

Instruction Sheet for testing of individual drugs or any combination of the following drugs:

6-MAM/AMP/BAR/BUP/BZO/ACL/COC/COT/EDDP/ETG/FYL/GAB/K2/K2+/KET/KRA/LSD/M DMA/MDPV/MET/MOP/MPD/MQL/MTD/OPI/OXY/PCP/PGBPPX/TCA/THC/TML/ZOL/ZOP/AL C

Including Specimen Validity Tests (S.V.T.) for:

Oxidants/PCC, Specific Gravity, pH, Nitrite, Glutaraldehyde and Creatinine

A Rapid Test for the simultaneous, qualitative detection of related drugs and drug metabolites in human urine. For healthcare professionals including professionals at point of care sites. Immunoassay for invitro diagnostic use only.

【INTENDED USE】

The Drug Rapid Test is a rapid chromatographic immunoassay for the qualitative detection of multiple drugs and drug metabolites in the following cut-off concentrations:

Test	Calibrator	Cut-off (ng/mL)
6-Monoacetylmorphine(6-MAM)	6-Monoacetylmorphine	10
Amphetamine (AMP)	d-Amphetamine	1,000/500/300
Barbiturates (BAR)	Secobarbital	300/200
Buprenorphine (BUP)	Buprenorphine	10
Benzodiazepines (BZO)	Oxazepam	500/300/200/100
Clonazepam (CLO/ACL)	7-Aminoclonazepam	100
Cocaine (COC)	Benzoylcegonine	300/150/100
Cotinine (COT)	Cotinine	200/100
2-ethylidene-1,5-dimethyl-3,3-diphenylpyrrolidine (EDDP)	2-ethylidene-1,5-dimethyl-3,3-diphenylpyrrolidine	300/100
Ethyl Glucuronide (ETG)	Ethyl Glucuronide	500
Fentanyl (FYL)	Norfentanyl	20/10
Gabapentin (GAB)	Gabapentin	2,000
Synthetic Marijuana (K2)	JWH-018 5-Pentanoic acid metabolite	50/30
AB-PINACA (K2+)	AB-PINACA pentanoic acid metabolite	10
Ketamine (KET)	Ketamine	1,000/500/300
Kratom (KRA)	Mitragynine	100
Lysergic acid diethylamide (LSD)	Lysergic acid diethylamide	50
Methylenedioxyamphetamin (MDMA)/Ecstasy	d,l-Methylenedioxyamphetamin	1,000/500
3,4-methylenedioxypropylvalerone (MDPV)	3,4-methylenedioxypropylvalerone	3,000/1,000
Methamphetamine (MET)	d-Methamphetamine	1,000/500/300
Morphine (MOP/OPI)	Morphine	300/200/100
Methylphenidate (MPD)	Methylphenidate	150
Methaqualone (MQL)	Methaqualone	300
Methadone (MTD)	Methadone	300/200
Opiate (OPI)	Morphine	2,000/1,000
Oxycodone (OXY)	Oxycodone	100
Phencyclidine (PCP)	Phencyclidine	25
Pregabalin (PGB)	Pregabalin	2,000/700/500
Propoxyphene (PPX)	Propoxyphene	300

Tricyclic Antidepressants (TCA)	Nortriptyline	1,000/500
Marijuana (THC)	11-nor- Δ^9 -THC-9 COOH	150/50/25/20/600
Tramadol (TML/TRA)	Tramadol	300/100
Zolpidem (ZOL)	Zolpidem Phenyl-4-carboxylic acid	50
Zopiclone (ZOP)	Zopiclone	50
Alcohol (ALC)	ALC	40mg/dL

Configurations of the Drug Rapid Test come with any combination of the above listed drug analytes with or without adulteration test. 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), 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 method^{1,2,3}. Clinical consideration and professional judgment should be applied to any drug of abuse test result, particularly when preliminary positive results are indicated.

[SUMMARY]

The Drug Rapid Test is a rapid urine 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 urine.

6-Monoacetylmorphine(6-MAM)

6-Monoacetylmorphine (6-MAM) or 6-Acetylmorphine (6-AM) 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 excreted in the urine. 6-MAM remains in the urine for no more than 24 hours. The best detection time was 2-8 hours after taking heroin. So a urine specimen must be collected soon after the last heroin use, but the presence of 6-MAM guarantees that heroin was in fact used as recently as within the last day. 6-MAM is naturally found in the brain, but in such small quantities that detection of this compound in urine virtually guarantees that heroin has recently been consumed.

Amphetamine (AMP)

Amphetamine is a Schedule II controlled substance available by prescription (Dexedrine®) and is also available on the illicit market. Amphetamines are a class of potent sympathomimetic agents with therapeutic applications. They are chemically related to the human body's natural catecholamines: epinephrine and norepinephrine. Acute higher doses lead to enhanced stimulation of the central nervous system (CNS) and induce euphoria, alertness, reduced appetite, and a sense of increased energy and power. Cardiovascular responses to amphetamines include increased blood pressure and cardiac arrhythmias. More acute responses produce anxiety, paranoia, hallucinations, and psychotic behavior. The effects of Amphetamines generally last 2-4 hours following use and the drug has a half-life of 4-24 hours in the body. About 30% of amphetamines are excreted in the urine in unchanged form, with the remainder as hydroxylated and deaminated derivatives.

Barbiturates (BAR)

Barbiturates are CNS 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.

Only a small amount (less than 5%) of most barbiturates are excreted unaltered in the urine. The approximate detection time limits for barbiturates are:

Short acting (e.g. Secobarbital)	100 mg PO (oral)	4.5 days
Long acting (e.g. Phenobarbital)	400 mg PO (oral)	7 days ^c

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™, 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 urine 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.⁴ While complete elimination of a single dose of the drug can take as long as 6 days, the window of detection for the parent drug in urine is thought to be approximately 3 days.

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

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.

Only trace amounts (less than 1%) of most benzodiazepines are excreted unaltered in the urine; most of the concentration in urine is conjugated drug. The detection period for benzodiazepines in urine is 3-7 days.

Clonazepam (CLO/ACL)

Clonazepam, a type of anti-epileptic drug, is used to treat certain seizure disorders (including absence seizures or Lennox-Gastaut syndrome) in adults and children. And it is also used to treat panic disorder (including agoraphobia) in adults. It belongs to a benzodiazepine. It affects chemicals in the brain that may be unbalanced to treat seizures and certain types of anxiety disorders.

Cocaine (COC)

Cocaine is a potent central nervous system stimulant and a local anesthetic. Initially, it brings about extreme energy and restlessness while gradually resulting in tremors, over-sensitivity and spasms. In large amounts, cocaine causes fever, unresponsiveness, difficulty in breathing and unconsciousness.

Cocaine is often self-administered by nasal inhalation, intravenous injection and free-base smoking. It is excreted in the urine in a short time primarily as benzoylecgonine.^{5,6} Benzoylecgonine, a major metabolite of cocaine, has a longer biological half-life (5-8 hours) than cocaine (0.5-1.5 hours), and can generally be detected for 24-48 hours after cocaine exposure.⁵

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 sprays.

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%.⁷ 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. As a result, cotinine is considered a good biological marker for determining nicotine use. The plasma half-life of nicotine is approximately 60 minutes following inhalation or parenteral administration.⁸ 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.

2-ethylidene-1,5-dimethyl-3,3-diphenylpyrrolidine (EDDP)

Methadone is an unusual drug in that its primary urinary metabolites (EDDP and EMDP) are cyclic in structure, making them very difficult to detect using immunoassays targeted to the native compound.⁷ Exacerbating this problem, there is a subsection of the population classified as "extensive metabolizers" of methadone. In these individuals, a urine specimen may not contain

enough parent methadone to yield a positive drug screen even if the individual is in compliance with their methadone maintenance. EDDP represents a better urine marker for methadone maintenance than unmetabolized methadone.

Ethyl Glucuronide (ETG)

Ethyl glucuronide (ETG) is a metabolite of ethyl alcohol which is formed in the body by glucuronidation following exposure to ethanol, usually from drinking alcoholic beverages. After Alcohol is absorbed by the body, 90-95% Alcohol is oxidized with the help of enzymes. Only 0.5%-1.5% Alcohol integrates with glucose into Ethyl Glucuronide. ETG remains in urine longer period than Alcohol. When low Alcohol volume is drunk (such as 0.1g/kg), ETG detection window varies from 13 - 20hours after drinking. However, maximum ETG detection window can be 80 hours for high Alcohol volume drinking^{9,10,11,12,13}.

Fentanyl (FYL)

Fentanyl, belongs to powerful narcotics analgesics, and is a μ special opiates receptor stimulant. Fentanyl is one of the varieties that been listed in management of United Nations "Single Convention of narcotic drug in 1961". Among the opiates agents that under international control, fentanyl is one of the most commonly used to cure moderate to severe pain¹⁴. After continuous injection of fentanyl, the sufferer will have the performance of protracted opioid abstinence syndrome, such as ataxia and irritability etc^{15,16}, which presents the addiction after taking fentanyl in a long time. Compared with drug addicts of amphetamine, drug addicts who take fentanyl mainly have got the possibility of higher infection rate of HIV, more dangerous injection behavior and more lifelong medication overdose¹⁷.

Gabapentin (GAB)

Gabapentin is an anti-epileptic drug developed by Warner-Lanbert. It was first marketed in the UK in 1993. Gabapentin is a novel antiepileptic drug, which is a derivative of γ -aminobutyric acid (GABA). Its pharmacological action is different from that of existing antiepileptic drugs. Recent studies have shown that the action of Gabapentin is produced by changing GABA metabolism.

Synthetic Marijuana (K2)

Synthetic Marijuana or K2 a psychoactive herbal and chemical product that, when consumed, mimics the effects of Marijuana. It is best known by the brand names K2 and Spice, both of which have largely become genericized trademarks used to refer to any synthetic Marijuana product. The studies suggest that synthetic marijuana intoxication is associated with acute psychosis, worsening of previously stable psychotic disorders, and also may have the ability to trigger a chronic (long-term) psychotic disorder among vulnerable individuals such as those with a family history of mental illness.

Elevated levels of urinary metabolites are found within hours of exposure and remain detectable for 72 hours after smoking (depending on usage/dosage). As of March 1, 2011, five cannabinoids, JWH-018, JWH-073, CP-47, JWH-200 and cannabicyclo hexanol are now illegal in the US because these substances have the potential to be extremely harmful and, therefore, pose an imminent hazard to the public safety.

AB-PINACA (K2+)

Synthetic cannabinoids are designer drugs that are structurally different from THC (the active component of cannabis) but act in similar ways to affect the cannabinoid receptor system in the brain. Over the past few years, this class of designer drugs has mainstreamed to become globally popular and increasingly problematic. Synthetic cannabinoids fall into seven major structural groups:

1. Naphthylindoles (e.g. JWH-018, JWH-073)
2. Naphthylmethylindoles (JWH-175, JWH-184, JWH-185, JWH-199)
3. Naphthylpyrroles (JWH-145, JWH-146, JWH-147, etc)
4. Naphthylmethylindenes (JWH-176)
5. Phenylacetylindoles (JWH-250, JWH-251, JWH-302)
6. Cyclohexylphenols (e.g. CP 47,497)
7. Dibenzopyrans (classic cannabinoid structure such as. HU-210 and HU-211)

New structural group: Aminoalkylindazoles (AB-PINACA, AB-FUBINACA, AB-CHMINACA, etc.) In their original, chemical state, synthetic cannabinoids are liquid. The drugs are usually sold combined with dried herbs that emulate marijuana and are intended for smoking although powdered versions are also available. As laws are written to control these drugs with each new synthetic cannabinoid class as they are introduced to the market, the older versions (JWH-018, JWH-073) are seen less frequently than years past. The current trend shows the aminoalkylindazole based drugs such as AB-PINACA, AB-FUBINACA and AB-CHMINACA.

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. Ketamine is excreted in the urine as unchanged drug (2.3%) and metabolites (96.8%).⁷

Kratom (KRA)

Kratom is most often used as an opium substitute, massively moderating opium addiction through a natural and organic method. It seems that opium addicts can typically use Kratom to help to overcome certain feelings and urges, cold-turkey and once the opium addiction is past, many continue to use Kratom due to its 'ceiling'. But several cases reported from the European Union and the United States have shown that it's harmful and can even lead to death, KRA can lead to drug abuse.

Lysergic acid diethylamide (LSD)

LSD (Lysergic acid diethylamide), which is one of the most effective hallucinogens, but non-addictive, is used mainly as an entheogen and recreational drug. LSD is very potent, with 20 - 30 µg being the threshold dose. After taking it 30 to 120 minutes, the effects are realized, which can normally last from 8 - 12 hours. However, acute adverse psychiatric reactions such as anxiety, paranoia, and delusions are possible. The metabolize of LSD is very widely and rapidly, which taking 24 hours to discharge 90%, part of metabolism through the liver is 2-Oxo-3-hydroxy-LSD.^{27,28,29}

Methylenedioxymethamphetamine (MDMA)

Methylenedioxymethamphetamine (ecstasy) is a designer drug first synthesized in 1914 by a German drug company for the treatment of obesity.¹⁸ 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 Oberlender, 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.

3,4-methylenedioxypyrovalerone (MDPV)

3,4-methylenedioxypyrovalerone (MDPV) is a psychoactive recreational drug with stimulant properties which acts as a norepinephrine-dopamine reuptake inhibitor (NDRI). It was first developed in the 1960s by a team at Boehringer Ingelheim. MDPV remained an obscure stimulant until around 2004 when it was reportedly sold as a designer drug. The recreational use of MDPV in the USA has become more prevalent since late 2010 and it is now illegal in many states¹⁹.

Products labeled as bath salts containing MDPV were previously sold as recreational drugs in gas stations and convenience stores in the United States, similar to the marketing for Spice and K2 as incense. MDPV is the 3,4-methylenedioxy ring-substituted analog of the compound pyrovalerone, developed in the 1960s, which has been used for the treatment of chronic fatigue and as an anorectic, but caused problems of abuse and dependence. However, despite its structural similarity, the effects of MDPV bear little resemblance to other methylenedioxy phenylalkylamine derivatives such as 3,4-methylenedioxy-N-methylamphetamine (MDMA), instead producing primarily stimulant effects with only mild entactogenic qualities.

MDPV undergoes CYP450 2D6, 2C19, 1A2, and COMT phase 1 metabolism (liver) into methylcatechol and pyrrolidine, which in turn are glucuronated (uridine 5'-diphospho-glucuronosyl-transferase) allowing it to be excreted by the kidneys, with only a small fraction of the metabolites being excreted into the stools. No free pyrrolidine will be detected in the urine.

Methamphetamine (MET)

Methamphetamine is an addictive stimulant drug that strongly activates certain systems in the brain. Methamphetamine is closely related chemically to Amphetamine, but the central nervous system effects of Methamphetamine are greater. Methamphetamine is made in illegal laboratories and has a high potential for abuse and dependence. The drug can be taken orally, injected, or inhaled. Acute higher doses lead to enhanced stimulation of the central nervous

system and induce euphoria, alertness, reduced appetite, and a sense of increased energy and power. Cardiovascular responses to Methamphetamine include increased blood pressure and cardiac arrhythmias. More acute responses produce anxiety, paranoia, hallucinations, psychotic behavior, and eventually, depression and exhaustion.

The effects of Methamphetamine generally last 2-4 hours and the drug have a half-life of 9-24 hours in the body. Methamphetamine is excreted in the urine primarily as Amphetamine, and oxidized and deaminated derivatives. However, 10-20% of Methamphetamine is excreted unchanged. Thus, the presence of the parent compound in the urine indicates Methamphetamine use. Methamphetamine is generally detectable in the urine for 3-5 days, depending on urine pH level.

Morphine/Opiate (MOP/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 acts on the opioid receptor.

Opioid analgesics comprise a large group of substances which control pain by depressing the CNS. Large doses of morphine can produce higher tolerance levels, physiological dependency in users, and may lead to substance abuse. Morphine is excreted unmetabolized, and is also the major metabolic product of codeine and heroin. Morphine is detectable in the urine for several days after an opiate dose.¹⁵

Methylphenidate (MPD)

Methylphenidate (Ritalin), it is a central nervous stimulant, and is mainly used in the treatment of ADHD (attention deficit hyperactivity disorder), postural orthostatic tachycardia syndrome and narcolepsy. The drug is quickly eliminated and metabolized to Ritalin acid, but about 80% (about 60% are Ritalin acid), will be excreted in the urine during 24 hours. After 20 minutes of drug-intake, it can be absorbed in the stomach. At the time of 60-90min, blood concentration reaches its peak. And its half-life in blood is 5 to 6 hours. The long-term use of ADHD stimulants decrease abnormalities in brain structure and function found in subjects with ADHD^{20,21,22}.

Methaqualone (MQL)

Methaqualone (Quaalude, Sopor) is a quinazoline derivative that was first synthesized in 1951 and found clinically effective as a sedative and hypnotic in 1956.⁷ 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 European countries in combination with diphenhydramine (Mandrax). Methaqualone is extensively metabolized *in vivo* principally by hydroxylation at every possible position on the molecule. At least 12 metabolites have been identified in the urine.

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). The pharmacology of oral methadone is very different from IV methadone. Oral methadone is partially stored in the liver for later use. IV methadone acts more like heroin. In most states you must go to a pain clinic or a methadone maintenance clinic to be prescribed methadone.

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.²³

Oxycodone (OXY)

Oxycodone is a semi-synthetic opioid with a structural similarity to codeine. The drug is manufactured by modifying thebaine, an alkaloid found in the opium poppy. Oxycodone, like all opiate agonists, provides pain relief by acting on opioid receptors in the spinal cord, brain, and possibly directly in the affected tissues. Oxycodone is prescribed for the relief of moderate to high pain under the well-known pharmaceutical trade names of 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. In a 24-hour urine, 33-61% of a single, 5 mg oral dose is excreted with the primary constituents being unchanged drug (13-19%), conjugated drug (7-29%) and conjugated oxymorphone (13-14%). The window of

detection for Oxycodone in urine is expected to be similar to that of other opioids such as morphine.

Phencyclidine (PCP)

Phencyclidine, also known as PCP or Angel Dust, is a hallucinogen that was first marketed as a surgical anesthetic in the 1950's. It was removed from the market because patients receiving it became delirious and experienced hallucinations.

PCP is used in powder, capsule, and tablet form. The powder is either snorted or smoked after mixing it with marijuana or vegetable matter. PCP is most commonly administered by inhalation but can be used intravenously, intra-nasally, and orally. After low doses, the user thinks and acts swiftly and experiences mood swings from euphoria to depression. Self-injurious behavior is one of the devastating effects of PCP.

PCP can be found in urine within 4 to 6 hours after use and will remain in urine for 7 to 14 days, depending on factors such as metabolic rate, user's age, weight, activity, and diet.⁶ PCP is excreted in the urine as an unchanged drug (4% to 19%) and conjugated metabolites (25% to 30%).²⁴

Pregabalin (PGB)

Pregabalin, sold under the trade name Lyrica®, an analog of the inhibitory neurotransmitter gamma-aminobutyric acid and also of gabapentin, has been used clinically since 2002 as an analgesic, anticonvulsant and anxiolytic agent. It is supplied as the free drug in 25-300mg capsules for oral administration. Adult doses are normally within a range of 50-200mg thrice daily.

Propoxyphene (PPX)

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

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

Tricyclic Antidepressants (TCA)

TCA (Tricyclic Antidepressants) are commonly used for the treatment of depressive disorders. TCA overdoses can result in profound CNS 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. Both TCAs and their metabolites are excreted in urine mostly in the form of metabolites for up to ten days.

Marijuana (THC)

smoked or orally administered, THC produces euphoric effects. Users have impaired short-term memory and slowed learning. They may also experience transient episodes of confusion and anxiety. Long-term, relatively heavy use may be associated with behavioral disorders. The peak effect of marijuana administered by smoking occurs in 20-30 minutes and the duration is 90-120 minutes after one cigarette. Elevated levels of urinary metabolites are found within hours of exposure and remain detectable for 3-10 days after smoking. The main metabolite excreted in the urine is 11-nor- Δ^9 -tetrahydrocannabinol-9-carboxylic acid (THC-COOH).

Tramadol (TML/TRA)

Tramadol (TML) is a quasi-narcotic analgesic used in the treatment of moderate to severe pain. It is a synthetic analog of codeine, but has a low binding affinity to the mu-opioid receptors. Large doses of tramadol can develop tolerance and physiological dependency and lead to its abuse. Tramadol is extensively metabolized after oral administration. Approximately 30% of the dose is excreted in the urine as unchanged drug, whereas 60% is excreted as metabolites. The major pathways appear to be N- and O- demethylation, glucuronidation or sulfation in the liver.

Zolpidem (ZOL)

Zolpidem is a non-benzodiazepine hypnotic sold under the trade names Ambien®, Stilnox® and Edluar® for the treatment of insomnia. Zolpidem has not adequately demonstrated effectiveness in maintaining sleep, unless delivered in a controlled-release (CR) form. However, it is effective in initiating sleep. It works quickly, usually within 15 minutes, and has a short half-life of 2-3 hours. Because the characteristic of quick effect, low side effect, etc, Zolpidem has the trend of gradually replacing the barbiturates and benzodiazepine sleeping pills. The result of its widely

used and easily obtained, the criminal cases showed a trend of rising. Zolpidem Phenyl-4-carboxylic acid is the major urinary metabolite of zolpidem, accounting for 51% of an administered dose. Literature references indicate the metabolite can be found in urine after ingesting a single therapeutic dose of zolpidem, for 2-3 days. Only 1% Zolpidem was extracted with original version by urine.^{25,26}

Zopiclone (ZOP)

Zopiclone (brand names Imovane, Zimovane, and Dopareel) is a nonbenzodiazepine hypnotic agent used in the treatment of insomnia. Zopiclone is molecularly distinct from benzodiazepine drugs and is classed as a cyclopyrrolone. However, zopiclone increases the normal transmission of the neurotransmitter gamma-aminobutyric acid in the central nervous system, via modulating benzodiazepine receptors in the same way that benzodiazepine drugs do.

Alcohol (ALC)

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% (20mg/dL) as the cut-off level at which an individual is considered positive for the presence of alcohol. Determination of ethyl alcohol in urine, blood and saliva is commonly used for measuring legal impairment, alcohol poisoning, etc. Gas chromatography techniques and enzymatic methods are commercially available for the determination of ethyl alcohol in human fluids. Alcohol Rapid Test Cup is designed to detect ethyl alcohol in urine specimens.

Adulteration Test/Specimen Validity Test (S.V.T)

Adulteration is the tampering of a urine specimen with the intention of altering the test results. The use of adulterants can cause false negative results in drug tests by either interfering with the screening test and/or destroying the drugs present in the urine. Dilution may also be employed in an attempt to produce false negative drug test results.

One of the best ways to test for adulteration or dilution is to determine certain urinary characteristics such as pH, specific gravity and creatinine and to detect the presence of oxidants/PCC, nitrites or glutaraldehyde in urine.

Oxidants/PCC (Pyridiniumchlorochromate) tests for the presence of oxidizing agents such as bleach and hydrogen peroxide. Pyridiniumchlorochromate (sold under the brand name UrineLuck) is a commonly used adulterant.⁸ Normal human urine should not contain oxidants of PCC.

Specific gravity tests for sample dilution. The normal range is from 1.003 to 1.030. Values outside this range may be the result of specimen dilution or adulteration.

pH tests for the presence of acidic or alkaline adulterants in urine. Normal pH levels should be in the range of 4.0 to 9.0. Values outside of this range may indicate the sample has been altered.

Nitrite tests for commonly used commercial adulterants such as Klear and Whizzies. They work by oxidizing the major cannabinoid metabolite THC-COOH.⁹ Normal urine should contain no trace of nitrite. Positive results generally indicate the presence of an adulterant.

Glutaraldehyde tests for the presence of an aldehyde. Adulterants such as UrinAid and Clear Choice contain glutaraldehyde which may cause false negative results by disrupting the enzyme used in some immunoassay tests.⁹ Glutaraldehyde is not normally found in urine; therefore, detection of glutaraldehyde in a urine specimen is generally an indicator of adulteration.

Creatinine is a waste product of creatine; an amino-acid contained in muscle tissue and found in urine.² A person may attempt to foil a test by drinking excessive amounts of water or diuretics such as herbal teas to "flush" the system. Creatinine and specific gravity are two ways to check for dilution and flushing, which are the most common mechanisms used in an attempt to circumvent drug testing. Low Creatinine and specific gravity levels may indicate dilute urine. The absence of Creatinine (<5 mg/dl) is indicative of a specimen not consistent with human urine.

[PRINCIPLE]

During testing, a urine specimen migrates upward by capillary action. A drug, if present in the urine 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 region of the specific drug strip. The presence of drug above the cut-off concentration will saturate all the binding sites of the antibody. Therefore, the colored line will not form in the test region.

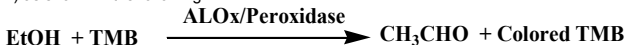
A drug-positive urine specimen will not generate a colored line in the specific test region of the strip because of drug competition, while a drug-negative urine specimen will generate a line in the test region because of the absence of drug competition.

To serve as a procedural control, a colored line will always appear at the control region,

indicating that proper volume of specimen has been added and membrane wicking has occurred.

For ALC strip:

Alcohol Rapid Test Strip is based on the high specificity of alcohol oxidase (ALOX) for ethyl alcohol in the presence of peroxidase and enzyme substrate such as tetramethylbenzidine (TMB) as shown in the following:



The distinct color on reactive pad could be observed in less than 60 seconds after the reaction pad was wetted with urine specimens with the ethyl alcohol concentration greater than 0.04%(40mg/dL). It should be pointed out that other alcohols such as methyl, propanyl and ethyl alcohol would develop the similar color on the reactive pad. However, these alcohols are not normally present in human urine.

For adulteration strip:

The adulteration strips contain chemically treated reagent pads. Three to five minutes following the activation of the reagent pads by the urine sample, the colors that appear on the pads can be compared with the printed color chart card. The color comparison provides a semi-quantitative screen for any combination of oxidants/pyridiniumchlorochromate (PCC), specific gravity, pH, nitrite, glutaraldehyde and creatinine in human urine which can help to assess the integrity of the urine sample.

【REAGENTS】

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

【PRECAUTIONS】

- For healthcare professionals including professionals at point of care sites.
- Immunoassay for *invitro* diagnostic use only. The test 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 test 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 must remain in the sealed pouch until use. **DO NOT FREEZE.** Do not use beyond the expiration date.

【SPECIMEN COLLECTION AND PREPARATION】

Urine Assay

The urine specimen should be collected in a clean and dry container. Urine collected at any time of the day may be used. Urine specimens exhibiting visible precipitates should be centrifuged, filtered, or allowed to settle to obtain a clear specimen for testing.

Specimen Storage

Urine specimens may be stored at 2-8°C for up to 48 hours prior to testing. For prolonged storage, specimens may be frozen and stored below -20°C. Frozen specimens should be thawed and mixed well before testing.

【MATERIALS】

Materials Provided

- Test Device
- Adulteration Color Chart (when applicable)
- Package insert
- ALC Color Card (when applicable)

Materials Required but Not Provided

- Specimen collection container
- timer

【DIRECTIONS FOR USE】

Allow the test, urine specimen, and/or controls to equilibrate to room temperature (15-30°C) prior to testing.

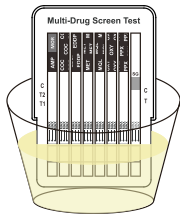
1. Remove the test device from the sealed pouch. If required by your process, write the donor name or ID in the provided space.
2. Collect urine into clean container.
3. Remove the cap, with the arrows pointing downward, dip the card into the urine specimen.
4. If the volume of the urine specimen exceeds the sampling window, immerse the test device into the urine specimen for minimum of 1 second. Replace the cap and place the card on a flat surface.
5. If the volume of urine specimen lower than the sampling window, dip the card into the urine

specimen for at least 20 seconds. Replace the card and place the card in a flat surface. Alternatively, the test device can remain in the specimen throughout the testing process.

- Read the adulteration strips between 3-5 minutes (when applicable) compare the colors on the adulteration pads to the enclosed color chart. If the specimen indicates adulteration, refer to your Drug Free Policy for guidelines on adulterated specimens. We recommend not to interpret the drug test results and either retest the urine or collect another specimen.
- Read the ALC strips between 2-3 minutes (when applicable) compare the colors on the ALC pads to the enclosed color chart.
- Read drug test results at 5 minutes. Results remain stable for 10 minutes.

Mutil-drug test:

Interpret adulteration strips between 3-5 minutes. See enclosed color chart for interpretation.



Interpret ALC strip between 2-3 minutes. See enclosed color chart for interpretation.

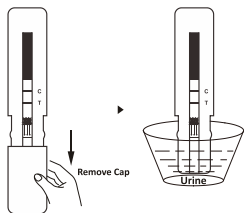
Blue or green

Positive Negative Invalid

Read the drug strips at 5 minutes.

Negative (-) Positive (+) Invalid

Single drugs test:



Remove Cap

Urine

Maximum Line

Minimum Line

Positive

Negative

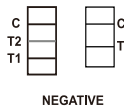
Invalid

【INTERPRETATION OF RESULTS】

Read results after 5 minutes. Do not read results past 10 minutes. A red or pink line must appear next to the "C" (control) on all of the test strips. The appearance of a red or pink line next to the "C" on each test strip indicates that the test has worked properly.

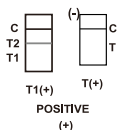
Negative Result:

A red or pink line next to the "T1" or "T2" (drug test line) under the drug name indicates a negative result for that drug. If a test line appears next to the "T1" or "T2" for all drugs, the sample is considered negative. Certain lines may appear lighter or thinner than other lines.



Preliminary Positive Result:

If NO red or pink line appears next to the "T1" or "T2" under the drug name, the sample may contain that drug. Send the sample to a laboratory for confirmation testing.



Invalid Result:

A colored line should always appear next to the letter "C" on every test strip. If no control line appears on any of test strips, the result is invalid.



INVALID

[S.V.T/ ADULTERATION INTERPRETATION]

(Please refer to the color chart)

Semi Quantitative results are obtained by visually comparing the reacted color blocks on the strip to the printed color blocks on the color chart. No instrumentation is required.

ALC: Negative: Almost no color change by comparing with the background. The negative result indicates that the alcohol concentration is less than 0.04% (40mg/dL).

Positive Blue or green color developed all over the pad. The positive result indicates that the urine alcohol concentration is 0.04% (40mg/dL) or higher.

Invalid: The test should be considered invalid if only the edge of the reactive pad turned color that might be ascribed to insufficient sampling. The subject should be re-tested.

[QUALITY CONTROL]

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

Control standards are not supplied with this kit. However, it is recommended that positive and negative controls be tested as good laboratory practice to confirm the test procedure and to verify proper test performance.

[LIMITATIONS]

1. The Drug Rapid Test 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) is the preferred confirmatory method.^{1,2,3}
2. There is a possibility that technical or procedural errors, as well as interfering substances in the urine specimen may cause erroneous results.
3. Adulterants, such as bleach and/or alum, in urine specimens may produce erroneous results regardless of the analytical method used. If adulteration is suspected, the test should be repeated with another urine specimen.
4. A positive result does not indicate level or intoxication, administration route or concentration in urine.
5. A negative result may not necessarily indicate drug-free urine. Negative results can be obtained when drug is present but below the cut-off level of the test.
6. This test does not distinguish between drugs of abuse and certain medications.
7. A positive test result may be obtained from certain foods or food supplements.

[S.V.T/ ADULTERATION LIMITATIONS]

1. The adulteration tests included with the product are meant to aid in the determination of abnormal specimens. While comprehensive, these tests are not meant to be an "all-inclusive" representation of possible adulterants.
2. Oxidants/PCC: Normal human urine should not contain oxidants or PCC. The presence of high levels of antioxidants in the specimen, such as ascorbic acid, may result in false negative results for the oxidants/PCC pad.
3. Specific Gravity: Elevated levels of protein in urine may cause abnormally high specific gravity values.
4. Nitrite: Nitrite is not a normal component of human urine. However, nitrite found in urine may indicate urinary tract infections or bacterial infections. Nitrite levels of > 20 mg/dL may produce false positive glutaraldehyde results.
5. Glutaraldehyde: is not normally found in urine. However certain metabolic abnormalities such as ketoacidosis (fasting, uncontrolled diabetes or high protein diets) may interfere with the test results.
6. Creatinine: Normal Creatinine levels are between 20 and 350mg/dL. Under rare conditions, certain kidney diseases may show dilute urine.

[EXPECTED VALUES]

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

[PERFORMANCE CHARACTERISTICS]**Accuracy**

A side-by-side comparison was conducted using the Test and commercially available drug Rapid

Test test devices. Testing was performed on approximately 250 specimens per drug type previously collected from subjects presenting for Drug Screen Testing. Presumptive positive results were confirmed by GC/MS, LC/MS.

Method		GC/MS or LC/MS		% agreement with GC/MS or LC/MS
Drug Rapid Test		Positive	Negative	
6-MAM 10	Positive	36	0	>99%
	Negative	0	128	>99%
AMP 1,000	Positive	161	4	97.0%
	Negative	5	210	98.1%
AMP 500	Positive	165	5	98.8%
	Negative	2	208	97.7%
AMP 300	Positive	168	3	99.4%
	Negative	1	208	98.6%
BAR 300	Positive	129	2	93.5%
	Negative	9	160	98.8%
BAR 200	Positive	135	2	94.4%
	Negative	8	155	98.7%
BUP 10	Positive	99	1	99.0%
	Negative	1	149	99.3%
BZO 500	Positive	135	2	96.4%
	Negative	5	158	98.8%
BZO 300	Positive	136	2	97.1%
	Negative	4	158	98.8%
BZO 200	Positive	137	2	97.2%
	Negative	4	157	98.7%
BZO 100	Positive	138	2	97.9%
	Negative	3	157	98.7%
CLO/ACL 100	Positive	27	1	>99.9%
	Negative	0	42	97.7%
COC 300	Positive	120	8	97.6%
	Negative	3	169	95.4%
COC 150	Positive	105	0	99.1%
	Negative	1	144	>99.9%
COC 100	Positive	126	12	98.4%
	Negative	2	165	93.2%
COT 200	Positive	87	4	94.6%
	Negative	5	154	97.4%
COT 100	Positive	91	3	95.8%
	Negative	4	152	98.1%
EDDP 300	Positive	82	5	98.8%
	Negative	1	112	95.7%
EDDP 100	Positive	87	6	96.7%
	Negative	3	104	94.5%
ETG 500	Positive	178	2	97.8%
	Negative	4	221	99.1%
FYL 20	Positive	22	0	>99%
	Negative	0	40	99.1%
FYL 10	Positive	60	0	>99 %
	Negative	0	45	>99 %
GAB 2000	Positive	47	1	97.9%
	Negative	1	40	>99%
K2 50	Positive	62	3	96.9%
	Negative	2	233	98.7%
K2 30	Positive	66	3	98.5%
	Negative	1	230	98.7%
K2	Positive	4	0	>99%

Method		GC/MS or LC/MS		% agreement with GC/MS or LC/MS
Drug Rapid Test		Positive	Negative	
10	Negative	0	40	>99%
KET	Positive	102	9	94.4%
1,000	Negative	6	133	93.7%
KET	Positive	113	9	96.6%
500	Negative	4	124	93.2%
KET	Positive	109	11	94.0%
300	Negative	7	123	91.8%
KRA	Positive	18	1	>99%
100	Negative	0	42	97.67%
LSD	Positive	143	2	97.3%
50	Negative	4	218	99.1%
MDMA	Positive	129	0	99.2%
1,000	Negative	1	180	>99.9%
MDMA	Positive	132	1	>99.9%
500	Negative	0	172	99.4%
MDPV	Positive	22	0	>99%
3,000	Negative	0	128	>99%
MDPV	Positive	22	0	>99%
1,000	Negative	0	128	>99%
MET	Positive	165	9	>99.9%
1,000	Negative	0	176	95.1%
MET	Positive	168	6	>99.9%
500	Negative	0	176	96.7%
MET	Positive	169	5	>99.9%
300	Negative	0	176	97.2%
MOP/OPI	Positive	141	6	99.3%
300	Negative	1	164	97.6%
MOP/OPI	Positive	141	6	99.3%
200	Negative	1	164	97.6%
MOP/OPI	Positive	142	5	>99.9%
100	Negative	0	163	97.0%
MPD	Positive	153	3	98.1%
150	Negative	3	226	98.7%
MQL	Positive	98	2	99.0%
300	Negative	1	149	98.7%
MTD	Positive	123	4	99.2%
300	Negative	1	172	97.7%
MTD	Positive	123	4	99.2%
200	Negative	1	172	97.7%
OPI	Positive	95	10	>99.9%
2,000	Negative	0	145	93.5%
OPI	Positive	95	10	>99.9%
1,000	Negative	0	145	93.5%
OXY	Positive	104	1	98.1%
100	Negative	2	143	99.3%
PCP	Positive	131	1	>99.9%
25	Negative	0	181	99.5%
PGB	Positive	29	0	>99%
2,000	Negative	0	110	>99%
PGB	Positive	12	0	>99%
700	Negative	0	75	>99%
PGB	Positive	29	0	>99%
500	Negative	0	110	>99%

Method		GC/MS or LC/MS		% agreement with GC/MS or LC/MS
Drug Rapid Test		Positive	Negative	
PPX 300	Positive	95	3	96.0%
	Negative	4	148	98.0%
TCA 1000	Positive	122	15	97.6%
	Negative	3	210	93.3%
TCA 500	Positive	122	15	97.6%
	Negative	3	210	93.3%
THC 150	Positive	127	5	97.7%
	Negative	3	185	97.4%
THC 50	Positive	137	6	97.8%
	Negative	3	184	96.8%
THC 25	Positive	117	9	99.2%
	Negative	1	193	95.5%
THC 20	Positive	117	9	99.2%
	Negative	1	193	95.5%
THC 600	Positive	48	0	96.0 %
	Negative	2	100	100 %
TML/TRA 300	Positive	98	2	99.0%
	Negative	1	149	98.7%
TML/TRA 100	Positive	98	2	99.0%
	Negative	1	149	98.7%
ZOL 50	Positive	148	2	98.0%
	Negative	3	236	99.2%
ZOP 50	Positive	35	2	97.2%
	Negative	1	46	95.8%

Alcohol Rapid Test Cup	Results	>0.04% (Spiked)	0	%Agreement
	Positive	26	0	96%
	Negative	1	29	>99.9%

Clinical samples for each drug were run using each of the Drug Rapid Test by an untrained operator at a professional point of care site. Based on GC/MS data, the operator obtained statistically similar positive agreement, negative agreement and overall agreement rates as trained laboratory personnel.

Precision

A study was conducted at three hospitals by untrained operators using three different lots of products to demonstrate the within run, between run and between operator precision. An identical card of coded specimens, containing drugs at concentrations of $\pm 50\%$ and $\pm 25\%$ cut-off level, was labeled, blinded and tested at each site. The results are given below:

6-MONOACETYLMORPHINE (6-MAM10)

6-monoacetylmorphine Concentration (ng/mL)	n per Site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
5	10	10	0	10	0	10	0
7.5	10	9	1	9	1	9	1
12.5	10	1	9	1	9	2	8
15	10	0	10	0	10	0	10

AMPHETAMINE (AMP 1,000)

Amphetamine conc. (ng/mL)	n per site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
500	10	10	0	10	0	10	0
750	10	9	1	8	2	8	2
1,250	10	2	8	2	8	2	8
1,500	10	0	10	0	10	0	10

AMPHETAMINE (AMP 500)

Amphetamine conc. (ng/mL)	n per site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
250	10	10	0	10	0	10	0
375	10	8	2	8	2	8	2
625	10	2	8	2	8	2	8
750	10	0	10	0	10	0	10

AMPHETAMINE (AMP 300)

Amphetamine conc. (ng/mL)	n per site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
150	10	10	0	10	0	10	0
225	10	7	3	8	2	8	2
375	10	2	8	2	8	2	8
450	10	0	10	0	10	0	10

BARBITURATES (BAR 300)

Secobarbital conc. (ng/mL)	n per site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
150	10	10	0	10	0	10	0
225	10	9	1	8	2	8	2
375	10	2	8	1	9	2	8
450	10	0	10	0	10	0	10

BARBITURATES (BAR 200)

Secobarbital conc. (ng/mL)	n per site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
100	10	10	0	10	0	10	0
150	10	9	1	9	1	8	2
250	10	2	8	1	9	1	9
300	10	0	10	0	10	0	10

BUPRENORPHINE (BUP)

Buprenorphine conc. (ng/mL)	n per site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
5	10	10	0	10	0	10	0
7.5	10	9	1	8	2	8	2
12.5	10	1	9	1	9	1	9
15	10	0	10	0	10	0	10

BENZODIAZEPINES (BZO 500)

Oxazepam conc. (ng/mL)	n per site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
250	10	10	0	10	0	10	0
375	10	8	2	9	1	9	1
625	10	1	9	1	9	1	9
750	10	0	10	0	10	0	10

BENZODIAZEPINES (BZO 300)

Oxazepam conc. (ng/mL)	n per site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
150	10	10	0	10	0	10	0
225	10	9	1	9	1	9	1
375	10	1	9	1	9	1	9
450	10	0	10	0	10	0	10

BENZODIAZEPINES (BZO 200)

Oxazepam conc. (ng/mL)	n per site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
100	10	10	0	10	0	10	0
150	10	8	2	8	2	9	1
250	10	1	9	1	9	1	9
300	10	0	10	0	10	0	10

BENZODIAZEPINES (BZO 100)

Oxazepam conc. (ng/mL)	n per site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
50	10	10	0	10	0	10	0
75	10	9	1	8	2	9	1
125	10	1	9	1	9	2	8
150	10	0	10	0	10	0	10

CLONAZEPAM (CLO/ACL 100)

7-Aminoclonazepam conc. (ng/mL)	n per site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
50	10	10	0	10	0	10	0
75	10	8	2	6	4	9	1
125	10	1	9	2	8	3	7
150	10	0	10	0	10	0	10

COCAINE (COC 300)

Benzoylcegonine conc. (ng/mL)	n per site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
150	10	10	0	10	0	10	0
225	10	9	1	8	2	8	2
375	10	1	9	1	9	1	9
450	10	0	10	0	10	0	10

COCAINE (COC 150)

Benzoylcegonine conc. (ng/mL)	n per site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
75	10	10	0	10	0	10	0
112.5	10	8	2	8	2	8	2
187.5	10	1	9	1	9	1	9
225	10	0	10	0	10	0	10

COCAINE (COC 100)

Benzoylcegonine conc. (ng/mL)	n per site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
50	10	10	0	10	0	10	0
75	10	9	1	9	1	9	1
125	10	2	8	1	9	1	9
150	10	0	10	0	10	0	10

COTININE (COT 200)

Cotinine conc. (ng/mL)	n per site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
100	10	10	0	10	0	10	0
150	10	9	1	9	1	9	1
250	10	1	9	1	9	2	8

300	10	0	10	0	10	0	10
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COTININE (COT 100)

Cotinine conc. (ng/mL)	n per site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
50	10	10	0	10	0	10	0
75	10	9	1	9	1	9	1
125	10	1	9	1	9	2	8
150	10	0	10	0	10	0	10

2-Ethylidene-1,5-dimethyl-3,3-diphenylpyrrolidine (EDDP 300)

EDDP conc. (ng/mL)	n per site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
150	10	10	0	10	0	10	0
225	10	8	2	9	1	9	1
375	10	1	9	2	8	1	9
450	10	0	10	0	10	0	10

2-Ethylidene-1,5-dimethyl-3,3-diphenylpyrrolidine (EDDP 100)

EDDP conc. (ng/mL)	n per site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
50	10	10	0	10	0	10	0
75	10	8	2	9	1	9	1
125	10	1	9	1	9	1	9
150	10	0	10	0	10	0	10

ETHYL-β-D-GLUCURONIDE (ETG500)

Ethyl Glucuronide conc. (ng/mL)	n per site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
250	10	10	0	10	0	10	0
375	10	6	4	7	3	6	4
625	10	2	8	1	9	1	9
750	10	0	10	0	10	0	10

FENTANYL(FYL20)

Norfentanyl conc. (ng/mL)	n per site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
10	10	10	0	10	0	10	0
15	10	8	2	7	3	7	3
25	10	1	9	3	7	3	7
30	10	0	10	0	10	0	10

FENTANYL (FYL10)

Norfentanyl conc. (ng/mL)	n per site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
5	10	10	0	10	0	10	0
7.5	10	8	2	8	2	9	1
12.5	10	1	9	1	9	2	8
15	10	0	10	0	10	0	10

GABAPENTIN (GAB2,000)

Gabapentin Concentration (ng/mL)	n per	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
1,000	10	10	0	10	0	10	0
1,500	10	7	3	8	2	8	2

2,500	10	1	9	1	9	2	8
3,000	10	0	10	0	10	0	10

SYNTHETIC MARIJUANA (K2 50)

Synthetic Marijuana Concentration (ng/mL)	n per	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
25	10	10	0	10	0	10	0
37.5	10	9	1	9	1	9	1
62.5	10	1	9	1	9	2	8
75	10	0	10	0	10	0	10

SYNTHETIC MARIJUANA (K2 30)

Synthetic Marijuana Concentration (ng/mL)	n per	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
15	10	10	0	10	0	10	0
22.5	10	9	1	9	1	9	1
37.5	10	1	9	1	9	2	8
45	10	0	10	0	10	0	10

AB-PINACA (K2+ 10)

AB-PINACA pentanoic acid metabolite Conc. (ng/mL)	n per Site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
5	10	10	0	10	0	10	0
7.5	10	9	1	9	1	9	1
12.5	10	1	9	1	9	2	8
15	10	0	10	0	10	0	10

KETAMINE (KET1, 000)

Ketamine Concentration (ng/mL)	n per	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
500	10	10	0	10	0	10	0
750	10	9	1	8	2	9	1
1,250	10	1	9	1	9	2	8
1,500	10	0	10	0	10	0	10

KETAMINE (KET500)

Ketamine Concentration (ng/mL)	n per	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
250	10	10	0	10	0	10	0
375	10	9	1	9	1	8	2
625	10	1	9	1	9	2	8
750	10	0	10	0	10	0	10

KETAMINE (KET300)

Ketamine Concentration (ng/mL)	n per	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
150	10	10	0	10	0	10	0
225	10	9	1	9	1	9	1
375	10	1	9	1	9	2	8
450	10	0	10	0	10	0	10

KRATOM (KRA300)

Mitragynine Concentration (ng/mL)	n per	Site A		Site B		Site C	
		-	+	-	+	-	+

0	10	10	0	10	0	10	0
50	10	10	0	10	0	10	0
75	10	8	2	9	1	8	2
125	10	1	9	1	9	2	8
150	10	0	10	0	10	0	10

LYSERGIC ACID DIETHYLAMIDE (LSD50)

LSD Concentration (ng/mL)	n per	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
25	10	10	0	10	0	10	0
37.5	10	6	4	6	4	6	4
62.5	10	1	9	1	9	1	9
75	10	0	10	0	10	0	10

METHYLENEDIOXYMETHAMPHETAMINE (MDMA1, 000)

Methylenedioxyamphet- amine Concentration (ng/mL)	n per Site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
500	10	10	0	10	0	10	0
750	10	8	2	9	1	8	2
1,250	10	2	8	2	8	1	9
1,500	10	0	10	0	10	0	10

METHYLENEDIOXYMETHAMPHETAMINE (MDMA 500)

Methylenedioxyamphet- amine Concentration (ng/mL)	n per Site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
250	10	10	0	10	0	10	0
375	10	8	2	9	1	9	1
625	10	2	8	1	9	1	9
750	10	0	10	0	10	0	10

3,4-METHYLENEDIOXYPYROVALERONE (MDPV3,000)

3,4-methylenedioxyprop- ylone Conc. (ng/mL)	n per Site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
1,500	10	10	0	10	0	10	0
2,250	10	9	1	9	1	9	1
3,750	10	1	9	1	9	2	8
4,500	10	0	10	0	10	0	10

3,4-METHYLENEDIOXYPYROVALERONE (MDPV1,000)

3,4-methylenedioxyprop- ylone Conc. (ng/mL)	n per Site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
500	10	10	0	10	0	10	0
750	10	9	1	9	1	9	1
1,250	10	1	9	1	9	2	8
1,500	10	0	10	0	10	0	10

METHAMPHETAMINE (MET1,000)

Methamphetamine Conc. (ng/mL)	n per Site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
500	10	10	0	10	0	10	0
750	10	9	1	9	1	9	1
1,250	10	1	9	1	9	1	9
1,500	10	0	10	0	10	0	10

METHAMPHETAMINE (MET 500)

Methamphetamine Conc. (ng/mL)	n per Site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
250	10	10	0	10	0	10	0
375	10	8	2	9	1	9	1
625	10	1	9	1	9	1	9
750	10	0	10	0	10	0	10

METHAMPHETAMINE (MET300)

Methamphetamine Conc. (ng/mL)	n per Site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
150	10	10	0	10	0	10	0
225	10	9	1	9	1	8	2
375	10	1	9	1	9	1	9
450	10	0	10	0	10	0	10

MORPHINE (MOP/OPI 300)

Morphine Conc. (ng/mL)	n per Site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
150	10	10	0	10	0	10	0
225	10	9	1	9	1	9	1
375	10	1	9	1	9	1	9
450	10	0	10	0	10	0	10

MORPHINE (MOP/OPI 200)

Morphine Conc. (ng/mL)	n per Site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
100	10	10	0	10	0	10	0
150	10	9	1	9	1	9	1
250	10	1	9	1	9	1	9
300	10	0	10	0	10	0	10

MORPHINE (MOP/OPI 100)

Morphine Conc. (ng/mL)	n per Site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
50	10	10	0	10	0	10	0
75	10	9	1	9	1	9	1
125	10	1	9	2	8	1	9
150	10	0	10	0	10	0	10

METHYLPHENIDATE (MPD150)

Methylphenidate conc. (ng/mL)	n per site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
75	10	10	0	10	0	10	0
112.5	10	6	4	6	4	6	4
187.5	10	1	9	1	9	1	9
225	10	0	10	0	10	0	10

METHAQUALONE (MQL 300)

Methaqualone conc. (ng/mL)	n per site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
150	10	10	0	10	0	10	0
225	10	9	1	9	1	9	1
375	10	1	9	2	8	1	9

450	10	0	10	0	10	0	10
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METHADONE (MTD300)

Methadone conc. (ng/mL)	n per site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
150	10	10	0	10	0	10	0
225	10	8	2	9	1	9	1
375	10	1	9	1	9	1	9
450	10	0	10	0	10	0	10

METHADONE (MTD200)

Methadone conc. (ng/mL)	n per site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
100	10	10	0	10	0	10	0
150	10	8	2	9	1	9	1
250	10	1	9	1	9	1	9
300	10	0	10	0	10	0	10

MORPHINE/OPIATE (OPI 2,000)

Morphine conc. (ng/mL)	n per site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
1,000	10	10	0	10	0	10	0
1,500	10	9	1	9	1	8	2
2,500	10	1	9	1	9	1	9
3,000	10	0	10	0	10	0	10

MORPHINE/OPIATE (OPI 1,000)

Morphine conc. (ng/mL)	n per site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
500	10	10	0	10	0	10	0
750	10	9	1	9	1	8	2
1,250	10	1	9	1	9	1	9
1,500	10	0	10	0	10	0	10

OXYCODONE (OXY100)

Oxycodone conc. (ng/mL)	n per site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
50	10	10	0	10	0	10	0
75	10	9	1	9	1	9	1
125	10	1	9	1	9	2	8
150	10	0	10	0	10	0	10

PHENCYCLIDINE (PCP25)

Phencyclidine conc. (ng/mL)	n per site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
12.5	10	10	0	10	0	10	0
18.75	10	8	2	9	1	8	2
31.25	10	1	9	1	9	2	8
37.5	10	0	10	0	10	0	10

PREGABALIN (PGB2,000)

Pregabalin conc. (ng/mL)	n per site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
1,000	10	10	0	10	0	10	0
1,500	10	6	4	7	3	6	4

2,500	10	2	8	1	9	1	9
3,000	10	0	10	0	10	0	10

PREGABALIN (PGB700)

Pregabalin conc. (ng/mL)	n per site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
350	10	10	0	10	0	10	0
525	10	6	4	7	3	6	4
875	10	2	8	1	9	1	9
1050	10	0	10	0	10	0	10

PREGABALIN (PGB500)

Pregabalin conc. (ng/mL)	n per site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
250	10	10	0	10	0	10	0
375	10	6	4	7	3	6	4
625	10	2	8	1	9	1	9
750	10	0	10	0	10	0	10

PROPOXYPHENE (PPX300)

Propoxyphene conc. (ng/mL)	n per site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
150	10	10	0	10	0	10	0
225	10	8	2	9	1	9	1
375	10	1	9	1	9	2	8
450	10	0	10	0	10	0	10

TRICYCLIC ANTIDEPRESSANTS (TCA1,000)

Nortriptyline conc. (ng/mL)	n per site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
500	10	10	0	10	0	10	0
750	10	8	2	8	2	8	2
1,250	10	1	9	1	9	2	8
1,500	10	0	10	0	10	0	10

TRICYCLIC ANTIDEPRESSANTS (TCA500)

Nortriptyline conc. (ng/mL)	n per site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
250	10	10	0	10	0	10	0
375	10	8	2	8	2	8	2
625	10	1	9	1	9	2	8
750	10	0	10	0	10	0	10

MARIJUANA (THC150)

11-nor- Δ^9 -COOH conc. (ng/mL)	n per site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
75	10	10	0	10	0	10	0
112.5	10	9	1	9	1	9	1
187.5	10	1	9	1	9	1	9
225	10	0	10	0	10	0	10

MARIJUANA (THC50)

11-nor- Δ^9 -COOH conc. (ng/mL)	n per site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
25	10	10	0	10	0	10	0

37.5	10	9	1	8	2	9	1
62.5	10	1	9	1	9	1	9
75	10	0	10	0	10	0	10

MARIJUANA (THC25)

11-nor- Δ^9 -COOH conc. (ng/mL)	n per site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
12.5	10	10	0	10	0	10	0
18.75	10	8	2	8	2	9	1
31.25	10	1	9	1	9	2	8
37.5	10	0	10	0	10	0	10

MARIJUANA (THC20)

11-nor- Δ^9 -COOH conc. (ng/mL)	n per site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
10	10	10	0	10	0	10	0
15	10	8	2	8	2	9	1
25	10	1	9	1	9	2	8
30	10	0	10	0	10	0	10

MARIJUANA (THC600)

11-nor- Δ^9 -COOH conc. (ng/mL)	n per site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
300	10	10	0	10	0	10	0
450	10	8	2	9	1	9	1
750	10	1	9	1	9	2	8
900	10	0	10	0	10	0	10

TRAMADOL (TML/TRA100)

Tramadol conc. (ng/mL)	n per site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
50	10	10	0	10	0	10	0
75	10	9	1	8	2	8	2
125	10	1	9	1	9	2	8
150	10	0	10	0	10	0	10

TRAMADOL (TML/TRA300)

Tramadol conc. (ng/mL)	n per site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
150	10	10	0	10	0	10	0
225	10	9	1	8	2	8	2
375	10	1	9	1	9	2	8
450	10	0	10	0	10	0	10

ZOLPIDEM (ZOL50)

Zolpidem conc. (ng/mL)	n per site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
25	10	10	0	10	0	10	0
37.5	10	6	4	6	4	6	4
62.5	10	1	9	1	9	1	9
75	10	0	10	0	10	0	10

ZOPICLONE (ZOP50)

Zopiclone Conc. (ng/mL)	n per Site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0

25	10	10	0	10	0	10	0
37.5	10	9	1	9	1	9	1
62.5	10	1	9	1	9	2	8
75	10	0	10	0	10	0	10

ALCOHOL (ALC 0.04%)

Alcohol Conc. (ng/mL)	n per Site	Site A		Site B		Site C	
		-	+	-	+	-	+
0	10	10	0	10	0	10	0
0.04%	10	0	10	0	10	0	10
0.08%	10	0	10	0	10	0	10

Analytical Sensitivity

A drug-free urine pool was spiked with drugs at the listed concentrations. The results are summarized below.

Drug Concentration Cut-off Range	6MAM 10		AMP 1,000		AMP 500		AMP 300		BAR 300		BAR 200		BUP 10		BZO 500	
	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+
0% Cut-off	30	0	30	0	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	30	0	30	0
-25% Cut-off	27	3	27	3	26	4	27	3	27	3	27	3	26	4	26	4
Cut-off	15	15	14	16	15	15	15	15	16	14	15	15	14	16	15	15
+25% Cut-off	3	27	3	27	3	27	4	26	4	26	3	27	3	27	3	27
+50% Cut-off	0	30	0	30	0	30	0	30	0	30	0	30	0	30	0	30
+300% Cut-off	0	30	0	30	0	30	0	30	0	30	0	30	0	30	0	30

Drug Concentration Cut-off Range	BZO 300		BZO 200		BZO 100		ACL 100		COC 300		COC 150		COC 100		COT 200	
	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+
0% Cut-off	30	0	30	0	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	30	0	30	0
-25% Cut-off	27	3	27	3	27	3	27	3	26	4	27	3	27	3	27	3
Cut-off	15	15	14	16	14	16	14	15	15	15	15	15	16	14	15	15
+25% Cut-off	4	26	3	27	3	27	4	26	3	27	3	27	4	26	4	26
+50% Cut-off	0	30	0	30	0	30	0	30	0	30	0	30	0	30	0	30
+300% Cut-off	0	30	0	30	0	30	0	30	0	30	0	30	0	30	0	30

Drug Concentration Cut-off Range	COT 100		EDDP 300		EDDP 100		ETG 500		FYL 20		FYL 10		GAB 2,000		K2 50	
	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+
0% Cut-off	30	0	30	0	30	0	20	0	30	0	30	0	30	0	30	0
-50% Cut-off	30	0	30	0	30	0	20	0	30	0	30	0	30	0	30	0
-25% Cut-off	27	3	27	3	27	3	18	2	27	3	27	3	23	7	27	3
Cut-off	15	15	14	16	14	16	12	8	15	15	15	15	14	16	15	15
+25% Cut-off	4	26	4	26	4	26	3	17	3	27	3	27	4	26	3	27
+50% Cut-off	0	30	0	30	0	30	0	20	0	30	0	30	0	30	0	30
+300% Cut-off	0	30	0	30	0	30	0	20	0	30	0	30	0	30	0	30

Drug Concentration Cut-off Range	K2 30		K2+ 10		KET 1,000		KET 500		KET 300		KRA 100		LSD 50		MDMA 1,000	
	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+
0% Cut-off	30	0	30	0	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	30	0	30	0
-25% Cut-off	27	3	27	3	26	4	27	3	26	4	25	5	27	3	26	4
Cut-off	15	15	14	16	16	14	15	15	14	16	14	16	15	15	15	15
+25% Cut-off	3	27	4	26	4	26	3	27	4	26	3	27	4	26	5	25
+50% Cut-off	0	30	0	30	0	30	0	30	0	30	0	30	0	30	0	30
+300% Cut-off	0	30	0	30	0	30	0	30	0	30	0	30	0	30	0	30

Drug Concentration Cut-off Range	MDMA 500		MDPV 3,000		MDPV 1,000		MET 1,000		MET 500		MET 300		MOP 300		MOP 200	
	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+
0% Cut-off	30	0	30	0	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	30	0	30	0
-25% Cut-off	25	5	27	3	27	3	26	4	25	5	27	3	26	4	27	3
Cut-off	14	16	18	12	18	12	14	16	15	16	14	15	15	16	14	14
+25% Cut-off	4	26	4	26	4	26	3	27	4	26	3	27	3	27	4	26
+50% Cut-off	0	30	0	30	0	30	0	30	0	30	0	30	0	30	0	30
+300% Cut-off	0	30	0	30	0	30	0	30	0	30	0	30	0	30	0	30

Drug Concentration Cut-off Range	MOP 100		MPD 150		MQL 300		MTD 300		MTD 200		OPI 2,000		OPI 1,000		OXY 100	
	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+
0% Cut-off	30	0	30	0	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	30	0	30	0
-25% Cut-off	27	3	27	3	27	3	27	3	27	3	27	3	27	3	27	3
Cut-off	16	14	15	15	15	15	15	15	15	15	15	15	15	15	16	14
+25% Cut-off	4	26	4	26	3	27	3	27	3	27	4	26	4	26	4	26
+50% Cut-off	0	30	0	30	0	30	0	30	0	30	0	30	0	30	0	30
+300% Cut-off	0	30	0	30	0	30	0	30	0	30	0	30	0	30	0	30

Drug Concentration Cut-off Range	PCP 25		PGB 2,000		PGB 700		PGB 500		PPX 300		TCA 1000		TCA 500		THC 150	
	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+
0% Cut-off	30	0	30	0	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	30	0	30	0
-25% Cut-off	26	4	3	27	27	3	27	3	27	3	25	5	25	5	27	3
Cut-off	14	16	15	15	14	16	14	16	14	16	15	15	15	15	15	15
+25% Cut-off	3	27	4	26	4	26	4	26	4	26	3	27	3	27	4	26
+50% Cut-off	0	30	0	30	0	30	0	30	0	30	0	30	0	30	0	30
+300% Cut-off	0	30	0	30	0	30	0	30	0	30	0	30	0	30	0	30

Drug Concentration Cut-off Range	THC 50		THC 25		THC 600		THC 20		TML 300		TML 100		ZOL 50		ZOP 50	
	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+
0% Cut-off	30	0	30	0	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	30	0	30	0
-25% Cut-off	26	4	27	3	26	4	27	3	27	3	27	3	27	3	28	2
Cut-off	14	16	16	14	15	15	16	14	14	16	14	16	15	15	14	16
+25% Cut-off	3	27	4	26	4	26	4	26	4	26	4	26	4	26	3	27
+50% Cut-off	0	30	0	30	0	30	0	30	0	30	0	30	0	30	0	30
+300% Cut-off	0	30	0	30	0	30	0	30	0	30	0	30	0	30	0	30

Analytical Specificity

The following table lists the concentrations of compounds (ng/mL) that are detected as positive in urine by the Drug Rapid Test at 5 minutes.

Analytes	Concentration (ng/mL)	Analytes	Concentration (ng/mL)
6-MAM10			
6-Monoacetylmorphine	10	Morphine	>100,000
Diacetylmorphine(herion)	25	Codeine	>100,000
Oxycodone	>100,000	Oxymorphone	>100,000
AMP1,000			
D,L-Amphetamine sulfate	200	Phentermine	800
L-Amphetamine	25,000	Maprotiline	50,000

(±) 3,4-Methylenedioxyamphetamine	400	Methoxyphenamine	6,000
		D-Amphetamine	1,000
AMP500			
D,L-Amphetamine sulfate	100	Phentermine	400
L-Amphetamine	12,500	Maprotiline	25,000
(±) 3,4-Methylenedioxyamphetamine	200	Methoxyphenamine	3,000
		D-Amphetamine	500
AMP300			
D,L-Amphetamine sulfate	70	Phentermine	300
L-Amphetamine	10,000	Maprotiline	12,500
(±) 3,4-Methylenedioxyamphetamine	150	Methoxyphenamine	2,000
		D-Amphetamine	300
BAR300			
Amobarbital	3,000	Alphenol	300
5,5-Diphenylhydantoin	6,000	Aprobarbital	450
Allobarbital	450	Butabarbital	150
Barbital	6,000	Butalbital	6,000
Talbutal	30	Butethal	450
Cyclopentobarbital	25,000	Phenobarbital	300
Pentobarbital	6,000	Secobarbital	300
BAR200			
Amobarbital	2,000	Alphenol	200
5,5-Diphenylhydantoin	4,000	Aprobarbital	300
Allobarbital	300	Butabarbital	100
Barbital	4,000	Butalbital	4,000
Talbutal	20	Butethal	300
Cyclopentobarbital	17,000	Phenobarbital	200
Pentobarbital	4,000	Secobarbital	200
BUP10			
Buprenorphine	10	Norbuprenorphine	50
Buprenorphine 3-D-Glucuronide	50	Norbuprenorphine 3-D-Glucuronide	100
BZO500			
Alprazolam	200	Bromazepam	1,300
a-hydroxyalprazolam	2,500	Chlordiazepoxide	1,300
Clobazam	300	Nitrazepam	300
Clonazepam	650	Norchlordiazepoxide	200
Clorazepate dipotassium	650	Nordiazepam	1,300
Delorazepam	1,300	Oxazepam	500
Desalkylflurazepam	300	Temazepam	200
Flunitrazepam	300	Diazepam	2,500
(±) Lorazepam	5,000	Estazolam	10,500
RS-Lorazepam glucuronide	300	Triazolam	5,000
Midazolam	10,500		
BZO300			
Alprazolam	100	Bromazepam	780
a-hydroxyalprazolam	1,500	Chlordiazepoxide	780
Clobazam	200	Nitrazepam	200
Clonazepam	390	Norchlordiazepoxide	100
Clorazepate dipotassium	390	Nordiazepam	780
Delorazepam	780	Oxazepam	300
Desalkylflurazepam	200	Temazepam	100
Flunitrazepam	200	Diazepam	1,500
(±) Lorazepam	3,100	Estazolam	6,250
RS-Lorazepam glucuronide	200	Triazolam	3,100
Midazolam	6,250		

BZO200			
Alprazolam	70	Bromazepam	520
a-hydroxyalprazolam	1,000	Chlordiazepoxide	520
Clobazam	120	Nitrazepam	120
Clonazepam	260	Norchlordiazepoxide	70
Clorazepate dipotassium	260	Nordiazepam	520
Delorazepam	520	Oxazepam	200
Desalkylflurazepam	120	Temazepam	70
Flunitrazepam	120	Diazepam	1,000
(±) Lorazepam	2,000	Estazolam	4,200
RS-Lorazepam glucuronide	120	Triazolam	2,000
Midazolam	4,200		
BZO100			
Alprazolam	40	Bromazepam	260
a-hydroxyalprazolam	500	Chlordiazepoxide	260
Clobazam	60	Nitrazepam	60
Clonazepam	130	Norchlordiazepoxide	40
Clorazepate dipotassium	130	Nordiazepam	260
Delorazepam	260	Oxazepam	100
Desalkylflurazepam	60	Temazepam	40
Flunitrazepam	60	Diazepam	500
(±) Lorazepam	1,000	Estazolam	2,100
RS-Lorazepam glucuronide	60	Triazolam	1,000
Midazolam	2,100		
CLO/ACL100			
7-Amino Clonazepam	100	Clonazepam	50,000
Meclonazepam	>100,000	Oxazepam	>100,000
Alprazolam	>100,000	Bromazepam	>100,000
Clobazam	>100,000	Clorazepate dipotassium	>100,000
Desalkylflurazepam	75,000	Diazepam	>100,000
COC300			
Benzoyllecgonine	300	Cocaethylene	12,500
Cocaine HCl	200	Ecgonine	30,000
COC150			
Benzoyllecgonine	150	Cocaethylene	6,250
Cocaine HCl	100	Ecgonine	15,000
COC100			
Benzoyllecgonine	100	Cocaethylene	5,000
Cocaine HCl	80	Ecgonine	10,000
COT200			
(-)-Cotinine	200	(-)-Nicotine	3,000
COT100			
(-)-Cotinine	100	(-)-Nicotine	1,500
EDDP300			
2-Ethylidene-1,5-dimethyl-3,3-diphenylpyrrolidine (EDDP)			300
EDDP100			
2-Ethylidene-1,5-dimethyl-3,3-diphenylpyrrolidine (EDDP)			100
ETG 500			
Ethyl glucuronide			500
FYL20			
Norfentanyl	20	Fentanyl	>100,000
Trazadone	>100 000	Risperidone	>100 000
Hydroxyzine HCl	>100 000	Buspirone HCl	>100 000
Gabapentin	>100 000	9-Hydroxyrisperidone	>100 000
Fluoxetine Hydrochloride	>100 000	Acetyl Fentanyl	>100 000
Ocfentanil	>100 000	Furanyl Fentanyl	>100 000

Butyryl Fentanyl	>100 000	Valeryl Fentanyl	>100 000
Para-fluorofentanyl	>100 000	Carfentanil Oxalate	>100 000
Norcarfentanil Oxalate	>100 000	para-Fluorobutyryl fentanyl	>100 000
Isobutyryl fentanyl HCl	>100 000	Remifentanil HCl	>100 000
Sufentanil Citrate	>100 000	(+/-)-beta-Hydroxythiofentanyl HCl	>100 000
4-Fluoro-isobutyryl fentanyl	>100 000	Cyclopropyl fentanyl HCl	>100 000
Methoxyacetyl fentanyl HCl	>100 000	Acetyl norfentanil oxalate	>100 000
bromhexin	>100 000	ciprofloxacin	>100 000
paliperidon	>100 000	prometazin	>100 000
efedrin och bromhexin	>100 000	alfentanil	>100 000
risperidon	>100 000		
FYL10			
Norfentanyl	10	Fentanyl	>100,000
Trazadone	>100 000	Risperidone	>100 000
Hydroxyzine HCl	>100 000	Bupirone HCl	>100 000
Gabapentin	>100 000	9-Hydroxyrisperidone	>100 000
Fluoxetine Hydrochloride	>100 000	Acetyl Fentanyl	>100 000
Ocfentanil	>100 000	Furanyl Fentanyl	>100 000
Butyryl Fentanyl	>100 000	Valeryl Fentanyl	>100 000
Para-fluorofentanyl	>100 000	Carfentanil Oxalate	>100 000
Norcarfentanil Oxalate	>100 000	para-Fluorobutyryl fentanyl	>100 000
Isobutyryl fentanyl HCl	>100 000	Remifentanil HCl	>100 000
Sufentanil Citrate	>100 000	(+/-)-beta-Hydroxythiofentanyl HCl	>100 000
4-Fluoro-isobutyryl fentanyl	>100 000	Cyclopropyl fentanyl HCl	>100 000
Methoxyacetyl fentanyl HCl	>100 000	Acetyl norfentanil oxalate	100 000
bromhexin	>100 000	ciprofloxacin	>100 000
paliperidon	>100 000	prometazin	>100 000
efedrin och bromhexin	>100 000	alfentanil	>100 000
risperidon	>100 000		
GAB2,000			
Gabapentin	2,000	Pregabalin	100,000
Vigabatrin	>100,000		
K2 50			
JWH-018 5-Pentanoic acid metabolite	50	MAM2201 N-Pentanoic acid	65
JWH-073 4-butanoic acid metabolite	50	JWH-210 N-5-Carboxypentyl	400
JWH-018 4-Hydroxypentyl metabolite	400	JWH-398 N-Pentanoic acid	350
JWH-018 5-Hydroxypentyl metabolite	600	JWH-200 6-Hydroxyindole	600
JWH-073 4-Hydroxybutyl metabolite	300	JWH-073 N-2-Hydroxybutyl	1,000
JWH-018 N-Propanoic acid	30	JWH-019 5-Hydroxyhexyl	1,000
JWH-019 6-Hydroxyhexyl	1,000	JWH-018	7,000
JWH-122 N-4-Hydroxypentyl	1,000	AM2201 N-(4-hydroxypentyl)	700
RCS4 N-5-Carboxypentyl	45,000	JWH-073 N-(3-hydroxybutyl)	450
K2 30			
JWH-018 5-Pentanoic acid metabolite	30	MAM2201 N-Pentanoic acid	39
JWH-073 4-butanoic acid metabolite	30	JWH-210 N-5-Carboxypentyl	240
JWH-018 4-Hydroxypentyl metabolite	250	JWH-398 N-Pentanoic acid	210
JWH-018 5-Hydroxypentyl	360	JWH-200 6-Hydroxyindole	360

metabolite			
JWH-073 4-Hydroxybutyl metabolite	180	JWH-073 N-2-Hydroxybutyl	600
JWH-018 N-Propanoic acid	18	JWH-019 5-Hydroxyhexyl	600
JWH-019 6-Hydroxyhexyl	600	JWH-018	4200
JWH-122 N-4-Hydroxypentyl	600	AM2201 N-(4-hydroxypentyl)	420
RCS4 N-5-Carboxypentyl	27000	JWH-073 N-(3-hydroxybutyl)	270
K2+10			
AB-PINACA pentanoic acid metabolite	10	CUMYL-THPINACA	> 100,000
AB-PINACA N-(4-hydroxypentyl) metabolite	10	5-fluoro AEB	> 100,000
ADB-PINACA N-(4-hydroxypentyl) metabolite	15	AB-CHMINACA metabolite M2	> 100,000
ADB-PINACA N-(5-hydroxypentyl) metabolite	20	PX 1 (5-fluoro APP-PICA)	> 100,000
5-fluoro AB-PINACA N-(4-hydroxypentyl)	20	PX 2 (5-fluoro APP-PINACA)	> 100,000
ADB-PINACA pentanoic acid metabolite	20	5-fluoro ADB (5-fluoro MDMB-PINACA)	> 100,000
AB-PINACA N-(5-hydroxypentyl) metabolite	30	4-cyano CUMYL-BUTINACA	> 100,000
5-fluoro AB-PINACA	50	MMB-FUBINACA	> 100,000
AB-PINACA	100	CUMYL-PICA	> 100,000
AB-FUBINACA	150	5-fluoro MN-18	> 100,000
5-fluoro ADB-PINACA	250	MN-18	> 100,000
5-chloro AB-PINACA	1,000	5-fluoro PB-22 3-carboxyindole metabolite	> 100,000
APINACA (AKB-48)	> 10,000	BB-22 3-carboxyindole metabolite	> 100,000
APINACA (AKB-48) 5-hydroxypentyl metabolite	> 10,000	AM 2201 N-(4-hydroxypentyl) metabolite	> 100,000
KET1, 000			
Ketamine	1,000		
KET500			
Ketamine	500		
KET300			
Ketamine	300		
KRA100			
Mitragynine	100	Olanzapine	50,000
7-Hydroxymitragynine	125		
LSD50			
Lysergic acid diethylamide	50		
MDMA1, 000			
(±) 3,4-Methylenedioxy methamphetamine HCl	1,000	3,4-Methylenedioxyethyl-amphetamine	600
(±) 3,4-Methylenedioxy-amphetamine HCl	6,000		
MDMA500			
(±) 3,4-Methylenedioxy methamphetamine HCl	500	3,4-Methylenedioxyethyl-amphetamine	300
(±) 3,4-Methylenedioxy-amphetamine HCl	3,000		
MDPV3,000			
3,4-Methylenedioxyprovalerone	3,000		
MDPV1,000			
3,4-Methylenedioxyprovalerone	1,000		

MET1, 000			
ρ-Hydroxymethamphetamine	25,000	(±)-3,4-Methylenedioxy-methamphetamine	6,250
D-Methamphetamine	1,000	Mephentermine	50,000
L-Methamphetamine	12,500		
MET500			
ρ-Hydroxymethamphetamine	12,500	(±)-3,4-Methylenedioxy-methamphetamine	3,000
D-Methamphetamine	500	Mephentermine	25,000
L-Methamphetamine	9,000		
MET300			
ρ-Hydroxymethamphetamine	7,500	(±)-3,4-Methylenedioxy-methamphetamine	1,800
D-Methamphetamine	300	Mephentermine	15,000
L-Methamphetamine	3,750		
MOP/OPI300			
Codeine	200	Norcodeine	6,000
Levorphanol	1,500	Normorphone	50,000
Morphine-3-β-D-Glucuronide	800	Oxycodone	30,000
Ethylmorphine	6,000	Oxymorphone	50,000
Hydrocodone	50,000	Procaine	15,000
Hydromorphone	3,000	Thebaine	6,000
6-Monoacetylmorphine	400	Morphine	300
MOP/OPI200			
Codeine	160	Norcodeine	4,000
Levorphanol	1,000	Normorphone	40,000
Morphine-3-β-D-Glucuronide	600	Oxycodone	20,000
Ethylmorphine	4,000	Oxymorphone	40,000
Hydrocodone	40,000	Procaine	10,000
Hydromorphone	2,000	Thebaine	4,000
6-Monoacetylmorphine	200	Morphine	200
MOP/OPI100			
Codeine	80	Norcodeine	2,000
Levorphanol	500	Normorphone	20,000
Morphine-3-β-D-Glucuronide	300	Oxycodone	10,000
Ethylmorphine	2,000	Oxymorphone	20,000
Hydrocodone	20,000	Procaine	5,000
Hydromorphone	1,000	Thebaine	2,000
6-Monoacetylmorphine	100	Morphine	100
MPD150			
Methylphenidate	150		
MQL300			
Methaqualone	300		
MTD300			
Methadone	300	Doxylamine	100,000
MTD200			
Methadone	200	Doxylamine	60,000
OPI2,000			
Codeine	2,000	Morphine	2,000
Ethylmorphine	3,000	Norcodeine	25,000
Hydrocodone	50,000	Normorphone	50,000
Hydromorphone	12,500	Oxycodone	25,000
Levorphanol	25,000	Oxymorphone	25,000
6-Monoacetylmorphine	3,000	Procaine	50,000
Morphine 3-β-D-glucuronide	2,000	Thebaine	25,000
OPI1,000			

Codeine	1,000	Morphine	1,000
Ethylmorphine	1,500	Norcodeine	12,500
Hydrocodone	25,000	Normorphine	25,000
Hydromorphone	6,250	Oxycodone	12,500
Levorphanol	12,500	Oxymorphone	12,500
6-Monoacetylmorphine	1,500	Procaine	25,000
Morphine 3-β-D-glucuronide	1,000	Thebaine	12,500
OXY100			
Oxycodone	100	Hydromorphone	50,000
Oxymorphone	200	Naloxone	25,000
Levorphanol	50,000	Naltrexone	25,000
Hydrocodone	6,250		
PCP25			
Phencyclidine	25	4-Hydroxyphencyclidine	6,250
PGB2,000			
Pregabalin	2,000		
PGB700			
Pregabalin	700		
PGB500			
Pregabalin	500		
PPX300			
D-Propoxyphene	300	D-Norpropoxyphene	300
TCA1,000			
Nortriptyline	1,000	Imipramine	400
Nordoxepine	400	Clomipramine	50,000
Trimipramine	3,000	Doxepine	1,500
Amitriptyline	1,500	Maprotiline	1,500
Promazine	3,000	Promethazine	25,000
Desipramine	200	Perphenazine	25,000
Cyclobenzaprine	1,500		
TCA500			
Nortriptyline	500	Imipramine	200
Nordoxepine	200	Clomipramine	25,000
Trimipramine	1,500	Doxepine	750
Amitriptyline	750	Maprotiline	750
Promazine	1,500	Promethazine	12,500
Desipramine	100	Perphenazine	12,500
Cyclobenzaprine	750		
THC150			
Cannabinol	50,000	Δ8-THC	45,000
11-nor-Δ8-THC-9 COOH	90	Δ9-THC	45,000
11-nor-Δ9-THC-9 COOH	150		
THC50			
Cannabinol	20,000	Δ8-THC	15,000
11-nor-Δ8-THC-9 COOH	30	Δ9-THC	15,000
11-nor-Δ9-THC-9 COOH	50		
THC25			
Cannabinol	10,000	Δ8-THC	7,500
11-nor-Δ8-THC-9 COOH	15	Δ9-THC	7,500
11-nor-Δ9-THC-9 COOH	25		
THC20			
Cannabinol	10,000	Δ8-THC	7,500
11-nor-Δ8-THC-9 COOH	15	Δ9-THC	7,500
11-nor-Δ9-THC-9 COOH	20		
THC 600			
11-nor-Δ9-THC-9 COOH	600	11-nor-Δ8-THC-9 COOH	400

TML/TRA300			
n-Desmethyl-cis-tramadol	600	o-Desmethyl-cis-tramadol	21,000
Cis-tramadol	300	Phencyclidine	> 100,000
Procyclidine	> 100,000	d,l-O-Desmethyl venlafaxine	> 100,000
TML/TRA100			
n-Desmethyl-cis-tramadol	200	o-Desmethyl-cis-tramadol	7,000
Cis-tramadol	100	Phencyclidine	100,000
Procyclidine	100,000	d,l-O-Desmethyl venlafaxine	50,000
ZOL50			
Zolpidem Phenyl-4-carboxylic acid	50	Ranitidine	20,000
Zolpidem hemitartrate	50		
ZOP50			
Zopiclone	50		

For ALC strip:

Strong oxidizers

Tannic acid

Mercaptans

Bilirubin

Ascorbic acid

Polyphenolic compounds

Uric acid

Oxalic acid

These compounds are not normally present in sufficient amount in urine to interfere with the test.

Effect of Urinary Specific Gravity

Fifteen (15) urine samples of normal, high, and low specific gravity ranges (1.000-1.037) were spiked with drugs at 50% below and 50% above cut-off levels respectively. The Drug Rapid Test was tested in duplicate using fifteen drug-free urine and spiked urine samples. The results demonstrate that varying ranges of urinary specific gravity do not affect the test results.

Effect of Urinary pH

The pH of an aliquoted negative urine pool was adjusted to a pH range of 5 to 9 in 1 pH unit increments and spiked with drugs at 50% below and 50% above cut-off levels. The spiked, pH-adjusted urine was tested with the Drug Rapid Test. The results demonstrate that varying ranges of pH do not interfere with the performance of the test.

Cross-Reactivity

A study was conducted to determine the cross-reactivity of the test with compounds in either drug-free urine or drug positive urine containing calibrators. The following compounds show no cross-reactivity when tested with the Drug Rapid Test at a concentration of 100µg/mL.

Non Cross-Reacting Compounds

Acetaminophen	Dextromethorphan	Isoxsuprine	β-Phenylethylamine
Acetone	Diclofenac	Kanamycin	Procaine
Acetophenetidin	Dicyclomine	Ketoprofen	Promethazine
Aspirin	Diffunisal	Labetalol	Quinacrine
Albumin	Digoxin	Lidocaine	Quinidine
Amoxapine	4-Dimethylaminoantipyrine	Lindane	Ranitidine
Amoxicillin	Diphenhydramine	Loperamide	Riboflavin
Ampicillin	5,5-Diphenylhydantoin	Meperidine	Sodium chloride
Ascorbic acid	Disopyramide	Methoxyphenamine	Sulfamethazine
Aspartame	Doxylamine	Metoprolol	Sulindac
Atropine	Dopamine	Nalidixic acid	Temazepam
Benzoic acid	(1R, 2S) - (-)-Ephedrine	(+)-Naproxen	Tetracycline
Bilirubin	Erythromycin	Nimesulide	Tetrahydrozoline
(+/-) Brompheniramine	Ethanol	Norethindrone	Thebaine
Benzocaine	Etodolac	Noscapine	Theophylline
Buspirone	Famprofazone	Niacinamide	Thiamine
Caffeine	Fenoprofen	Norephedrine	Thioridazine
Chloramphenicol	Fluoxetine Hydrochloride	Orphenadrine	Tolbutamide
Chloroquine	Furosemide	Oxalic acid	Trazodone

(+/-)-Chlorpheniramine	Gentisic acid	Oxolinic acid	Triamterene
S- (+)-Chlorpheniramine maleate salt	D (+) Glucose	Oxymetazoline	Trifluoperazine
Chlorpromazine	Guaicol Glyceryl Ether	Papaverine	Trimethoprim
Chlorprothixene	Hemoglobin	Pemoline	Trimipramine
Cimetidine	Hydralazine	Penicillin-G	Tryptamine
Clomipramine	Hydrochlorothiazide	Perphenazine	Tyramine
Clonidine	Hydroxyzine	Phenelzine	Uric acid
Creatine	Imipramine	Pheniramine	Verapamil
Cyclobenzaprine	Isoproterenol hydrochloride	Phenothiazine	Zomepirac

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Index of Symbols

	Consult Instruction for use		Tests per kit		Authorized Representative
	For <i>in vitro</i> diagnostic use only		Use by		Do not reuse
	Store between 2-30°C		Lot Number		Catalog #
	Do not use if package is damaged		CE marking		Manufacturer
	Importer		Distributor		Unique Device Identifier



Manufacturer

Hangzhou Biotest Biotech Co., Ltd.
17#, Futai Road, Zhongtai Street,
Yuhang District, Hangzhou, P. R. China



For GAB Rapid Test and ACL Rapid Test:



Riomavix S.L.
Calle de Almansa 55, 1D,
Madrid 28039 Spain



Importer and distributor: Noviral
SwedenAB
Imported by: Noviral SwedenAB

For other Drug Rapid Test:



Shanghai International
Holding Corp. GmbH (Europe)
Eiffelstrasse 80,
20537 Hamburg, Germany



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Noviral Sweden AB
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Number: RP5625600
Effective date: 2025-01-07