

UScreen™ Oral Cube Instructions For Use For Employment and Insurance Use Only

Instructions for testing the following drugs:

Amphetamine, Barbiturates, Benzodiazepines, Buprenorphine, Cocaine, Ecstasy, Lysergic acid diethylamide, Heroin (6-MAM), Marijuana, Methadone, Methamphetamine, Methaqualone, Opiates, Oxycodone, Phencyclidine, Propoxyohene and Tricvclic Antidepressants.

INTENDED USE

The UScreen™ Oral Cube is intended for screening for the presence of drugs and their metabolites in oral fluid.

The UScreen™ Oral Cube is intended solely for use in employment and insurance testing and does not include test systems intended for Federal drug testing programs (e.g., programs run by the Substance Abuse and Mental Health Services Administration (SAMHSA), the Department of Transportation (DOT), and the U.S. military). The UScreen™ Oral Cube is a lateral flow chromatographic immunoassay for the qualitative and simultaneous detection of drugs and drug metabolites in oral fluid at the following cut-off concentrations:

Test	Calibrator	Cut-off (ng/mL)
Amphetamine (AMP)	d-Amphetamine	50
Barbiturate (BAR)	Secobarbital	50/300
Benzodiazepines (BZO)	Oxazepam	10
Buprenorphine (BUP)	Buprenorphine	5/10
Cocaine (COC)	Benzoylecgonine	20
Ecstasy (MDMA)	3,4- Methylenedioxymethamphetamine	50
Lysergic acid diethylamide (LSD)	d-Lysergic acid diethylamide	10
Heroin (6-MAM)	6-Monoacetylmorphine	10
Marijuana Metabolite (THC)	11-nor-Δ ⁹ -THC-9 COOH	12
Marijuana (THC)	Δ ⁹ -THC	40
Methadone (MTD)	Methadone	30
Methamphetamine (MET)	d-Methamphetamine	50
Methaqualone (MQL)	Methaqualone	100
Opiates (OPI)	Morphine	40
Oxycodone (OXY)	Oxycodone	20
Phencyclidine (PCP)	Phencyclidine	10
Propoxyphene (PPX)	Propoxyphene	50
Tricyclic Antidepressants (TCA)	Nortriptyline	100

This test will detect other related compounds, please refer to the Analytical Specificity table in this Instructions For Use

SUMMARY

AMP: Amphetamine is a sympathomimetic amine with therapeutic indications. The drug is often self-administered by nasal inhalation or oral ingestion.¹

BAR: Barbiturates are central nervous system depressants. They are used therapeutically as sedatives, hypnotics, and anticonvulsants. Barbiturates are almost always taken orally as capsules or tablets. The effects resemble those of intoxication with alcohol. Chronic use of barbiturates leads to tolerance and physical dependence. Short acting Barbiturates taken at 400 mg/day for 2-3 months can produce a clinically significant degree of physical dependence. Withdrawal symptoms experienced during periods of drug abstinence can be severe enough to cause death.

BZO: 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.

BUP: Buprenorphine is a semisynthetic opioid analgesic derived from Thebaine, a component of opium. It has a longer duration of action than morphine when indicated for the treatment of moderate to severe pain, peri-operative analgesia, and opioid dependence. Low doses buprenorphine produces sufficient agonist effect to enable opioid-addicted individuals to discontinue the misuse of opioids without experiencing withdrawal symptoms. Buprenorphine carries a lower risk of abuse, addiction, and side effects compared to full opioid agonists because of the "ceiling effect", which means no longer continue to increase with further increases in dose when reaching a plateau at moderate doses. However, it has also been shown that Buprenorphine has abuse potential and may itself cause dependency. Buprenorphine was rescheduled from Schedule V to Schedule III drug just before FDA approval of Suboxone and Subutex.

COC: Cocaine is a potent central nervous system (CNS) stimulant and a local anesthetic derived from the coca plant (erythroxylum coca).¹

MDMA: Abbreviated for the chemical 3, 4- methylenedioxymethamphetamine, MDMA has many street names 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 stoke. MDMA belongs to a family of man-made drugs; its relatives include MDA (3, 4- methylenedioxymethamphetamine), the parent drug of MDMA, and MDEA (3, 4-Methylenedioxy-N-ethylamphetamine), 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 50-100 mg; 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 detectible in the oral fluid for up to 3 days after use.

THC: Tetrahydrocannabinol, the active ingredient in the marijuana plant (cannabis sativa), is detectable in oral fluid shortly 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 cavity.²

LSD: D-lysergic acid diethylamide (LSD) is the most potent hallucinogenic substance known to man. Dosages of LSD are measured in micrograms, or millionths of a gram. By comparison, dosages of cocaine and heroin are measured in milligrams, or thousandths of a gram.

6-MAM: 6-Monoacetylmorphine (6-MAM) or 6-acetylmorphine is one of three active metabolites of heroin (diacetylmorphine), the others being morphine and the much less active 3-monoacetylmorphine (3-MAM). 6-MAM is rapidly created from heroin in the body, and then is either metabolized into morphine or excrete. Since 6-MAM is a unique metabolite to heroin, its presence in the saliva confirms that heroin was the opioid used. This is significant because on a saliva immunoassay drug screen, the test typically tests for morphine, which is a metabolite of a number of legal and illegal opiates/opioids such as codeine, morphine sulfate, and heroin.

MTD: 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.as. Due to this recommendation, the cut-off level of the methadone test was calibrated to 30 ng/mL.

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 indestion.¹

MQL: Methaqualone is a quinazoline derivative that was first synthesized in 1951 and found clinically effective as a sedative and hypnotic in 1956. It soon gained popularity as a drug of abuse and in 1984 was removed from the US market due to extensive misuse. It is occasionally encountered in illicit form and is also available in Europe and other countries in combination with diphenhydramine (Mandrax).

OPI: 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 control pain by depressing the CNS and demonstrate addictive properties when used for sustained periods of time. 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.³

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.

PCP: Phencyclidine is a hallucinogen and, can be detected in oral fluid as a result of the exchange of the drug between the circulatory system and the oral cavity.⁵

PPX: Propoxyphene or Dextropropoxyphene is a narcotic analgesic compound with a structural similarity to methadone. Physiological effects of propoxyphene include respiratory depression. Propoxyphene is metabolized in the liver to yield norpropoxyphene. Norpropoxyphene has a longer half-life (30 to 36 hours) than that of propoxyphene (6 to 12 hours). Norpropoxyphene demonstrates substantially less central-nervous system depression than propoxyphene but shows a greater local anesthetic effect.

TCA: TCA (Tricyclic Antidepressants) are commonly used for the treatment of depressive disorders. TCA overdoses can result in profound central nervous system depression, cardiotoxicity and anticholinergic effects. TCA overdose is the most common cause of death from prescription drugs. TCAs are taken orally or sometimes by injection. TCAs are metabolized in the liver.

This assay provides only a preliminary analytical test result. A more specific alternate chemical method must be used in order to obtain a confirmed analytical result. Gas chromatography/mass spectrometry (GC/MS) and liquid chromatography/tandem mass spectrometry (LC-/MS/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.

PRINCIPLE

The UScreen™ Oral Cube 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 along the test strip 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

The UScreen $^{\text{TM}}$ Oral Cube contains mouse monoclonal antibody-coupled particles and corresponding drug-protein conjugates. A goat antibody is employed in each control line.

PRECAUTIONS

- · For Use in Employment and Insurance Testing.
- Do not use after the expiration date.
- The test device and collection swab are single use only.
- The test device should remain in the sealed pouch until use.
- All specimens should be considered potentially hazardous and handled in the same manner as an infectious agent.
- The used collection swab and device should be discarded according to local regulations.

STORAGE AND STABILITY

Store as packaged in the sealed pouch either at room temperature or refrigerated

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

SPECIMEN COLLECTION AND PREPARATION

The oral fluid specimen should be collected using the collection swab provided with the kit. Follow the detailed Directions for Use below. No other collection devices should be used with this test. Oral fluid collected at any time of the day may be used. Perform testing immediately after collection.

MATERIALS

Materials Provided

- · Individually sealed test devices
- Security seal labels
- · Collection swab (with indicator)
- Instructions For Use

· Procedure card

Materials Required but Not Provided

· Timer, clock, or watch

Gloves

DIRECTIONS FOR USE

Allow the test device, and/or controls to reach room temperature [15 30°C (59°F-86°F)] prior to testing. Instruct the donor not to place anything in the mouth including food, drink, gum, tobacco products for at least 10 minutes prior to collection.

 Bring the pouch to room temperature [15-30°C (59°F-86°F)] before opening. Remove the test device from the sealed pouch and use it as soon as possible.

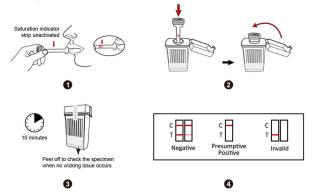
Remove the collection swab from packaging. Relax the mouth and insert collection swab horizontally into the mouth. Do not bite, suck, or chew on the collection swab. Keep collection swab horizontal to ensure sufficient oral fluid is collected and use a circular motion to gently swab cheeks, gums, and surface of tongue each 5-10 times. (Illustration 1). Continue swab process until a red color appears on the saturation indicator strio.

Note: Refer to Notes and Troubleshooting if the saturation indicator strip does not activate after 4 minutes. If after 7 minutes, color has not appeared, proceed with the test below. (See illustration 1)

- Remove cube from sealed pouch and place upright on a clean, flat surface. Keeping the cube upright, gently and slowly insert the collection swab into the cube, swab end first, until it reaches the bottom of the cube. Push the cap until it locks in place. The cube must remain upright for test to run. (Illustration 2)
- Keep test device upright on a flat surface until the test is complete. Set a timer for 10 minutes. (Illustration 3)

Important: Peel off the bottom label to check the specimen volume when no wicking issues occur.

4. Interpret results at 10 minutes.



NOTES AND TROUBLESHOOTING

- If invalid results occur or the strips do not wick, peel off the label (as marked at bottom of the device) to check if either there is enough specimen, or if the oral fluid is too thick to run.
- a.) If strips do not appear to flow when there is enough oral fluid, or the oral fluid is too thick to run, move the device back and forth several times across a flat, clean surface. Ensure the device remains upright. Do not tilt the device when the test is running before reading results.
- b.) Oral fluid tends to form air bubbles which sit at the bottom of the strip and prevent the strip from running. Gently tap the device on the table or counter surface popping the air bubble allowing capillary action to begin, thus initiating the test.
- If the indicator strip has not turned red after 4 minutes, instruct the donor to rotate
 the swab in a circular motion while swabbing each area of the mouth until the
 saturation indicator activates or collection time is greater than 7 minutes. (Illustration
 helow)



INTERPRETATION OF RESULTS

(Please refer to the previous illustration)

NEGATIVE: * A colored line in the control line region (C) and a colored line in the test line region (T) for a specific drug indicates a negative result. This indicates that the drug concentration in the oral fluid specimen is below the designated cut-off level for that specific drug.

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

POSITIVE: A colored line in the control line region (C) but no line in the test line region (T) for a specific drug indicates a positive result. This indicates that the drug concentration in the oral fluid specimen exceeds the designated cut-off for that specific drug.

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

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. Control standards are not supplied with this kit; however, 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

- The UScreen™ Oral Cube 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) or liquid chromatography/tandem mass spectrometry (LC-MS/MS) is the preferred confirmatory method.
- There is a possibility that technical or procedural errors, as well as other interfering substances in the oral fluid specimen may cause erroneous results.
- 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 cut-off level of the test.
- 5. The test does not distinguish between drugs of abuse and certain medications.
- 6. A positive result may be obtained from certain foods or food supplements.

PERFORMANCE CHARACTERISTICS

Accuracy

100 clinical spiked oral fluid specimens tested using the UScreen™ Oral Cube were compared to a commercial oral fluid kit. Each test was performed by three operators. Samples were divided by concentration into five categories: drug-free, less than half the cutoff, near cutoff negative, near cutoff positive, and high positive. Results were

as follows:

Specimen	AMP50	BAR50	BAR300	BZO10	BUP5	BUP10
Positive	100%	100%	100%	100%	98.20%	100%
Negative	100%	100%	100%	100%	100%	97.7%
Total	>99%	>99%	>99%	>99%	98.99%	98.99%
Specimen	COC20	LSD10	MDMA50	MET50	MQL100	MTD30
Positive	100%	100%	100%	100%	100%	100%
Negative	100%	100%	100%	100%	100%	100%
Total	>99%	>99%	>99%	>99%	>99%	>99%
Specimen	6-MAM10	OPI40	OXY20	PCP10	PPX50	TCA100
Positive	100%	100%	100%	100%	100%	100%
Negative	100%	100%	100%	100%	100%	97.70%
Total	>99%	>99%	>99%	>99%	>99%	98.99%

Specimen	THC12	THC40
Positive	100%	96%
Negative	100%	100%
Total	>99%	98%

Analytical Sensitivity

A phosphate-buffered saline (PBS) pool was spiked with drugs to target concentrations of $\pm\,50\%$ cut-off and tested with the UScreen $^{\text{TM}}$ Oral Cube. The results are summarized below.

Drug Conc.	AM	P50	BAI	R50	BAF	2300	BZ	D10	BU	IP5	BUI	P10
(Cut-off range)	-	+	-	+	-	+	-	+	-	+	-	+
0% Cut-off	30	0	30	0	30	0	30	0	30	0	30	0
-50% Cut-off	30	0	30	0	30	0	30	0	30	0	30	0
+50% Cut-off	0	30	0	30	0	30	0	30	0	30	0	30

Drug Conc.	CO	C20	LSI	D10	MDN	1A50	ME	T50	MQL	100	MTI	D30
(Cut-off range)	-	+	-	+	-	+	-	+	-	+	-	+
0% Cut-off	30	0	30	0	30	0	30	0	30	0	30	0
-50% Cut-off	30	0	30	0	30	0	30	0	30	0	30	0
+50% Cut-off	0	30	0	30	0	30	0	30	0	30	0	30

Drug Conc.	6-M <i>A</i>	M10	OP	140	OX	Y20	PC	P10	PP	X50	TC	A100
(Cut-off range)	-	+	-	+	-	+	-	+	-	+	-	+
0% Cut-off	30	0	30	0	30	0	30	0	30	0	30	0
-50% Cut-off	30	0	30	0	30	0	30	0	30	0	30	0
+50% Cut-off	0	30	0	30	0	30	0	30	0	30	0	30

Drug Conc.	TH	C12	THC40		
(Cut-off range)	-	+	-	+	
0% Cut-off	30	0	30	0	
-50% Cut-off	30	0	30	0	
+50% Cut-off	0	30	0	30	

Analytical Specificity and Cross Reactivity

The following table lists the concentration of compounds (ng/mL) above which the UScreen™ Oral Cube identified positive results at 10 minutes.

Drug Compound	Concentration (ng/mL)			
AMPHETAMINE (AMP50)				
d-Amphetamine	50			
Phentermine	120,000			
R(-)-Amphetamine	10,000			
(±)-Amphetamine	50			

Drug Compound	Concentration (ng/mL)
Serotonin	500,000
Octopamine	60,000
(±)-Phenylpropanolamine hydrochloride	100,000
Tryptamine	1,500
BARBITURATE (BAR50)	1,000
Secobarbital	50
Amobarbital	100
Alphenal	100
Aprobarbital	30
Butabarbital	30
Butalbital	400
Butethal	30
Cyclopentobarbital	60
Pentobarbital	150
Phenobarbital	30
BARBITURATE (BAR300)	1 000
Secobarbital	300
Amobarbital	300 150
Alphenal Aprobarbital	200
Butabarbital	75
Butalbital	2,500
Butethal	100
Cyclopentobarbital	600
Pentobarbital	300
Phenobarbital	100
BENZODIAZEPINES (BZO10)	
Oxazepam	10
Alprazolam	6
Bromazepam	12
Chlordiazepoxide	12
Clobazam	6
Clorazepate	25
Delorazepam	25
Desalkylflurazepam	25
Diazepam	3
Estazolam	3
Flunitrazepam	100 200
α-Hydroxyalprazolam (±)-Lorazepam	200
Midazolam	25
Nitrazepam	12
Norchlordiazepoxide	200
Nordiazepam	25
Temazepam	6
Triazolam	25
BUPRENORPHINE (BUP5)	
Buprenorphine	5
Buprenorphine-3-D-Glucuronide	10
Norbuprenorphine	5
Buprenorphine-3-D-Glucuronide	10
Buprenorphine Glucuronide	20
BUPRENORPHINE (BUP10)	
Buprenorphine	10
Buprenorphine-3-D-Glucuronide	10
Norbuprenorphine	20
Buprenorphine-3-D-Glucuronide	200

Drug Compound	Concentration (ng/mL)
Buprenorphine Glucuronide	10
COCAINE (COC20)	
Benzoylecgonine	20
Cocaine	20
Cocaethylene	25
Ecgonine	1,500
Ecgonine methyl ester	12,500
N-Acetylprocainamide	12,500
Norcocaine	500
LYSERGIC ACID DIETHYLAMIDE (LSD10)	
D-lysergic acid diethylamide	10
Fentanyl	25
Norfentanyl	50
•	
Risperidone	4,000
Prilocaine	1,800
ECSTASY (MDMA50)	
3,4-Methylenedioxymethamphetamine	50
Butylone HCI	6,250
Ephedrine HCL	12,500
Ethylone	12,500
Phentermine	12,500
I-Methamphetamine	1,562.5
Methylone HCL	50,000
3,4-Methylenedioxyamphetamine (MDA)	781.25
3,4-Methylenedioxyethylampheta mine (MDEA)	97.7
(1R,2S)- (-)-Ephedrine	3,125
METHAMPHETAMINE (MET50)	1
d-Methamphetamine	50
Fenfluramine	60,000
p-Hydroxymethamphetamine	400
Methoxyphenamine	25,000
3,4-Methylenedioxymethamphetamine (MDMA)	50
I-Phenylephrine	4,000
Procaine	2,000
(1R,2S)- (-) Ephedrine	400
1-Ephedrine	400
Mephentermine	800
(-) Deoxyephedrine, L-Methamphetamine	3,000
Ephedrine	800
4-Methylethcathinone hydrochloride	25,000
Ethylone hydrochloride	25,000
(+/-) 3,4-Methylenedioxy-n-ethylamphetamine(MDEA)	100
(+/-)-Methylenedioxyamphetamine(MDA)	25,000
D,L-Methamphetamine	4,000
(±)-Amphetamine	10,000
Acetylsalicylic	4,000
Chlorothiazide	25,000
R(-)-Methamphetamine	400
METHAQUALONE (MQL100)	
Methaqualone	100
METHADONE (MTD30)	1
Methadone	30
Promethazine	30,000
PCP(Phencyclidine)	5,000
Levorphanol	10,000
·	
Disopyramide	1,000

Drug Compound	Concentration (ng/mL)
HEROIN (6-MAM10)	
6-Monoacetylmorphine (6-MAM)	10
Codeine	>600,000
Morphine	>550,000
Heroin	250
Diethylstilbestrol	70,000
Trimethoprim	50,000
OPIATE (OPI40)	30,000
Morphine	40
Codeine	10
Ethyl morphine	24
Hydromorphone	100
Hydrocodone	100
Levorphanol	400
Oxycodone	25,000
Morphine 3-β-d-glucuronide	50
Norcodeine	1,500
Normorphine	12,500
Nalorphine	10,000
Oxymorphone	25,000
Thebaine	1,500
Diacetylmorphine (Heroin)	50 25
6-Monoacetylmorphine (6-MAM) Bilirubin	3,500
OXYCODONE (OXY20)	3,300
Oxycodone	20
Dihydrocodeine HCL	3,125
Gatifloxacin	25,000
Hydrocodone	1,562.5
Hydromorphone	781.25
Heroin	12,500
Oxymorphone-D3	390.6
Oxymorphone	48.8
Naltrexone hydrochloride	3,125
PHENCYCLIDINE (PCP10)	T .a
Phencyclidine	10
Tetrahydrozoline	50,000
PROPOXYPHENE (PPX50)	50
Propoxyphene (PPX) D-Norpropoxyphene	200
TRICYCLIC ANTIDEPRESSANTS (TCA100)	200
Nortriptyline	100
Amitriptyline	250
Clomipramine	5,000
Desipramine	20
Doxepin	30
Imipramine	2,000
Maprotiline	10,000
Nordoxepin	1,500
Promazine	6,000
Promethazine	500
Trimipramine	5,000
Cyclobenzaprine Hydrochloride	500
Norclomipramine	5,000
MARIJUANA METABOLITE (THC12)	10
11-nor-Δ ⁹ -THC-9 COOH Cannabinol	12
Carmadilloi	31,500

Drug Compound	Concentration (ng/mL)
11-nor-Δ ⁸ -THC-9 COOH	2
Δ ⁸ -THC	6,000
Δ ⁹ -THC	20,000
MARIJUANA (THC40)	
Δ ⁹ -Tetrahydrocannabinol	40
Δ ⁸ -Tetrahydrocannabinol	80
11-nor-Δ ⁹ -THC-9 COOH	4
11-hydroxy-Δ ⁹ -THC	45
Cannabinol	200
Cannabidiol (CBD)	2,200
11-Nor-Δ ⁹ -THC-carboxy-glucuronide	60
(+)-11-nor-9-carboxy-Δ ⁹ -THC	50
11-nor-Δ ⁸ -THC-9-COOH	20
8-beta-11-dihydroxy-Δ ⁹ -THC	200
8-beta-hydroxy-Δ ⁹ -THC	200
Exo-THC	75
I-11-Nor-Δ ⁹ -THC-9-Carboxylic Acyl-Glucuronide	15
Δ ⁸ -THC Carboxylic Acid	20
Δ ⁹ -THC Carboxylic Acid	4

Interference

A study was conducted to determine the cross-reactivity of the UScreen $^{T\!M}$ Oral Cube with compounds spiked into drug-free PBS stock. The following compounds demonstrated no false positive results on the UScreen $^{T\!M}$ Oral Cube when tested at concentrations up to 100 $\mu g/mL$.

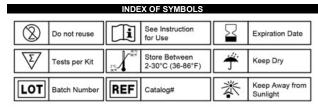
Non-Cross-Reacting Compounds

Acetaminophen	Diclofenac	Loperamide	d-Pseudoephedrine
Acetophenetidin	Dicyclomine	Meprobamate	Quinacrine
Acetylsalicylic acid	Diflunisal	Methylphenidate	Quinine
Aminopyrine	Digoxin	Naproxen	Quinidine
Amoxicillin	Diphenhydramine	Niacinamide	Salicylic acid
Ampicillin	β-Estradiol	Nifedipine	Sulfamethazine
Ascorbic acid	Ethyl-p- aminobenzoate	Nimesulide	Sulindac
Apomorphine	Erythromycin	Norethindrone	Tetracycline
Aspartame	Fenoprofen	Noscapine	Tetrahydrocortisone
Atropine	Furosemide	d, I-Octopamine	3-acetate
Benzilic acid	Gentisic acid	Oxalic acid	3 (β-d-glucuronide)
Benzoic acid	Hemoglobin	Oxolinic acid	Theophylline
Benzphetamine	Hydralazine	Oxymetazoline	Thiamine
Caffeine	Hydrochlorothiazide	Papaverine	Thioridazine
Chloral hydrate	Hydrocortisone	Penicillin-G	d, I-Tyrosine
Chloramphenicol	o-Hydroxyhippuric acid	dPentazocine	Tolbutamide
Chlorothiazide	β Hydroxynorephedrine	Perphenazine	Trazodone
d, I-Chlorpheniramine	5-Hydroxytryptamine	Phenelzine	Triamterene
Chlorpromazine	3-Hydroxytyramine	Trans-2-phenylcyclo-	Trifluoperazine
Chloroquine	Ibuprofen	propylamine	d, I-Tryptophan
Cholesterol	Iproniazid	Labetalol	Tyramine
Clonidine	(-) Isoproterenol	Phenylpropanolamine	Uric acid
Creatinine	Isoxsuprine	Prednisolone	Verapamil
Deoxycorticosterone	Ketoprofen	d, I-Propranolol	Zolpidem
Dextromethorphan	Nalidixic acid	Prednisone	

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