

# **CLIA WAIVED** C-Cup Multi-Drug Urine Test Cup

Catalogue No. See Box Label

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

SAFElife<sup>™</sup> C-Cup Multi-Drug Urine Test Cup are competitive binding, lateral flow immunochromatographic assays for qualitative and simultaneous detection of Amphetamine, Secobarbital, Buprenorphine, 2-ethylidene-1,5-dimethyl-3,3-diphenylpyrrolidine (EDDP). Oxazepam, Cocaine, 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)	Benzoylecgonine	150 ng/mL	1-4 hours	2-4 days
Cocaine (COC300)	Benzoylecgonine	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
Methylenedioxymethamp hetamine (MDMA)	3,4- Methylenedioxymetha mphetamine	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-Δ9-THC-9- COOH	50 ng/mL	2 hours	Up to 5+ days

SAFElife<sup>™</sup> C-Cup Multi-Drug Urine Test Cup offers any 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, Proposyphene, 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

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

# CONTENT OF THE KIT

- 25 SAFElife<sup>™</sup> C-Cup test devices, each in one pouch with desiccant. The desiccants are for storage purposes only and are not used in the test procedure.
- One (1) Package Insert
- 5 Adulteration Color Comparison Charts (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?

- Remove the test cup from the foil pouch by tearing at the notch. Use it as soon as possible. Instruct 1 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).

- After the urine has been collected properly, tighten the lid and place the test cup on a flat surface.
- Peel off the label from right to left.
- 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 If suspect someone is taking drugs but get the negative test results, please test again at another time, or read the drug test results. Instruct the donor to provide urine specimen again with another new test for different drugs. 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 (-)

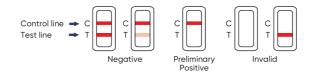
A colored band is visible in each Control Region (C) and the appropriate Test Region (T). It indicates that the concentration of the corresponding drug of that specific test zone is zero or below the detection limit of the test.

# 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 SAFElife<sup>™</sup> C-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 SAFElife" C-Cup Multi-Drug Urine Test Cup. If the specimen is diluted or adulterated, it may cause the false negative result



# ADULTERATION CONTROL

#### Expected Results

Creatinine (CR): Creatinine reacts with a creatinine indicator in an alkaline medium to form a purplishbrown 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, Ferricygnide, 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 bluegreen 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

- 1. 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 2. (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 3. specimen may cause false results.
- 4 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 SAFElife<sup>™</sup> C-Cup Multi-Drug Urine Test Cup do? 1.

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), Methylenedioxymethamphetamine, Methamphetamine, Morphine, Methadone, Oxycodone, Phencyclidine, Propoxyphene, Nortriptyline and Cannabinoids are present in urine.

The testing is done in two steps. First, test urine with SAFElife™ C-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 9. negative.

# 3. 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? 4

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.
Methylenedioxymethamp hetamine (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, trank, 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.

#### How accurate is the test? 5.

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.

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

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.

# What is the principle of SAFElife<sup>™</sup> C-Cup Multi-Drug Urine Test Cup?

SAFElife<sup>™</sup> C-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 and each new operator 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 SAFElife<sup>™</sup> C-Cup Multi-Drug Urine Test Cup. Each SAFElife<sup>™</sup> C-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	SAFElif	e™	Drug	Less	Near Cutoff	Near Cutoff	High	%	
Test	C-Cup		Free	than	Negative	Positive	Positive	Agreement	
	Resu	t		Half	(Between	(Between	(Greater	with GC/MS	
				the	50% below	the cutoff	than 50%	or LC/MS	
				Cutoff	the cutoff	and 50%	above the		
					and the	above the	cutoff)		
					cutoff)	cutoff)			
	Viewer	+	0	0	2	30	10	100%	
	A	-	10	17	11	0	0	95%	
AMP	Viewer	+	0	0	1	30	10	100%	
500	В	-	10	17	12	0	0	97.5%	
	Viewer	+	0	0	2	30	10	100%	
	С	-	10	17	11	0	0	95%	
	Viewer	+	0	0	2	28	10	95%	
	Α	-	10	16	12	2	0	95%	
AMP	Viewer	+	0	0	2	28	10	95%	
1000	В	-	10	16	12	2	0	95%	
	Viewer	+	0	0	2	28	10	95%	
	С	-	10	16	12	2	0	95%	
	Viewer	+	0	0	1	28	11	97.5%	
	А	-	10	19	10	1	0	97.5%	
BAR	Viewer	+	0	0	1	28	11	97.5%	
300	В	-	10	19	10	1	0	97.5%	
	Viewer	+	0	0	1	28	11	97.5%	
	С	-	10	19	10	1	0	97.5%	

				-	_												
	Viewer	+	0	0	3	29	10	97.5%		C	-	10	18	10	1	0	95%
	A	-	10	18	9	1	0	92.5%		Viewer	+	0	0	3	29	10	97.5%
BUP 10	Viewer	+	0	0	3	29	10	97.5%		A	-	10	18	9	1	0	92.5%
	B	-	10	18	9	1	0	92.5%	OPI 2000	Viewer	+	0	0	3	29	10	97.5%
	Viewer	+	0	0	3	29	10	97.5%	2000	B	-	10	18	9	1	0	92.5%
	C	-	10 0	18	9 2	1 29	0	92.5%		Viewer C	+	0 10	0 18	3	29	10	97.5% 92.5%
	Viewer	+	-	0	13	1		97.5%			+			9	29		
	A	-+	10	15	2		0	95%		Viewer	+	0 10	0		1	10	97.5%
BZO 300	Viewer B	+	0 10	0	13	29	0	97.5% 95%	OXY	A	+	0	18 0	12 0	29	10	
300		+	0	15 0	2	1 29	10	97.5%	100	Viewer B	-	10	18	12	1	0	97.5%
	Viewer C	-	10	15	13	1	0	97.5%	100	Viewer	+	0	0	0	29	10	97.5%
	Viewer	+	0	0	2	31	9	100%		C	-	10	18	12	1	0	100%
	A		10	18	10	0	0	95%		Viewer	+	0	0	1	28	10	95%
coc	Viewer	+	0	0	1	31	9	100%		A	-	10	20	9	20	0	97.5%
150	B	-	10	18	11	0	0	97.5%	PCP	Viewer	+	0	0	1	28	10	95%
	Viewer	+	0	0	2	31	9	100%	25	B	-	10	20	9	20	0	97.5%
	C	-	10	18	10	0	0	95%		Viewer	+	0	0	1	28	10	95%
	Viewer	+	0	0	3	27	11	95%		C	<u> </u>	10	20	9	20	0	97.5%
	A	-	10	13	14	2	0	92.5%		Viewer	+	0	0	2	31	8	97.5%
coc	Viewer	+	0	0	3	27	11	95%		A	-	10	17	11	1	0	95%
300	B	-	10	13	14	2/	0	92.5%	PPX	Viewer	+	0	0	2	31	8	97.5%
	Viewer	+	0	0	3	27	11	95%	300	B	<u> </u>	10	17	11	1	0	95%
	C	-	10	13	14	2	0	92.5%	000	Viewer	+	0	0	2	31	8	97.5%
	Viewer	+	0	0	1	32	8	100%		C	-	10	17	11	1	0	95%
	A	-	10	18	11	0	0	97.5%		Viewer	+	0	0	2	29	10	97.5%
EDDP	Viewer	+	0	0	1	32	8	100%		A	-	10	18	10	1	0	95%
300	B		10	18	11	0	0	97.5%	TCA	Viewer	+	0	0	2	29	10	97.5%
	Viewer	+	0	0	1	32	8	100%	1000	B	-	10	18	10	1	0	95%
	C		10	18	11	0	0	97.5%		Viewer	+	0	0	2	29	10	97.5%
	Viewer	+	0	0	2	30	10	100%		C	-	10	18	10	1	0	95%
	A	-	10	18	10	0	0	95%		Viewer	+	0	0	3	28	10	95%
MDMA	Viewer	+	0	0	2	30	10	100%		A	-	10	19	8	20	0	92.5%
500	В	-	10	18	10	0	0	95%	тнс	Viewer	+	0	0	3	28	10	95%
	Viewer	+	0	0	2	30	10	100%	50	В	-	10	19	8	2	0	92.5%
	C	-	10	18	10	0	0	95%		Viewer	+	0	0	3	28	10	95%
	Viewer	+	0	0	2	20	20	100%		C	-	10	19	8	2	0	92.5%
	A	-	10	15	13	0	0	95%									
MET	Viewer	+	0	0	1	20	20	100%	Precision	and Sensi	tivitv						
500	В	-	10	15	14	0	0	97.5%									
	Viewer	+	0	0	2	20	20	100%	To investi	gate the	prec	ision an	d sensitiv	vity, each dr	ug samples	were analyzed	at the follow
	C	-	10	15	13	0	0	95%								6, cutoff, cutoff +	
	Viewer	+	0	0	3	23	15	95%	cutoff +75	% and the	cuto	ff +100%.	All conce	ntrations wer	e confirmed	with GC/MS or LO	C/MS method.
	A	-	10	18	9	2	0	92.5%	study wa	perform	ed 2	runs/day	and last	ted 25 days	using three	different lots of t	the correspond
MET	Viewer	+	0	0	3	23	15	95%				-				participated in	
1000	B	-	10	18	9	20	0	92.5%								operator tests 2	
	Viewer	+	0	0	3	23	15	95%						-		eterminations per	concentration
	C	-	10	18	9	20	0	92.5%	lot of the	correspon	ding S	SAFElife™	C-Cup Mu	ulti-Drug Urine	e Test Cup.		
	Viewer	+	0	0	0	28	10	95%									
	A	-	10	18	12	20	0	100%	Drug Te			imate		mber of		Results	
MOP	Viewer	+	0	0	0	28	10	95%				ration of		minations		(Negative/Positiv	
300	B	-	10	18	12	20	0	100%		_		(ng/mL)	P	er Lot	Lot 1	Lot 2	Lot 3
	Viewer	+	0	0	0	28	10	95%	AMP 50	' <u>⊢</u>	0			50	50/0	50/0	50/0
	C	_	10	18	12	20	0	100%			12			50	50/0	50/0	50/0
	Viewer	+	0	0	2	27	12	97.5%			25			50	50/0	50/0	50/0
	A	-	10	18	10	1	0	95%			37			50	50/0	50/0	50/0
	Viewer	+	0	0	2	27	12	97.5%			50			50	11/39	10/40	10/40
MTD			5								62	5		50	0/50	0/50	0/50
MTD 300	1	-	10	18	10	1		Q5%				-					
	B	-+	10 0	18 0	10 2	1 27	0	95% 97.5%			75 87			50 50	0/50 0/50	0/50 0/50	0/50 0/50

	1000	50	0/50	0/50	0/50
AMP	0	50	50/0	50/0	50/0
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
BAR 300	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	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
0110.10	600	50	0/50	0/50	0/50
BUP 10	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
	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 0/50
	17.5	50	0/50	0/50	.,
BZO 300	20 0	50 50	0/50	0/50	0/50
BZO 300			50/0 50/0	50/0	50/0 50/0
	75 150	50 50	50/0	50/0 50/0	50/0
	225	50	50/0	50/0	50/0
	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
COC 150	0	50	50/0	50/0	50/0
000.00	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
	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
COC 300	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
EDDP	0	50	50/0	50/0	50/0
300	75	50	50/0	50/0	50/0
200		1		1	
	150	50	50/0	50/0	50/0

	300	50	9/41	8/42	9/41
-	375	50	0/50	0/42	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
MDMA	0	50	50/0	50/0	50/0
500	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
MET 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
$\vdash$	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
MET 1000	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	0/42
	1500	50	0/50	0/50	0/50
-	1750	50	0/50	0/50	0/50
	2000	50	0/50	0/50	0/50
MOP 300	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
F	525	50	0/50	0/50	0/50
	600	50	0/50	0/50	0/50
MTD 300	0	50	50/0	50/0	50/0
H	75	50	50/0	50/0	50/0
	150	50	50/0	50/0	50/0
- F	225	50	50/0	50/0	50/0
F	300	50	9/41	9/41	8/42
$\vdash$	375	50	0/50	0/50	0/42
	450	50	0/50	0/50	0/50
	525	50	0/50	0/50	0/50
	600	50	0/50	0/50	0/50
OPI 2000	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
H	2000	50	10/40	10/40	10/40
H	2500				
⊢	3000	50 50	0/50 0/50	0/50 0/50	0/50 0/50
	3500	50	0/50	0/50	0/50
	4000	50	0/50	0/50	0/50
	4000	1 30	0/50	0/50	0/50

OXY 100	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
PCP 25	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
PPX 300	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
TCA 1000	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
THC 50	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
F	37.5	50	50/0	50/0	50/0
	50	50	10/40	10/40	11/39
F	62.5	50	0/50	0/50	0/50
F	75	50	0/50	0/50	0/50
F	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/m	
AMP 500				
d-Amphetamine	500	I-Amphetamine	25,000	
d Amphatania	1.500	(+/-) 3,4-	2 5 0 0	
d,I-Amphetamine	1,500	Methylenedioxyamphetamine	2,500	

Phentermine	1,500	(MDA) Hydroxyamphetamine	8,000
d-methamphetamine	>100,000	I-methamphetamine	>100,000
(+/-) 3,4-	>100,000	(+/-) 3,4-	>100,000
Methylenedioxyethylamphetamin	>100,000	Methylenedioxymethampheta	>100,000
e (MDE)	2100,000	mine (MDMA)	>100,000
Ephedrine	>100,000	β-Phenylethylamine	100,000
Tyramine	100,000	p-Hydroxynorephedrine	100,000
Phenylpropanolamine	>100,000	(±) Phenylpropanolamine	>100,000
d/I-Norephedrine	100,000	Benzphetamine	>100,000
I-Ephedrine	>100,000	I-Epinephrine	>100,000
d/I-Epinephrine	>100,000	Герперінне	- 100,000
AMP 1000	100,000		1
d-Amphetamine	1,000	I-Amphetamine	50,000
	.,000	(+/-) 3.4-	00,000
d,I-Amphetamine	3,000	Methylenedioxyamphetamine	5,000
	0,000	(MDA)	0,000
Phentermine	3,000	d-Methamphetamine	>100,000
I-Methamphetamine	>100,000	Ephedrine	>100,000
(+/-) 3,4-			
Methylenedioxymethamphetamin	100,000	Hydroxyamphetamine	8,000
e (MDMA)			
β-Phenylethylamine	100,000	p-Hydroxynorephedrine	100,000
Tyramine	100,000	(±) Phenylpropanolamine	>100,000
Phenylpropanolamine	>100,000	d/I-Norephedrine	100,000
p-Hydroxyamphetamine	100,000	I-Ephedrine	>100,000
Benzphetamine	>100,000	d/I-Epinephrine	>100,000
I-Epinephrine	>100,000		
BAR 300			
Secobarbital	300	Butathal	100
Amobarbital	10,000	Butalbital	2,500
Alphenol	150	Cyclopentobarbital	600
Aprobarbital	200	Pentobarbital	2,500
Butabarbital	75	Phenobarbital	10,000
BUP 10		•	1 .
Buprenorphine	10	Norbuprenorphine	20
		Norbuprenorphine-3-D-	
Buprenorphine-3-D-Glucuronide	15	Glucuronide	200
Morphine	>100,000	Oxymorphone	>100,000
Hydromorphone	>100,000		
BZO 300	•	·	
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
COC 150			
Benzoylecgonine	150	Ecgonine	16,000
Cocaine	375	Ecgonine methyl ester	>100,000
Cocaethylene	6,250	Norcocaine	>100,000
COC 300	1		,
Benzoylecgonine	300	Ecgonine	32,000
Cocaine	750	Ecgonine methyl ester	>100,000

nL)

Cocaethylene	12,500	Norcocaine	>100,000	
EDDP 300		1		
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	
MDMA 500		1		
3,4-		3,4-		
Methylenedioxymethamphetamin	500	Methylenedioxyethylamphetam	300	
e (MDMA)		ine (MDEA)		
3,4-Methylenedioxyamphetamine	3,000	d-Methamphetamine	>100,000	
(MDA)				
I-methamphetamine	50,000	I-amphetamine	>100,000	
d-amphetamine	>100,000			
MET 500				
		(+/-) 3,4-		
d-methamphetamine	500	Methylenedioxymethampheta mine (MDMA)	2,000	
p-Hydroxymethamphetamine	15,000	(-)-Methamphetamine	12,500	
I-methamphetamine	10,000	d-Amphetamine	25,000	
I-Amphetamine	37,500	Chloroquine	10,000	
(+/-)-Ephedrine	25,000	d/I-Methamphetamine	500	
(,, produite	20,000	(+/-)		
L-Methamphetamine	10,000	3,4Methylenedioxyethylamphet	500	
L-Methomphetomine	10,000	amine (MDEA)	500	
(+/-) 3,4-		diffine (FIDEA)		
	500	8-Phonylothylamino	25.000	
Methylenedioxyamphetamine (MDA)	500	β-Phenylethylamine	25,000	
Trimethobenzamide	5,000	d/I-Amphetamine	75,000	
p-Hydroxymethamphetamine	15,000	Mephentermine	25,000	
(1R,2S)-(-)-Ephedrine	50,000	I-Phenylephrine	100,000	
MET 1000	1 000			
d-methamphetamine	1,000	I-phenylephrine	>100,000	
p-Hydroxymethamphetamine	30,000	Mephentermine	50,000	
		(+/-) 3,4-		
I-methamphetamine	25,000	Methylenedioxyethylamphetam	1,000	
		ine (MDEA)		
D/L-Methamphetamine	1,000	D-Amphetamine	100,000	
L-Amphetamine	75,000	Chloroquine	50,000	
(+/-)-Ephedrine	50,000	(-)-Methamphetamine	25,000	
(+/-) 3,4-		(+/-) 3,4-		
Methylenedioxyamphetamine	1,000	Methylenedioxymethampheta	4,000	
(MDA)		mine (MDMA)		
β-Phenylethylamine	50,000	Trimethobenzamide	10,000	
d,I-Amphetamine	100,000	(1R,2S)-(-)-Ephedrine	100,000	
MOP 300				
Morphine	300	Morphinie-3-β-d-glucuronide	1,000	
Codeine	300	Norcodeine	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	1		
MTD 300				
Methadone	300	Doxylamine	50,000	
EMDP	>100,000	EDDP	>100,000	
LINDI			>100,000	
LAAM	>100,000	Alpha Methadol		

Morphine	2,000	Morphinie-3-β-D-glucuronide	2,000
Codeine	2,000	Norcodeine	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		
OXY 100			
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		
PCP 25			
Phencyclidine	25	4-Hydroxyphencyclidine	12,500
PPX 300			
d-Propoxyphene	300	d-Norpropoxyphene	300
TCA 1000			
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		
THC 50			
11-nor-Δ9-THC-9-COOH	50	Δ9-Tetrahydrocannabinol	5,000
11-nor-∆8-THC-9-COOH	30	Cannabinol	20,000
11-hydroxy-∆9-	5,000	Cannabidiol	100,000
Tetrahydrocannabinol			
∆8-Tetrahydrocannabinol	1,300	11-nor-Δ9-THC-carboxy-	100
		glucuronide	

# 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 SAFElife™ C-Cup Multi-Drug Urine Test Cup. All potential interferents were added at a concentration of 100  $\mu$ g/mL. None of the urine samples showed any deviation from the expected results.

- (-) Cotinine 3-Hydroxytyramine Acetaminophen Acetophenetidin Acetylsalicylic Acid Acyclovir Afrin Albumin
- Ecgonine Methyl Ester Effexor Enalapril Maleate Epinephrine Hydrochloride Erythromycin Esomeprazole Magnesium Ethanol Fenofibrate

Nimodipine
Norethindrone
O-Hydroxyhippuric Acid
Olanzapine
Omeprazole
Ondansetran
Oxalic Acid
Oxolinic Acid

Aminophylline Fenoprofen Aminopyrine Fentanyl Citrate Amiodarone Hydrochloride Fluoxetine Hydrochloride Amlodipine Mesylate Fluvoxamine Amoxicillin Furosemide Ampicillin Gabapentin Apomorphine Gentisic Acid Aripiprazole Glibenclamide Aspartame Gliclazide Atomoxetine Glipizide Atorvastatin Calcium Glucose Atropine Haloperidol **Benzilic Acid** Hemoglobin Benzoic Acid Ibuprofen Bilirubin Isosorbide Dinitrate Isoxsuprine Bupropion Captopril Ketamine Carbamazepine Ketoconazole Cefradine Ketoprofen Cephalexin Kratom Chloral Hydrate Labetalol Chloramphenicol Lamotrigine Chloroquine Levofloxacin Hvdrochloride Chlorothiazide Levonorgestrel Chlorpheniramine Levothyroxine Sodium Cholesterol Lidocaine Hydrochloride Ciprofloxacin Hydrochloride Lisinopril Citalopram Lithium Carbonate Clarithromycin Liverite Clonidine Loperamide Clopidogrel Hydrogen Loratadine Sulphate Clozapine Magnesium d,I-Propranolol Maprotiline d,I-Octopamine Meperidine d,I-Tyrosine Meprobamate Deoxycorticosterone Metoprolol Tartrate Dextromethorphan Mifepristone Diclofenac Minocycline Dicyclomine Mirtazapine Diflunisal Montelukast Sodium Digoxin Mosapride Citrate Diphenhydramine N-acetylprocainamide Dirithromycin Nalidixic Acid d-Norpropoxyphene Naproxen Domperidone Niacinamide

Oxymetazoline Paliperidone Pantoprazole Papaverine Paroxetine Hydrochloride Penfluridol Penicillin-G Penicillin V Potassium Phenelzine Pioglitazone Hydrochloride Piracetam Pravastatin Sodium Prednisone Promethazine Propylthiouracil Quetiapine Fumarate Quinine Ranitidine Rifampicin Risperidone Salicylic Acid Serotonin Sertraline Hydrochloride Sildenafil Citrate Simvastatin Sodium Valproate Spironolactone Sulfamethazine Sulindac Tetracycline Tetrahydrocortisone 3acetate Tetrahydrocortisone-(β-Dglucuronide) Tetrahydrozoline Thiamine Thioridazine Topiramate Tramadol Hydrochloride Trazodone Hydrochloride Triamterene Trifluoperazine Trimethoprim Uric Acid Valproate Verapamil Vitamin B2 Vitamin C β-Estradiol

# ASSISTANCE

Duloxetine

D-Pseudoephedrine

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).

Nifedipine

Nikethamide

# BIBLIOGRAPHY OF SUGGESTED READING

Baselt, R.C. Disposition of Toxic Drugs and Chemicals in Man. Biomedical Publications, Davis, CA, 1982. Ellenhorn, M.J. and Barceloux, D. G Medical Toxicology. Elservier Science Publishing Company, Inc., New York, 1988.

Gilman, A. G., and Goodman, L. S. The Pharmacological Fluids, in Martin WR (ed): Drug Addiction I, New York, Spring - Verlag, 1977.

Harvey, R.A., Champe, P.C. Lippincotts Illustrated Reviews. Pharmacology. 91-95, 1992. Hawwks RL, CN Chiang. Urine Testing for drugs of Abuse. National Institute for Drug Abuse (NIDA), Research Monography 73, 1986. Hofmann F.E., A Handbook on Drug and Alcohol Abuse: The Biomedical Aspects, New York, Oxford University Press, 1983. McBay, A. J. Clin. Chem. 33,33B-40B, 1987.

# 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 1-800-729-6686 Center for Substance Abuse Treatment www.health.org 1-800-662-HELP The National Council on Alcoholism and Drug Dependence www.ncadd.org 1-800-NCA-CALL American Council for Drug Education (ACDE) www.acde.org 1-800-488-DRUG

# INDEX OF SYMBOLS

Keep dry

\* X <u>\*\*</u> Do not re-use

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