



# CLIA WAIVED Multi-Drug Urine Test Cup

Catalogue No. See Box Label

## CLIA CATEGORIZATION: WAIVED URINE SCREENING TEST RESULTS AT 5 MINUTES

T-Cup® Multi-Drug Urine Test Cup are competitive binding, lateral flow immunochromatographic assays for qualitative and simultaneous detection of Amphetamine, Secobarbital, Buprenorphine, Oxazepam, Cocaine, 2-ethylidene-1,5-dimethyl-3,3-diphenylpyrrolidine (EDDP), Methylenedioxymethamphetamine, Methamphetamine, Morphine, Methadone, Oxycodone, Phencyclidine, Propoxyphene, Nortriptyline and Cannabinoids in human urine with below cutoff concentrations and approximate detection time:

Drug (Identifier)	Calibrator	Cut-off Level	Minimum Detection Time	Maximum Detection Time
Amphetamine (AMP500)	d-Amphetamine	500 ng/mL	2-7 hours	1-2 days
Amphetamine (AMP1000)	d-Amphetamine	1000 ng/mL	2-7 hours	1-2 days
Secobarbital (BAR)	Secobarbital	300 ng/mL	2-4 hours	1-4 days
Buprenorphine (BUP)	Buprenorphine	10 ng/mL	4 hours	1-3 days
Oxazepam (BZO)	Oxazepam	300 ng/mL	2-7 hours	1-2 days
Cocaine (COC150)	Benzoylcegonine	150 ng/mL	1-4 hours	2-4 days
Cocaine (COC300)	Benzoylcegonine	300 ng/mL	1-4 hours	2-4 days
EDDP	2-ethylidene-1,5-dimethyl-3,3-diphenyl-pyrrolidine	300 ng/mL	3-8 hours	1-3 days
Methylenedioxymethamphetamine (MDMA)	3,4-Methylenedioxymethamphetamine	500 ng/mL	2-7 hours	2-4 days
Methamphetamine (MET500/mAMP500)	D(+)-Methamphetamine	500 ng/mL	2-7 hours	2-4 days
Methamphetamine (MET1000/mAMP1000)	D(+)-Methamphetamine	1000 ng/mL	2-7 hours	2-4 days
Morphine (MOP/OPI300)	Morphine	300 ng/mL	2 hours	2-3 days
Methadone (MTD)	Methadone	300 ng/mL	3-8 hours	1-3 days
Morphine (OPI2000)	Morphine	2000 ng/mL	2 hours	2-3 days
Oxycodone (OXY)	Oxycodone	100 ng/mL	4 hours	1-3 days
Phencyclidine (PCP)	Phencyclidine	25 ng/mL	4-6 hours	7-14 days
Propoxyphene (PPX)	d-Propoxyphene	300 ng/mL	2 hours	2-3 days
Nortriptyline (TCA)	Nortriptyline	1000 ng/mL	8-12 hours	2-7 days
Cannabinoids (THC)	11-nor- $\Delta^9$ -THC-9-COOH	50 ng/mL	2 hours	Up to 5+ days

T-Cup® Multi-Drug Urine Test Cup offers various combinations from 2 to 15 drugs of abuse tests but only one cutoff concentration under same drug condition will be included per device. It is intended for over-the-counter and for prescription use. For *in vitro* diagnostic use.

The tests may yield positive results for the prescription drugs Buprenorphine, Nortriptyline, Oxazepam, Secobarbital, Propoxyphene, and Oxycodone when taken at or above prescribed doses. It is not intended to distinguish between prescription use or abuse of these drugs. Clinical consideration and professional judgment should be applied to any drug of abuse test result, particularly in evaluating a preliminary positive result.

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

## WARNINGS AND PRECAUTIONS

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

## CONTENT OF THE KIT

- 25 T-Cup® test devices, each in one pouch with two desiccants. The desiccants are for storage purposes only and are not used in the test procedure.
- One (1) Package Insert
- One (1) Adulteration Color Comparison Chart (If equipped).
- 25 Security Seals
- 25 Pieces of Gloves

## MATERIAL REQUIRED BUT NOT PROVIDED

Timer or Clock

## STORAGE AND STABILITY

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

## SPECIMEN COLLECTION AND PREPARATION

### WHEN TO COLLECT URINE FOR THE TEST?

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

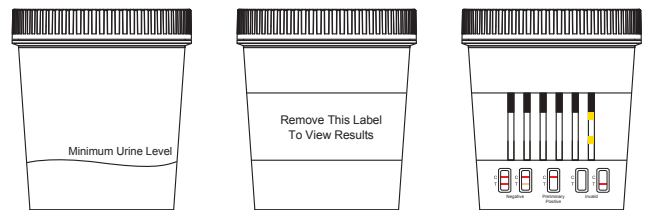
### HOW TO COLLECT URINE?

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

### HOW TO DO THE TEST?

Test should be performed at room temperature 18°C-30°C (65°F-86°F).

1. After the urine has been collected properly, tighten the lid and place the test cup on a flat surface.
2. Peel off the label from right to left.
3. For the adulteration strip(s) if equipped, read results immediately, or at 30 seconds, or at 45 seconds and compare each adulterant pad to verify pad color is within acceptable range according to the Adulteration Color Comparison Chart. If the results indicate adulteration, do not read the drug test results. Instruct the donor to provide urine specimen again with another new test cup.
4. For the drug tests, read the drug test results at 5 minutes. The results can be stable for 30 minutes.



**Note:** Results after more than 30 minutes may be not accurate and should not be read.

## READING THE RESULTS

### Negative (-)

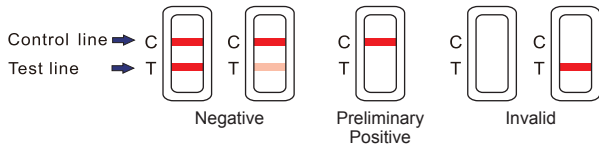
A colored band is visible in each Control Region (C) and the appropriate Test Region (T). It indicates that the concentration of the corresponding drug of that specific test zone is zero or below the detection limit of the test.

### Preliminary Positive (+)

A colored band is visible in each Control Region (C). No colored band appears in the appropriate Test Region (T). It indicates a preliminary positive result for the corresponding drug of that specific test zone.

### Invalid

If a colored band is not visible in each of the Control Region (C) or a colored band is only visible in the Test Region (T), the test is invalid. Another test should be run to re-evaluate the specimen. If the new test still provides an invalid result, please contact the distributor from whom you purchased the product. When calling, be sure to provide the lot number of the test.



**Note:** There is no meaning attributed to line color intensity or width.

The preliminary positive test result does not always mean that a person took illegal drugs. The negative test result does not always mean that a person did not take illegal drugs. There could be a number of factors that affect the reliability of drug tests. Certain drugs of abuse tests are more accurate than others.

### What Is the False Positive Test?

The definition of the false positive test would be the instance where a substance is identified incorrectly by T-Cup® Multi-Drug Urine Test Cup. The most common causes of the false positive test are cross reactants. Certain foods and medicines, diet plan drugs and nutritional supplements may cause the false positive test result.

### What Is the False Negative Test?

The definition of the false negative test is that the initial drug is present but isn't detected by T-Cup® Multi-Drug Urine Test Cup. If the specimen is diluted or adulterated, it may cause the false negative result.

If suspect someone is taking drugs but get the negative test results, please test again at another time, or test for different drugs.

## ADULTERATION CONTROL

### Expected Results

**Creatinine (CR):** Creatinine reacts with a creatinine indicator in an alkaline medium to form a purplish-brown color complex if creatinine in the urine is present at the normal level. The color intensity is directly proportional to the concentration of creatinine. A urine sample with creatinine concentration of less than 20 mg/dl produces a very light, or no pad color change, which indicates adulteration in the form of specimen dilution.

**Glutaraldehyde (GL):** Glutaraldehyde is not a natural component of human urine and it should not be present in normal urine. The presence of glutaraldehyde in the urine sample indicates the possibility of adulteration. However, false positive may result when ketone bodies are present in urine. Ketone bodies may appear in urine when a person is in ketoacidosis, starvation or other metabolic abnormalities.

**Nitrite (NI):** Although nitrite is not a normal component of urine, nitrite levels of up to 3.6 mg/dL may be found in some urine specimens due to urinary tract infections, bacterial contamination or improper storage. In this adulteration control, nitrite level above 15 mg/dL is considered abnormal.

**Oxidants/Bleach (OX):** The presence of Bleach and other oxidizing reagents in the urine is indicative of adulteration since oxidizing reagents are not normal constituents of urine. Other oxidizing reagents include Hydrogen Peroxide, Ferricyanide, Persulfate, Pyridinium Chlorochromate etc.

**pH (PH):** Normal urine pH ranges from 4.5 to 8.0. Values below pH 4.0 or above pH 9.0 are indicative of adulteration.

**Specific Gravity (S.G.):** The specific gravity test is based on the pKa change of certain pretreated polyelectrolytes in relation to the ionic concentration. The pad colors will change from dark blue to blue-green in urine of low ionic concentration to green and yellow-green in urine of higher ionic concentration. A urine specific gravity below 1.003 or above 1.025 is considered abnormal.

## TEST LIMITATIONS

- This test kit has been developed for testing urine samples only. No other fluids have been evaluated. DO NOT use it to test anything other than urine.
- Adulterated urine samples may produce false results. Strong oxidizing agents such as bleach (hypochlorite) can oxidize drug analytes. If a specimen is suspected of being adulterated, obtain a new specimen.
- It is possible that technical or procedural errors, as well as other interfering substances in the urine specimen may cause false results.
- This test is a qualitative screening assay. It is not designed to determine the quantitative concentration of drugs or the level of intoxication.

## QUESTIONS AND ANSWERS

- What does the T-Cup® Multi-Drug Urine Test Cup do?**  
These tests detect if one or more prescription or illegal drugs such as Amphetamine, Secobarbital, Buprenorphine, Oxazepam, Cocaine, 2-ethylidene-1,5-dimethyl-3,3-diphenylpyrrolidine (EDDP), Methylenedioxyamphetamine, Methamphetamine, Morphine, Methadone, Oxycodone, Phencyclidine, Propoxyphene, Nortriptyline and Cannabinoids are present in urine.  
  
The testing is done in two steps. First, test urine with T-Cup® Multi-Drug Urine Test Cup. Second, if any drug test result is preliminary positive, please send the cup with urine to the drug testing laboratory for confirmatory result.
- What is "cut-off level"?**  
The cut-off level is the specified concentration of a drug in a urine sample. If the concentration of a drug in urine is above the cutoff concentration, this drug test result will be preliminary positive. If the concentration of a drug in urine is below the cutoff concentration, this drug test result will be negative.
- What are drugs of abuse?**  
Drugs of abuse are illegal or prescription drugs (for example, Oxycodone or Valium) that are taken for a non-medical purpose, including taking the medication longer than doctor prescribed or for a purpose other than what the doctor prescribed.
- What are the Common Street Names for the Drugs to be detected?**

Drug	Common Street Names
Amphetamine (AMP)	Speed, Jelly Beans or Super Jellies, Hearts, Uppers, Pick me ups or Wake me ups, Wake ups, Get ups, Boot ups, Sparkles
Secobarbital (BAR)	Amytal, Downers, Nembutal, Phenobarbital, Reds, Red Birds, Red devils, Seconal, Tuninal, Yellowjackets
Buprenorphine (BUP)	Bupe, Subbies, Temmies
Oxazepam (BZO)	Benzos, Downers, Nerve Pills, Tranks
Cocaine (COC)	Blow, C, Candy, Coke, Do a line, Freeze, Girl, Happy dust, Mama coca, Mojo, Monster, Nose, Pimp, Shot, Smoking gun, Snow, Sugar, Sweet stuff, and White powder.
Methylenedioxyamphetamine (MDMA)	Ecstasy, E, X, XTC, Adam, Clarity, Lover's Speed
Methamphetamine (MET/mAMP)	Speed, Ice, Chalk, Meth, Crystal, Crank, Fire, Glass
Methadone (MTD)	mixture, meth, linctus, green
Morphine (MOP/OPI300)	Aunt Hazel, big H, black pearl, brown sugar, capital H, charley, china white, dope, good horse, H, hard stuff, hero, heroina, little boy, mud, perfect high, smack, stuff and tar.

Oxycodone (OXY)	OC, Ocycotton, OX, and Kicker
Phencyclidine (PCP)	Angel dust, belladonna, black whack, CJ, cliffhanger, crystal joint, Detroit pink, elephant tranquilizer, hog, magic, Peter Pan, sheets, soma, TAC, trunk, white horizon and zoom.
Propoxyphene (PPX)	Darvon, Darvocet, Dolene, Propacet 100, Wygesic, SK-65, SK-65 APAP, Trycet, Genagesic, E-Lor, Balacet, Pain Killer, Pinks, Footballs, PP-Cap
Nortriptyline (TCA)	Blue angels, Blue birds, Vivactil, Anafranil, Janimine, Tofranil
Cannabinoids (THC)	420, Aunt Mary, baby, bobby, boom, chira, chronic, ditch, ganja, grass, greens, hash, herb, Mary Jane, nigra, Pot, reefer, rip, root, skunk, stack, torch, weed and zambi.

5. *How accurate is the test?*

The tests are sensitive to drugs and accurate. These tests, however, are not as accurate as lab tests. In some cases, certain foods and drugs may cause false positives as well as false negatives for those who use drug testing kits.

6. *If the test results are negative, can the conclusion be that the person is free of drugs?*

This means that if the sample was collected properly and if the test was performed according to direction, then none of the drug screened were present in the urine.

7. *Does a preliminary positive screen test mean that drugs of abuse have been found?*

This means that the test has reacted with something in the urine and the urine must be sent to the lab for a more accurate test.

8. *What should I do, if the lab test confirms a positive result?*

If you have received a confirmed positive result, please consult with counselor for a proper course of action. It is important that you remain calm and do not react in a negative way to the situation. If you do not believe the test result, please consult with your physician. They will have your background medical history and be able to provide you with detailed information on both the test and the meaning of the result.

9. *What is the principle of T-Cup® Multi-Drug Urine Test Cup?*

T-Cup® Multi-Drug Urine Test Cup is a competitive immunoassay that is used to screen for the presence of drugs of abuse in urine. When the test is activated, the urine is absorbed into the device by capillary action. When flowing across the pre-coated membrane, it will be mixed with the respective drug antibody conjugates. If concentrations of drugs are below corresponding detected drugs' cutoff, respective drug antibody conjugates bind to the respective drug-protein conjugates immobilized in the Test Region (T) of the device. This produces the colored band in Test Region (T) that indicates the negative result. On the contrary, if concentrations of drugs are at or above corresponding detected drugs' cutoff, the free drugs in urine bind to the respective drug antibody conjugates. It prevents the respective drug antibody conjugates from binding to the respective drug-protein conjugates immobilized in the Test Region (T) of the device. Therefore, there is no colored band in the Test Region (T) that indicates the preliminary positive result. To serve as the procedure control, if the test has been performed properly, a colored band will appear at the Control Region (C).

**QUALITY CONTROL**

Users should follow the appropriate federal, state, and local guidelines concerning the frequency of assaying external quality control materials. Even though there is an internal procedural control line in the test device in the Control Region (C), the use of external controls is strongly recommended as good laboratory testing practice to confirm the test procedure and to verify proper test performance. Positive and negative controls should give the expected results. When testing the positive and negative controls, the same assay procedure should be adopted. External Control (positive and negative) should be run with each new lot of test received, each new shipment, each new operator and monthly to determine that tests are working properly.

**PERFORMANCE CHARACTERISTICS**

**Accuracy**

1520 (eighty for each drug) clinical urine specimens were analyzed by GC-MS or LC/MS-MS and by each corresponding T-Cup® Multi-Drug Urine Test Cup. Each T-Cup® Multi-Drug Urine Test Cup was read by three viewers. Specimens were divided by concentration into five categories: Drug Free, Less than Half the Cutoff, Near Cutoff Negative, Near Cutoff Positive and High Positive. Results were as followed:

Drug Test	T-Cup® Result	Drug Free	Less than Half the Cutoff	Near Cutoff Negative (Between 50% below the cutoff and the cutoff)	Near Cutoff Positive (Between the cutoff and 50% above the cutoff)	High Positive (Greater than 50% above the cutoff)	% Agreement with GC/MS or LC/MS	
AMP 500	Viewer	+	0	0	2	30	10	100%
	A	-	10	17	11	0	0	95%
	Viewer	+	0	0	1	30	10	100%
	B	-	10	17	12	0	0	97.5%
AMP 1000	Viewer	+	0	0	2	30	10	100%
	A	-	10	17	11	0	0	95%
	Viewer	+	0	0	2	28	10	95%
	B	-	10	16	12	2	0	95%
BAR 300	Viewer	+	0	0	2	28	10	95%
	A	-	10	19	10	1	0	97.5%
	Viewer	+	0	0	1	28	11	97.5%
	B	-	10	19	10	1	0	97.5%
BUP 10	Viewer	+	0	0	3	29	10	97.5%
	A	-	10	18	9	1	0	92.5%
	Viewer	+	0	0	3	29	10	97.5%
	B	-	10	18	9	1	0	92.5%
BZO 300	Viewer	+	0	0	2	29	10	97.5%
	A	-	10	15	13	1	0	95%
	Viewer	+	0	0	2	29	10	97.5%
	B	-	10	15	13	1	0	95%
COC 150	Viewer	+	0	0	2	31	9	100%
	A	-	10	18	10	0	0	95%
	Viewer	+	0	0	1	31	9	100%
	B	-	10	18	11	0	0	97.5%
COC 300	Viewer	+	0	0	2	31	9	100%
	A	-	10	18	10	0	0	95%
	Viewer	+	0	0	3	27	11	95%
	B	-	10	13	14	2	0	92.5%
EDDP 300	Viewer	+	0	0	3	27	11	95%
	A	-	10	13	14	2	0	92.5%
	Viewer	+	0	0	1	32	8	100%
	B	-	10	18	11	0	0	97.5%
MDMA 500	Viewer	+	0	0	1	32	8	100%
	A	-	10	18	11	0	0	97.5%
	Viewer	+	0	0	2	30	10	100%
	B	-	10	18	10	0	0	95%
	Viewer	+	0	0	2	30	10	100%
	A	-	10	18	10	0	0	95%
	Viewer	+	0	0	2	30	10	100%
	B	-	10	18	10	0	0	95%
	Viewer	+	0	0	2	30	10	100%
	A	-	10	18	10	0	0	95%
	Viewer	+	0	0	2	30	10	100%
	B	-	10	18	10	0	0	95%
	Viewer	+	0	0	2	30	10	100%
	A	-	10	18	10	0	0	95%
	Viewer	+	0	0	2	30	10	100%
	B	-	10	18	10	0	0	95%

	C	-	10	18	10	0	0	95%
MET 500	Viewer A	+	0	0	2	20	20	100%
	Viewer A	-	10	15	13	0	0	95%
	Viewer B	+	0	0	1	20	20	100%
	Viewer B	-	10	15	14	0	0	97.5%
MET 1000	Viewer C	+	0	0	2	20	20	100%
	Viewer C	-	10	15	13	0	0	95%
	Viewer A	+	0	0	3	23	15	95%
	Viewer A	-	10	18	9	2	0	92.5%
MOP 300	Viewer B	+	0	0	3	23	15	95%
	Viewer B	-	10	18	9	2	0	92.5%
	Viewer C	+	0	0	3	23	15	95%
	Viewer C	-	10	18	9	2	0	92.5%
MTD 300	Viewer A	+	0	0	28	10	10	95%
	Viewer A	-	10	18	12	2	0	100%
	Viewer B	+	0	0	28	10	10	95%
	Viewer B	-	10	18	12	2	0	100%
OPI 2000	Viewer C	+	0	0	28	10	10	95%
	Viewer C	-	10	18	12	2	0	100%
	Viewer A	+	0	0	2	27	12	97.5%
	Viewer A	-	10	18	10	1	0	95%
OXY 100	Viewer B	+	0	0	2	27	12	97.5%
	Viewer B	-	10	18	10	1	0	95%
	Viewer C	+	0	0	2	27	12	97.5%
	Viewer C	-	10	18	10	1	0	95%
PCP 25	Viewer A	+	0	0	3	29	10	97.5%
	Viewer A	-	10	18	9	1	0	92.5%
	Viewer B	+	0	0	3	29	10	97.5%
	Viewer B	-	10	18	9	1	0	92.5%
PPX 300	Viewer C	+	0	0	3	29	10	97.5%
	Viewer C	-	10	18	9	1	0	92.5%
	Viewer A	+	0	0	29	10	10	97.5%
	Viewer A	-	10	18	12	1	0	100%
TCA 1000	Viewer B	+	0	0	29	10	10	97.5%
	Viewer B	-	10	18	12	1	0	100%
	Viewer C	+	0	0	29	10	10	97.5%
	Viewer C	-	10	18	12	1	0	100%
THC 50	Viewer A	+	0	0	1	28	10	95%
	Viewer A	-	10	20	9	2	0	97.5%
	Viewer B	+	0	0	1	28	10	95%
	Viewer B	-	10	20	9	2	0	97.5%
MET 500	Viewer C	+	0	0	1	28	10	95%
	Viewer C	-	10	20	9	2	0	97.5%
	Viewer A	+	0	0	2	31	8	97.5%
	Viewer A	-	10	17	11	1	0	95%
MOP 300	Viewer B	+	0	0	2	31	8	97.5%
	Viewer B	-	10	17	11	1	0	95%
	Viewer C	+	0	0	2	31	8	97.5%
	Viewer C	-	10	17	11	1	0	97.5%
MTD 300	Viewer A	+	0	0	2	29	10	97.5%
	Viewer A	-	10	18	10	1	0	95%
	Viewer B	+	0	0	2	29	10	97.5%
	Viewer B	-	10	18	10	1	0	95%
OPI 2000	Viewer C	+	0	0	2	29	10	97.5%
	Viewer C	-	10	18	10	1	0	95%
	Viewer A	+	0	0	3	28	10	95%
	Viewer A	-	10	19	8	2	0	92.5%
OXY 100	Viewer B	+	0	0	3	28	10	95%
	Viewer B	-	10	19	8	2	0	92.5%
	Viewer C	+	0	0	3	28	10	95%
	Viewer C	-	10	19	8	2	0	92.5%

cutoff -100%, cutoff -75%, cutoff -50%, cutoff -25%, cutoff, cutoff +25%, cutoff +50%, cutoff +75% and the cutoff +100%. All concentrations were confirmed with GC/MS or LC/MS method. The study was performed 2 runs/day and lasted 25 days using three different lots of the corresponding T-Cup® Multi-Drug Urine Test Cup. Totally 3 operators participated in the study of the corresponding T-Cup® Multi-Drug Urine Test Cup. Each operator tests 2 aliquots at each concentration for each lot per day (2 runs/day) for the total of 50 determinations per concentration per lot of the corresponding T-Cup® Multi-Drug Urine Test Cup.

Drug Test	Approximate Concentration of Sample (ng/mL)	Number of Determinations per Lot	Results (Negative/Positive)		
			Lot 1	Lot 2	Lot 3
AMP 500	0	50	50/0	50/0	50/0
	125	50	50/0	50/0	50/0
	250	50	50/0	50/0	50/0
	375	50	50/0	50/0	50/0
	500	50	11/39	10/40	10/40
	625	50	0/50	0/50	0/50
	750	50	0/50	0/50	0/50
	875	50	0/50	0/50	0/50
	1000	50	0/50	0/50	0/50
	0	50	50/0	50/0	50/0
AMP 1000	250	50	50/0	50/0	50/0
	500	50	50/0	50/0	50/0
	750	50	50/0	50/0	50/0
	1000	50	8/42	8/42	7/43
	1250	50	0/50	0/50	0/50
	1500	50	0/50	0/50	0/50
	1750	50	0/50	0/50	0/50
	2000	50	0/50	0/50	0/50
	0	50	50/0	50/0	50/0
	75	50	50/0	50/0	50/0
BAR 300	150	50	50/0	50/0	50/0
	225	50	50/0	50/0	50/0
	300	50	8/42	8/42	8/42
	375	50	0/50	0/50	0/50
	450	50	0/50	0/50	0/50
	525	50	0/50	0/50	0/50
	600	50	0/50	0/50	0/50
	0	50	50/0	50/0	50/0
	2.5	50	50/0	50/0	50/0
	5	50	50/0	50/0	50/0
BUP 10	7.5	50	50/0	50/0	50/0
	10	50	9/41	9/41	10/40
	12.5	50	0/50	0/50	0/50
	15	50	0/50	0/50	0/50
	17.5	50	0/50	0/50	0/50
	20	50	0/50	0/50	0/50
	0	50	50/0	50/0	50/0
	75	50	50/0	50/0	50/0
	150	50	50/0	50/0	50/0
	225	50	50/0	50/0	50/0
BZO 300	300	50	7/43	7/43	8/42
	375	50	0/50	0/50	0/50
	450	50	0/50	0/50	0/50
	525	50	0/50	0/50	0/50
	600	50	0/50	0/50	0/50
	0	50	50/0	50/0	50/0
	37.5	50	50/0	50/0	50/0
	75	50	50/0	50/0	50/0
	112.5	50	50/0	50/0	50/0
	150	50	10/40	11/39	10/40
COC 150	187.5	50	0/50	0/50	0/50
	225	50	0/50	0/50	0/50
	262.5	50	0/50	0/50	0/50
	300	50	0/50	0/50	0/50

#### Precision and Sensitivity

To investigate the precision and sensitivity, each drug samples were analyzed at the following concentrations:

<b>COC 300</b>	0	50	50/0	50/0	50/0
	75	50	50/0	50/0	50/0
	150	50	50/0	50/0	50/0
	225	50	50/0	50/0	50/0
	300	50	10/40	11/39	10/40
	375	50	0/50	0/50	0/50
	450	50	0/50	0/50	0/50
	525	50	0/50	0/50	0/50
	600	50	0/50	0/50	0/50
<b>EDDP 300</b>	0	50	50/0	50/0	50/0
	75	50	50/0	50/0	50/0
	150	50	50/0	50/0	50/0
	225	50	50/0	50/0	50/0
	300	50	9/41	8/42	9/41
	375	50	0/50	0/50	0/50
	450	50	0/50	0/50	0/50
	525	50	0/50	0/50	0/50
	600	50	0/50	0/50	0/50
<b>MDMA 500</b>	0	50	50/0	50/0	50/0
	125	50	50/0	50/0	50/0
	250	50	50/0	50/0	50/0
	375	50	50/0	50/0	50/0
	500	50	11/39	10/40	10/40
	625	50	0/50	0/50	0/50
	750	50	0/50	0/50	0/50
	875	50	0/50	0/50	0/50
	1000	50	0/50	0/50	0/50
<b>MET 500</b>	0	50	50/0	50/0	50/0
	125	50	50/0	50/0	50/0
	250	50	50/0	50/0	50/0
	375	50	50/0	50/0	50/0
	500	50	10/40	9/41	9/41
	625	50	0/50	0/50	0/50
	750	50	0/50	0/50	0/50
	875	50	0/50	0/50	0/50
	1000	50	0/50	0/50	0/50
<b>MET 1000</b>	0	50	50/0	50/0	50/0
	250	50	50/0	50/0	50/0
	500	50	50/0	50/0	50/0
	750	50	50/0	50/0	50/0
	1000	50	7/43	7/43	8/42
	1250	50	0/50	0/50	0/50
	1500	50	0/50	0/50	0/50
	1750	50	0/50	0/50	0/50
	2000	50	0/50	0/50	0/50
<b>MOP 300</b>	0	50	50/0	50/0	50/0
	75	50	50/0	50/0	50/0
	150	50	50/0	50/0	50/0
	225	50	50/0	50/0	50/0
	300	50	10/40	11/39	10/40
	375	50	0/50	0/50	0/50
	450	50	0/50	0/50	0/50
	525	50	0/50	0/50	0/50
	600	50	0/50	0/50	0/50
<b>MTD 300</b>	0	50	50/0	50/0	50/0
	75	50	50/0	50/0	50/0
	150	50	50/0	50/0	50/0
	225	50	50/0	50/0	50/0
	300	50	9/41	9/41	8/42
	375	50	0/50	0/50	0/50
	450	50	0/50	0/50	0/50
	525	50	0/50	0/50	0/50
	600	50	0/50	0/50	0/50
<b>OPI 2000</b>	0	50	50/0	50/0	50/0
	500	50	50/0	50/0	50/0

	1000	50	50/0	50/0	50/0	
	1500	50	50/0	50/0	50/0	
	2000	50	10/40	10/40	10/40	
	2500	50	0/50	0/50	0/50	
	3000	50	0/50	0/50	0/50	
	3500	50	0/50	0/50	0/50	
	4000	50	0/50	0/50	0/50	
	<b>OXY 100</b>	0	50	50/0	50/0	50/0
		25	50	50/0	50/0	50/0
50		50	50/0	50/0	50/0	
75		50	50/0	50/0	50/0	
100		50	9/41	9/41	9/41	
125		50	0/50	0/50	0/50	
150		50	0/50	0/50	0/50	
175		50	0/50	0/50	0/50	
200		50	0/50	0/50	0/50	
<b>PCP 25</b>	0	50	50/0	50/0	50/0	
	6.25	50	50/0	50/0	50/0	
	12.5	50	50/0	50/0	50/0	
	18.75	50	50/0	50/0	50/0	
	25	50	7/43	6/44	7/43	
	31.25	50	0/50	0/50	0/50	
	37.5	50	0/50	0/50	0/50	
	43.75	50	0/50	0/50	0/50	
	50	50	0/50	0/50	0/50	
<b>PPX 300</b>	0	50	50/0	50/0	50/0	
	75	50	50/0	50/0	50/0	
	150	50	50/0	50/0	50/0	
	225	50	50/0	50/0	50/0	
	300	50	11/39	10/40	11/39	
	375	50	0/50	0/50	0/50	
	450	50	0/50	0/50	0/50	
	525	50	0/50	0/50	0/50	
	600	50	0/50	0/50	0/50	
<b>TCA 1000</b>	0	50	50/0	50/0	50/0	
	250	50	50/0	50/0	50/0	
	500	50	50/0	50/0	50/0	
	750	50	50/0	50/0	50/0	
	1000	50	10/40	10/40	10/40	
	1250	50	0/50	0/50	0/50	
	1500	50	0/50	0/50	0/50	
	1750	50	0/50	0/50	0/50	
	2000	50	0/50	0/50	0/50	
<b>THC 50</b>	0	50	50/0	50/0	50/0	
	12.5	50	50/0	50/0	50/0	
	25	50	50/0	50/0	50/0	
	37.5	50	50/0	50/0	50/0	
	50	50	10/40	10/40	11/39	
	62.5	50	0/50	0/50	0/50	
	75	50	0/50	0/50	0/50	
	87.5	50	0/50	0/50	0/50	
	100	50	0/50	0/50	0/50	

#### Specificity and Cross Reactivity

To test the specificity, the test device was used to test various drugs, drug metabolites and other components of the same class that are likely to be present in urine. All the components were added to drug-free normal human urine. The following structurally related compounds produced positive results with the test when tested at levels equal to or greater than the concentrations listed below.

Substance	Conc. (ng/mL)	Substance	Conc. (ng/mL)
<b>AMP 500</b>			
d-Amphetamine	500	l-Amphetamine	25,000

d,l-Amphetamine	1,500	(+/-) 3,4-Methylenedioxyamphetamine (MDA)	2,500
Phentermine	1,500	Hydroxyamphetamine	8,000
d-methamphetamine	>100,000	l-methamphetamine	>100,000
(+/-) 3,4-Methylenedioxyethylamphetamine (MDE)	>100,000	(+/-) 3,4-Methylenedioxyamphetamine (MDMA)	>100,000
Ephedrine	>100,000	β-Phenylethylamine	100,000
Tyramine	100,000	p-Hydroxynorephedrine	100,000
Phenylpropanolamine	>100,000	(±) Phenylpropanolamine	>100,000
d/l-Norephedrine	100,000	Benzphetamine	>100,000
l-Ephedrine	>100,000	l-Epinephrine	>100,000
d/l-Epinephrine	>100,000		
<b>AMP 1000</b>			
d-Amphetamine	1,000	l-Amphetamine	50,000
d,l-Amphetamine	3,000	(+/-) 3,4-Methylenedioxyamphetamine (MDA)	5,000
Phentermine	3,000	d-Methamphetamine	>100,000
l-Methamphetamine	>100,000	Ephedrine	>100,000
(+/-) 3,4-Methylenedioxyamphetamine (MDMA)	100,000	Hydroxyamphetamine	8,000
β-Phenylethylamine	100,000	p-Hydroxynorephedrine	100,000
Tyramine	100,000	(±) Phenylpropanolamine	>100,000
Phenylpropanolamine	>100,000	d/l-Norephedrine	100,000
p-Hydroxyamphetamine	100,000	l-Ephedrine	>100,000
Benzphetamine	>100,000	d/l-Epinephrine	>100,000
l-Epinephrine	>100,000		
<b>BAR 300</b>			
Secobarbital	300	Butathal	100
Amobarbital	10,000	Butalbital	2,500
Alphenol	150	Cyclopentobarbital	600
Aprobarbital	200	Pentobarbital	2,500
Butobarbital	75	Phenobarbital	10,000
<b>BUP 10</b>			
Buprenorphine	10	Norbuprenorphine	20
Buprenorphine-3-D-Glucuronide	15	Norbuprenorphine-3-D-Glucuronide	200
Morphine	>100,000	Oxymorphone	>100,000
Hydromorphone	>100,000		
<b>BZO 300</b>			
Oxazepam	300	Diazepam	200
Alprazolam	200	Estazolam	1,000
α-Hydroxyalprazolam	1,500	Flunitrazepam	2,500
Bromazepam	500	D,L-Lorazepam	1,500
Chlordiazepoxide	1,500	Midazolam	12,500
Clobazam	100	Nitrazepam	4,000
Clonazepam	800	Norchlordiazepoxide	200
Clorazepate dipotassium	200	Nordiazepam	500
Delorazepam	1,500	Temazepam	250
Desalkylflurazepam	400	Triazolam	1,200
Demoxepam	2,000	Flurazepam	500
<b>COC 150</b>			
Benzoyllecgonine	150	Ecgonine	16,000
Cocaine	375	Ecgonine methyl ester	>100,000
Cocacethylene	6,250	Norcocaine	>100,000
<b>COC 300</b>			
Benzoyllecgonine	300	Ecgonine	32,000
Cocaine	750	Ecgonine methyl ester	>100,000
Cocacethylene	12,500	Norcocaine	>100,000

<b>EDDP 300</b>			
2-ethylidene-1,5-dimethyl-3,3-diphenylpyrrolidine	300	Methadone	300,000
EMDP	300,000	Doxylamine	>100,000
LAAM (Levo-alpha-acetylmethadol) HCl	>100,000	Alpha Methadol	>100,000
<b>MDMA 500</b>			
3,4-Methylenedioxyamphetamine (MDMA)	500	3,4-Methylenedioxyethylamphetamine (MDEA)	300
3,4-Methylenedioxyamphetamine (MDA)	3,000	d-Methamphetamine	>100,000
l-methamphetamine	50,000	l-amphetamine	>100,000
d-amphetamine	>100,000		
<b>MET 500</b>			
d-methamphetamine	500	(+/-) 3,4-Methylenedioxyamphetamine (MDMA)	2,000
p-Hydroxymethamphetamine	15,000	(-)-Methamphetamine	12,500
l-methamphetamine	10,000	d-Amphetamine	25,000
l-Amphetamine	37,500	Chloroquine	10,000
(+/-)-Ephedrine	25,000	d/l-Methamphetamine	500
l-Methamphetamine	10,000	(+/-) 3,4-Methylenedioxyethylamphetamine (MDEA)	500
(+/-) 3,4-Methylenedioxyamphetamine (MDA)	500	β-Phenylethylamine	25,000
Trimethobenzamide	5,000	d/l-Amphetamine	75,000
p-Hydroxymethamphetamine	15,000	Mephentermine	25,000
(1R,2S)-(-)-Ephedrine	50,000	l-Phenylephrine	100,000
<b>MET 1000</b>			
d-methamphetamine	1,000	l-phenylephrine	>100,000
p-Hydroxymethamphetamine	30,000	Mephentermine	50,000
l-methamphetamine	25,000	(+/-) 3,4-Methylenedioxyethylamphetamine (MDEA)	1,000
D/L-Methamphetamine	1,000	D-Amphetamine	100,000
L-Amphetamine	75,000	Chloroquine	50,000
(+/-)-Ephedrine	50,000	(-)-Methamphetamine	25,000
(+/-) 3,4-Methylenedioxyamphetamine (MDA)	1,000	(+/-) 3,4-Methylenedioxyamphetamine (MDMA)	4,000
β-Phenylethylamine	50,000	Trimethobenzamide	10,000
d,l-Amphetamine	100,000	(1R,2S)-(-)-Ephedrine	100,000
<b>MOP 300</b>			
Morphine	300	Morphine-3-β-d-glucuronide	1,000
Codeine	300	Norcocodeine	6,250
Ethyl Morphine	100	Normorphine	300
Heroin	300	Oxycodone	10,000
Hydrocodone	5,000	Oxymorphone	10,000
Hydromorphone	1,000	Procaine	150,000
6-Monoacetylmorphine (6-MAM)	150	Thebaine	3,000
Levorphanol	10,000		
<b>MTD 300</b>			
Methadone	300	Doxylamine	50,000
EMDP	>100,000	EDDP	>100,000
LAAM	>100,000	Alpha Methadol	>100,000
<b>OPI 2000</b>			
Morphine	2,000	Morphine-3-β-D-glucuronide	2,000
Codeine	2,000	Norcocodeine	12,500
Ethyl Morphine	1,500	Normorphine	50,000
Heroin	2,000	Oxycodone	25,000

Hydrocodone	12,500	Oxymorphone	25,000
Hydromorphone	3,500	Procaine	150,000
6-Monoacetylmorphine (6-MAM)	1,500	Thebaine	5,000
Levorphanol	75,000		
<b>OXY 100</b>			
Oxycodone	100	Codeine	100,000
Dihydrocodeine	20,000	Ethyl Morphine	>100,000
Hydrocodone	10,000	Hydromorphone	32,000
Oxymorphone	1,000	Thebaine	>100,000
Acetylmorphine	>100,000	Morphine	>100,000
Buprenorphine	>100,000		
<b>PCP 25</b>			
Phencyclidine	25	4-Hydroxyphencyclidine	12,500
<b>PPX 300</b>			
d-Propoxyphene	300	d-Norpropoxyphene	300
<b>TCA 1000</b>			
Nortriptyline	1,000	Promazine	1,500
Amitriptyline	1,500	Maprotiline	2,000
Clomipramine	12,500	Nordoxepin	1,000
Desipramine	200	Promethazine	25,000
Doxepin	2,000	Trimipramine	3,000
Imipramine	400	Cyclobenzaprine	800
Norclomipramine	12,500		
<b>THC 50</b>			
11-nor- $\Delta^9$ -THC-9-COOH	50	$\Delta^9$ -Tetrahydrocannabinol	5,000
11-nor- $\Delta^8$ -THC-9-COOH	30	Cannabinol	20,000
11-hydroxy- $\Delta^9$ -Tetrahydrocannabinol	5,000	Cannabidiol	100,000
$\Delta^8$ -Tetrahydrocannabinol	1,300	11-nor- $\Delta^9$ -THC-carboxy-glucuronide	100

#### Effect of Urinary Specific Gravity

The results demonstrate that the urinary specific gravity range of 1.000–1.035 does not affect the test results.

#### Effect of Urinary pH

The results demonstrate that the range of urinary pH from 4 to 9 does not interfere with the performance of test.

#### Interfering Substances

The following compounds were added to drug-free urine, urine with drug concentration 25% below the cutoff, and urine with drug concentration 25% above the cutoff for the corresponding T-Cup® Multi-Drug Urine Test Cup. All potential interferents were added at a concentration of 100 µg/mL. None of the urine samples showed any deviation from the expected results.

(-) Cotinine	Ecgonine Methyl Ester	Nimodipine
3-Hydroxytyramine	Effexor	Norethindrone
Acetaminophen	Enalapril Maleate	O-Hydroxyhippuric Acid
Acetophenetidin	Epinephrine Hydrochloride	Olanzapine
Acetylsalicylic Acid	Erythromycin	Omeprazole
Acyclovir	Esomeprazole Magnesium	Ondansetran
Afrin	Ethanol	Oxalic Acid
Albumin	Fenofibrate	Oxolinic Acid
Aminophylline	Fenoprofen	Oxymetazoline
Aminopyrine	Fentanyl Citrate	Paliperidone
Amiodarone Hydrochloride	Fluoxetine Hydrochloride	Pantoprazole
Amlodipine Mesylate	Fluvoxamine	Papaverine
Amoxicillin	Furosemide	Paroxetine Hydrochloride
Ampicillin	Gabapentin	Penfluridol
Apomorphine	Gentisic Acid	Penicillin-G
Aripiprazole	Glibenclamide	Penicillin V Potassium

Aspartame	Gliclazide	Phenelzine
Atomoxetine	Glipizide	Pioglitazone Hydrochloride
Atorvastatin Calcium	Glucose	Piracetam
Atropine	Haloperidol	Pravastatin Sodium
Benzilic Acid	Hemoglobin	Prednisone
Benzoic Acid	Ibuprofen	Promethazine
Bilirubin	Isosorbide Dinitrate	Propylthiouracil
Bupropion	Isoxsuprine	Quetiapine Fumarate
Captopril	Ketamine	Quinine
Carbamazepine	Ketoconazole	Ranitidine
Cefradine	Ketoprofen	Rifampicin
Cephalexin	Kratom	Risperidone
Chloral Hydrate	Labetalol	Salicylic Acid
Chloramphenicol	Lamotrigine	Serotonin
Chloroquine	Levofloxacin Hydrochloride	Sertraline Hydrochloride
Chlorothiazide	Levonorgestrel	Sildenafil Citrate
Chlorpheniramine	Levothyroxine Sodium	Simvastatin
Cholesterol	Lidocaine Hydrochloride	Sodium Valproate
Ciprofloxacin Hydrochloride	Lisinopril	Spironolactone
Citalopram	Lithium Carbonate	Sulfamethazine
Clarithromycin	Liverite	Sulindac
Clonidine	Loperamide	Tetracycline
Clopidogrel Hydrogen Sulphate	Loratadine	Tetrahydrocortisone 3-acetate
Clozapine	Magnesium	Tetrahydrocortisone-( $\beta$ -D-glucuronide)
d,l-Propranolol	Maprotiline	Tetrahydrozoline
d,l-Octopamine	Meperidine	Thiamine
d,l-Tyrosine	Meprobamate	Thioridazine
Deoxycorticosterone	Metoprolol Tartrate	Topiramate
Dextromethorphan	Mifepristone	Tramadol Hydrochloride
Diclofenac	Minocycline	Trazodone Hydrochloride
Dicyclomine	Mirtazapine	Triamterene
Diffunisal	Montelukast Sodium	Trifluoperazine
Digoxin	Mosapride Citrate	Trimethoprim
Diphenhydramine	N-acetylprocainamide	Uric Acid
Dirithromycin	Nalidixic Acid	Valproate
d-Norpropoxyphene	Naproxen	Verapamil
Domperidone	Niacinamide	Vitamin B2
D-Pseudoephedrine	Nifedipine	Vitamin C
Duloxetine	Nikethamide	$\beta$ -Estradiol

#### ASSISTANCE

If you have any question regarding to the use of this product, please call our Toll Free Number 1-888-444-3657 (9:30 a.m. to 5:00 p.m. CDT M-F).

#### BIBLIOGRAPHY OF SUGGESTED READING

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Hofmann F.E., A Handbook on Drug and Alcohol Abuse: The Biomedical Aspects, New York, Oxford University Press, 1983.  
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#### ADDITIONAL INFORMATION AND RESOURCES

The following list of organizations may be helpful to you for counseling support and resources. These groups also have an Internet address which can be accessed for additional information.

National Clearinghouse for Alcohol and Drug Information [www.health.org](http://www.health.org) 1-800-729-6686

Center for Substance Abuse Treatment [www.health.org](http://www.health.org) 1-800-662-HELP

The National Council on Alcoholism and Drug Dependence [www.ncadd.org](http://www.ncadd.org) 1-800-NCA-CALL

American Council for Drug Education (ACDE) [www.acde.org](http://www.acde.org) 1-800-488-DRUG

#### INDEX OF SYMBOLS



Keep away from sunlight



Store between 4°C - 30°C (39°F - 86°F)



Keep dry



Do not re-use

Manufactured by Guangzhou Wondfo Biotech Co., LTD  
No.8 Lizhishan Road, Science City, Luogang District  
Guangzhou, Guangdong, P.R. China 510663

Made in China

Rel.: 2019/10/24