



T-Cup Multi-Drug Urine Test Cup

Catalogue No. See Box Label

The SAFElife™ T-Cup Multi-Drug Urine Test Cup contains competitive binding, lateral flow immunochromatographic assay, qualitative detection of 6-monoacetylmorphine, Amphetamine, Amphetamine, Sebacarbitol, Buprenorphine, Oxazepam, Cocaine, Cotinine, 2-ethylidene-15-dimethyl-3,3-diphenylpyrrolidine (EDDP), Ethyl Glucuronide, Fentanyl, Gabapentin, Hydromorphone, Synthetic Cannabinoids, Ketamine, Kratom, Lysergic acid diethylamide, Methylendioxyamphetamin, Methamphetamine, Methamphetamine, Methamphetamine, Phenylethylamine, Propoxyphene, Propoxyphene, Nortriptyline, Cannabinoids, Tramadol and Alcohol in human urine with below cutoff concentrations and approximate detection time:

Drug (Identifier)	Calibrator	Cut-off Level	Minimum Detection Time	Maximum Detection Time
6-Monoacetylmorphine (6-MAM)	6-Monoacetylmorphine	10 ng/mL	2 hours	8 hours
Amphetamine (AMPS00)	d-Amphetamine	300 ng/mL	2-7 hours	1-2 days
Amphetamine (AMPS00)	d-Amphetamine	500 ng/mL	2-7 hours	1-2 days
Amphetamine (AMPS00)	d-Amphetamine	1000 ng/mL	2-7 hours	1-2 days
Sebacarbitol (BAR)	Sebacarbitol	300 ng/mL	2-4 hours	1-4 days
Propoxyphene (BUP)	Propoxyphene	5 ng/mL	4 hours	3 days
Buprenorphine (BUP)	Buprenorphine	10 ng/mL	4 hours	3 days
Oxazepam (BZO100)	Oxazepam	100 ng/mL	2-7 hours	1-2 days
Oxazepam (BZO200)	Oxazepam	200 ng/mL	2-7 hours	1-2 days
Oxazepam (BZO300)	Oxazepam	300 ng/mL	2-7 hours	1-2 days
Cocaine (COC100)	Benzoylcoconine	100 ng/mL	1-4 hours	2-4 days
Cocaine (COC150)	Benzoylcoconine	150 ng/mL	1-4 hours	2-4 days
Cocaine (COC300)	Benzoylcoconine	300 ng/mL	1-4 hours	2-4 days
Cotinine (COT)	Cotinine	200 ng/mL	2-8 hours	1-7 days
EDDP100	2-ethylidene-15-dimethyl-3,3-diphenylpyrrolidine	100 ng/mL	3-8 hours	1-3 days
EDDP300	2-ethylidene-15-dimethyl-3,3-diphenylpyrrolidine	300 ng/mL	3-8 hours	1-3 days
Ethyl Glucuronide (EG100)	Ethyl Glucuronide	300 ng/mL	1-2 hours	Up to 3+ days
Ethyl Glucuronide (EG100)	Ethyl Glucuronide	500 ng/mL	1-2 hours	Up to 3+ days
Fentanyl (FTY)	Norfentanyl	20 ng/mL	1-4 hours	1-3 days
Gabapentin (GAB)	Gabapentin	2000 ng/mL	5-7 hours	Up to 2 days
Hydromorphone (HMO)	Hydromorphone	100 ng/mL	4-6 hours	1-2 days
Synthetic Cannabinoid (K2)	JWH-073 Butanoic Acid	50 ng/mL	8-12 hours	Up to 5+ days
Ketamine (KET300)	Ketamine	300 ng/mL	2-4 hours	2-3 days
Ketamine (KET1000)	Ketamine	1000 ng/mL	2-4 hours	2-3 days
Kratom (KRA100)	Mitragynine	100 ng/mL	7 hours	5-6 days
Kratom (KRA300)	Mitragynine	300 ng/mL	7 hours	5-6 days
Lysergic acid diethylamide (LSD)	Lysergic acid diethylamide	20 ng/mL	2 hours	Up to 5+ days
Methylendioxyamphetaminetamine (MDMA)	3,4-Methylendioxyamphetaminetamine (MDMA)	500 ng/mL	2-7 hours	2-4 days
Methamphetamine (MET300/mAMP300)	Di(-)-Methamphetamine	300 ng/mL	2-7 hours	2-4 days
Methamphetamine (MET500/mAMP500)	Di(-)-Methamphetamine	500 ng/mL	2-7 hours	2-4 days
Methamphetamine (MET1000/mAMP1000)	Di(-)-Methamphetamine	1000 ng/mL	2-7 hours	2-4 days
Morphine (MOP100/OP100)	Morphine	100 ng/mL	2 hours	2-3 days
Morphine (MOP300/OP300)	Morphine	300 ng/mL	2 hours	2-3 days
Methadone (MTD200)	Methadone	200 ng/mL	3-8 hours	1-3 days
Methadone (MTD300)	Methadone	300 ng/mL	3-8 hours	1-3 days
Methamphetamine (MQL)	Methamphetamine	300 ng/mL	6-8 hours	Up to 7+ days
Opiate (OPI)	Morphine	2000 ng/mL	2 hours	2-3 days
Oxycodone (OXY)	Oxycodone	100 ng/mL	4 hours	1-3 days
Phencyclidine (PCP)	Phencyclidine	25 ng/mL	4-6 hours	7-14 days
Pregabalin (PGB)	Pregabalin	500 ng/mL	8-10 hours	1-3 days
Propoxyphene (PPX)	Propoxyphene	200 ng/mL	2 hours	2-3 days
Nortriptyline (TCA)	Nortriptyline	1000 ng/mL	8-12 hours	2-7 days
Cannabinoids (THC15)	11-nor-Δ9-THC-9-COOH	15 ng/mL	2 hours	Up to 5+ days
Cannabinoids (THC25)	11-nor-Δ9-THC-9-COOH	25 ng/mL	2 hours	Up to 5+ days
Cannabinoids (THC40)	11-nor-Δ9-THC-9-COOH	40 ng/mL	2 hours	Up to 5+ days
Cannabinoids (THC50)	11-nor-Δ9-THC-9-COOH	50 ng/mL	2 hours	Up to 5+ days
Tramadol (TRA 100)	Tramadol	100 ng/mL	8-12 hours	3-7 days
Tramadol (TRA 200)	Tramadol	200 ng/mL	8-12 hours	3-7 days
Tramadol (TRA 1000)	Tramadol	1000 ng/mL	8-12 hours	3-7 days
Alcohol (ETOH)	Alcohol	0.04 g/dL	-	-

Configurations of the SAFElife™ T-Cup Multi-Drug Urine Test Cup can consist of any combination of the above listed drug analytes.

It is intended for forensic use only.

It is not intended to distinguish between prescription use or abuse of these drugs. Professional judgment should be applied to any drug of abuse test result, particularly in evaluating a preliminary positive result.

The tests provide only preliminary results. To obtain a confirmed analytical result, a more specific chemical method must be used. Chromatography/Mass Spectrometry (GC/MS) or Liquid Chromatography/Tandem Mass Spectrometry (LC/MS-MS) is the recommended confirmatory method.

WARNINGS AND PRECAUTIONS

- The test kit is for external use only.
- Discard after first use. The test kit cannot be used more than once.
- Do not use the test kit beyond expiration date.
- Do not use the test kit if the pouch is punctured or not well sealed.
- Keep out of the reach of children.

Approximate Alcohol Concentration

0.0 mg/100 mL	40 mg/100 mL	80 mg/100 mL	200 mg/100 mL
(0.04%)		(0.08%)	(0.2%)

STORAGE AND STABILITY

Store at 39°F–86°F (4°C–30°C) in the sealed pouch up to the expiration date. Keep away from direct sunlight, moisture and heat. DO NOT FREEZE.

SPECIMEN COLLECTION

WHEN TO COLLECT URINE FOR THE TEST?

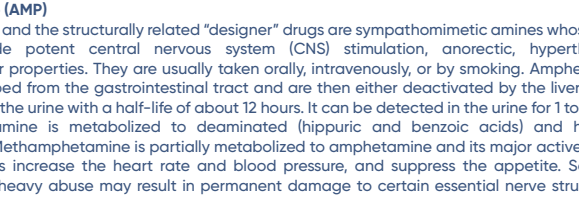
Collect urine specimen after minimum detection time following suspected drug use. Urine collection time is very important in detecting any drugs of abuse. Each drug is cleared by the body and is detected in the urine at different times and rates. Please refer to the minimum or maximum detection time of each drug in this instruction.

HOW TO COLLECT URINE?

- Remove the test cup from the foil pouch by tearing at the notch. Use it as soon as possible. Instruct the donor to remove the test cup and void directly into the test cup until reach the Minimum Urine Level mark (approximately 25 mL). It is acceptable to collect extra volume of urine. If insufficient specimen has been collected, instruct the donor to provide urine specimen again with another new test cup. Wipe off any splashes or spills that may be on the outside of the cup. It is recommended to wear gloves when handling the test cup with urine specimen.
- Observe the temperature strip affixed on the outside of the cup between 2 to 4 minutes after urine is voided into the cup. The temperature between 90°F–100°F (32°C–38°C) indicates the fresh uncontaminated specimen. If the temperature is out of this range, instruct the donor to provide urine specimen again with another new test cup.

TEST PROCEDURE

- Test should be performed at room temperature 65°F–86°F (18°C–30°C).
- After the urine has been collected properly, tighten the lid until an audible click is heard. Place the cup on a flat surface.
 - Shed off the label from the right to left.
 - For the adulteration(s) if equipped, read results immediately, or at 30 seconds, or at 45 seconds and compare each adulterant pad to verify pad color is within acceptable range according to the Adulteration Color Comparison Chart. If the results indicate adulteration, do not read the drug test results. Instruct the donor to provide another new test cup.
 - For the alcohol test, read the alcohol test result at 2 minutes. **Do not read results after 2 minutes.**
 - For the drug tests, read the drug test results at 5 minutes. **Do not read results after 5 minutes.**



Sebacarbitol (BAR)
Barbiturates are a class of central nervous system depressants. They have a wide range of half-life of 2 to 40 hours and can be detected in the urine for 1 to 4 days after use. Phenobarbital is a long acting barbiturate derivative that has been used as a daytime sedative and very extensively as an anxiolytic. Phenobarbital and sebacarbitol are two examples of a short acting barbiturate sedative. Abuse of barbiturates can lead not only to impaired motor coordination and mental disorder, but also to respiratory collapse, coma and even death. Barbiturates are taken orally, rectally, or by intravenous and intramuscular injections. Short-acting barbiturates will generally be excreted in urine as metabolites, while the long-acting barbiturates will primarily appear unchanged.

Buprenorphine (BUP)

Buprenorphine is a potent analgesic often used in the treatment of opioid addiction. The drug is sold under the trade names Subutex®, Buprenex®, Temgesic® and Suboxone®, all of which contain Buprenorphine HCl alone or in combination with Naloxone HCl. Therapeutically, Buprenorphine is used as a substitution treatment for opioid addicts. A 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 treatment, Buprenorphine is as effective as, or even more effective than, the lower level of physical dependence. 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 5 days, the detection window for the parent drug in urine is thought to be approximately 3 days.

Oxazepam (BZO)

Benzodiazepines are the most widely used anxiolytic drugs. They are used extensively as anti-anxiety agents, hypnotics, muscle relaxants and anti-convulsants. They are taken orally or sometimes by injection and have a wide range of half-life from 2 to 40 hours. They can generally be detected for 2 to 3 days after use. Benzodiazepines are metabolized in the liver. Some Benzodiazepines and their metabolites are excreted in the urine. Their use can result in drowsiness and/or confusion. Benzodiazepines potentiate alcohol and other CNS depressants. Psychological and physical dependence on benzodiazepines can develop if high doses of the drug are given over a prolonged period.

Cocaine (COC)

Cocaine derived from leaves of coca plant, is a potent central nervous system stimulant and a local anesthetic. Among the psychological effects induced by using cocaine are euphoria, alertness, and a sense of increased energy accompanied by increased heart rate, dilation of the pupils, fever, tremors and sweating. Cocaine is excreted in urine primarily as benzoylecgonine in a short period of time.

Cotinine (COT)

Cotinine is an alkaloid found in tobacco and is also a major metabolite of Nicotine, which produces stimulation of the autonomic ganglia and central nervous system when in humans. Nicotine is found in tobacco products such as cigarettes, tobacco chew, and nicotine patches or gums. It is an addictive substance and is poisonous in a large amount. In addition to addiction, some of the other substances within tobacco products, such as carbon monoxide or tar, are dangerous to the body and can lead to medical conditions such as emphysema, lung cancer, and heart disease. In a 24-hour urine, approximately 5% of a nicotine dose is excreted as unchanged drug with 10% as cotinine and 35% as hydroxycotinine, the concentrations of other metabolites are believed to account for less than 5%. While Cotinine is thought to be an inactive metabolite, its elimination profile is more stable than that of Nicotine which is largely urine pH dependent. Cotinine is stable in body fluids and has a relatively long half-life of approximately 17 hours, and is typically detected for several days (up to one week) after the use of tobacco, therefore the detection of Cotinine is less dependent on the time of sampling than that of Nicotine. Nicotine and Cotinine are rapidly eliminated by the kidney; the window of detection for cotinine in urine at a cutoff level of 200 ng/mL is expected to be up to 2–3 days after nicotine use.

Negative (-)

A distinct color developed all over the pad. The positive result indicates that the concentration of ethyl alcohol in urine is 0.04% or higher.

EDDP

EDDP (2-ethylidene-1,5-dimethyl-3,3-diphenylpyrrolidine) is the primary metabolite of methadone. Methadone is a synthetic analgesic drug that is originally used in the treatment of narcotic addicts. The detection of EDDP is more beneficial than traditional methadone screening since EDDP exists only in urine from individuals that ingested methadone. The tampering of specimens by spiking the urine with methadone can be prevented. Secondly, renal clearance of EDDP is not affected by urinary pH, therefore EDDP detection test provides a more accurate result of methadone ingestion than the methadone parent screening.

Ethyl Glucuronide (EG)

Ethyl Glucuronide is a direct metabolite of alcohol. Presence in urine may be used to detect recent alcohol intake, even after alcohol is no longer measurable. Traditional laboratory methods detect the actual alcohol in the body, which reflects current intake within the past few hours (depending on how much was consumed). The presence of EG in urine is a definitive indicator that it can be detected in the urine for 3 to 40 hours after alcohol intake. The detection of Ethyl Glucuronide in urine is a sensitive and specific indicator of the recent intake of alcohol than measuring for the presence of alcohol itself. The EG test can aid in the diagnosis of drunk driving and alcoholism, which has important significance in the forensic identification and medical examination.

Fentanyl (FTY)

Fentanyl is a potent, synthetic narcotic analgesic with a rapid onset and short duration of action. It was first synthesized by Janssen Pharmaceutica (Belgium) in the late 1950s, and it is approximately 100 times more potent than morphine. Fentanyl is a strong agonist of the μ -opioid receptors. Historically it has been used to treat breakthrough pain and is commonly used in pre-operative and post-operative pain relief as an anesthetic in combination with a benzodiazepine. Fentanyl is frequently given intrathecally as part of spinal anesthesia or epidurally for epidural anesthesia and analgesia.

Gabapentin (GAB)

Gabapentin (GAB), sold under the brand name Neurontin, is a medication used to treat epilepsy, neuropathic pain, hot flashes, and restless legs syndrome. In epilepsy, it may be used for those with partial seizures. It is recommended as one of a number of first-line medications for the treatment of neuropathic pain. It is used to treat neuropathic pain, central neuropathic pain, and central neuropathic pain. It is also used to relieve nerve pain following shingles (a painful rash due to herpes zoster infection) in adults. The most common side effects of gabapentin include dizziness, fatigue, drowsiness, ataxia, peripheral edema (swelling of extremities), myalgia, and tremor. Serious side effects may include an increased risk of suicide, aggressive behavior, and drug reaction with eosinophilia and systemic symptoms.

Hydromorphone (HMO)

Hydromorphone, also known as dihydromorphone or dihydromorphone, is a semi-synthetic strong opioid analgesic. It is similar to morphine, but it is more potent and has a shorter duration of action. Its side effects are lighter than morphine. It is mainly used for relieving medium-intensity pain caused by cancer, postoperative and soft tissue trauma.

Synthetic cannabinoids (K2)

Synthetic cannabinoids are psychoactive designer drugs derived of natural herbs sprayed with synthetic chemicals that, when consumed, allegedly mimic the effects of cannabis. It is best known by the brand names K2 and Spice. Synthetic cannabinoids act on the body in a similar way to cannabinoids naturally found in cannabis, such as THC. Although synthetic cannabinoids do not have the same psychoactive results in drug tests for cannabis, it is possible to detect its metabolites in human urine.

Ketamine (KET)

Ketamine is a sort of medical sedative. The principal metabolites are norketamine. Smoking, manufacturing, sweating, and dissolving into drink or alcohol are the primary method of use of ketamine. Ketamine is usually administered in combination with heroin, marijuana etc. for the relief of moderate to severe pain. Overdose may cause central nervous system effects, do harm to liver and kidney, and even cause death. Ketamine is liver metabolized in humans. About 70% ketamine is excreted in urine, and 30% original drugs are excreted in the urine. They can generally be detected for 2 to 4 hours after ketamine use.

Kratom (KRA)

Kratom (Mitragyna speciosa) is a plant indigenous to Thailand and Southeast Asia. Kratom leaves produce kratom alkaloids and opioid-like analgesic effects. In Asia, it is often used to stave off fatigue and to manage pain, diarrhea, cough, and opioid withdrawal. Recently, kratom has become widely available in the United States and Europe by means of smoke shops and the Internet. The clinical manifestations of kratom are not well defined and studies are limited, but its safety profile has become a national and international concern, primarily due to the risk of increased dependence in hospital visits, increased hepatic injury, seizures, coma, and death. The main active ingredients include Mitragynine and 7-Hydroxymitragynine, which can be detected in urine up to 72 hrs (1–3).

Lysergic acid diethylamide (LSD)

Lysergic acid diethylamide (LSD) is a white powder or colorless liquid that is a strong semi artificial hallucinogen. LSD is manufactured from Lysergic acid which occurs naturally in the ergot fungus that grows on wheat and rye. It is a schedule I controlled substance, available in liquid, Powder, tablets (microdots), capsules, and pills. LSD is a non-selective 5-HT agonist, may exert its effects at a lower level of physical dependence. LSD is a non-selective 5-HT agonist, may exert its effects at a lower level of physical dependence. 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 5 days, the detection window for the parent drug in urine is thought to be approximately 3 days.

Methylenedioxyamphetaminetamine (MDMA)

Methylenedioxyamphetaminetamine (ecstasy) is a designer drug first synthesized in 1946 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 peripheral vasoconstriction in the form of increased sensitivity to light, difficulty in focusing, and blurred vision. 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 take a reasonable dose of the drug, was to produce a clenching of the jaws.

Methamphetamine (MET/mAMP)

Methamphetamine is a potent sympathomimetic agent with therapeutic applications. Acute higher doses produce a euphoric state, which can generally be detected for 2 to 40 hours after use. Methamphetamine is a potent sympathomimetic agent with therapeutic applications. Acute higher doses produce a euphoric state, which can generally be detected for 2 to 40 hours after use. Methamphetamine is a potent sympathomimetic agent with therapeutic applications. Acute higher doses produce a euphoric state, which can generally be detected for 2 to 40 hours after use.

Morphine (MOP/OP)

The opiates such as heroin, morphine, and codeine are derived from the resin of opium poppy. The principal metabolites of opiates are morphine, morphine-3-glucuronide morphine and morphine with a half-life of about 3 hours. Heroin is quickly metabolized to morphine. Thus, morphine and morphine glucuronide might both be found in the urine of a person who has taken only heroin. The body also changes codeine to morphine. Thus, the presence of morphine (or the metabolite, morphine glucuronide) in the urine indicates heroin, morphine or codeine use. The test for Morphine (MOP300/OP300) of the SAFElife™ T-Cup Multi-Drug Urine Test Cup yields a positive result when the morphine in urine exceeds 300 ng/mL.

Methadone (MTD)

Methadone is a synthetic analgesic drug that is originally used in the treatment of narcotic addicts. Among the psychological effects induced by using methadone are analgesia, sedation and respiratory depression. Overdose of methadone may cause coma or even death. It is administered orally or intravenously and is metabolized in the liver and excreted in urine as methadone, EDDP, EMDA and methadol. The kidneys are a major route of methadone excretion. Methadone has a biological half-life of 15 to 40 hours.

Methaqualone (MQL)

Methaqualone is a sedative that falls outside the benzodiazepine and barbiturate classes. It was once a popular pharmaceutical and recreational drug, but its current use is largely relegated to Africa, particularly

South Africa

Because it faced few restrictions when it first entered the market, the drug was widely prescribed and perceived as uniquely safe. We now know methaqualone can be used recreationally and has caused physical and psychological dependence. A lot of love exists around the effects. In reality, it's not a massively useful substance and it can be compared to barbiturates, ethanol, carisoprodol, and meprobamate. Methaqualone is a sedative that increases the activity of the GABA receptors in the brain and nervous system. When GABA activity is increased, blood pressure drops and the breathing and pulse rates slow, leading to a state of deep relaxation. These properties explain why methaqualone was originally prescribed for insomnia. Methaqualone peaks in the bloodstream within several hours, with a half-life of 20–60 hours. Regular users build up a physical tolerance, requiring larger doses for the same effect. Overdose can lead to nervous system shutdown, coma and death.

Opiate (OPI)

Opiate refers to any drug that is derived from the opium poppy, including the natural products, morphine and codeine, and the semi-synthetic drugs such as heroin. Opioid is more general, referring to any drug that binds to the opioid receptors. The detection of Ethyl Glucuronide in urine is a sensitive and specific indicator of the recent intake of alcohol than measuring for the presence of alcohol itself. The EG test can aid in the diagnosis of drunk driving and alcoholism, which has important significance in the forensic identification and medical examination.

Oxycodone (OXY)

Oxycodone is known as Oxycortin and Roxicodone. It is an ingredient of Percodan, Percocet, Roxicet and Tylox. Oxycodone is a semi-synthetic opiate derived from opium. Like other opiates, Oxycodone is characterized by its analgesic properties, and the tendency for users to form a physical dependency and develop tolerance with extended use. Oxycodone is usually administered in combination with non-opiate analgesics such as acetaminophen and salicylates for the relief of moderate to severe pain. Oxycodone is a central nervous system depressant that may cause drowsiness, dizziness, lethargy, weakness and confusion. Toxicity in an overdose of Oxycodone can lead to stupor, coma, muscle flaccidity, severe respiratory depression, hypotension, and cardiac arrest. Oxycodone is metabolized by N- and O-demethylation. One of the metabolites, oxycodone, is a potent narcotic analgesic, while the other, oxycodone, is relatively inactive. Oxycodone is excreted in urine as oxycodone and its metabolites. Other urine collection and consists of 13–19% free Oxycodone, 7–29% glucuronide conjugated Oxycodone, 13–14% glucuronide conjugated oxycodone and an unknown amount of noroxycodone. The detection time window of Oxycodone is 1–3 days following use.

Phencyclidine (PCP)

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, ataxia, and in severe cases, coma and death. It is also used to relieve pain. It is a potent narcotic analgesic, while the other, oxycodone, is relatively inactive. Oxycodone is excreted in urine as oxycodone and its metabolites. Other urine collection and consists of 13–19% free Oxycodone, 7–29% glucuronide conjugated Oxycodone, 13–14% glucuronide conjugated oxycodone and an unknown amount of noroxycodone. The detection time window of Oxycodone is 1–3 days following use.

Pregabalin (PGB)

Pregabalin is an analogue of γ -aminobutyric acid (GABA), which is similar to gabapentin in structure and function. It is used to treat neuropathic pain, anxiety, and other conditions. It is a potent narcotic analgesic, while the other, oxycodone, is relatively inactive. Oxycodone is excreted in urine as oxycodone and its metabolites. Other urine collection and consists of 13–19% free Oxycodone, 7–29% glucuronide conjugated Oxycodone, 13–14% glucuronide conjugated oxycodone and an unknown amount of noroxycodone. The detection time window of Oxycodone is 1–3 days following use.

Propoxyphene (PPX)

Propoxyphene, a synthetic opiate agonist, is structurally similar to methadone. Propoxyphene is a narcotic analgesic used to relieve mild to moderate pain. The principal metabolites are norendropropoxyphene. The combination usage of propoxyphene, aspirin, acetaminophen or other sedatives can lead cooperative cause death. Ketamine is liver metabolized in humans. About 70% ketamine is excreted in urine, and 30% original drugs are excreted in the urine. They can generally be detected for 2 to 4 hours after ketamine use.

Nortriptyline (TCA)

TCA (Tricyclic Antidepressants) are commonly used for the treatment of depressive disorders. TCA overdoes 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 intravenously. They can generally be detected for 2 to 4 hours after ketamine use.

Cannabimimetics (THC)

Cannabimimetics are hallucinogenic agents derived from the flowering portion of the hemp plant. The active ingredients in Cannabinoids, THC & Cannabinol can be metabolized and excreted as 11-nor-Δ9-tetrahydrocannabinol-9-carboxylic acid with a half-life of 24 hours. They can be detected for 1 to 5 days after use. Smoking is the primary method of use of Cannabinoids/cannabis. Higher doses used by abusers produce a euphoric state, which can generally be detected for 2 to 40 hours after use. Methamphetamine is a potent sympathomimetic agent with therapeutic applications. Acute higher doses produce a euphoric state, which can generally be detected for 2 to 40 hours after use.

Tramadol (TRA)

Tramadol (2-(dimethylaminoethyl)-1-(3-methoxyphenyl) cyclohexanol) is used similarly to codeine, to treat moderate to moderately severe pain. It is a synthetic analog of the phenanthrene alkaloid codeine and, as such, is an opiate and also a prodrug (codeine is metabolized to morphine, tramadol is converted to O-desmethyltramadol). Tramadol and its metabolites are excreted primarily in the urine with observed plasma half-lives of 6.3 and 74 hours for tramadol and O-desmethyltramadol (denoted M1), respectively. Approximately 30% of the dose is excreted in the urine as unchanged drug, whereas 60% of the dose is excreted as metabolites.

Alcohol (ETOH)

Alcohol test is intended for use to detect the presence of alcohol in urine greater than 0.04%. Alcohol intoxication can lead to loss of alertness, coma, death and as well as birth defects. The BAC at which a person becomes impaired is variable. The United States Department of Transportation (DOT) has established a BAC of 0.02% (0.02 g/dL) as the cut-off level at which an individual is considered positive for the presence of alcohol. Since the urine alcohol concentration is normally higher than that in saliva and blood, a urine alcohol concentration of 0.04% is equivalent to a blood alcohol concentration of 0.02%. Normally, it will take at least 30 minutes for the alcohol to be detected in saliva, blood and urine after drinking.

PRINCIPLE

The SAFElife™ T-Cup Multi-Drug Urine Test Cup is a competitive immunoassay that is used to screen for the presence of drugs of abuse in urine. It is a chromatographic absorbent device in which drugs in a sample competitively combine to a limited number of drug monoclonal antibody (mouse) conjugate binding sites.

When the absorbent and is immersed into urine specimen, the urine is absorbed into the device by capillary action, mixes with the respective drug monoclonal antibody conjugate, and flows across the pre-coated membrane. When sample drug levels are zero or below the target cutoff (the detection sensitivity of the test), respective drug monoclonal antibody conjugate binds to the respective drug-protein conjugate immobilized in the Test Region (T) of the device. This produces a colored band in the Test Region (T) that, regardless of its intensity, indicates a negative result.

When sample drug levels are at or above the target cutoff, the free drug in the sample binds to the respective drug monoclonal antibody conjugate, preventing the respective drug monoclonal antibody conjugate from binding to the respective drug-protein conjugate immobilized in the Test Region (T) of the device. This prevents the development of a distinct colored band in the Test Region (T), indicating a potentially positive result.

To serve as a procedure control, a colored band will appear at the Control Region (C), where the Goat anti mouse IgG polyclonal antibody immobilized in, if the test has been performed properly.

QUALITY CONTROL

South Africa

Because it faced few restrictions when it first entered the market, the drug was widely prescribed and perceived as uniquely safe. We now know methaqualone can be used recreationally and has caused physical and psychological dependence. A lot of love exists around the effects. In reality, it's not a massively useful substance and it can be compared to barbiturates, ethanol, carisoprodol, and meprobamate. Methaqualone is a sedative that increases the activity of the GABA receptors in the brain and nervous system. When GABA activity is increased, blood pressure drops and the breathing and pulse rates slow, leading to a state of deep relaxation. These properties explain why methaqualone was originally prescribed for insomnia. Methaqualone peaks in the bloodstream within several hours, with a half-life of 20–60 hours. Regular users build up a physical tolerance, requiring larger doses for

[100]	A	+	10	20	8	0	0	95% (79.5% - 100%)
	Viewer	-	10	20	9	1	19	20 97.5% (84.5% - 100%)
	B	-	10	20	9	0	0	97.5% (79.5% - 100%)
	Viewer	-	10	20	1	18	20	95% (84.5% - 100%)
TRA (200)	C	+	10	20	9	2	0	97.5% (82% - 100%)
	Viewer	+	0	0	2	19	21	100% (84.5% - 100%)
	A	-	10	20	8	0	0	95% (79.5% - 100%)
	Viewer	+	0	0	1	20	0	95% (79.5% - 100%)
TRA (1000)	B	-	10	20	8	0	0	95% (79.5% - 100%)
	Viewer	-	10	20	9	0	0	97.5% (82% - 100%)
	A	-	10	20	9	0	0	97.5% (84.5% - 100%)
	Viewer	-	10	20	1	19	20	95% (79.5% - 100%)
Precision and Sensitivity	C	+	0	0	1	18	20	95% (84.5% - 100%)
	Viewer	-	10	20	9	2	0	97.5% (82% - 100%)
	A	-	10	20	8	0	0	95% (79.5% - 100%)
	Viewer	-	10	20	9	2	0	97.5% (82% - 100%)

To investigate the precision and sensitivity, each drug sample was analyzed at the following concentrations: cutoff -100%, cutoff -75%, cutoff -50%, cutoff -25%, cutoff +25%, cutoff +50%, cutoff +75% and the cutoff +100%. All concentrations were confirmed with GC-MS. The study was performed 2 runs /day and lasted 25 days using three different lots of the corresponding drug test. Totally 3 operators participated in the study of the corresponding drug test. Each of the 3 operators tests 2 aliquots at each concentration for each lot per day (2 runs/day), for a total of 50 determinations per concentration per lot of the corresponding drug test.

Drug Test	Approximate Concentration of Sample (ng/mL)	Number of Determinations per Lot	Results		
			Negative	Positive	
6-MAM	2.5	50	50/0	50/0	50/0
	5	50	50/0	50/0	50/0
	7.5	50	47/3	48/2	47/3
	10	50	4/46	5/45	6/44
	12.5	50	2/48	2/48	2/48
	15	50	0/50	0/50	0/50
	17.5	50	0/50	0/50	0/50
	20	50	0/50	0/50	0/50
	22.5	50	0/50	0/50	0/50
	25	50	0/50	0/50	0/50
AMP (300)	2.5	50	50/0	50/0	50/0
	5	50	50/0	50/0	50/0
	7.5	50	50/0	50/0	50/0
	10	50	50/0	50/0	50/0
	12.5	50	50/0	50/0	50/0
	15	50	50/0	50/0	50/0
	17.5	50	50/0	50/0	50/0
	20	50	50/0	50/0	50/0
	22.5	50	50/0	50/0	50/0
	25	50	50/0	50/0	50/0
AMP (500)	2.5	50	50/0	50/0	50/0
	5	50	50/0	50/0	50/0
	7.5	50	50/0	50/0	50/0
	10	50	50/0	50/0	50/0
	12.5	50	50/0	50/0	50/0
	15	50	50/0	50/0	50/0
	17.5	50	50/0	50/0	50/0
	20	50	50/0	50/0	50/0
	22.5	50	50/0	50/0	50/0
	25	50	50/0	50/0	50/0
AMP (1000)	2.5	50	50/0	50/0	50/0
	5	50	50/0	50/0	50/0
	7.5	50	50/0	50/0	50/0
	10	50	50/0	50/0	50/0
	12.5	50	50/0	50/0	50/0
	15	50	50/0	50/0	50/0
	17.5	50	50/0	50/0	50/0
	20	50	50/0	50/0	50/0
	22.5	50	50/0	50/0	50/0
	25	50	50/0	50/0	50/0
BAR	2.5	50	50/0	50/0	50/0
	5	50	50/0	50/0	50/0
	7.5	50	50/0	50/0	50/0
	10	50	50/0	50/0	50/0
	12.5	50	50/0	50/0	50/0
	15	50	50/0	50/0	50/0
	17.5	50	50/0	50/0	50/0
	20	50	50/0	50/0	50/0
	22.5	50	50/0	50/0	50/0
	25	50	50/0	50/0	50/0
BUP (5)	2.5	50	50/0	50/0	50/0
	5	50	50/0	50/0	50/0
	7.5	50	50/0	50/0	50/0
	10	50	50/0	50/0	50/0
	12.5	50	50/0	50/0	50/0
	15	50	50/0	50/0	50/0
	17.5	50	50/0	50/0	50/0
	20	50	50/0	50/0	50/0
	22.5	50	50/0	50/0	50/0
	25	50	50/0	50/0	50/0
BUP (10)	2.5	50	50/0	50/0	50/0
	5	50	50/0	50/0	50/0
	7.5	50	50/0	50/0	50/0
	10	50	50/0	50/0	50/0
	12.5	50	50/0	50/0	50/0
	15	50	50/0	50/0	50/0
	17.5	50	50/0	50/0	50/0
	20	50	50/0	50/0	50/0
	22.5	50	50/0	50/0	50/0
	25	50	50/0	50/0	50/0
BZO (100)	2.5	50	50/0	50/0	50/0
	5	50	50/0	50/0	50/0
	7.5	50	50/0	50/0	50/0
	10	50	50/0	50/0	50/0
	12.5	50	50/0	50/0	50/0
	15	50	50/0	50/0	50/0
	17.5	50	50/0	50/0	50/0
	20	50	50/0	50/0	50/0
	22.5	50	50/0	50/0	50/0
	25	50	50/0	50/0	50/0
BZO (200)	2.5	50	50/0	50/0	50/0
	5	50	50/0	50/0	50/0
	7.5	50	50/0	50/0	50/0
	10	50	50/0	50/0	50/0
	12.5	50	50/0	50/0	50/0
	15	50	50/0	50/0	50/0
	17.5	50	50/0	50/0	50/0
	20	50	50/0	50/0	50/0
	22.5	50	50/0	50/0	50/0
	25	50	50/0	50/0	50/0
BZO (1000)	2.5	50	50/0	50/0	50/0
	5	50	50/0	50/0	50/0
	7.5	50	50/0	50/0	50/0
	10	50	50/0	50/0	50/0
	12.5	50	50/0	50/0	50/0
	15	50	50/0	50/0	50/0
	17.5	50	50/0	50/0	50/0
	20	50	50/0	50/0	50/0
	22.5	50	50/0	50/0	50/0
	25	50	50/0	50/0	50/0
K2 JWH-018	2.5	50	50/0	50/0	50/0
	5	50	50/0	50/0	50/0
	7.5	50	50/0	50/0	50/0
	10	50	50/0	50/0	50/0
	12.5	50	50/0	50/0	50/0
	15	50	50/0	50/0	50/0
	17.5	50	50/0	50/0	50/0
	20	50	50/0	50/0	50/0
	22.5	50	50/0	50/0	50/0
	25	50	50/0	50/0	50/0

BZO (300)	400	50	0/50	0/50	0/50
	0	50	50/0	50/0	50/0
	75	50	50/0	50/0	50/0
	150	50	50/0	50/0	50/0
	225	50	50/0	50/0	50/0
	300	50	6/44	5/45	6/44
	375	50	0/50	0/50	0/50
	450	50	0/50	0/50	0/50
	525	50	0/50	0/50	0/50
	600	50	0/50	0/50	0/50
COC (100)	400	50	0/50	0/50	0/50
	0	50	50/0	50/0	50/0
	25	50	50/0	50/0	50/0
	50	50	50/0	50/0	50/0
	75	50	50/0	50/0	50/0
	100	50	4/46	4/46	3/47
	125	50	0/50	0/50	0/50
	150	50	0/50	0/50	0/50
	175	50	0/50	0/50	0/50
	200	50	0/50	0/50	0/50
COC (150)	400	50	0/50	0/50	0/50
	0	50	50/0	50/0	50/0
	25	50	50/0	50/0	50/0
	50	50	50/0	50/0	50/0
	75	50	50/0	50/0	50/0
	100	50	50/0	50/0	50/0
	125	50	50/0	50/0	50/0
	150	50	50/0	50/0	50/0
	175	50	50/0	50/0	50/0
	200	50	50/0	50/0	50/0
COC (300)	400	50	0/50	0/50	0/50
	0	50	50/0	50/0	50/0
	25	50	50/0	50/0	50/0
	50	50	50/0	50/0	50/0
	75	50	50/0	50/0	50/0
	100	50	50/0	50/0	50/0
	125	50	50/0	50/0	50/0
	150	50	50/0	50/0	50/0
	175	50	50/0	50/0	50/0
	200	50	50/0	50/0	50/0
COT (200)	400	50	6/44	4/46	5/45
	0	50	50/0	50/0	50/0
	25	50	50/0	50/0	50/0
	50	50	50/0	50/0	50/0
	75	50	50/0	50/0	50/0
	100	50	50/0	50/0	50/0
	125	50	50/0	50/0	50/0
	150	50	50/0	50/0	50/0
	175	50	50/0	50/0	50/0
	200	50	50/0	50/0	50/0
EDDP (100)	400	50	50/0	50/0	50/0
	0	50	50/0	50/0	50/0
	25	50	50/0	50/0	50/0
	50	50	50/0	50/0	50/0
	75	50	50/0	50/0	50/0
	100	50	50/0	50/0	50/0
	125	50	50/0	50/0	50/0
	150	50	50/0	50/0	50/0
	175	50	50/0	50/0	50/0
	200	50	50/0	50/0	50/0
EDDP (300)	400	50	50/0	50/0	50/0
	0	50	50/0	50/0	50/0
	25	50	50/0	50/0	50/0
	50	50	50/0	50/0	50/0
	75	50	50/0	50/0	50/0
	100	50	50/0	50/0	50/0
	125	50	50/0	50/0	50/0
	150	50	50/0	50/0	50/0
	175	50	50/0	50/0	50/0
	200	50	50/0	50/0	50/0
EG (300)	400	50	50/0	50/0	50/0
	0	50	50/0	50/0	50/0
	25	50	50/0	50/0	50/0
	50	50	50/0	50/0	50/0
	75	50	50/0	50/0	50/0
	100	50	50/0	50/0	50/0
	125	50	50/0	50/0	50/0
	150	50	50/0	50/0	50/0
	175	50	50/0	50/0	50/0
	200	50	50/0	50/0	50/0
EG (500)	400	50	50/0	50/0	50/0
	0	50	50/0	50/0	50/0
	25	50	50/0	50/0	50/0
	50	50	50/0	50/0	50/0
	75	50	50/0	50/0	50/0