

Multi-Drug Rapid Test Cassette (Salivatracor) (Oral Fluid)

Package Insert

English

A rapid test for the simultaneous, qualitative detection of multiple drugs and drug metabolites in human saliva. For healthcare professionals including professionals at point of care sites. Immunoassay for *in vitro* diagnostic use only.

INTENDED USE

The Multi-Drug Rapid Test Cassette for AMP/MET /COC/OPI/THC/PCP /MTD /MDMA /OXY /COT/BZO/KET/BAR is a lateral flow chromatographic immunoassay for the qualitative detection of multiple drugs and drug metabolites in saliva at the following cut-off concentrations:

Test	Calibrator	Cut-off (ng/mL)
Amphetamine (AMP)	l-Amphetamine	50
Methamphetamine (MET)	l-Methamphetamine	50
Phencyclidine (PCP)	Phencyclidine	10
Opiates (OPI/MOP)	Morphine	40
Methadone (MTD)	Methadone	30
Oxycodone (OXY)	Oxycodone	20
Cotinine (COT)	Cotinine	30
Methylenedioxymethamphetamine (MDMA)	d,l-Methylenedioxymethamphetamine	50
Benzodiazepines (BZO)	Oxazepam	20
Ketamine (KET)	Ketamine	30/50
Barbiturates (BAR)	Secobarbital	50
Marijuana (THC)	Δ9-THC	15/40
Cocaine (COC)	Cocaine	20

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/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. Professional judgment should be applied to any drug of abuse screen test result, particularly when preliminary positive results are indicated.

SUMMARY

The Multi-Drug Rapid Test Cassette for AMP/MET/COC/OPI/THC/PCP/MTD/MDMA/OXY/COT/BZO/KET/BAR and their metabolites is a rapid, saliva 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 saliva

Amphetamine (AMP)

Amphetamine is a sympathomimetic amine with therapeutic indications. 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 use¹. Amphetamine can be detected in oral fluids for up to 72 hours after use¹.

Methamphetamine (MET)

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 use¹. Methamphetamine can be detected in oral fluids for up to 72 hours after use¹.

Cocaine (COC)

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 use¹. Cocaine and benzoylecgonine can be detected in oral fluids for up to 24 hours after use¹.

Opiates (OPI)

The drug class opiates refers 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 dose². Heroin metabolite 6-monoacetylmorphine (6-MAM) is found more prevalently in excreted unmetabolized, and is also the major metabolic product of codeine and heroin.

Marijuana (THC)

THC (Δ9-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 slow 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 Δ9-THC is present in oral fluid after use. The detection of the drug is thought to be primarily due to the direct exposure of the drug to the mouth (oral and smoking administrations) and the subsequent sequestering of the drug in the buccal cavity³. Historical studies have shown a window of detection for THC in saliva of up to 14 hours after drug use³.

Phencyclidine (PCP)

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/mL⁴.

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 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.

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 opiate 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 oxycodone and noroxycodone.

Cotinine (COT)

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 spray.

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 30 ng/mL is expected to be up to 1-2 days after nicotine use.

Methylenedioxyamphetamines (MDMA)

Methylenedioxyamphetamines (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 Oberlander, 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.

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.

Ketamine (KET)

Ketamine is a dissociative anesthetic developed in 1963 to replace PCP (Phencyclidine). While Ketamine is still used in human anesthesia and veterinary medicine, it is becoming increasingly abused as a street drug. Ketamine is molecularly similar to PCP and thus creates similar effects including numbness, loss of coordination, sense of invulnerability, muscle rigidity, aggressive / violent behavior, slurred or blocked speech, exaggerated sense of strength, and a blank stare. There is depression of respiratory function but not of the central nervous system, and cardiovascular function is maintained. The effects of Ketamine generally last 4-6 hours following use.

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. Withdrawal symptoms experienced during periods of drug abstinence can be severe enough to cause death.

ASSAY PRINCIPLE

The Multi-Drug Rapid Test Cassette for AMP/MET/COC/OPI/THC/PCP/MTD/MDMA /OXY/COT/BZO/KET/BAR 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.

REAGENTS

Each test line contains anti-drug antibody and corresponding drug-protein conjugates. The control line contains goat anti-rabbit IgG polyclonal antibodies and rabbit IgG.

PRECAUTIONS

- 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 cassette 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 cassettes 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 cassettes should be used with this assay. Oral fluid collected at any time of the day may be used.

MATERIALS

- Test cassettes
- Materials Provided
- Package insert
- Procedure Card

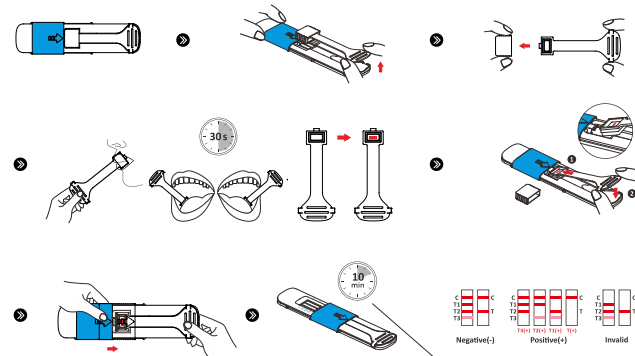
Materials Required but Not Provided

- Timer

DIRECTIONS FOR USE

Allow the test cassette, 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.

- Bring the pouch to room temperature before opening. Remove the test from the sealed pouch and use within one hour of opening.
- Instruct the donor to place the tongue against the root of the upper or lower jaw and collect saliva in the mouth.
- Remove the swab from the cassette, then remove the cap from the swab.
- Instruct the donor to place the swab between the lower cheek and gum and gently rub back and forth between the left and right cheeks and gums until the sponge is completely saturated with saliva. Do not bite, suck, or chew the sponge as it may break.
- Remove the swab from the mouth after 30 seconds, if the saturation indicator has turned red, insert the swab into the cassette. If the saturation indicator has not turned red, place the swab back in the mouth and continue to collect saliva until the saturation indicator turns red.
Note: When inserting the swab into the cassette, insert the protruding part of the swab head into the hole reserved at the sampling site, and then press down the tail of the swab to secure it.
- Move the slider in the direction of the arrow until the slider is blocked.
- Place the device on a flat surface while the test is running. Negative results can be read as soon as clear lines form in both the C and T zones of the test. Read presumptive positive results at 10 minutes. Do not read results after 20 minutes.



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.

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 sufficient specimen volume, adequate membrane wicking and correct procedural technique.

LIMITATIONS

- The Multi-Drug Rapid Test Cassette 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), 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.
- 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.

PERFORMANCE CHARACTERISTICS

Accuracy

Assemble each single test into the cassette before testing, and evaluate the cassette with approximately 44-280 specimens per drug type previously collected from subjects presenting for Drug Screen Testing which were confirmed by GC/MS. These specimens were randomized and tested using the Oral Fluid Drug Screen Test. Specimens were rated as either positive or negative at 10 minutes. The test results are shown in table below.

Table: Specimen Correlation

Method	GC/MS		% agreement with GC/MS	% Total agreement with GC/MS
	Positive	Negative		
AMP 50	Positive	90	6	94.7%
	Negative	5	109	94.8%
BAR50	Positive	80	6	96.4%
	Negative	3	121	95.3%

Drug	Result	n	+	%	95% CI
BZO20	Positive	94	5	94.0%	94.8%
	Negative	6	105	95.5%	
COC20	Positive	38	2	95.0%	96.7%
	Negative	3	107	97.3%	
COT30	Positive	131	2	99.2%	98.7%
	Negative	1	96	98.0%	
KET 30	Positive	49	3	94.2%	94.5%
	Negative	5	88	94.6%	
KET 50	Positive	90	6	93.8%	94.8%
	Negative	5	109	95.6%	
MDMA50	Positive	96	1	97.0%	98.3%
	Negative	3	130	99.2%	
MET 50	Positive	126	4	99.2%	98.2%
	Negative	1	149	97.4%	
MTD 30	Positive	116	3	97.5%	97.4%
	Negative	3	108	97.3%	
OPI40	Positive	89	7	93.7%	93.8%
	Negative	6	108	93.9%	
OXY 20	Positive	91	1	97.8%	98.7%
	Negative	2	136	99.3%	
PCP 10	Positive	107	2	96.4%	97.4%
	Negative	4	117	98.3%	
THC 15	Positive	75	5	96.2%	96.8%
	Negative	3	167	97.1%	
THC 40	Positive	84	1	>99%	99.6%
	Negative	0	165	99.4%	

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 Multi-Drug Rapid Test Cassette. The results are summarized below.

Drug conc. (Cut-off range)	n	AMP		MET		THC15		THC40	
		-	+	-	+	-	+	-	+
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	28	2	26	4	26	4
Cut-off	30	15	15	16	14	12	18	12	18
+25% Cut-off	30	7	23	6	24	8	22	8	22
+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. (Cut-off range)	n	PCP		BZO		OPI		KET50	
		-	+	-	+	-	+	-	+
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	26	4	27	3	25	5
Cut-off	30	14	16	14	16	13	17	18	12
+25% Cut-off	30	10	20	5	25	7	23	8	22
+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. (Cut-off range)	n	MTD		OXY		COT		MDMA	
		-	+	-	+	-	+	-	+
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	25	5	26	4
Cut-off	30	15	15	20	10	20	10	19	11
+25% Cut-off	30	7	23	4	26	7	23	6	24
+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. (Cut-off range)	n	BAR		COC20		KET30	
		-	+	-	+	-	+
0% Cut-off	30	30	0	30	0	30	0
-50% Cut-off	30	30	0	30	0	30	0
-25% Cut-off	30	23	7	25	5	25	5
Cut-off	30	16	14	15	15	16	14
+25% Cut-off	30	6	24	3	27	4	26
+50% Cut-off	30	0	30	0	30	0	30
+300% Cut-off	30	0	30	0	30	0	30

Analytical Specificity

The following table lists the concentration of compounds (ng/mL) above which the Multi-Drug Rapid Test Cassette for AMP/MET/COC/OPI/THC/PCP/MTD/OXY/COT/MDMA/BZO/KET/BAR identified positive results at a read time of 10 minutes.

Compound	ng/mL	Compound	ng/mL
AMPHETAMINE (AMP)			
d-Amphetamine	50	p-Hydroxyamphetamine	100
d/l-Amphetamine	100	(+)-3,4-Methylenedioxyamphetamine (MDA)	100
β -Phenylethylamine	25,000	l-Amphetamine	25,000
Tryptamine	12,500	Methoxyphenamine	12,500
METHAMPHETAMINE (MET)			
d-Methamphetamine	50	(1R,2S) - (-) Ephedrine	400
Fenfluramine	60,000	Procaine	2,000
p-Hydroxymethamphetamine	400	l-Phenylephrine (R)-(-)-Phenylephrine	6,250
Methoxyphenamine	25,000	Ephedrine	400
Mephentermine	1,500	Benzphetamine	25,000
3,4-Methylenedioxyamphetamine (MDMA)	50		
MARIJUANA (THC15)			
Δ^9 -THC	15	11-nor- Δ^9 -THC-9 COOH	12.5
Cannabinol	20,000	(-) Δ^8 -THC	100
(\pm)-11-Hydroxy- Δ^9 -THC	400	(\pm) Δ^8 -THC	40
MARIJUANA (THC40) (Parent)			
Δ^9 -THC	40	11-nor- Δ^9 -THC-9 COOH	32
Cannabinol	40,000	(-) Δ^8 -THC	250
(\pm)-11-Hydroxy- Δ^9 -THC	800	(\pm) Δ^8 -THC	80
COCAINE (COC20) (Parent)			
Cocaine HCl	20	EcgonineHCl	60,000
Benzoylcocaine	20	Ecgonine methyl ester	100,000
Cocaeethylene	700		
OPIATES (OPI)			
Morphine	40	Norcodeine	6,250
Codeine	25	Normorphine	25,000
Ethylmorphine	25	Nalorphine	10,000
Hydromorphone	100	Oxymorphone	25,000
Hydrocodone	100	Thebaine	2,000
Levorphanol	400	Diacetylmorphine (Heroin)	50
Oxycodone	25,000	6-Monoacetylmorphine	25
Morphine 3- β -D-Glucuronide	50		
PHENCYCLIDINE (PCP)			
Phencyclidine	10	4-Hydroxyphencyclidine	2,500
METHADONE (MTD)			
Methadone	30	LAAM	200
Disopyramide	400	Doxylamine	12,500
(+)-Chlorpheniramine	6,250	Nor-LAAM	12,500
OXYCODONE (OXY)			
Oxycodone	20	Hydromorphone	10,000
Oxymorphone	40	Naloxone	5,000
Levorphanol	10,000	Naltrexone	5,000
Hydrocodone	1,500		
COTININE (COT)			
(-)-Cotinine	30	(-)-Nicotine	450
METHYLENEDIOXYMETHAMPHETAMINE (MDMA)			
(\pm) 3,4-Methylenedioxyamphetamine HCl (MDMA)	50		
(\pm) 3,4-Methylenedioxyamphetamine HCl (MDA)	300		
3,4-Methylenedioxyethyl-amphetamine (MDE)	30		
l-Methamphetamine	25,000		
BENZODIAZEPINES (BZO)			
Oxazepam	20	7-Amino-clonazepam	10,000
Alprazolam	200	Bromazepam	20
Chlordiazepoxide	100	Clonazepam	2,000
Desalkylfurazepam	1,000	Diazepam	100
Estazolam	160	Flunitrazepam	1,000
Furosemide	10,000	Lorazepam	1,400
Midazolam	2,000	Midazolam Maleate	5,000
Nefopam	2,000	Nitrazepam	50
Norchlordiazepoxide	50	Oxolinic acid	100,000
Pheniramine	100,000	Theophylline	100,000
α -Hydroxyalprazolam	100		
KETAMINE (KET50)			
Ketamine	50	Mephentermine	1250
Tetrahydrozoline	20	Phencyclidine	625
Benzphetamine	1250	(1R, 2S) - (-)-Ephedrine	5000
d-Methamphetamine	1250	Promazine	1250
(+) Chlorpheniramine	1250	4-Hydroxyphencyclidine	2500
l-Methamphetamine	2500	Promethazine	1250
Clonidine	5000	Levorphanol	2500
Methoxyphenamine	625	Thioridazine	2500
Disopyramide	625	MDE	2500
d-Norpropoxyphene	625	Meperidine	1250
EDDP	2500	Dextromethorphan	75
Pentazocine	1250	(+)-3,4-Methylenedioxyamphetamine (MDMA)	5000
KETAMINE (KET30)			
Ketamine (KET)	30	Norketamine	400
(\pm)-Chlorpheniramine	50,000	Pantoprazole Sodium	50,000
Levorphanol	50	hydromorphpne	2,500
Meperidine (Pethidine)	50,000	Promethazine	50,000
Naloxone	10,000	d-Pseudoephedrine	100,000

Naltrexone	2,500	Phencyclidine	100
EDDP			
(2-ethylidene-1,5-dimethyl-3,3-diphenylpyrrolidine)	5,000	Tetrahydrozoline	5,000
Normorphine	50,000	Heroin (diacetylmorphine)	50,000
Oxymorphone	1,000	Methamphetamine Hydrochloride	50,000
Pheniramine	50,000	R (-)-Methamphetamine	50,000
BARBITURATES (BAR)			
Amobarbital	500	Cyclopentobarbital	4170
5,5-Diphenylhydantoin	1000	Pentobarbital	1000
Allobarbitol	75	Alphenol	50
Barbital	1000	Aprobarbital	75
Talbutal	5	Butabarbital	25
Butalbital	1000	Butethal	75
Phenobarbital	50	Secobarbital	50

Cross-Reactivity

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-Drug Rapid Test Cassette when tested with at concentrations up to 100 μ g/mL.

Acetaminophen	Acetophenetidin
N-Acetylprocainamide	Acetylsalicylic acid
Aminopyrine	Amoxicillin
Ampicillin	l-Ascorbic acid
Apomorphine	Aspartame
Atropine	Benzilic acid
Benzoic acid	d/l-Brompheniramine
Caffeine	Chloral hydrate
Chloramphenicol	Chlorothiazide
d/l-Chloropheniramine	Chlorpromazine
Chloroquine	Cholesterol
Cortisone	l-Cotinine
Creatinine	Deoxycorticosterone
Diclofenac	Diffunisal
Digoxin	Diphenhydramine
l- Ψ -Ephedrine	β -Estradiol
Levorphanol	Ethyl-p-aminobenzoate
Oxycodone	l(-)-Epinephrine
Morphine 3- β -D-Glucuronide	Fenoprofen
	Genitric acid
	Hemoglobin Hydratazine
	Hydrochlorothiazide
	Hydrocortisone
	o-Hydroxyhippuric acid
	l-Propriazid
	d/l-Isoproterenol
	Labelol
	Ketoprofen
	Loperamide
	Methylphenidate
	Naproxen
	Nifedipine
	Norethindrone
	Noscapine
	Oxalic acid
	Oxymetazoline
	Penicillin-G
	Phenazine
	hydrochloride
	Prednisolone
	d/l-Propranolol
	d-Pseudoephedrine
	Quinine
	Ranitidine
	Serotonin
	Sulindac
	Tetrahydrocortisone 3-acetate
	Tetrahydrocortisone 3 (β -D-glucuronide)
	d/l-Tyrosine
	Tolbutamide
	Trifluoperazine
	d/l-Tryptophan
	Uric acid
	Zomepirac

[BIBLIOGRAPHY]

- 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 SOFT-TIAFT meeting October 1998.
- Kim, I, et al. "Plasma and oral fluid pharmacokinetics and pharmacodynamics after oral codeine administration", *ClinChem*, 2002 Sept.; 48 (9), pp 1486-96.
- Schramm, W, et al. "Drugs of Abuse in Saliva: A Review," *J Anal Tox*, 1992 Jan-Feb; 16 (1), pp 1-9
- McCarron, MM, et al. "Detection of Phencyclidine Usage by Radioimmunoassay of Saliva," *J Anal Tox*. 1984 Sep-Oct; 8 (5), pp 197-201.