99.2% MDMA50 Negative 3 130 99.2% Positive 89 7 93.7% Negative 89 7 93.7% OP140 Positive 61 3 95.3% Negative 1 96 108 93.9% DP130 Positive 107 2 96.4% POSITIVE 94 5 94.0% POSITIVE 94 5 94.0% POSITIVE 107 2 96.4% POP10 Positive 107 2 96.4% POP 10 Positive 107 2 96.4% POP 2 90.5% Negative 4 117 98.3% POP 10 Positive 107 2 96.4% POP 3 Positive 107 2 96.4% POP 3 Positive 116 3 97.5% Negative 4 117 98.3% POP 3 Positive 107 2 96.4% POP 4 Positive 107 2 96.4% POP 5 Positive 107 2 96.4% POP 10 Positive 107 2 96.4% POP 10 Positive 107 2 96.4% POP 2 90.5% Negative 1 196 98.0% POSITIVE 131 2 99.2% Negative 1 96 98.0% POSITIVE 131 2 99.2% POSITIVE 1 96 98.0% POSITIVE 1 96 98.0% POSITIVE 1 99 99.8% POSITIVE 1 196 98.0% POSITIVE 1 1 96 98.0%	Oral Flui	d Drug Test	Positive	Negative		
AMP 25 Positive	AMDEO		90	6	94.7%	04.99/
Negative	AIVIPOU	Negative	5	109	94.8%	94.6%
BAR50	AMD 25	Positive	56	2	96.6%	07.5%
BAR50 Negative 3 121 95.3% 95.7% BUP5 Positive 86 5 95.6% 95.7% Negative 4 115 95.8% 95.7% COC20 Positive 38 2 92.7% 96.7% Negative 3 107 98.2% 96.7% COC15 Positive 41 0 >999% 999% Negative 0 109 >999% 999% THC50 Positive 75 5 96.2% 96.8% Negative 1 149 97.4% 98.2% MET50 Positive 126 4 99.2% 98.2% MET 25 Negative 1 149 97.4% 98.2% MET 25 Negative 3 92 96.8% 96.4% MDMA50 Positive 96 1 97.0% 98.3% MDMA50 Positive 61 3 130 99.2% 98.3% OPI40 Positive 61 3 95.3% 96.8% DPI30 Positive 61 3 95.3% 96.8% BZO10 Positive 94 5 94.0% 94.8% POSITIVE 94 5 94.0% 94.8% PCP 10 Positive 107 2 96.4% 97.4% PCP 10 Negative 4 117 98.3% 97.4% MTD 30 Negative 4 117 98.3% 97.4% MTD 30 Negative 91 1 97.8% 98.7% Negative 107 2 96.4% 97.4% Negative 4 117 98.3% 97.4% Negative 4 117 98.3% 97.4% Negative 107 2 96.4% 97.4% Negative 4 117 98.3% 97.4% Negative 107 2 96.4% 97.4% Negative 2 136 99.3% 98.7% Negative 131 2 99.2% 98.87% Negative 131 2 99.2% 98.87%	AIVIF 23	Negative	2	100	98.0%	97.576
BUP5	DADEO		80	6	96.4%	05.70/
BUPS	DARSU	Negative	3	121	95.3%	95.7 %
COC20	DUDE				95.6%	05.7%
COC20 Negative 3 107 98.2% 96.7% COC15 Positive 41 0 >999% >99% Negative 0 109 >999% >99% THC50 Positive 75 5 96.2% 96.8% Negative 3 167 97.1% 96.8% MET50 Positive 126 4 99.2% 98.2% Negative 1 149 97.4% 98.2% MET 25 Negative 3 92 96.8% 96.4% Negative 3 130 99.2% 98.3% Negative 3 130 99.2% 98.3% OPI40 Positive 89 7 93.7% 93.8% OPI30 Positive 6 108 93.9% 93.8% BZO10 Positive 94 5 94.0% 94.8% BZO10 Positive 6 105 95.5% 94.8%	BUPS	Negative	4	115	95.8%	95.7 %
COC15	COC30				92.7%	06.7%
COC15 Negative 0 109 >99% Positive 75 5 96.2% Negative 3 167 97.1% MET50 Positive 126 4 99.2% Negative 1 149 97.4% MET50 Negative 1 149 97.4% MET50 Negative 3 92 96.8% Negative 3 92 96.8% MDMA50 Positive 96 1 97.0% Negative 3 130 99.2% Positive 89 7 93.7% Negative 6 108 93.9% OPI40 Positive 61 3 95.3% Negative 2 89 97.8% Positive 94 5 94.0% BZO10 Positive 94 5 94.0% Negative 6 105 95.5% PCP 10 Positive 107 2 96.4% PCP 3 Positive 107 2 96.4% PCP 3 Positive 116 3 97.5% Negative 4 117 98.3% PCP 3 Positive 116 3 97.5% Negative 4 117 98.3% MTD 30 Positive 116 3 97.5% Negative 4 117 98.3% MTD 30 Positive 107 2 96.4% PCP 3 Positive 107 107 2 96.4% PCP 3 Positive 107 2 96.4% PCP 3 Positive 107 107 2 96.4% PCP 3 Positive 107 96.9% PCP 3 Positive 107 97.4% PCP 3	COC20	Negative	3	107	98.2%	90.7 76
Negative	COC15	Positive	41	0	>99%	>00%
Negative 3 167 97.1% 96.8%	COC 15	Negative	0	109	>99%	299%
MET50	THOSE	Positive	75	5	96.2%	00.00/
MET50 Negative 1 149 97.4% 98.2% MET 25 Positive 43 2 95.6% 96.4% Negative 3 92 96.8% 96.4% MDMA50 Positive 96 1 97.0% 98.3% OPI40 Positive 89 7 93.7% 93.8% OPI30 Positive 61 3 95.3% 96.8% Negative 2 89 97.8% 96.8% Positive 94 5 94.0% 94.8% BZ010 Negative 6 105 95.5% 94.8% PCP 10 Positive 107 2 96.4% 97.4% PCP 3 Positive 107 2 96.4% 97.4% MTD 30 Negative 4 117 98.3% 97.4% MTD 30 Positive 116 3 97.5% 97.4% OXY 20 Positive 1 1 97.8	THC50	Negative	3	167	97.1%	96.8%
MET 25		Positive	126	4	99.2%	
MET 25 Negative 3 92 96.8% 96.4% Positive 96 1 97.0% Negative 3 130 99.2% 98.3% Positive 89 7 93.7% Negative 6 108 93.9% Positive 61 3 95.3% 96.8% Negative 2 89 97.8% 96.8% BZO10 Positive 94 5 94.0% Negative 6 105 95.5% 94.8% PCP 10 Positive 107 2 96.4% Negative 4 117 98.3% 97.4% PCP 3 Positive 107 2 96.4% 97.4% Negative 4 117 98.3% 97.4% MTD 30 Negative 116 3 97.3% 97.4% MTD 30 Negative 116 3 97.3% 97.4% Negative 91 1 97.8% 98.7% Negative 91 1 97.8% 98.7% POSITIVE 131 2 99.2% Negative 1 99.2% 98.7% POSITIVE 131 2 99.2% Negative 1 96 98.0% 98.7% POSITIVE 131 2 99.2% Negative 1 96 98.0% 98.7% POSITIVE 131 2 99.2% Negative 1 96 98.0% 98.7% POSITIVE 131 96 98.0% 98.7% POSITIVE 131 96 98.0% 98.7% POSITIVE 1 96 98.0% 98.7% POSITIVE 1 96 98.0% 98.7%	ME150	Negative	1	149	97.4%	98.2%
MDMA50		Positive	43	2	95.6%	
MDMA50 Positive Negative 3 130 99.2% 98.3% OPI40 Positive 89 7 93.7% 93.8% OPI 30 Negative 6 108 93.9% 93.8% OPI 30 Positive 61 3 95.3% 96.8% Negative 2 89 97.8% 96.8% BZO10 Negative 94 5 94.0% 94.8% PCP 10 Positive 107 2 96.4% 97.4% PCP 3 Positive 107 2 96.4% 97.4% PCP 3 Positive 107 2 96.4% 97.4% MTD 30 Negative 4 117 98.3% 97.4% MTD 30 Positive 116 3 97.5% 97.4% OXY 20 Positive 91 1 97.8% 98.7% OXY 20 Negative 2 136 99.3% 98.7% COT30 Negative 131 2 99.2% 98.7% Negative 1 1 96 98.0% 98.7% <td>ME I 25</td> <td>Negative</td> <td>3</td> <td>92</td> <td>96.8%</td> <td>96.4%</td>	ME I 25	Negative	3	92	96.8%	96.4%
MDMASO Negative 3 130 99.2% 98.3% OPI40 Positive 89 7 93.7% 93.8% Negative 6 108 93.9% 93.8% Positive 61 3 95.3% 96.8% Negative 2 89 97.8% 96.8% Positive 94 5 94.0% 94.8% Negative 6 105 95.5% 94.8% PCP 10 Positive 107 2 96.4% 97.4% PCP 3 Positive 107 2 96.4% 97.4% PCP 3 Negative 4 117 98.3% 97.4% MTD 30 Positive 116 3 97.5% 97.4% MTD 30 Positive 3 108 97.3% 97.4% OXY 20 Positive 91 1 97.8% 98.7% OXY 20 Positive 91 1 97.8% 98.7%		•	96	1	97.0%	
OPI40 Negative 6 108 93.9% 93.8% OPI 30 Positive 61 3 95.3% 96.8% Negative 2 89 97.8% 96.8% BZO10 Positive 94 5 94.0% Negative 6 105 95.5% 94.8% PCP 10 Positive 107 2 96.4% 97.4% Negative 4 117 98.3% 97.4% PCP 3 Positive 116 3 97.5% 97.4% MTD 30 Positive 116 3 97.5% 97.4% Negative 3 108 97.3% 97.4% OXY 20 Positive 91 1 97.8% 98.7% Negative 1 96 98.0% 98.7% COT30 Positive 131 2 99.2% 98.7% Negative 1 96 98.0% 98.7% Negative 1 <td>MDMA50</td> <td>Negative</td> <td>3</td> <td>130</td> <td></td> <td>98.3%</td>	MDMA50	Negative	3	130		98.3%
OPI 30		Positive	89	7	93.7%	
DPI 30	OPI40	Negative	6	108	93.9%	93.8%
Negative 2 89 97.8% 94.0% 94.5% 94.0% 94.5% 94.0% 94.5% 94.0% 94.8% 94.0% 94.8% 97.4% 97.4% 97.4% 97.4% 97.4% 97.4% 97.4% 97.4% 97.4% 97.4% 97.4% 97.4% 97.4% 97.4% 97.4% 97.4% 97.4% 97.4% 97.5% 97.4% 97.4% 97.5% 97.4% 97.4% 97.5% 97.4% 97.5% 97.4% 97.5% 97.4% 97.5% 97.4% 97.5% 97.4% 97.5% 97.4% 97.5% 97.4% 97.5% 97.4% 97.5% 97.4% 97.5% 97.4% 97.5%	00100	Positive	61	3	95.3%	00.00/
BZO10 Negative 6 105 95.5% 94.8% PCP 10 Positive 107 2 96.4% 97.4% PCP 3 Positive 107 2 96.4% 97.4% PCP 3 Positive 107 2 96.4% 97.4% Negative 4 117 98.3% 97.4% MTD 30 Positive 116 3 97.5% 97.4% Negative 3 108 97.3% 97.4% OXY 20 Positive 91 1 97.8% 98.7% Negative 2 136 99.3% 98.7% Positive 131 2 99.2% 98.7% COT50 Positive 131 2 99.2% 98.7% Negative 1 96 98.0% 98.7% Negative 1 96 98.0% 98.7% POSITIVE Positive 92 3 95.8% 06.7%	OPI 30	Negative	2	89	97.8%	96.8%
Positive 107 2 96.4% 97.4%	D7040	Positive	94	5	94.0%	0.4.00/
PCP 10	BZO10	Negative	6	105	95.5%	94.8%
PCP 3 Positive 107 2 96.4% Negative 4 117 98.3% Negative 4 117 98.3% Positive 116 3 97.5% Negative 3 108 97.3% OXY 20 Positive 91 1 97.8% Negative 2 136 99.3% Positive 131 2 99.2% Negative 1 96 98.0% Positive 1 96 98.0% Positive 1 99.2 3 95.8%	DOD 40	Positive	107	2	96.4%	07.40/
PCP 3 Negative 4 117 98.3% 97.4% MTD 30 Positive 116 3 97.5% Negative 3 108 97.3% 97.4% OXY 20 Positive 91 1 97.8% Negative 2 136 99.3% 98.7% COT30 Positive 131 2 99.2% Negative 1 96 98.0% Positive 131 2 99.2% Positive 131 2 99.2% Negative 1 96 98.0% Positive 131 2 99.2% Negative 1 96 98.0% Positive 1 96 98.0% Positive 1 96 98.0% Positive 92 3 95.8%	PCP 10	Negative	4	117	98.3%	97.4%
Negative	000 3	Positive	107	2	96.4%	07.49/
MTD 30	PCP 3	Negative	4	117	98.3%	97.4%
OXY 20	MTD 00	Positive	116	3	97.5%	07.40/
OXY 20 Negative 2 136 99.3% 98.7% COT30 Positive 131 2 99.2% 98.7% Negative 1 96 98.0% 98.7% COT50 Negative 131 2 99.2% 98.7% Negative 1 96 98.0% 98.7% Positive 92 3 95.8% 08.7%	MID 30	Negative	3	108	97.3%	97.4%
Negative 2 136 99.3%	OVV 20		91	1	97.8%	09.70/
COT30	UX 1 20	Negative	2	136	99.3%	96.776
Negative 1 96 98.0% COT50	COT30		131	2	99.2%	09.7%
COT50 Negative 1 96 98.0% Positive 92 3 95.8% OS 79/	00130	,	1	96	98.0%	90.776
Negative 1 96 98.0% PDV 50 Positive 92 3 95.8%	COTEO	Positive	131	2	99.2%	08.79/
	CO 150	Negative	1	96	98.0%	90.7%
Negative 4 111 97.4%	DDV 50		92	3		06.79/
	PPX 50	Negative	4	111	97.4%	90.7%

Alcohol Strips Results >0.02%(Spiked) Alcohol Strip (Saliva) Positive 30

30 29 30 Negative Total Results 31 29 60 97% 100% 98% % Agreement

Total Results

Analytical Sensitivity

A Phosphate-buffered saline (PBS) pool was spiked with drugs to target concentrations of \pm 50% cut-off, \pm 25% cut-off and +300% cut-off and tested with the Oral Fluid Drug Test. The results are summarized

Drug conc.	n	AMP25		AMP50		THC		PCP10	
(Cut-off range)	"	-	+	-	+	-	+	-	+
0% Cut-off	30	30	0	30	0	30	0	30	0
-50% Cut-off	30	30	0	30	0	30	0	30	0
-25% Cut-off	30	25	5	27	3	27	3	26	4
+25% Cut-off	30	4	26	7	23	5	25	5	25
+50% Cut-off	30	0	30	0	30	0	30	0	30
+300% Cut-off	30	0	30	0	30	0	30	0	30

Drug conc.	_	PCP 3		COC15		COC 20		OPI 30	
(Cut-off range)	n	-	+	-	+	-	+	-	+
0% Cut-off	30	30	0	30	0	30	0	30	0
-50% Cut-off	30	30	0	30	0	30	0	30	0
-25% Cut-off	30	26	4	26	4	25	5	24	6
+25% Cut-off	30	5	25	5	25	3	27	4	26
+50% Cut-off	30	0	30	0	30	0	30	0	30
+300% Cut-off	30	0	30	0	30	0	30	0	30

Drug conc.	n	OPI40		COT30		MTD		OXY	
(Cut-off range)		-	+	-	+	-	+	-	+
0% Cut-off	30	30	0	30	0	30	0	30	0
-50% Cut-off	30	30	0	30	0	30	0	30	0
-25% Cut-off	30	27	3	27	3	27	3	25	5
+25% Cut-off	30	8	22	4	26	7	23	7	23
+50% Cut-off	30	0	30	0	30	0	30	0	30
+300% Cut-off	30	0	30	0	30	0	30	0	30

Drug conc.	n	СОТ	COT (50)		MDMA		BAR		BZO	
(Cut-off range)	"	-	+		+	-	+	-	+	
0% Cut-off	30	30	0	30	0	30	0	30	0	
-50% Cut-off	30	30	0	30	0	30	0	30	0	
-25% Cut-off	30	28	2	25	5	26	4	27	3	
+25% Cut-off	30	6	24	7	23	6	24	7	23	
+50% Cut-off	30	0	30	0	30	0	30	0	30	
+300% Cut-off	30	0	30	0	30	0	30	0	30	

Drug conc.	n	BUP		PPX		MET 50		MET25	
(Cut-off range)	"	-	+	-	-	+	+	-	+
0% Cut-off	30	30	0	30	0	30	0	30	0
-50% Cut-off	30	30	0	30	0	30	0	30	0
-25% Cut-off	30	27	3	25	5	28	2	27	3
+25% Cut-off	30	7	23	4	26	6	26	4	26
+50% Cut-off	30	0	30	0	30	0	30	0	30
+300% Cut-off	30	0	30	0	30	0	30	0	30

Analytical Specificity

The following table lists the cutoff concentration of compounds (ng/mL) above which will be detected by the Oral Fluid Drug Test for AMP/MET/COC/OPI/THC/PCP/MTD/OXY/COT/MDMA/BAR/BZO/ BUP/PPX/ALC at a read time of 10 minutes, respectively

Compound	ng/mL	Compound	ng/mL
Al	MPHETAN	IINE (AMP25)	
D-Amphetamine	25	p-Hydroxyamphetamine	200
D,L-Amphetamine	500	(+)3,4-Methylenedioxyamphetamine (MDA)	250
L-Amphetamine	35,000		
	MPHETAN	MINE (AMP50)	
D-Amphetamine	50	p-Hydroxyamphetamine	400
D,L-Amphetamine	1,000	(+)3,4-Methylenedioxyamphetamine (MDA)	500
L-Amphetamine	70,000		
MET	HAMPHET	TAMINE (MET50)	
d-Methamphetamine	50	Procaine	25,000
3,4-Methylenedioxymethamphetamine (MDMA)	500	L-Phenylephrine	2,500
(1R,2S) - (-) Ephedrine	400	Ephedrine	1,000
MET	HAMPHET	TAMINE (MET25)	
d-Methamphetamine	25	Procaine	12,500
3,4-Methylenedioxymethamphetamine (MDMA)	250	L-Phenylephrine	1,250
(1R,2S) - (-) Ephedrine	200	Ephedrine	500
	MARIJUA	NA (THC50)	
Δ9 -THC	50	11- nor - △ 9-THC-9 COOH	40
Cannabinol	5,000	(-) △ 8 -THC	300
(+/-)-11-Hydroxy- △ 9-THC	1,000	(±) △ 8 -THC	100
		E (COC20)	
Benzoylecgonine	20	Ecgonine HCI	60,000
Cocaine HCI	20	Ecgonine methyl ester	100,000
Cocaethylene	700		

COCAINE	(COC15)	
15	EcgonineHCl	45,000
15	Ecgonine methyl ester	75,000
550		
OPIATES	(OPI40)	
		70
		70,000
	Nalorphine	100,000
200	Oxymorphone	50,000
100	Thebaine	25,000
		50
		125
		50
		52,500
		75,000
		37,500
		18,750
		75
45,000	6-Monoacetylmorphine	100
		6,250
		200
		12,500
	INE(PCP10)	
PHENCYCLIC	DINE(PCP3)	
3		
		25,000
		6,250
		5,000
		5,000
		25,000
		450
		750
	IA)	50
		50
		250
		70
		30
	Secobarbital	50
		5,000
		10
	Clonazepam	1,000
500	Diazepam	50
80	Flunitrazepam	500
5,000	Lorazepam	700
1,000		2,500
1,000	Nitrazepam	25
	Oxolinic acid	50,000
25		
25 50,000	Theophylline	50,000
50,000 50	Theophylline	50,000
50,000 50 BUPRENORP	Theophylline PHINE(BUP)	50,000
50,000 50	Theophylline PHINE(BUP) Buprenorphine	5
50,000 50 BUPRENORP	Theophylline PHINE(BUP)	
50,000 50 BUPRENORF 90	Theophylline PHINE(BUP) Buprenorphine Norbuprenorphine-3-β-D-glucuronide	5
	15	15

The following substances may interfere with Alcohol Strip (Saliva):

Strong oxidizers Ascorbic acid Tannic acid Polyphenolic compopunds

Uric acid Mercantans Bilirubin Oxalic acid

These compounds don't exist in saliva usually, and may not interfere with the test.

Cross-Reactivity

A study was conducted to determine the cross-reactivity of the test with compounds spiked into drugfree PBS stock. The following compounds demonstrated no false positive results on the Oral Fluid Drug Test when tested with at concentrations up to 10 µg/mL.

Acetaminophen Acetophenetidin Acetylsalicylic acid N-Acetylprocainamide Amoxicillin Aminopyrine I-Ascorbic acid Ampicillin Apomorphine Aspartame Benzilic acid Atronine Benzoic acid d/l-Brompheniramine Caffeine Chloral-hydrate Chlorothiazide Chloramphenicol Cortisone Chlorpromazine Chloroquine Cholesterol Deoxycorticosterone Creatinine

Diclofenac Diflunisal Digoxin Diphenhydramine I -Ψ-Ephedrine β-Estradiol . Ethyl-p-aminobenzoate Estrone-3-sulfate I(-)-Epinephrine Erythromycin Fenoprofen Furosemide Gentisic acid Hydralazine

Hydrochlorothiazide Hydrocortisone o-Hydroxyhippuric acid p-Hydroxytyramine Ibuprofen Iproniazid d/l-İsoproterenol . Isoxsuprine Ketoprofen Labetalol Loperamide Meprobamate Methylphenidate Nalidixic acid Naproxen Niacinamide Nifedipine Norethindrone Oxalic acid Oxolinic acid Oxymetazoline Papaverine Penicillin-G Perphenazine

Phenelzine Trans-2-phenylcyclopropylamine Phenylpropanolamine

hydrochloride Prednisolone Prednisone d/I-Propranolol Zomepirac d-Pseudoephedrine Quinacrine Quindine Quinine Ranitidine Salicylic acid Serotonin Sulfamethazine Sulindac Tetracycline Tetrahydrocortisone 3-acetate Thiamine Tetrahydrocortisone 3 (β-D-glucuronide) d/I-Tyrosine Tolbutamide Triamterene d/l-Octopamine

Trifluoperazine d/l-Tryptophan Uric acid [BIBLIOGRAPHY]

- [BIBLIOGRAPHY]

 1. Schramm, W. et al, "Drugs of Abuse in Saliva: A Review," J Anal Tox, 1992 Jan-Feb; 16 (1), pp 1-9

 2. Scheidweiler, K, et al, "Pharmacokinetics of Cocaine and Metabolites in Human Oral Fluid and Correlation with Plasma Concentrations following Controlled Administration," Ther Drug Monit 2010 October; 32 (5) 628-637.

Tyramine Verapamil

- October; 32 (5) 628-637.
 Kim, I, et al, "Plasma and Oral Fluid Pharmacokinetics and Pharmacodynamics after Oral Codeine Administration," *Clin Chem*, 48:9, 1486-1496, 2002.
 McCarron, MM, et al, "Detection of Phencyclidine Usage by Radioimmunoassay of Saliva," *J Anal Tox*.
- 1984 Sep-Oct.; 8 (5), pp 197-201.

 5. Gray, T, et al, "Methadone Disposition in Oral Fluid during Pharmacotherapy for Opioid-Dependence," Forensic Sci Int, 2011, March 20; 206(1-3): 98-102.
- 6. Fritch, D, et al, "Barbiturate Detection in Oral Fluid, Plasma and Urine." Ther Drug Monit 201 Feb;
- 7. Tietz NW. Textbook of Clinical Chemistry. W.B. Saunders Company. 1986; 1735
- 8. Baselt RC. Disposition of Toxic Drugs and Chemicals in Man. 2nd Ed. Biomedical Publ., Davis, CA.
- 9. Hawks RL, CN Chiang. Urine Testing for Drugs of Abuse. National Institute for Drug Abuse (NIDA), Research Monograph 73, 1986

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