



SalivaScreen Test Cup

Catalogue NO. See Box Label

INTENDED USE

The Multi-Saliva Drugs of Abuse Rapid Test Cup is a rapid visual immunoassay for the qualitative detection of drugs of abuse in human oral fluid specimens. The test system consists of up to 16 membrane strips mounted in a plastic device. This test detects combinations of the following drugs at the concentrations listed below. Specific combinations will vary according to the test in question:

Test	Calibrator	Cut-off (ng/mL)
Amphetamine (AMP)	D-Amphetamine	50
Barbiturate (BAR)	Barbiturate	50
Benzodiazepine (BZO)	Oxazepam	10
Buprenorphine (BUP)	Buprenorphine	5
Cocaine (COC)	Cocaine	20
Cotinine (COT)	Cotinine	50
Methadone (MTD)	Methadone	30
Methamphetamine (MET)	D-Methamphetamine	50
Ecstasy (MDMA)	3,4-Methylenedioxyamphetamine	50
Opiates (OPI)	Morphine	40
Oxycodone (OXY)	Oxycodone	20
Phencyclidine (PCP)	Phencyclidine	10
Marijuana (THC)	11-nor- Δ^9 -THC-9 COOH	12
Marijuana (THC)	Δ^9 -THC	50

PRINCIPLE

The Multi-Saliva Drugs of Abuse Rapid Test Cup 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 testing, 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.

MATERIALS

Materials Provided

oral fluid collection swabs
Individually packed screening devices

Package insert



Materials Required but Not provided

Timer

Positive and negative controls

INTRODUCTION

The Oral Fluid Drug Screen Device For AMP/BAR/BUP/BZO/COC/COT/MET/MDMA/OPI/MTD/OXY/PCP/THC parent/THC 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 (AMP 50): Amphetamine is a potent central nervous system stimulant currently prescribed to treat Attention-Deficit/Hyperactivity Disorder (ADHD) and narcolepsy. Acute higher doses induce euphoria, alertness and sense of increased energy and power. Although highly pH dependent, amphetamine is readily present and detectable in saliva; experiments indicate that the saliva/plasma ratio of amphetamine is 2.76. The cut-off level of amphetamine assay (50 ng/mL) mirrors the saliva screening cut-off proposed by the Department of Health and Human Services (DHHS) for the Federal Drug Free Workplace Program.

Barbiturate (BAR 50): 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 produce a clinically significant degree of physical dependence. Withdrawal symptoms experienced during periods of drug abstinence can be severe enough to cause death.

Benzodiazepines (BZD 10): Benzodiazepines are central nervous system (CNS) depressants commonly prescribed for the short-term treatment of anxiety and insomnia. In general, benzodiazepines act as hypnotics in high doses, as anxiolytics in moderate doses and as sedatives in low doses. The use of benzodiazepines can result in drowsiness and confusion. Psychological and physical dependence on benzodiazepines can develop if high doses of the drug are given over a prolonged period. Benzodiazepines are taken orally or by intramuscular or intravenous injection, and are extensively oxidized in the liver to metabolites. Benzodiazepines can be detected in oral fluid after use.

Buprenorphine (BUP 5): Buprenorphine is a potent analgesic often used in the treatment of opioid addiction. The drug is sold under the trade names SubutexTM, BuprenexTM, TemgesicTM and SuboxoneTM, which contain Buprenorphine HCl alone or in combination with Naloxone HCl. Therapeutically, Buprenorphine is used as a substitution treatment for opioid addicts. Substitution treatment is a form of medical care offered to opiate addicts (primarily heroin addicts) based on a similar or identical substance to the drug normally used. In substitution therapy, Buprenorphine is as effective as Methadone but demonstrates a lower level of physical dependence. Concentrations of free Buprenorphine and Norbuprenorphine in saliva may be less than 1 ng/ml after therapeutic administration, but can range up to 20 ng/ml in abuse situations. The plasma half-life of Buprenorphine is 2-4 hours. While complete elimination of a single-dose of the drug can take as long as 6 days, the detection window for the parent drug in urine is thought to be approximately 3 days.

Cocaine (COC 20): Cocaine is a potent central nervous system stimulant and a local anesthetic found in the leaves of the coca plant. The psychological effects induced by using cocaine are euphoria, confidence and sense of increased energy. These psychological effects are accompanied by increased heart rate, dilation of the pupils, fever, tremors and sweating. Cocaine and its metabolites, benzoylecgonine, and ecgonine methylester, can be detected in oral fluid after use 1,2.

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.

Marijuana (Δ^9 -THC, parent 50): Tetrahydrocannabinol, the active ingredient in the marijuana plant (cannabis sativa), is detectable in saliva shortly after use. When ingested or smoked, it produces euphoric effects. Abusers exhibit central nervous system effects, altered mood and sensory perceptions, loss of coordination, impaired short term memory, anxiety, paranoia, depression, confusion, hallucinations and increased heart rate. THC (delta-9-Tetrahydrocannabinol), is the major psychoactive compound found in marijuana. The detection of the drug in saliva is thought to be primarily due to the direct exposure of the drug to the mouth (oral and smoking administrations). The Δ^9 -THC (parent) saliva test provides a snapshot of drugs immediately following consumption. It detects the Δ^9 -THC (parent) present in the oral cavity as a result of recent oral consumption. There are many different studies on the subject of the analytical detection window for Δ^9 -THC (parent) in saliva. A window of up to 6 hours is considered realistic due to individual fluctuations in the composition of saliva. The Δ^9 -THC (parent) -Assay contained within the Oral Fluid Drug Screen Device yields a positive result when the THC concentration exceeds 50 ng/mL.

Marijuana (THC-COOH 12): Tetrahydrocannabinol is generally accepted to be the principle active component in marijuana. Once in the blood stream, Δ^9 -THC (parent) is mainly quickly metabolized into THC metabolites in the liver. These psycho inactive THC metabolites are stored in the fatty tissue to some extent and are then discharged in urine over a period of between a few days to several weeks following consumption, where it is detected as THC-COOH (metabolite) in a positive test result. When ingested or smoked, it produces euphoric effects. Abusers exhibit central nervous system effects, altered mood and sensory perceptions, loss of coordination, impaired short term memory, anxiety, paranoia, depression, confusion, hallucinations and increased heart rate. The THC-COOH-Assay contained within the Oral Fluid Drug Screen Device yields a positive result when the THC-COOH concentration exceeds 12 ng/mL.

Methadone (MTD 30): Methadone is a synthetic analgesic drug originally used for the treatment of narcotic addiction. In addition to use as a narcotic agonist, methadone is being used more frequently as a

pain management agent. The psychological effects induced by using methadone are analgesia, sedation, and respiratory depression. Based on the saliva/plasma ratio calculated over salivary pH ranges of 6.4-7.6 for therapeutic or recreational doses of methadone, a cut-off <50 ng/mL is suggested. Due to this recommendation, the cut-off level of the methadone test was calibrated to 30 ng/mL.

Methamphetamine (MET 50): Methamphetamine is a potent central nervous system stimulant. Acute higher doses induce euphoria, alertness, and sense of increased energy and power. More acute responses produce anxiety, paranoia, psychotic behaviour, and cardiac dysrhythmias. Depending on the route of administration, amphetamine or methamphetamine can be detected in oral fluid as early as 5-10 minutes after use and can be detected in oral fluid for up to 72 hours after use.

Ecstasy (MDMA 50): MDMA is an abbreviation for the chemical methylenedioxyamphetamine MDMA. It has street many name including Ecstasy, X, XTC, E, Love Doves, Clarity, Adam, Disco Biscuits and Shamrocks, etc. it is a stimulant with hallucinogenic tendencies, described as an empathogen as it releases mood-altering chemicals, such as cartooning and L-dopa, in the brain and may generate feelings of love and friendliness. MDMA is a Class A drug, in the same category as heroin and cocaine. The adverse effects of MDMA use include elevated blood pressure, hyperthermia, anxiety, paranoia, and insomnia. Overdoses of MDMA can be fatal, often resulting in heart failure or heart stroke. MDMA belongs to a family of man-made drugs; its relatives include MDA (methylenedioxy MDMA), the parent drug of MDMA, and MDEA (methylenedioxyethyl MDMA), also known as EVE. They all share the MDMA-like effects. MDMA is administered either by oral ingestion or intravenous injection. MDMA tablets come in different sizes and colors, and often have logos such as doves on them. Its clinical dose is 50-100mg; the threshold toxic dose is 500mg. The effects of MDMA begin 30 minutes after intake. They peak in an hour and last for 2-3 hours. It is detectable in the saliva for up to 3 days after use.

Opiates (OPI 40): Opiates such as heroin, morphine, and codeine, are central nervous system (CNS) depressants. The use of opiates at high doses produces euphoria and release from anxiety. Physical dependence is apparent in users and leads to depressed coordination, disrupted decision making, decreased respiration, hypothermia and coma. After opiates are used, morphine and its metabolites are present in oral fluid 2,3.

Oxycodone (OXY 20): 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 OxyContin[®], 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 noroxycodone.

Phencyclidine (PCP 10): Phencyclidine is an arylcyclohexylamine that was originally used as an anesthetic agent and a veterinary tranquilizer. Phencyclidine can produce hallucinations, lethargy, disorientation, loss of coordination, trance-like ecstatic states, a sense of euphoria and visual distortions. It has many street names, such as "angel dust" and "crystal cyclone", etc. Phencyclidine can be administered orally, by nasal ingestion, smoking, or intravenous injection. It is metabolized in the liver and excreted through the kidneys.

PRECAUTIONS

- For professional *in vitro* diagnostic use only.
- Do not use after the expiration date indicated on the package. Do not use the test if the foil pouch is damaged. Do not reuse tests.
- This kit contains products of animal origin. Certified knowledge of the origin and/or sanitary state of the animals does not completely guarantee the absence of transmissible pathogenic agents. It is therefore, recommended that these products be treated as potentially infectious, and handled by observing usual safety precautions (e.g., do not ingest or inhale).
- Read the entire procedure carefully prior to testing.
- Do not eat, drink or smoke in the area where specimens and kits are handled. Handle all specimens as if they contain infectious agents. Observe established precautions against microbiological hazards throughout the procedure and follow standard procedures for the proper disposal of specimens. Wear protective clothing such as laboratory coats, disposable gloves and eye protection when specimens are assayed.
- Humidity and temperature can adversely affect results.
- Used testing materials should be discarded in accordance with local regulations.
- Wear protective clothing such as laboratory coats, disposable gloves and eye protection when specimens are assayed.

STORAGE AND STABILITY

- The kit should be stored at 2-30°C until the expiry date printed on the sealed pouch.
- The test must remain in the sealed pouch until use.
- Do not freeze.
- Kits should be kept out of direct sunlight.
- Care should be taken to protect the components of the kit from contamination. Do not use if there is evidence of microbial contamination or precipitation. Biological contamination of dispensing equipment, containers or reagents can lead to false results.

SPECIMEN COLLECTION AND STORAGE

- The Multi-Saliva Drugs of Abuse Rapid Test Cup is intended for use with human oral fluid specimens only.
- Oral fluid specimens must be collected according to the directions in the Procedure section of this package insert.
- Perform testing immediately after specimen collection.
- If specimens are to be shipped, pack them in compliance with all applicable regulations for transportation of etiologic agents.

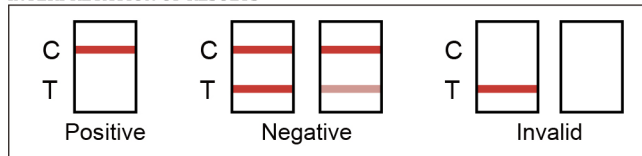
PROCEDURE

Bring tests, specimens, and/or controls to room temperature (15-30°C) before use. Donors should avoid placing anything (including food, drink, gum and tobacco products) in their mouth for at least 10 minutes prior to specimen collection.

- The oral fluid specimen should be collected using the collector provided with the kit. No other collection devices should be used with this assay.
- 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.
- Bring tests, specimens, and/or controls to room temperature (15-30°C) before use.
- Using the provided collection swab, have donor sweep inside of mouth (cheek, gums, tongue) several times, then hold swab in mouth until color on the saturation indicator strip appears in the indicator window of collection swab. Important: Do not bite, suck, or chew on the sponge.
- NOTE: If after 7 minutes, color on the saturation indicator has not appeared in the indicator window, proceed with the test below.
- Remove collection swab from mouth and insert the sponge into the screening device until it touches the bottom. Push cap until the cap locks in place in the bottom of the device.
- Test device upright on flat surface and keep upright while test is running. Wait for the colored bands to appear in test results area. Read results at 10 minutes.
- NOTE: Once the collection swab locks in place, the device is airtight, tamper evident, and ready to be disposed or sent to lab for confirmation (on presumptive positive result).



INTERPRETATION OF RESULTS



INTERPRETATION OF RESULTS

(See previous illustration)

POSITIVE: Only one colored band appears, in the control region (C). No colored band appears in the test region (T) for the drug in question. A positive result indicates that the drug concentration exceeds the detectable level.

NEGATIVE: Two colored bands appear on the membrane. One band appears in the control region (C) and another band appears in the test region (T) for the drug in question. A negative result indicates that the drug concentration is below the detectable level.

INVALID: Control band fails to appear. Results from any test which has not produced a control band at the specified read time must be discarded. Please review the procedure and repeat with a new test. If the problem persists, discontinue using the kit immediately and contact your local distributor.

NOTE:

- The intensity of color in the test region (T) may vary depending on the concentration of analytes present in the specimen. Therefore, any shade of color in the test region (T) should be considered negative. Please note that this is a qualitative test only, and cannot determine the concentration of analytes in the specimen.
- Insufficient specimen volume, incorrect operating procedure or expired tests are the most likely reasons for control band failure.

QUALITY CONTROL

- Internal procedural controls are included in the test. A colored band appearing in the control region (C) is considered an internal positive procedural control, confirming sufficient specimen volume and correct procedural technique.
- External controls are not supplied with this kit. It is recommended that positive and negative controls be tested as a good laboratory practice to confirm the test procedure and to verify proper test performance.

LIMITATIONS OF THE TEST

- The Multi-Saliva Drugs of Abuse Rapid Test Cup is for professional in vitro diagnostic use, and should be only used for the qualitative detection of drugs of abuse in oral fluid.
- This assay provides a preliminary analytical test result only. A more specific alternative chemical method must be used in order to obtain a confirmed analytical result. Gas chromatography/mass spectrometry (GC/MS) has been established as the preferred confirmatory method by the National Institute on Drug Abuse (NIDA). Clinical consideration and professional judgment should be applied to any test result, particularly when preliminary positive results are indicated.
- There is a possibility that technical or procedural errors as well as other substances and factors may interfere with the test and cause false results.
- A positive result indicates the presence of a drug/metabolite only, and does not indicate or measure intoxication.
- A negative result does not at any time rule out the presence of drugs/metabolites in urine, as they may be present below the minimum detection level of the test.
- This test does not distinguish between drugs of abuse and certain medications.

PERFORMANCE CHARACTERISTICS

A. Sensitivity

A phosphate-buffered saline (PBS) pool was spiked with drugs to target concentrations of $\pm 50\%$ cut-off and tested with The Multi-Saliva Drugs of Abuse Rapid Test Cup. The results are summarized below.

Drug Conc. (Cut-off range)	AMP		BUP		BZO		COC	
	-	+	-	+	-	+	-	+
0% Cut-off	30	0	30	0	87	0	30	0
-50% Cut-off	30	0	30	0	87	0	30	0
+50% Cut-off	0	30	0	30	0	87	0	30

Drug Conc. (Cut-off range)	COT		MET		MOR		MTD	
	-	+	-	+	-	+	-	+
0% Cut-off	30	0	30	0	30	0	30	0
-50% Cut-off	30	0	30	0	30	0	30	0
+50% Cut-off	30	0	0	30	0	30	0	30

Drug Conc. (Cut-off range)	OXY		PCP		THC		THC parent	
	-	+	-	+	-	+	-	+
0% Cut-off	90	0	30	0	30	0	30	0
-50% Cut-off	90	0	30	0	30	0	30	0
+50% Cut-off	0	90	0	30	0	30	0	30

Drug Conc. (Cut-off range)	BAR		MDMA	
	-	+	-	+
0% Cut-off	30	0	30	0
-50% Cut-off	30	0	30	0
+50% Cut-off	0	30	0	30

B. Specificity

The following table lists the concentrations of compounds (ng/mL) above which The Multi-Saliva Drugs of Abuse Rapid Test Cup identified positive results at 10 minutes.

Amphetamine-Related Compounds	Concentration (ng/mL)
D-Amphetamine	50
d,l-Amphetamine	125
β -Phenylethylamine	4,000
Tyramine	1,500
p-Hydroxyamphetamine	800
(+) 3,4-Methylenedioxamphetamine(MDA)	150
l-Amphetamine	4,000

Benzodiazepine-Related Compounds	Concentration (ng/mL)
Oxacepam	10
Alprazolam	6
Bromazepam	12
Chlordiazepoxide	12
Clobazam	6
Clorazepate	25
Delorazepam	25
Desalkylflurazepam	25
Diazepam	3
Estazolam	3
Flunitrazepam	100
α -Hydroxyalprazolam	200
(\pm)-Lorazepam	200
Midazolam	25
Nitrazepam	12
Norchlordiazepoxide	200
Nordiazepam	25
Temazepam	6

Buprenorphine -Related Compounds	Concentration (ng/mL)
Buprenorphine	5
Buprenorphine -3-D-Glucuronide	5
Norbuprenorphine	10
Norbuprenorphine-3-D-Glucuronide	200
Buprenorphine Glucuronide	10

Cocaine-Related Compounds	Concentration (ng/mL)
Benzoylcegonine	20
Cocaine	20
Cocaeethylene	25
Egonine	1,500
Egonine methyl ester	12,500
N-Acetylprocainamide	12,500
Chlordiazepoxide	

Cotinine-Related Compounds	Concentration (ng/mL)
Cotinine	50
Nicotine	20,000

Marijuana -Related Compounds	Concentration (ng/mL)
11-nor- Δ^9 -THC-9 COOH	12
Cannabinol	31,500
11-hydroxy- Δ^9 -THC	2
Δ^8 -Tetrahydrocannabinol	6,000
Δ^9 -Tetrahydrocannabinol	20,000

Marijuana -Related Compounds	Concentration (ng/mL)
Δ^9 -Tetrahydrocannabinol	50
Δ^8 -Tetrahydrocannabinol	75
11-nor- Δ^9 -THC-9 COOH	12
11-hydroxy- Δ^9 -THC	300
Cannabinol	2,000
Cannabidiol	>10,000

Methadone -Related Compounds	Concentration (ng/mL)
Methadone	30
Doxylamine	50,000
Estrone-3-sulfate	50,000
Phencyclidine	50,000

Ecstasy-Related Compounds	Concentration (ng/mL)
3,4-Methylenedioxyamphetamine	50
3,4-Methylenedioxyamphetamine (MDA)	250
3,4-Methylenedioxyethylamphetamine (MDEA)	60
Paramethoxyamphetamine (PMA)	1,600
Paramethoxymethamphetamine (PMMA)	160

Methamphetamine-Related Compounds	Concentration (ng/mL)
D-Methamphetamine	50
Fenfluramine	60,000
p-Hydroxymethamphetamine	400
Methoxyphenamine	25,000
3,4-Methylenedioxyamphetamine (MDMA)	50
l-Phenylephrine	4,000
Procaine	2,000
(1R,2S)-(-) Ephedrine	400
l-Ephedrine	400
Mephentermine	800
(-) Deoxyephedrine, l-Methamphetamine	3,000
Ephedrine	800

Opiates -Related Compounds	Concentration (ng/mL)
Morphine	40
Codeine	10
Ethylmorphine	24
Hydromorphone	100
Hydrocodone	100
Levorphanol	400
Oxycodone	25,000
Morphine 3-β-dglucuronide	50
Norcodeine	1,500
Normorphine	12,500
Nalorphine	10,000
Oxymorphone	25,000

Oxycodone-Related Compounds	Concentration (ng/mL)
Oxycodone	20
Hydrocodone	6,250
Levorphanol	12,500
Naloxone	12,500
Naltrexone	6,250
(+) 3,4-Methylenedioxyamphetamine (MDA)	150
l-Amphetamine	4,000

Phencyclidine-Related Compounds	Concentration (ng/mL)
Phencyclidine (PCP)	10
Tetrahydrozoline	50,000

Barbiturate -Related Compounds	Concentration (ng/mL)
Barbiturate (BAR)	50
Allobarbitol	200
Alphenal	100
Amobarbital	100
Aprobarbital	30
Butabarbital	15
Butalbital	400
Butethal	30
Cyclopentobarbital	60
Pentobarbital	150
Phenobarbital	300

Acetaminophen	Diclofenac	Maprotiline	d,l-Propranolol
Acetophenetidine	Dicyclomine	MDEA	d-Propoxyphene
Acetylsalicylic acid	Diflunisal	Meperidine	d-Pseudoephedrine
Aminopyrine	Digoxin	Meprobamate	Quinacrine
Amoxicillin	Diphenhydramine	Methylphenidate	Quinine
Ampicillin	l-ψ-Ephedrine	Nalidixic acid	Quindine
Amitriptyline	β-Estradiol	Naproxen	Ranitidine
Amobarbital	Ethyl-p-aminobenzoate	Niacinamide	Salicylic acid
Ascorbic acid	Cannabidiol	Nifedipine	Sulfamethazine
Apomorphine	l-Epinephrine	Nimesulide	Sulindac
Aspartame	Erythromycin	Norethindrone	Tetracycline
Atropine	Fenoprofen	d-Norpropoxyphene	Tetrahydrocortisone
Benzilic acid	Furosemide	Noscapine	3-acetate
Benzoic acid	Gentisic acid	d,l-Octopamine	Tetrahydrocortisone
Benzphetamine	Hemoglobin	Oxalic acid	3(β-d-glucuronide)
Buspirone	Hydralazine	Oxolinic acid	Theophylline
d,l-Brompheniramine	Hydrochlorothiazide	Oxymetazoline	Thiamine
Caffeine	Hydrocortisone	Papaverine	Thioridazine
Chloral hydrate	o-Hydroxyhippuric acid	Penicillin-G	d,l-Tyrosine
Chloramphenicol	β Hydroxynorephedrine	Pentazocine	Tolbutamide
Chlorothiazide	5-Hydroxytryptamine	Pentobarbital	Trazodone
d,l-Chlorpheniramine	(Serotonin)	Perphenazine	Triamterene
Chlorpromazine	3-Hydroxytyramine	Phenelzine	Trifluoperazine
Chloroquine	Ibuprofen	Trans-2-phenylcyclopropylamine	Trimethoprim
Cholesterol	Imipramine		Trimipramine
Clonidine	lproniazid	Phentermine	d,l-Tryptophan
Cortisone	(-)Isoproterenol	Phenylpropanolamine	Tyramine
l-Cotinine	Isoxsuprine	Prednisolone	Uric acid
Creatinine	Ketamine	Phenolbarbital	Verapamil
Clomipramine	Ketoprofen	Prednisone	Zomepirac
Deoxycorticosterone	Labetalol	Promazine	
Dextromethorphan	Loperamide	Promethazine	

LITERATURE REFERENCES

- Moolchan, E., et al, "Saliva and Plasma Testing for Drugs of Abuse: Comparison of the Disposition and Pharmacological Effects of Cocaine", Addiction Research Center, IRP, NIDA, NIH, Baltimore, MD. As presented at the FOFT-TIAFT meeting October 1998.
- Jenkins, A.J., Oyler, J.M. and Cone, E.J. Comparison of Heroin and Cocaine Concentrations in Saliva with Concentrations in Blood and Plasma. J. Anal. Toxicology. 19: 359-374 (1995).
- Kidwell, D.A., Holland, J.C., Athanaselis, S. Testing for Drugs of Abuse in Saliva and Sweat. J. Chrom. B. 713: 111-135 (1998).
- Baselt RC. Disposition of Toxic Drugs and Chemicals in Man. 2nd ed. Davis: Biomedical Publications; 1982.
- Hawks RL, Chiang CN, eds. Urine Testing for Drugs of Abuse. Rockville: Department of Health and Human Services, National Institute of Drug Abuse; 1986.
- Substance Abuse and Mental Health Services Administration. Mandatory Guidelines for Federal Workplace Drug Testing Programs. 53 Federal Register; 1988
- McBay AJ. Drug-analysis technology—pitfalls and problems of drug testing. Clin Chem. 1987 Oct; 33 (11 Suppl):33B-40B.
- Gilman AG, Goodman LS, Gilman A, eds. Goodman and Gilman's The Pharmacological Basis of Therapeutics. 6th ed. New York: Macmillan; 1980.

A study was conducted to determine the cross-reactivity of the test with compounds spiked into drug-free PBS stock. The following compounds demonstrated no false positive results on The Multi-Saliva Drugs of Abuse Rapid Test Cup when tested at concentrations up to 100 ug/mL.