

L-Cup Rapid Test with Adulteration (Urine)

Package Insert

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

ACE/AMP/ABP/ALP/7-ACL/BAR/BZO/BUP/COC/COT/CLO/CAF/CFYL/CAT/CIT/CAR/CNB/DIA/ETG/EDDP/FYL/FLX/FKET/GAB/HMO/KET/K2/KRA/LSD/MTD/MET/MDMA/MOP/MQL/6-MAM/MDA/MPD/MEP/MDPV/MCAT/MPRD/MES/MTZ/NND/OPI/OXY/OZP/PCP/PPX/PGB/PAP/QTP/RPD/SCOP/THC/TAP/TLD/TZD/TRO/TC/A/TML/UR-144/ZOL/ZOP/ZAL/ α -PVP

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

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

A rapid test for the simultaneous, qualitative detection of multiple drugs and drug metabolites in human urine. For forensic use only, not for *in vitro* diagnostic use.

INTENDED USE

The L-Cup Rapid Test w/ Adulteration is a rapid chromatographic immunoassay for the qualitative detection of multiple drugs and drug metabolites in urine at the following cut-off concentrations:

Test	Calibrator	Cut-off (ng/mL)
Acetaminophen (ACE)	Acetaminophen	5,000
Amphetamine (AMP)	d-Amphetamine	1,000/500/300
AB-PINACA (ABP)	AB-PINACA	10
Alprazolam (ALP)	Alprazolam	100
7-Aminoclonazepam (7-ACL)	7-Aminoclonazepam	300/200/100
Barbiturates (BAR)	Secobarbital	300/200
Benzodiazepines (BZO)	Oxazepam	500/300/200/100
Buprenorphine (BUP)	Buprenorphine	10/5
Cocaine (COC)	Benzoyllecgonine	1,500/300/200/150/100
Cotinine (COT)	Cotinine	500/300/200/100/50/10
Clonazepam (CLO)	Clonazepam	400/150
Caffeine (CAF)	Caffeine	1,000
Carfentanyl (CFYL)	Carfentanyl	500/250
Cathine (CAT)	(+)-Norpseudoephedrine	150
Citalopram (CIT)	Citalopram	500
Carisoprodol (CAR)	Carisoprodol	2,000/1,000/500
Cannabinol (CNB)	Cannabinol	500
Diazepam (DIA)	Diazepam	300/200
Ethyl- β -D-Glucuronide (ETG)	Ethyl- β -D-Glucuronide	1,500/1,000/500/300
2-ethylidene-1,5-dimethyl-3,3-diphenylpyrrolidine (EDDP)	2-ethylidene-1,5-dimethyl-3,3-diphenylpyrrolidine	300/100
Fentanyl (FYL)	Fentanyl	300/200/100/20/10
Fluoxetine (FLX)	Fluoxetine	500
Fluoketamine (FKET)	Fluoketamine	1,000
Gabapentin (GAB)	Gabapentin	2,000
Hydromorphone (HMO)	Hydromorphone	500/300/250
Ketamine (KET)	Ketamine	1,000/500/300/100
Synthetic Marijuana (K2)	JWH-018- JWH-073	50/30/25
Kratom (KRA)	Mitragynine	300
Lysergic Acid Diethylamide (LSD)	Lysergic Acid Diethylamide	50/20/10
Methadone (MTD)	Methadone	300/200
Methamphetamine (MET)	d-Methamphetamine	1,000/500/300/200
Methylenedioxy-methamphetamine (MDMA)	d,l-Methylenedioxymethamphetamine	1,000/500/300
Morphine (MOP)	Morphine	300/200/100
Methaqualone (MQL)	Methaqualone	300
6-Monoacetylmorphine (6-MAM)	6-MAM	10
(\pm) 3,4-Methylenedioxy-Amphetamine (MDA)	(\pm) 3,4-Methylenedioxy-Amphetamine	500
Methylphenidate (MPD)	Methylphenidate	300/150

Methylphenidate (MPD)	Ritalin acid	1,000
Mephedrone (MEP)	Mephedrone	500/100
3, 4-methylenedioxy-pyrovalerone (MDPV)	3, 4-methylenedioxy-pyrovalerone	1,000/500/300
Methcathinone (MCAT)	S(-)-Methcathinone	500
Meperidine (MPRD)	Normeperidine	100
Mescaline (MES)	Mescaline	300/100
Mirtazapine (MTZ)	Desmethylmirtazapine	500
N,N-Dimethyltryptamine (NND)	N,N-Dimethyltryptamine	1,000
Opiate (OPI)	Morphine	2,000/1,000
Oxycodone (OXY)	Oxycodone	300/100
Olanzapine (OZP)	Olanzapine	1,000
Phencyclidine (PCP)	Phencyclidine	50/25
Propoxyphene (PPX)	Propoxyphene	300
Pregabalin (PGB)	Pregabalin	50,000/500
Papaverine (PAP)	Papaverine	500
Quetiazepam (QTP)	Quetiazepam	1,000
Risperidone (RPD)	Risperidone	150
Scopolamine (SCOP)	Scopolamine	500
Marijuana (THC)	11-nor- Δ^9 -THC-9 COOH	300/200/150/50/30/25/20
Tapentadol (TAP)	Tapentadol	1,000
Tilidine (TLD)	Nortilidine	50
Trazodone (TZD)	Trazodone	200
Tropicamide (TRO)	Tropicamide	350
Tricyclic Antidepressants (TCA)	Nortriptyline	1,000/500/300
Tramadol (TML)	Cis-Tramadol	500/300/200/100
UR-144	UR-144 5-Pentanoic acid	25
Zolpidem (ZOL)	Zolpidem	50
Zopiclone (ZOP)	Zopiclone	300/50
Zaleplon (ZAL)	Zaleplon	100
Alpha-Pyrrolidinovalerophenone (α -PVP)	Alpha-Pyrrolidinovalerophenone	2,000/1,000/500/300

Configurations of the L-Cup Rapid Test w/ Adulteration come with any combination of the above listed drug analytes with or without S.V.T. This assay provides only a preliminary 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) is the preferred confirmatory method. Clinical consideration and professional judgment should be applied to any drug test result, particularly when preliminary positive results are indicated.

SUMMARY OF ADULTERATION

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.

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 dipstick. 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 dipstick 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.

PRINCIPLE OF ADULTERATION

Oxidants/PCC (Pyridiniumchlorochromate) tests for the presence of oxidizing agents such as bleach and hydrogen peroxide. Pyridiniumchlorochromate (sold under the brand name Urine Luck) is a commonly used adulterant.² Normal human urine should not contain

oxidants or 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.³ 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 Urin Aid and Clear Choice contain glutaraldehyde which may cause false negative results by disrupting the enzyme used in some immunoassay tests.³ 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.¹ 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.

Bleach tests for the presence of bleach. Bleach refers to a number of chemicals which remove color, whiten or disinfect, often by oxidation, Bleaches are used as household chemicals to whiten clothes and remove stains and as disinfectants. Normal human urine should not contain bleach.

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.

S.V.T REAGENTS

Adulteration Pad	Reactive indicator	Buffers and non-reactive ingredients
Creatinine	0.04%	99.96%
Nitrite	0.07%	99.93%
Bleach	0.39%	99.61%
Glutaraldehyde	0.02%	99.98%
pH	0.06%	99.94%
Specific Gravity	0.25%	99.75%
Oxidants / PCC	0.36%	99.64%

PRECAUTIONS

- For forensic use only, not for *in vitro* diagnostic use. 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 local regulations.

STORAGE AND STABILITY

Store as packaged in the sealed pouch at 2-30°C (35.6-86°F). 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 (36-46.4°F) for up to 48 hours prior to testing. For prolonged storage, specimens may be frozen and stored below -20°C (-4°F). Frozen specimens should be thawed and mixed well before testing. When testing cards with S.V.T. storage of urine specimens should not exceed 2 hours at room temperature or 4 hours refrigerated prior to testing.

MATERIALS

Materials Provided

- Test Cups
- Adulteration Color Chart (when applicable)
- Package Insert

Materials Required But Not Provided

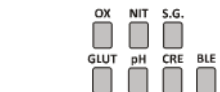
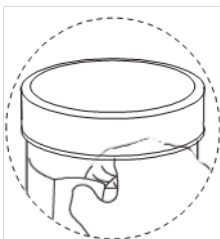
- Timer
- Specimen collection containers

DIRECTIONS FOR USE

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

1. Bring the pouch to room temperature before opening it. Remove the cup from the sealed pouch and use it within one hour.
2. Donor provides specimen.
3. Technician replaces and secures cap while the cup is on a flat surface.
4. Check the temperature label (Temp Label) 2-4 minutes after specimen collection. A green color will appear to indicate the temperature of the urine specimen. The proper range for an unadulterated specimen is 32-38°C (90-100°F).
5. Technician dates and initials the security seal and attaches the security seal over the cup cap.
6. Technician peels off the label on test cup to view results.
7. **Read the adulteration strips between 3-5 minutes with the help of color chart.** 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 in case of any positive result for any adulteration test.
8. **The drug strip result should be read at 5 minutes.** Do not interpret the result after 10 minutes.

Interpret adulteration strip between 3-5 minutes (see enclosed color chart for interpretation).



Read the drug strips at 5 minutes.



INTERPRETATION OF RESULTS

(Please refer to the illustration above)

NEGATIVE: A colored line appears in the control region (C) and another colored line appears in the test region (T). This negative result means that the concentrations in the urine sample are below the designated cut-off levels for a particular drug tested.

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

POSITIVE: A colored line appears in the control region (C) and no line appears in the test region (T). The positive result means that the drug concentration in the urine sample is greater than the designated cut-off for a specific drug.

INVALID: No line appears in the control region (C). Insufficient specimen volume or incorrect procedural techniques are the most likely reasons for control line failure. Read the directions again and repeat the test with a new test. If the result is still invalid, contact your manufacturer.

INTERPRETATION OF RESULTS (S.V.T./ADULTERATION)

(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.

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

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

LIMITATIONS

1. The L-Cup Rapid Test w/ Adulteration provides only a qualitative, preliminary result. A secondary analytical method must be used to obtain a confirmed result. Gas Chromatography/Mass Spectrometry (GC/MS) is the preferred confirmatory method.^{4,5}
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 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 350 mg/dL. Under rare conditions, certain kidney diseases may show dilute urine.
7. **Bleach:** Normal human urine should not contain bleach. The presence of high levels of bleach in the specimen may result in false negative results for the bleach pad.
8. **pH:** Normal pH levels are between 4.0 and 9.0.

PERFORMANCE CHARACTERISTICS

Accuracy
% Agreement with GC/MS

	ACE 5,000	AMP 1,000	AMP 500	AMP 300	ABP 10	ALP 100	7-ACL 300	7-ACL 200	7-ACL 100	BAR 300	BAR 200
Positive Agreement	93.5%	98.1%	99.1%	99.1%	92.0%	90.9%	94.1%	94.6%	94.7%	96.1%	95.3%
Negative Agreement	98.6%	97.9%	98.6%	98.5%	97.1%	97.4%	97.7%	97.6%	97.5%	98.6%	97.9%
Total Results	97.0%	98.0%	98.8%	98.8%	95.8%	95.9%	96.2%	96.2%	96.2%	97.6%	96.8%
	BZO 500	BZO 300	BZO 200	BZO 100	BUP 10	BUP 5	COC 1,500	COC 300	COC 200	COC 150	COC 100
Positive Agreement	98.2%	98.4%	99.2%	99.2%	99.1%	99.1%	92.0%	98.2%	>99.9%	98.3%	99.2%
Negative Agreement	97.8%	99.2%	98.4%	97.5%	>99.9%	>99.9%	98.3%	97.8%	>99.9%	97.0%	97.0%
Total Results	98.0%	98.8%	98.8%	98.4%	99.6%	99.6%	95.2%	98.0%	100.0%	97.6%	98.0%
	COT 500	COT 300	COT 200	COT 100	COT 50	COT 10	CLO 400	CLO 150	CAF 1,500	CFYL 500	CFYL 250
Positive Agreement	95.7%	97.7%	96.7%	97.9%	96.7%	97.8%	97.1%	99.0%	91.3%	94.7%	94.7%
Negative Agreement	96.1%	97.5%	97.5%	98.1%	97.5%	98.1%	99.3%	98.6%	95.7%	98.6%	98.6%
Total Results	96.0%	97.6%	97.2%	98.0%	97.2%	98.0%	98.4%	98.8%	94.6%	97.3%	97.3%
	CAT 150	CIT 500	CAR 2,000	CAR 1,000	CAR 500	CNB 500	DIA 300	DIA 200	ETG 1,500	ETG 1,000	ETG 500
Positive Agreement	90.5%	93.3%	95.0%	90.0%	90.0%	95.8%	98.4%	98.4%	97.7%	95.3%	97.6%
Negative Agreement	97.3%	95.5%	94.2%	98.1%	92.3%	97.6%	99.2%	99.2%	99.4%	99.4%	99.4%
Total Results	95.8%	94.8%	94.4%	95.8%	91.7%	96.9%	98.8%	98.8%	98.8%	98.0%	98.8%
	ETG 300	EDDP 300	EDDP 100	FYL 300	FYL 200	FYL 100	FYL 20	FYL 10	FLX 500	FKET 1,000	GAB 2,000
Positive Agreement	98.8%	97.9%	96.9%	97.0%	97.0%	97.1%	96.7%	>99.9%	97.1%	96.7%	92.3%
Negative Agreement	99.4%	99.4%	96.7%	98.6%	98.6%	98.7%	98.9%	97.8%	96.6%	97.0%	98.5%
Total Results	99.2%	98.8%	96.8%	98.1%	98.1%	98.2%	98.4%	98.4%	96.8%	96.9%	96.7%

	HMO 500	HMO 300	HMO 250	KET 1,000	KET 500	KET 300	KET 100	K2 50	K2 30	K2 25	KRA 300
Positive Agreement	91.7%	91.7%	93.8%	97.5%	97.6%	96.7%	96.0%	97.5%	97.6%	97.6%	95.7%
Negative Agreement	98.7%	98.7%	97.5%	98.2%	98.2%	97.5%	97.3%	98.2%	98.8%	98.2%	98.3%
Total Results	96.1%	96.1%	96.1%	98.0%	98.0%	97.2%	96.8%	98.0%	98.4%	98.0%	97.6%
	LSD 50	LSD 20	LSD 10	MTD 300	MTD 200	MET 1,000	MET 500	MET 300	MET 200	MDMA 1,000	MDM A 500
Positive Agreement	94.1%	94.3%	94.3%	98.9%	98.9%	96.2%	97.6%	97.8%	97.6%	98.0%	98.1%
Negative Agreement	98.5%	98.5%	98.5%	98.8%	98.7%	97.1%	97.0%	97.5%	97.0%	99.3%	99.3%
Total Results	97.0%	97.0%	97.0%	98.8%	98.8%	96.8%	97.2%	97.6%	97.2%	98.8%	98.8%
	MDMA 300	MOP 300	MOP 200	MOP 100	MQL 300	6-MAM 500	MDA 500	MPD 1,000	MPD 300	MPD 150	MEP 500
Positive Agreement	98.1%	95.0%	95.0%	97.0%	89.8%	97.7%	98.1%	94.6%	94.6%	91.9%	95.2%
Negative Agreement	99.3%	95.3%	96.0%	96.6%	93.2%	98.1%	97.9%	98.4%	98.4%	98.4%	98.5%
Total Results	98.8%	95.2%	95.6%	96.8%	92.0%	98.0%	98.0%	97.0%	97.0%	96.0%	97.7%
	MEP 100	MDPV 1,000	MDPV 500	MDPV 300	MCAT 500	MPRD 100	MES 300	MES 100	MTZ 500	NND 1,000	OPI 2,000
Positive Agreement	90.5%	93.3%	93.1%	93.8%	90.9%	95.0%	95.8%	95.8%	93.3%	96.7%	96.7%
Negative Agreement	97.0%	98.6%	98.3%	97.1%	95.0%	94.2%	97.6%	97.6%	95.6%	97.0%	93.8%
Total Results	95.4%	97.0%	96.6%	96.1%	94.1%	94.4%	96.9%	96.9%	94.9%	96.9%	95.2%
	OPI 1,000	OXY 300	OXY 100	OZP 1,000	PCP 50	PPX 25	PPX 300	PGB 50,000	PGB 500	PAP 500	QTP 1,000
Positive Agreement	95.9%	96.5%	97.7%	95.8%	92.3%	92.4%	96.0%	90.9%	95.2%	96.9%	97.1%
Negative Agreement	93.8%	99.4%	99.4%	97.6%	96.9%	96.8%	94.0%	97.3%	96.3%	98.0%	98.3%
Total Results	94.8%	98.4%	98.8%	96.9%	95.2%	95.2%	94.8%	95.9%	96.0%	97.6%	97.9%
	RPD 150	SCOP 500	THC 300	THC 200	THC 150	THC 50	THC 300	THC 25	THC 20	TAP 1,000	TLD 50
Positive Agreement	93.3%	93.5%	95.5%	93.4%	94.5%	97.9%	97.9%	96.9%	94.8%	94.4%	97.3%
Negative Agreement	95.5%	98.6%	98.1%	97.5%	97.5%	98.1%	98.1%	97.4%	99.3%	98.2%	98.3%
Total Results	94.8%	97.0%	97.2%	96.0%	96.4%	98.0%	98.0%	97.2%	97.6%	96.7%	97.9%
	TZD 200	TRO 350	TCA 1,000	TCA 500	TCA 300	TML 500	TML 300	TML 200	TML 100	UR- 144 25	ZOL 50
Positive Agreement	92.9%	92.0%	94.8%	94.9%	94.9%	92.9%	88.0%	88.2%	88.2%	97.1%	90.9%
Negative Agreement	96.1%	97.0%	91.6%	92.1%	92.1%	98.1%	96.2%	96.2%	92.4%	98.4%	97.1%
Total Results	95.2%	95.6%	92.8%	93.2%	93.2%	96.9%	93.2%	93.2%	90.8%	98.0%	95.6%
	ZOP 300	ZOP 50	ZAL 100	α-PVP 2,000	α-PVP 1,000	α-PVP 500	α-PVP 300				
Positive Agreement	90.9%	86.4%	95.2%	86.8%	92.1%	91.9%	92.1%				
Negative Agreement	97.2%	97.2%	97.4%	96.8%	96.8%	95.2%	95.2%				
Total Results	95.7%	94.6%	96.7%	93.0%	95.0%	94.0%	94.0%				

Precision

A study was conducted at three hospitals using three different lots of product to demonstrate the within run, between run and between operator precision. An identical card of coded specimens, containing drugs at concentrations of negative, 50% and 25% cut-off level, was labeled, blinded, and tested at each site. The results gained $\geq 75\%$ accuracy in $\pm 25\%$ cut-off level specimen and 100% accuracy in negative and $\pm 50\%$ cut-off level specimen.

Analytical Sensitivity

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

Drug Concentration	ACE 5000	AMP 1,000	AMP 500	AMP 300	ABP 10	ALP 100	7-ACL 300	7-ACL 200
Cut-off Range	- +	- +	- +	- +	- +	- +	- +	- +
0% Cut-off	30	0	30	0	30	0	30	0
-50% Cut-off	30	0	30	0	30	0	30	0
-25% Cut-off	26	4	26	4	25	5	27	3
Cut-off	14	16	15	15	15	15	15	15
+25% Cut-off	3	27	3	27	3	27	4	26
+50% Cut-off	0	30	0	30	0	30	0	30
+300% Cut-off	0	30	0	30	0	30	0	30

Drug Concentration	7-ACL 100	BAR 300	BAR 200	BZO 500	BZO 300	BZO 200	BZO 100	BUP 10	BUP 5	COC 1,500
Cut-off Range	- +	- +	- +	- +	- +	- +	- +	- +	- +	- +
0% Cut-off	30	0	30	0	30	0	30	0	30	0
-50% Cut-off	30	0	30	0	30	0	30	0	30	0
-25% Cut-off	27	3	27	3	26	4	27	3	27	3
Cut-off	13	17	15	15	15	15	15	16	14	16
+25% Cut-off	4	26	4	26	3	27	4	26	3	27
+50% Cut-off	0	30	0	30	0	30	0	30	0	30
+300% Cut-off	0	30	0	30	0	30	0	30	0	30

Drug Concentration	COC 300	COC 200	COC 150	COC 100	COT 500	COT 300	COT 200	COT 100	COT 50	COT 10
Cut-off Range	- +	- +	- +	- +	- +	- +	- +	- +	- +	- +
0% Cut-off	30	0	30	0	30	0	30	0	30	0
-50% Cut-off	30	0	30	0	30	0	30	0	30	0
-25% Cut-off	26	4	26	4	27	3	27	3	26	4
Cut-off	13	17	14	16	16	14	16	15	15	15
+25% Cut-off	3	27	3	27	4	26	4	26	4	26
+50% Cut-off	0	30	0	30	0	30	0	30	0	30
+300% Cut-off	0	30	0	30	0	30	0	30	0	30

Drug Concentration	CLO 400	CLO 150	CAF 1,000	CFYL 500	CFYL 250	CAT 150	CIT 500	CAR 2,000
Cut-off Range	- +	- +	- +	- +	- +	- +	- +	- +
0% Cut-off	30	0	30	0	30	0	30	0
-50% Cut-off	30	0	30	0	30	0	30	0
-25% Cut-off	26	4	26	4	26	4	25	5
Cut-off	14	16	14	16	17	13	14	16
+25% Cut-off	5	25	5	25	6	24	6	24
+50% Cut-off	0	30	0	30	0	30	0	30
+300% Cut-off	0	30	0	30	0	30	0	30

Drug Concentration	CAR 1,000	CAR 500	CNB 500	DIA 300	DIA 200	ETG 1,500	ETG 1,000	ETG 500	ETG 300
Cut-off Range	- +	- +	- +	- +	- +	- +	- +	- +	- +
0% Cut-off	30	0	30	0	30	0	30	0	30
-50% Cut-off	30	0	30	0	30	0	29	1	30
-25% Cut-off	27	3	27	3	27	3	27	3	26
Cut-off	16	14	15	14	16	15	15	15	15
+25% Cut-off	4	26	4	26	4	26	3	27	3
+50% Cut-off	0	30	0	30	0	30	0	30	0
+300% Cut-off	0	30	0	30	0	30	0	30	0

Drug Concentration	EDDP 300	EDDP 100	FYL 300	FYL 200	FYL 100	FYL 20	FYL 10	FLX 500	FKET 1,000
Cut-off Range	- +	- +	- +	- +	- +	- +	- +	- +	- +
0% Cut-off	30	0	30	0	30	0	30	0	30
-50% Cut-off	30	0	30	0	30	0	30	0	30
-25% Cut-off	27	3	26	4	27	3	27	3	26
Cut-off	15	15	15	15	16	14	16	14	16
+25% Cut-off	4	26	3	27	3	27	3	27	3
+50% Cut-off	0	30	0	30	0	30	0	30	0
+300% Cut-off	0	30	0	30	0	30	0	30	0

Drug Concentration	GAB 2,000	HMO 500	HMO 300	HMO 250	KET 1,000	KET 500	KET 300	KET 100	K2 50	K2 30
Cut-off Range	- +	- +	- +	- +	- +	- +	- +	- +	- +	- +
0% Cut-off	30	0	30	0	30	0	30	0	30	0
-50% Cut-off	30	0	30	0	30	0	30	0	30	0
-25% Cut-off	28	2	28	2	28	2	27	3	27	3
Cut-off	14	16	15	15	15	15	16	14	15	15
+25% Cut-off	3	27	3	27	3	27	3	27	4	26
+50% Cut-off	0	30	0	30	0	30	0	30	0	30
+300% Cut-off	0	30	0	30	0	30	0	30	0	30

Drug Concentration	K2 25	KRA 300	LSD 50	LSD 20	LSD 10	MTD 300	MTD 200	MET 1,000	MET 500
Cut-off Range	- +	- +	- +	- +	- +	- +	- +	- +	- +
0% Cut-off	30	0	30	0	30	0	30	0	30
-50% Cut-off	30	0	30	0	30	0	30	0	30
-25% Cut-off	25	5	28	2	27	3	27	3	27
Cut-off	14	16	14	16	14	16	13	17	15
+25% Cut-off	3	27	1	29	3	27	3	27	4
+50% Cut-off	0	30	0	30	0	30	0	30	0
+300% Cut-off	0	30	0	30	0	30	0	30	0

Drug Concentration	MET 300	MET 200	MDMA 1,000	MDMA 500	MDMA 300	MOP 300	MOP 200	MOP 100	MQL 300	6-MAM 10
Cut-off Range	- +	- +	- +	- +	- +	- +	- +	- +	- +	- +
0% Cut-off	30	0	30	0	30	0	30	0	30	0
-50% Cut-off	30	0	30	0	30	0	30	0	30	0
-25% Cut-off	27	3	27	3	26	4	25	5	26	4
Cut-off	16	14	15	15	15	14	16	15	15	15
+25% Cut-off	3	27	4	26	5	25	4	26	3	27
+50% Cut-off	0	30	0	30	0	30	0	30	0	30
+300% Cut-off	0	30	0	30	0	30	0	30	0	30

Drug Concentration	MDA 500	MPD 150	MPD 300	MPD 1,000	MEP 500	MEP 100	MDPV 1,000	MDPV 500	MDPV 300
Cut-off Range	- +	- +	- +	- +	- +	- +	- +	- +	- +
0% Cut-off	30	0	30	0	30	0	30	0	30
-50% Cut-off	30	0	30	0	30	0	30	0	30
-25% Cut-off	26	4	26	4	27	3	26	4	25
Cut-off	15	15	15	15	16	14	16	14	15
+25% Cut-off	3	27	5	25	5	25	5	25	4
+50% Cut-off	0	30	0	30	0	30	0	30	0
+300% Cut-off	0	30	0	30	0	30	0	30	0

Drug Concentration	MCAT 500	MPRD 100	MES 300	MES 100	MTZ 500	NND 1,000	OPI 2,000	OPI 1,000	OXY 100	OXY 300
Cut-off Range	- +	- +	- +	- +	- +	- +	- +	- +	- +	- +
0% Cut-off	30	0	30	0	30	0	30	0	30	0
-50% Cut-off	30	0	30	0	30	0	30	0	30	0
-25% Cut-off	28	2	27	3	27	3	27	3	27	3
Cut-off	17	13	15	14	16	14	16	15	15	15
+25% Cut-off	3	27	2	28	5	25	4	26	4	26
+50% Cut-off	0	30	0	30	0	30	0	30	0	30
+300% Cut-off	0	30	0	30	0	30	0	30	0	30

Drug Concentration	OZP 1,000	PCP 50	PCP 25	PXP 300	PGB 50,000	PGB 500	PAP 500	QTP 1,000	RPD 150
Cut-off Range	- +	- +	- +	- +	- +	- +	- +	- +	- +
0% Cut-off	30	0	30	0	30	0	30	0	30
-50% Cut-off	30	0	30	0	30	0	30	0	30
-25% Cut-off	27	3	26	4	25	5	26	4	25
Cut-off	14	16	15	15	15	14	16	15	15
+25% Cut-off	4	26	3	27	3	27	5	25	6
+50% Cut-off	0	30	0	30	0	30	0	30	0
+300% Cut-off	0	30	0	30	0	30	0	30	0

Drug Concentration	SCOP 500	THC 300	THC 200	THC 150	THC 50	THC 30	THC 25	THC 20	TAP 1,000	TLD 50
Cut-off Range	- +	- +	- +	- +	- +	- +	- +	- +	- +	- +
0% Cut-off	30	0	30	0	30	0	30	0	30	0
-50% Cut-off	30	0	30	0	30	0	30	0	30	0
-25% Cut-off	26	4	26	4	26	4	27	3	26	4
Cut-off	14	16	15	15	15	15	14	16	14	16
+25% Cut-off	3	27	4	26	4	26	3	27	4	26
+50% Cut-off	0	30	0	30	0	30	0	30	0	30
+300% Cut-off	0	30	0	30	0	30	0	30	0	30

Drug Concentration	TZD 200	TRO 350	TCA 1,000	TCA 500	TCA 300	TML 100	TML 200	TML 300	TML 500	UR-144 25
Cut-off Range	- +	- +	- +	- +	- +	- +	- +	- +	- +	- +
0% Cut-off	30	0	30	0	30	0	30	0	30	0
-50% Cut-off	30	0	30	0	30	0	30	0	30	0
-25% Cut-off	28	2	27	3	25	5	26	4	27	3
Cut-off	14	16	15	15	15	14	16	14	16	15
+25% Cut-off	3	27	3	27	4	26	3	27	4	26
+50% Cut-off	0	30	0	30	0	30	0	30	0	30
+300% Cut-off	0	30	0	30	0	30	0	30	0	

AB-PINACA (ABP 10)			
AB-PINACA	10	AB-PINACA 5-Pentanoic	10
AB-PINACA 5-hydroxypentyl	10	AB-FUBINACA	10
AB-PINACA 4-hydroxypentyl	10,000	UR-144 5-Pentanoic	5,000
UR-144 5-hydroxypentyl	10,000	UR-144 4-hydroxypentyl	10,000
APINACA 5-hydroxypentyl	10,000	ADB-PINACA Pentanoic Acid	10
ADB-PINACA N-(5-hydroxypentyl)	30	5-fluoro AB-PINACA N-(4-hydroxypentyl)	30
5-fluoro AB-PINACA	25		
ALPRAZOLAM (ALP 100)			
Benzodiazepines	300	Flunitrazepam	200
a-hydroxylalprazolam	1,500	(±) Lorazepam	3,000
Bromazepam	900	RS-Lorazepamglucuronide	200
Chlordiazepoxide	900	Midazolam	6,000
Clobazam	200	Nitrazepam	200
Clonazepam	500	Norchlordiazepoxide	100
Clorazepatedipotassium	500	Nordiazepam	900
Delorazepam	900	Oxazepam	300
Desalkylflurazepam	200	Temazepam	100
Diazepam	300	Triazolam	3,000
Estazolam	6,000	Alprazolam	100
7-AMINOCLONAZEPAM (7-ACL 300)			
a-hydroxylalprazolam	6,000	Flunitrazepam	3,000
Bromazepam	6,000	RS-Lorazepam glucuronide	2,700
Chlordiazepoxide	6,000	Norchlordiazepoxide	4,500
Clobazam	9,000	Nordiazepam	15,000
Clonazepam	2,400	Temazepam	9,000
Delorazepam	6,000	7-Aminoclonazepam	300
Desalkylflurazepam	6,000		
7-Aminoclonazepam (7-ACL 200)			
a-hydroxylalprazolam	4,000	Flunitrazepam	2,000
Bromazepam	4,000	RS-Lorazepam glucuronide	1,800
Chlordiazepoxide	4,000	Norchlordiazepoxide	3,000
Clobazam	6,000	Nordiazepam	10,000
Clonazepam	1,600	Temazepam	6,000
Delorazepam	4,000	7-Aminoclonazepam	200
Desalkylflurazepam	4,000		
7-Aminoclonazepam (7-ACL 100)			
a-hydroxylalprazolam	2,000	Flunitrazepam	1,000
Bromazepam	2,000	RS-Lorazepam glucuronide	900
Chlordiazepoxide	2,000	Norchlordiazepoxide	1,500
Clobazam	3,000	Nordiazepam	5,000
Clonazepam	800	Temazepam	3,000
Delorazepam	2,000	7-Aminoclonazepam	100
Desalkylflurazepam	2,000		
BARBITURATES (BAR 300)			
Amobarbital	5,000	Alphenol	600
5,5-Diphenylhydantoin	8,000	Aprobarbital	500
Allobarbital	600	Butobarbital	200
Barbital	8,000	Butalbital	8,000
Talbutal	200	Butethal	500
Cyclopentobarbital	30,000	Phenobarbital	300
Pentobarbital	8,000	Secobarbital	300
BARBITURATES (BAR 200)			
Amobarbital	3,000	Alphenol	400
5,5-Diphenylhydantoin	5,000	Aprobarbital	300
Allobarbital	400	Butobarbital	150
Barbital	5,000	Butalbital	5,000
Talbutal	150	Butethal	300
Cyclopentobarbital	20,000	Phenobarbital	200
Pentobarbital	5,000	Secobarbital	200
BENZODIAZEPINES (BZO 500)			
Alprazolam	200	Bromazepam	1,500
a-hydroxylalprazolam	2,500	Chlordiazepoxide	1,500
Clobazam	300	Nitrazepam	300
Clonazepam	800	Norchlordiazepoxide	200

Clorazepatedipotassium	800	Nordiazepam	1,500
Delorazepam	1,500	Oxazepam	500
Desalkylflurazepam	300	Temazepam	300
Flunitrazepam	300	Diazepam	500
(±) Lorazepam	5,000	Estazolam	10,000
RS-Lorazepamglucuronide	300	Triazolam	5,000
Midazolam	10,000		
BENZODIAZEPINES (BZO 300)			
Alprazolam	100	Bromazepam	900
a-hydroxylalprazolam	1,500	Chlordiazepoxide	900
Clobazam	200	Nitrazepam	200
Clonazepam	500	Norchlordiazepoxide	100
Clorazepatedipotassium	500	Nordiazepam	900
Delorazepam	900	Oxazepam	300
Desalkylflurazepam	200	Temazepam	100
Flunitrazepam	200	Diazepam	300
(±) Lorazepam	3,000	Estazolam	6,000
RS-Lorazepamglucuronide	200	Triazolam	3,000
Midazolam	6,000		
BENZODIAZEPINES (BZO 200)			
Alprazolam	70	Bromazepam	600
a-hydroxylalprazolam	1,000	Chlordiazepoxide	600
Clobazam	120	Nitrazepam	120
Clonazepam	300	Norchlordiazepoxide	70
Clorazepatedipotassium	300	Nordiazepam	600
Delorazepam	600	Oxazepam	200
Desalkylflurazepam	120	Temazepam	70
Flunitrazepam	120	Diazepam	200
(±) Lorazepam	2,000	Estazolam	4,000
RS-Lorazepamglucuronide	120	Triazolam	2,000
Midazolam	4,000		
BENZODIAZEPINES (BZO 100)			
Alprazolam	40	Bromazepam	300
a-hydroxylalprazolam	500	Chlordiazepoxide	300
Clobazam	60	Nitrazepam	60
Clonazepam	150	Norchlordiazepoxide	40
Clorazepatedipotassium	150	Nordiazepam	300
Delorazepam	300	Oxazepam	100
Desalkylflurazepam	60	Temazepam	40
Flunitrazepam	60	Diazepam	100
(±) Lorazepam	1,000	Estazolam	2,000
RS-Lorazepamglucuronide	60	Triazolam	1,000
Midazolam	2,000		
BUPRENORPHINE (BUP 10)			
Buprenorphine	10	Norbuprenorphine	50
Buprenorphine 3-D-Glucuronide	50	Norbuprenorphine 3-D-Glucuronide	100
BUPRENORPHINE (BUP 5)			
Buprenorphine	5	Norbuprenorphine	25
Buprenorphine 3-D-Glucuronide	25	Norbuprenorphine 3-D-Glucuronide	50
COCAINE (COC 1,500)			
Benzoyllecgonine	1,500	Cocaethylene	100,000
Cocaine HCl	1200	Ecgonine	150,000
COCAINE (COC 300)			
Benzoyllecgonine	300	Cocaethylene	20,000
Cocaine HCl	200	Ecgonine	30,000
COCAINE (COC 200)			
Benzoyllecgonine	200	Cocaethylene	13,500
Cocaine HCl	135	Ecgonine	20,000
COCAINE (COC 150)			
Benzoyllecgonine	150	Cocaethylene	1,000
Cocaine HCl	120	Ecgonine	15,000
COCAINE (COC 100)			
Benzoyllecgonine	100	Cocaethylene	7,000
Cocaine HCl	80	Ecgonine	10,000
COTININE (COT 300)			

(-)-Cotinine	300	(-)-Nicotine	7,500
COTININE (COT 200)			
(-)-Cotinine	200	(-)-Nicotine	5,000
COTININE (COT 100)			
(-)-Cotinine	100	(-)-Nicotine	2,500
COTININE (COT 500)			
(-)-Cotinine	500	(-)-Nicotine	12,500
COTININE (COT 50)			
(-)-Cotinine	50	(-)-Nicotine	1,250
COTININE (COT 10)			
(-)-Cotinine	10	(-)-Nicotine	250
CLONAZEPAM (CLO 400)			
Clonazepam	400	Flunitrazepam	300
Alprazolam	200	(±) Lorazepam	1,250
a-hydroxylalprazolam	2,000	RS-Lorazepamglucuronide	250
Bromazepam	1,000	Midazolam	5,000
Chlordiazepoxide	1,000	Nitrazepam	200
Clobazam	250	Norchlordiazepoxide	200
Clorazepatedipotassium	600	Nordiazepam	1,000
Delorazepam	1,000	Oxazepam	350
Desalkylflurazepam	250	Temazepam	150
Diazepam	300	Triazolam	5,000
Estazolam	1,250		
CLONAZEPAM (CLO 150)			
Clonazepam	150	Flunitrazepam	120
Alprazolam	75	(±) Lorazepam	500
a-hydroxylalprazolam	750	RS-Lorazepamglucuronide	100
Bromazepam	400	Midazolam	2,000
Chlordiazepoxide	400	Nitrazepam	75
Clobazam	100	Norchlordiazepoxide	75
Clorazepatedipotassium	250	Nordiazepam	400
Delorazepam	400	Oxazepam	130
Desalkylflurazepam	100	Temazepam	60
Diazepam	120	Triazolam	2,000
Estazolam	500		
CAFFEINE (CAF 1,000)			
Caffeine	1,000		
CARFENTANYL (CFYL 500)			
Carfentanyl	500	Fentanyl	100
Sufentanil	50,000	Ramifentanil	10,000
(±)cis-3-Menthylfentanyl	20,000	Butyl fentanyl	150
Carfentanyl (CFYL 250)			
Carfentanyl	250	Fentanyl	50
Sufentanil	25,000	Ramifentanil	5,000
(±)cis-3-Menthylfentanyl	10,000	Butyl fentanyl	75
CATHINE (CAT 150)			
(+)-Norpseudoephedrine HCl150 (Cathine)	150	(+)-3,4-Methylenedioxyamph 100 etamine (MDA)	100
d/l-Amphetamine	100	p-Hydroxyamphetamine	100
Tryptamine	12,500	Methoxyphenamine	12,500
CITALOPRAM (CIT 500)			
Desmethylcitalopram	500		
CARISOPRODOL (CAR 2,000)			
Carisoprodol	2,000		
CARISOPRODOL (CAR 1,000)			
Carisoprodol	1,000		
CARISOPRODOL (CAR 500)			
Carisoprodol	500		
CANNABINOL (CNB 500)			
Cannabinol	500	Δ ⁹ -THC	10,000
11-nor-Δ ⁹ -THC-9 COOH	300		
DIAZEPAM (DIA 300)			
Diazepam	300	Midazolam	6,000
Clobazam	200	Nitrazepam	200
Clonazepam	500	Norchlordiazepoxide	100
Clorazepate dipotassium	500	Nordiazepam	900
Alprazolam	100	Flunitrazepam	200

a-hydroxylprazolam	1,500	(±) Lorazepam	3,000
Bromazepam	900	RS-Lorazepam glucuronide	200
Chlordiazepoxide	900	Triazolam	3,000
Estazolam	6,000	Temazepam	100
Delorazepam	900	Oxazepam	300
Desalkylflurazepam	200		
DIAZEPAM (DIA 200)			
Diazepam	200	Midazolam	4,000
Clobazam	120	Nitrazepam	120
Clonazepam	300	Norchlordiazepoxide	70
Clorazepate dipotassium	300	Nordiazepam	600
Alprazolam	70	Flunitrazepam	120
a-hydroxylprazolam	1,000	(±) Lorazepam	2,000
Bromazepam	600	RS-Lorazepam glucuronide	120
Chlordiazepoxide	600	Triazolam	2,000
Estazolam	4,000	Temazepam	70
Delorazepam	600	Oxazepam	200
Desalkylflurazepam	120		
ETHYL-β-D-GLUCURONIDE (ETG 300)			
Ethyl- β-D-Glucuronide	300	Propyl β-D-glucuronide	30,000
Morphine 3β-glucuronide	60,000	Morphine 6β-glucuronide	60,000
Glucuronic Acid	60,000	Ethanol	>100,000
Methanol	>100,000		
ETHYL-β-D-GLUCURONIDE (ETG 500)			
Ethyl- β-D-Glucuronide	500	Propyl β-D-glucuronide	50,000
Morphine 3β-glucuronide	100,000	Morphine 6β-glucuronide	100,000
Glucuronic Acid	100,000	Ethanol	>100,000
Methanol	>100,000		
ETHYL-β-D-GLUCURONIDE (ETG 1,000)			
Ethyl- β-D-Glucuronide	1,000	Propyl β-D-glucuronide	100,000
Morphine 3β-glucuronide	>100,000	Morphine 6β-glucuronide	>100,000
Glucuronic Acid	>100,000	Ethanol	>100,000
Methanol	>100,000		
ETHYL-β-D-GLUCURONIDE (ETG 1,500)			
Ethyl- β-D-Glucuronide	1,500	Propyl β-D-glucuronide	150,000
Morphine 3β-glucuronide	>100,000	Morphine 6β-glucuronide	>100,000
Glucuronic Acid	>100,000	Ethanol	>100,000
Methanol	>100,000		
2-ETHYLIDENE-1,5-DIMETHYL-3,3-DIPHENYLPIRROLIDINE (EDDP 300)			
2-Ethylidene-1,5-dimethyl-3,3-diphenylpyrrolidine (EDDP)			300
2-ETHYLIDENE-1,5-DIMETHYL-3,3-DIPHENYLPIRROLIDINE (EDDP 100)			
2-Ethylidene-1,5-dimethyl-3,3-diphenylpyrrolidine (EDDP)			100
FENTANYL (FYL 300)			
Fentanyl	300	Methoxyacetyl-Fentanyl	600
Cyclopro Fentanyl	7,500	Acetyl Fentanyl	600
Norfentanyl	>100,000	Ocfentanyl	3,000
(±)cis-3-Methylfentanyl	7,500	4-Fluoro-isobutyryl Fentanyl	3,000
Butyl fentanyl	4,500	para-Fluorobutyryl fentanyl (PBPF)	3,000
Valeryl Fentanyl	3,000	para-Fluorofentanyl	1,500
FENTANYL (FYL 200)			
Fentanyl	200	Methoxyacetyl-Fentanyl	400
Cyclopro Fentanyl	5,000	Acetyl Fentanyl	400
Norfentanyl	>100,000	Ocfentanyl	2,000
(±)cis-3-Methylfentanyl	5,000	4-Fluoro-isobutyryl Fentanyl	2,000
Butyl fentanyl	3,000	para-Fluorobutyryl fentanyl (PBPF)	2,000
Valeryl Fentanyl	2,000	para-Fluorofentanyl	1,000
FENTANYL (FYL 100)			
Fentanyl	100	Methoxyacetyl-Fentanyl	200
Cyclopro Fentanyl	2,500	Acetyl Fentanyl	200
Norfentanyl	>100,000	Ocfentanyl	1,000
(±)cis-3-Methylfentanyl	2,500	4-Fluoro-isobutyryl Fentanyl	1,000
Butyl fentanyl	1,500	para-Fluorobutyryl fentanyl (PBPF)	1,000
Valeryl Fentanyl	1,000	para-Fluorofentanyl	500
FENTANYL (FYL 20)			

Fentanyl	20	Methoxyacetyl-Fentanyl	40
Cyclopro Fentanyl	500	Acetyl Fentanyl	40
Norfentanyl	>100,000	Ocfentanyl	200
(±)cis-3-Methylfentanyl	500	4-Fluoro-isobutyryl Fentanyl	200
Butyl fentanyl	300	para-Fluorobutyryl fentanyl (PBPF)	200
Valeryl Fentanyl	200	para-Fluorofentanyl	100
FENTANYL (FYL 10)			
Fentanyl	10	Methoxyacetyl-Fentanyl	20
Cyclopro Fentanyl	250	Acetyl Fentanyl	20
Norfentanyl	>100,000	Ocfentanyl	100
(±)cis-3-Methylfentanyl	250	4-Fluoro-isobutyryl Fentanyl	100
Butyl fentanyl	150	para-Fluorobutyryl fentanyl (PBPF)	100
Valeryl Fentanyl	100	para-Fluorofentanyl	50
FLUOXETINE (FLX 500)			
Fluoxetine	500		
F-KETAMINE (FKET 1,000)			
2-(2-fluorophenyl)-2-methylamino-cyclohexanone			
GABAPENTIN (GAB 2,000)			
Gabapentin	2,000		
HYDROMORPHONE (HMO 500)			
Hydromorphone	500	Morphine	200
Codeine	120	Ethylmorphine	120
Hydrocodone	500	Morphine	250
		3-β-D-Glucuronide	
Levorphanol	2,000	Oxycodone	125,000
Normorphine	125,000	Norcodeine	31,200
Oxymorphone	125,000	Nalorphine	50,000
Thebaine	10,000	Diacetylmorphine (Heroin)	250
6-Monoacetylmorphine			
HYDROMORPHONE (HMO 300)			
Hydromorphone	300	Morphine	120
Codeine	75	Ethylmorphine	75
Hydrocodone	300	Morphine	150
		3-β-D-Glucuronide	
Levorphanol	1,200	Oxycodone	75,000
Normorphine	75,000	Norcodeine	18,700
Oxymorphone	75,000	Nalorphine	30,000
Thebaine	6,000	Diacetylmorphine (Heroin)	150
6-Monoacetylmorphine			
HYDROMORPHONE (HMO 250)			
Hydromorphone	250	Morphine	100
Codeine	60	Ethylmorphine	60
Hydrocodone	250	Morphine	125
		3-β-D-Glucuronide	
Levorphanol	1,000	Oxycodone	62,500
Normorphine	62,500	Norcodeine	15,600
Oxymorphone	62,500	Nalorphine	25,000
Thebaine	5,000	Diacetylmorphine (Heroin)	125
6-Monoacetylmorphine			
KETAMINE (KET 1,000)			
Ketamine	1,000	Benzphetamine	25,000
Dextromethorphan	2,000	(+) Chlorpheniramine	25,000
Methoxyphenamine	25,000	Clonidine	100,000
d-Norpropoxyphene	25,000	EDDP	50,000
Promazine	25,000	4-Hydroxyphenacyclidine	50,000
Promethazine	25,000	Levorphanol	50,000
Pentazocine	25,000	MDE	50,000
Phencyclidine	25,000	Meperidine	25,000
Tetrahydrozoline	500	d-Methamphetamine	50,000
Mephentermine	25,000	l-Methamphetamine	50,000
(1R, 2S) - (-)-Ephedrine	100,000	3,4-Methylenedioxy-methamphetamine (MDMA)	100,000
Disopyramide	25,000	Thioridazine	50,000
KETAMINE (KET 500)			

Ketamine	500	Benzphetamine	12,500
Dextromethorphan	1,000	(+) Chlorpheniramine	12,500
Methoxyphenamine	12,500	Clonidine	50,000
d-Norpropoxyphene	12,500	EDDP	25,000
Promazine	12,500	4-Hydroxyphenacyclidine	25,000
Promethazine	12,500	Levorphanol	25,000
Pentazocine	12,500	MDE	25,000
Phencyclidine	12,500	Meperidine	12,500
Tetrahydrozoline	250	d-Methamphetamine	25,000
Mephentermine	12,500	l-Methamphetamine	25,000
(1R, 2S) - (-)-Ephedrine	50,000	3,4-Methylenedioxy-methamphetamine (MDMA)	50,000
Disopyramide	12,500	Thioridazine	25,000
KETAMINE (KET 300)			
Ketamine	300	Benzphetamine	6,250
Dextromethorphan	600	(+) Chlorpheniramine	6,250
Methoxyphenamine	6,250	Clonidine	30,000
d-Norpropoxyphene	6,250	EDDP	15,000
Promazine	6,250	4-Hydroxyphenacyclidine	15,000
Promethazine	6,250	Levorphanol	15,000
Pentazocine	6,250	MDE	15,000
Phencyclidine	6,250	Meperidine	6,250
Tetrahydrozoline	150	d-Methamphetamine	15,000
Mephentermine	6,250	l-Methamphetamine	15,000
(1R, 2S) - (-)-Ephedrine	30,000	3,4-Methylenedioxy-methamphetamine (MDMA)	30,000
Disopyramide	6,250	Thioridazine	15,000
KETAMINE (KET 100)			
Ketamine	100	Benzphetamine	2,000
Dextromethorphan	200	(+) Chlorpheniramine	2,000
Methoxyphenamine	2,000	Clonidine	10,000
d-Norpropoxyphene	2,000	EDDP	5,000
Promazine	2,000	4-Hydroxyphenacyclidine	5,000
Promethazine	2,000	Levorphanol	5,000
Pentazocine	2,000	MDE	5,000
Phencyclidine	2,000	Meperidine	2,000
Tetrahydrozoline	50	d-Methamphetamine	5,000
Mephentermine	2,000	l-Methamphetamine	5,000
(1R, 2S) - (-)-Ephedrine	10,000	Thioridazine	5,000
Disopyramide	2,000	3,4-Methylenedioxy-methamphetamine (MDMA)	10,000
SYNTHETIC MARIJUANA (K2-50)			
JWH-018 5-Pentanoic acid	50	JWH-073 4-butanoic acid	50
JWH-018 4-Hydroxypentyl	400	JWH-018 5-Hydroxypentyl	500
JWH-073 4-Hydroxybutyl	500		
SYNTHETIC MARIJUANA (K2-30)			
JWH-018 5-Pentanoic acid	30	JWH-073 4-butanoic acid	30
JWH-018 4-Hydroxypentyl	250	JWH-018 5-Hydroxypentyl	300
JWH-073 4-Hydroxybutyl	300		
SYNTHETIC MARIJUANA (K2-25)			
JWH-018 5-Pentanoic acid	25	JWH-073 4-butanoic acid	25
JWH-018 4-Hydroxypentyl	200	JWH-018 5-Hydroxypentyl	250
JWH-073 4-Hydroxybutyl	250		
KRATOM (KRA 300)			
Mitragynine	300	7-hydroxymitragynine	>50,000
LYSERGIC ACID DIETHYLAMIDE (LSD 10)			
Lysergic Acid Diethylamide	10		
LYSERGIC ACID DIETHYLAMIDE (LSD 20)			
Lysergic Acid Diethylamide	20		
LYSERGIC ACID DIETHYLAMIDE (LSD 50)			
Lysergic Acid Diethylamide	50		
METHADONE (MTD 300)			
Methadone	300	Doxylamine	100,000
METHADONE (MTD 200)			
Methadone	200	Doxylamine	65,000
METHAMPHETAMINE (MET 1,000)			
p-Hydroxymethamphetamine	25,000	(±)-3,4-Methylenedioxy-	12,500

methamphetamine			
D-Methamphetamine	1,000		
L-Methamphetamine	20,000	Mephentermine	50,000
METHAMPHETAMINE (MET 500)			
p-Hydroxymethamphetamine	12,500	(±)-3,4-Methylenedioxy-methamphetamine	6,250
D-Methamphetamine	500		
L-Methamphetamine	10,000	Mephentermine	25,000
METHAMPHETAMINE (MET 300)			
p-Hydroxymethamphetamine	7,500	(±)-3,4-Methylenedioxy-methamphetamine	3,750
D-Methamphetamine	300		
L-Methamphetamine	6,000	Mephentermine	15,000
METHAMPHETAMINE (MET 200)			
p-Hydroxymethamphetamine	5,000	(±)-3,4-Methylenedioxy-methamphetamine	2,500
D-Methamphetamine	200		
L-Methamphetamine	4,000	Mephentermine	10,000
METHYLENEDIOXYMETHAMPHETAMINE (MDMA 1,000) Ecstasy			
(±) 3,4-Methylenedioxy-methamphetamine HCl	1,000	3,4-Methylenedioxyethyl-amphetamine	600
(±)3,4-Methylenedioxyampheta-mine HCl	6,000		
METHYLENEDIOXYMETHAMPHETAMINE (MDMA 500) Ecstasy			
(±) 3,4-Methylenedioxy-methamphetamine HCl	500	3,4-Methylenedioxyethyl-amphetamine	300
(±)	3,000		
3,4-Methylenedioxyampheta-mine HCl			
METHYLENEDIOXYMETHAMPHETAMINE (MDMA 300) Ecstasy			
(±) 3,4-Methylenedioxy-methamphetamine HCl	300	3,4-Methylenedioxyethyl-amphetamine	180
(±)	1,800		
3,4-Methylenedioxyampheta-mine HCl			
MORPHINE (MOP 300)			
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	300	Morphine	300
MORPHINE (MOP 200)			
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
MORPHINE (MOP 100)			
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	200	Morphine	100
METHAQUALONE (MQL 300)			
Methaqualone	300		
6-MONOACETYLMORPHINE (6-MAM 10)			
6-Monoacetylmorphine	10	Morphine	100,000
(±) 3, 4-METHYLENEDIOXY AMPHETAMINE (MDA 500)			
(±) 3,4-Methylenedioxy amphetamine	500	Methoxyphenamine	6,000
		D-Amphetamine	2,000
D,L-Amphetamine sulfate	300	Phentermine	1,000
L-Amphetamine	25,000	Maprotiline	50,000

METHYLPHENIDATE (MPD 300)			
Methylphenidate (Ritalin)	300	Ritalinic Acid	1,000
METHYLPHENIDATE (MPD 150)			
Methylphenidate (Ritalin)	150	Ritalinic Acid	500
METHYLPHENIDATE (MPD 1,000)			
Methylphenidate (Ritalin)	350	Ritalinic Acid	1,000
MEPHEDRONE (MEP 500)			
Mephedrone HCl	500	R(+)-Methcathinone HCl	7,500
S(-)-Methcathinone HCl	2,500	3-Fluoromethcathinone HCl	7,500
4-Fluoromethcathinone HCl	1,500	Methoxyphenamine	100,000
MEPHEDRONE (MEP 100)			
Mephedrone HCl	100	R(+)-Methcathinone HCl	1,500
S(-)-Methcathinone HCl	500	3-Fluoromethcathinone HCl	1,500
4-Fluoromethcathinone HCl	300	Methoxyphenamine	100,000
3, 4-METHYLENEDIOXYPYROVALERONE (MDPV 1,000)			
3, 4-methylenedioxy-pyrovalerone	1,000		
3, 4-METHYLENEDIOXYPYROVALERONE (MDPV 500)			
3, 4-methylenedioxy-pyrovalerone	500		
3, 4-METHYLENEDIOXYPYROVALERONE (MDPV 300)			
3, 4-methylenedioxy-pyrovalerone	300		
METHCATHINONE (MCAT 500)			
S(-)-Methcathinone HCl	500	R(+)-Methcathinone HCl	1,500
Methoxyphenamine	100,000	3-Fluoromethcathinone HCl	1,500
MEPERIDINE (MPRD 100)			
Normeperidine	100	Meperidine	100
MESCALINE (MES 100)			
Mescaline	100		
MESCALINE (MES 300)			
Mescaline	300		
MIRTAZAPINE (MTZ 500)			
N-Desmethyilmirtazapine	500	Mirtazapine	500
N, N-DIMETHYLTRYPTAMINE (NND 1,000)			
N, N-Dimethyltryptamine	1,000		
OPIATE (OPI 2,000)			
Codeine	2,000	Morphine	2,000
Ethylmorphine	3,000	Norcodeine	25,000
Hydrocodone	50,000	Normorphone	50,000
Hydromorphone	15,000	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
OPIATE (OPI 1,000)			
Codeine	1,000	Morphine	1,000
Ethylmorphine	1,500	Norcodeine	12,500
Hydrocodone	25,000	Normorphone	25,000
Hydromorphone	7,500	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
OXYCODONE (OXY 300)			
Oxycodone	300	Hydromorphone	150,000
Oxymorphone	900	Naloxone	75,000
Levorphanol	15,000	Naltrexone	75,000
Hydrocodone	75,000		
OXYCODONE (OXY 100)			
Oxycodone	100	Hydromorphone	50,000
Oxymorphone	300	Naloxone	25,000
Levorphanol	50,000	Naltrexone	25,000
Hydrocodone	25,000		
OLANZAPINE (OZP 1,000)			
Olanzapine	1,000		
PHENCYCLIDINE (PCP 50)			
Phencyclidine	50	4-Hydroxyphencyclidine	25,000
PHENCYCLIDINE (PCP 25)			

Phencyclidine	25	4-Hydroxyphencyclidine	12,500
PROPOXYPHENE (PPX 300)			
D-Propoxyphene	300	D-Norpropoxyphene	300
PREGABALIN (PGB 50,000)			
Pregabalin	50,000		
PREGABALIN (PGB 500)			
Pregabalin	500		
PAPAVERINE (PAP 500)			
Papaverine	500	Diflunisal	1,000,000
Methortrexate	65,000	Methedrone	500,000
Pragablin	500,000	Phenezine	8,000
Quinine	4,000		
QUETIAPINE (QTP 1,000)			
Quetiapine	1,000	Norquetiapine	10,000
RISPERIDONE (RPD 150)			
Risperidone	150		
SCOPOLAMINE (SCOP 500)			
Scopolamine	500	Atropine	3,000
MARIJUANA (THC 300)			
Cannabinol	200,000	Δ ⁸ -THC	100,000
11-nor-Δ ⁸ -THC-9 COOH	200	Δ ⁹ -THC	100,000
11-nor-Δ ⁹ -THC-9 COOH	300		
MARIJUANA (THC 200)			
Cannabinol	140,000	Δ ⁸ -THC	68,000
11-nor-Δ ⁸ -THC-9 COOH	120	Δ ⁹ -THC	68,000
11-nor-Δ ⁹ -THC-9 COOH	200		
MARIJUANA (THC 150)			
Cannabinol	100,000	Δ ⁸ -THC	50,000
11-nor-Δ ⁸ -THC-9 COOH	100	Δ ⁹ -THC	50,000
11-nor-Δ ⁹ -THC-9 COOH	150		
MARIJUANA (THC 50)			
Cannabinol	35,000	Δ ⁸ -THC	17,000
11-nor-Δ ⁸ -THC-9 COOH	30	Δ ⁹ -THC	17,000
11-nor-Δ ⁹ -THC-9 COOH	50		
MARIJUANA (THC 30)			
Cannabinol	20,000	Δ ⁸ -THC	10,000
11-nor-Δ ⁸ -THC-9 COOH	20	Δ ⁹ -THC	10,000
11-nor-Δ ⁹ -THC-9 COOH	30		
MARIJUANA (THC 25)			
Cannabinol	17,500	Δ ⁸ -THC	8,500
11-nor-Δ ⁸ -THC-9 COOH	15	Δ ⁹ -THC	8,500
11-nor-Δ ⁹ -THC-9 COOH	25		
MARIJUANA (THC 20)			
Cannabinol	14,000	Δ ⁸ -THC	6,800
11-nor-Δ ⁸ -THC-9 COOH	12	Δ ⁹ -THC	6,800
11-nor-Δ ⁹ -THC-9 COOH	20		
TAPENTADOL (TAP 1,000)			
3-((1R,2R)-3-(dimethylamino)-1-ethyl-2-methylpropyl)phenol	1,000		
TILIDINE (TLD 50)			
Nortilidide	50	Tilidide	100
TRAZODONE (TZD 200)			
Trazodone	200		
TROPICAMIDE (TRO 350)			
Tropicamide	350		
TRICYCLIC ANTIDEPRESSANTS (TCA 1,000)			
Nortriptyline	1,000	Imipramine	400
Nordoxepine	500	Clomipramine	50,000
Trimipramine	3,000	Doxepine	2,000
Amitriptyline	1,500	Maprotiline	2,000
Promazine	3,000	Promethazine	50,000
Desipramine	200	Perphenazine	50,000
Cyclobenzaprine	2,000	Dithiaden	10,000
TRICYCLIC ANTIDEPRESSANTS (TCA 500)			
Nortriptyline	500	Imipramine	200
Nordoxepine	250	Clomipramine	25,000
Trimipramine	1,500	Doxepine	1,000

Amitriptyline	750	Maprotiline	1,000
Promazine	1,500	Promethazine	25,000
Desipramine	100	Perphenazine	25,000
Cyclobenzaprine	1,000	Dithiaden	5,000
TRICYCLIC ANTIDEPRESSANTS (TCA 300)			
Nortriptyline	300	Imipramine	120
Nordoxepine	150	Clomipramine	15,000
Trimipramine	900	Doxepine	600
Amitriptyline	450	Maprotiline	600
Promazine	900	Promethazine	15,000
Desipramine	60	Perphenazine	15,000
Cyclobenzaprine	600	Dithiaden	3,000
TRAMADOL (TML 100)			
n-Desmethyl-cis-tramadol	200	o-Desmethyl-cis-tramadol	10,000
Cis-tramadol	100	Phencyclidine	100,000
Procyclidine	100,000	d,l-O-Desmethyl venlafaxine	50,000
TRAMADOL (TML 200)			
n-Desmethyl-cis-tramadol	400	o-Desmethyl-cis-tramadol	20,000
Cis-tramadol	200	Phencyclidine	200,000
Procyclidine	200,000	d,l-O-Desmethyl venlafaxine	100,000
TRAMADOL (TML 300)			
n-Desmethyl-cis-tramadol	600	o-Desmethyl-cis-tramadol	30,000
Cis-tramadol	300	Phencyclidine	300,000
Procyclidine	300,000	d,l-O-Desmethyl venlafaxine	150,000
TRAMADOL (TML 500)			
n-Desmethyl-cis-tramadol	10,000	o-Desmethyl-cis-tramadol	50,000
Cis-tramadol	500	Phencyclidine	500,000
Procyclidine	500,000	d,l-O-Desmethyl venlafaxine	250,000
UR-144 (25)			
UR-144 5-Pentanoic acid	25	UR-144 4-hydroxypentyl	10,000
UR-144 5-hydroxypentyl	5000	XLR-11 4-hydroxypentyl	2,000
5-fluoro	10,000	ADB-PINAC	>10,000
AB-Pinaca		N-(4-hydroxypentyl)	
N-(4-hydroxypentyl)			
AB-PINACA 4-hydroxypentyl	>10,000		
ZOLPIDEM (ZOL 50)			
Zolpidem	50		
ZOPICLONE (ZOP 300)			
Zopiclone-x-oxide	300	Zopiclone	300
ZOPICLONE (ZOP 50)			
Zopiclone-x-oxide	50	Zopiclone	50
ZALEPLON (ZAL 100)			
Zaleplon	100		
ALPHA-PYRROLIDINOVALEROPHENONE (α-PVP 2,000)			
Alpha-Pyrrolidinovalerophenone	2,000		
ALPHA-PYRROLIDINOVALEROPHENONE (α-PVP 1,000)			
Alpha-Pyrrolidinovalerophenone	1,000		
ALPHA-PYRROLIDINOVALEROPHENONE (α-PVP 500)			
Alpha-Pyrrolidinovalerophenone	500		
ALPHA-PYRROLIDINOVALEROPHENONE (α-PVP 300)			
Alpha-Pyrrolidinovalerophenone	300		

Effect of Urinary Specific Gravity

Fifteen (15) urine samples of normal, high, and low specific gravity ranges (1.005-1.045) were spiked with drugs at 50% below and 50% above cut-off levels respectively. The Multi-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 Multi-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 above related calibrator substances. The following compounds show no cross-reactivity when tested with the Multi-Drug Rapid Test at a concentration of 100 µg/mL.









Non Cross-Reacting Compounds

Acetophenetidin	Cortisone	Zomepirac	Quinidine
N-Acetylprocainamide	Creatinine	Ketoprofen	Quinine
Acetylsalicylic acid	Deoxycorticosterone	Labetalol	Salicylic acid
Aminopyrine	Dextromethorphan	Loperamide	Serotonin
Amoxicillin	Diclofenac	Meprobamate	Sulfamethazine
Ampicillin	Diflunisal	Isoxsuprine	Sulindac
l-Ascorbic acid	Digoxin	d,l-Propranolol	Tetracycline
Apomorphine	Diphenhydramine	Nalidixic acid	Tetrahydrocortisone,
Aspartame	Ethyl-p-aminobenzoate	Naproxen	3-acetate
Atropine	β-Estradiol	Niacinamide	Tetrahydrocortisone
Benzoic acid	Estrone-3-sulfate	Nifedipine	Tetrahydrozoline
Benzoic acid	Erythromycin	Norethindrone	Thiamine
Bilirubin	Fenoprofen	Noscapine	Thioridazine
d,l-Brompheniramine	Furosemide	d,l-Octopamine	d,l-Tyrosine
Cannabidiol	Gentisic acid	Oxalic acid	Tolbutamide
Chloral hydrate	Hemoglobin	Oxolinic acid	Triamterene
Chloramphenicol	Hydralazine	Oxymetazoline	Trifluoperazine
Chlorothiazide	Hydrochlorothiazide	Papaverine	Trimethoprim
d,l-Chlorpheniramine	Hydrocortisone	Penicillin-G	d,l-Tryptophan
Chlorpromazine	o-Hydroxyhippuric acid	Perphenazine	Uric acid
Cholesterol	3-Hydroxytyramine	Phenelzine	Verapamil
Clonidine	d,l-Isoproterenol	Prednisone	

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Glossary of Symbols

	Consult instructions for use		Test per Kit		Catalogue #
	Store between 2-30°C (36-86°F)		Use by		Do Not Reuse
	Lot Number		Manufacturer		

 BTNX Inc.
722 Rosebank Road,
Pickering, ON L1W 4B2
Canada

Technical support: 1-888-339-9964

Number: 14601599400
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