

MD-U621 Drugs of Abuse Integrated Cup (Urine)

INTENDED USE

The Drugs of Abuse Integrated Cup (Urine) is a rapid visual immunoassay for the qualitative, presumptive detection of any combination of drugs of abuse in human urine specimens at the cut-off concentrations listed below:

Test	Calibrator	Cut-off (ng/mL)
ACE	Acetaminophen	5,000
AMP	d-Amphetamine	1,000
AMP	d-Amphetamine	300
BAR	Secobarbital	300
BUP	Buprenorphine	10
BUP	Buprenorphine	5
BZO	Oxazepam	300
BZO	Oxazepam	200
COC	Benzoylcegonine	300
COC	Benzoylcegonine	150
COC	Benzoylcegonine	100
COT	Cotinine	200
EDDP	2-Ethylidene-1,5-dimethyl-3,3-diphenylpyrrolidine	300
EDDP	2-Ethylidene-1,5-dimethyl-3,3-diphenylpyrrolidine	100
FYL	Fentanyl	200
KET	Ketamine	1,000
MDMA	3,4-Methylenedioxy-MET	500
MET	d-Methamphetamine	1,000
MET	d-Methamphetamine	500
MET	d-Methamphetamine	300
MTD	Methadone	300
OPI/MOP	Morphine	300
OPI/MOP	Morphine	100
OPI2000	Morphine	2,000
OXY	Oxycodone	100
PCP	Phencyclidine	25
PPX	Propoxyphene	300
TCA	Nortriptyline	1,000
THC	11-nor- Δ^9 -THC-9-carboxylic acid	200
THC	11-nor- Δ^9 -THC-9-carboxylic acid	50
THC	11-nor- Δ^9 -THC-9-carboxylic acid	25
TML	Tramadol	100
Synthetic cannabis(K2)	JWH-073/JWH-018	50
ALC	Alcohol	0.02%

The Integrated Split Specimen Cup (Urine) can also come with adulteration strips listed below:
 Adulteration (StripA) Oxidants / Specific Gravity / PH
 Adulteration (StripB) Nitrite / Glutaraldehyde / Creatinine

PRINCIPLE

The Drugs of Abuse Integrated Cup (Urine) is an immunoassay based on the principle of competitive binding. Drugs that may be present in the urine specimen compete against their respective drug conjugate for binding sites on their specific antibody.

During testing, a portion of the 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 appear in the test line region of the corresponding drug strip. The presence of drug above the cut-off concentration in the urine specimen will saturate all the binding sites of the antibody. Therefore, no colored line will form in the test line region.

A drug-positive urine specimen will not generate a colored line in the specific test line region of the strip because of drug competition, while a drug-negative urine specimen will generate a line in the test line region because of the absence of drug competition. To serve as a procedural control, a colored line will always appear at the control line region, indicating that proper volume of specimen has been added and membrane wicking has occurred.

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 Creatinine, pH, and Specific Gravity and to detect the presence of Glutaraldehyde, Nitrite and Oxidants/Pyridinium Chlorochromate in urine.

Creatinine (CRE): Tests for specimen dilution. Creatinine is a waste product of Creatine, and is an amino-acid contained in muscle tissue and found in urine.1 A person may attempt to foil a drug 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 to circumvent drug testing. Low Creatinine and Specific Gravity levels may indicate diluted urine. The absence of Creatinine (<5 mg/dL) is indicative of a specimen not consistent with human urine.

Nitrite (NIT): Tests for commonly used commercial adulterants. They work by oxidizing the major cannabinoid metabolite THC-COOH.2 Normal urine should contain no trace of Nitrites. Positive results generally indicate the presence of an adulterant.

Glutaraldehyde (GLUT): Tests for the presence of aldehydes. Adulterants can contain Glutaraldehyde

and can cause false negative screening results by disrupting the enzyme used in some immunoassay tests.3Glutaraldehyde is not normally found in urine; therefore, detection of Glutaraldehyde in a urine specimen is generally indicates 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 that the specimen has been altered.

Specific Gravity (SG): Tests for specimen dilution. The normal range is from 1.003 to 1.030. Values outside this range may be the result of specimen dilution or adulteration.

Oxidants/Pyridinium Chlorochromate (OXI/PCC): Tests for the presence of oxidizing reagents such as bleach and hydrogen peroxide. Pyridinium Chlorochromate is a commonly used adulterant. 3Normal human urine should not contain Oxidants or PCC.

MATERIALS

Materials Provided

Individually packed test cups with integrated drug of abuse test panels

Caps Package insert

Materials Required but Not provided

Timer Centrifuge

Positive and negative controls

PRECAUTIONS

- For professional in vitro diagnostic use only.
- Do not use after the expiration date indicated on the package. Do not use the test if the foil pouch is damaged. Do not reuse tests.
- This kit contains products of animal origin. Certified knowledge of the origin and/or sanitary state of the animals does not completely guarantee the absence of transmissible pathogenic agents. It is therefore, recommended that these products be treated as potentially infectious, and handled by observing usual safety precautions (e.g., do not ingest or inhale).
- Avoid cross-contamination of specimens by using a new specimen collection container for each specimen obtained.
- Read the entire procedure carefully prior to testing.
- Do not eat, drink or smoke in the area where specimens and kits are handled. Handle all specimens as if they contain infectious agents. Observe established precautions against microbiological hazards throughout the procedure and follow standard procedures for the proper disposal of specimens. Wear protective clothing such as laboratory coats, disposable gloves and eye protection when specimens are assayed.
- Humidity and temperature can adversely affect results.
- Used testing materials should be discarded in accordance with local regulations.

STORAGE AND STABILITY

- The kit should be stored at 2-30 °C until the expiry date printed on the sealed pouch.
- The test must remain in the sealed pouch until use.
- Do not freeze.
- Kits should be kept out of direct sunlight.
- Care should be taken to protect the components of the kit from contamination. Do not use if there is evidence of microbial contamination or precipitation. Biological contamination of dispensing equipment, containers or reagents can lead to false results.

SPECIMEN COLLECTION AND STORAGE

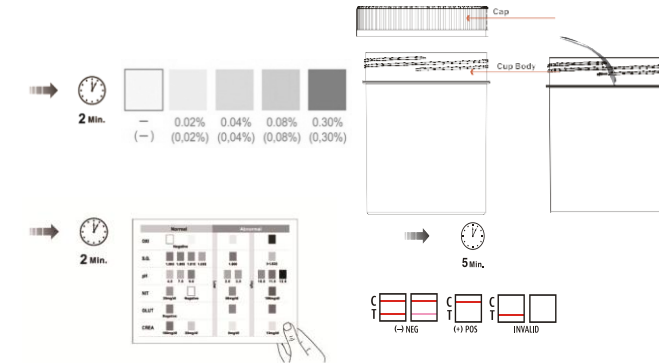
- The Drugs of Abuse Integrated Cup (Urine) is intended for use with human urine specimens only.
- Urine collected at any time of the day may be used.
- Urine specimens must be collected in clean, dry containers.
- Turbid specimens should be centrifuged, filtered, or allowed to settle and only the clear supernatant should be used for testing.
- Perform testing immediately after specimen collection. Do not leave specimens at room temperature for prolonged periods. Urine specimens may be stored at 2-8 °C for up to 2 days. For long term storage, specimens should be kept below -20 °C.
- Bring specimens to room temperature prior to testing. Frozen specimens must be completely thawed and mixed well prior to testing. Avoid repeated freezing and thawing of specimens.
- If specimens are to be shipped, pack them in compliance with all applicable regulations for transportation of etiological agents.

PROCEDURE

Bring tests, specimens, and/or controls to room temperature (15-30 °C) before use if stored at refrigerated temperatures. Remove the cup from sealed pouch and use it as soon as possible.

- Donor dates and initials body label.
- Donor provides a urine specimen in the cup and screws cap on to it. Start timer immediately.
- Operator checks the cap for tightness.
- Remove the peel-off label.
- Check the temperature strip label at 2-4 minutes after specimen collection for the fresh urine specimen. A green color will appear to indicate the temperature of the urine specimen. The proper range for an unadulterated specimen is 90-100 F (32-38 °C).
- Drug test results are indicated by the presence or absence of colored band(s) in the result area of the test strips. The result should be read at 5 minutes. Do not interpret the result after 10 minutes.
- Positive test results must be confirmed by another test method. Send the cup and urine specimen intact to a toxicology laboratory for confirmation.
- For the adulteration, compared with the color card, and the results should be read at 2 minutes , do not interpret the result after 5 minutes.
- For alcohol test, read results at 2 minutes by visually comparing the color of the reaction pad to the

corresponding color blocks printed on the pouch to determine the alcohol concentration. Do not interpret the result after 3 minutes. For the adulteration, compared with the color card and the results should be read at 2 minutes, do not interpret the result after 5 minutes.



INTERPRETATION OF RESULTS

(See previous illustration)

POSITIVE: Only one colored band appears, in the control region (C). No colored band appears in the test region (T) for the drug in question. A positive result indicates that the drug concentration exceeds the detectable level.

NEGATIVE: Two colored bands appear on the membrane. One band appears in the control region (C) and another band appears in the test region (T) for the drug in question. A negative result indicates that the drug concentration is below the detectable level.

INVALID: Control band fails to appear. Results from any test which has not produced a control band at the specified read time must be discarded. Please review the procedure and repeat with a new test. If the problem persists, discontinue using the kit immediately and contact your local distributor.

NOTE:

- The intensity of color in the test region (T) may vary depending on the concentration of analytes present in the specimen. Therefore, any shade of color in the test region (T) should be considered negative. Please note that this is a qualitative test only, and cannot determine the concentration of analytes in the specimen.
- Insufficient specimen volume, incorrect operating procedure or expired tests are the most likely reasons for control band failure.

The Result Of Adulteration Strips:

	Normal	Abnormal
OXI	Negative	
S.G.	1.003 1.005 1.015 1.025	1.000 >1.035
pH	4.0 7.0 9.0	2.0 3.0 10.0 11.0 12.0
NIT	20mg/dl Negative	50mg/dl 100mg/dl
GLUT	Negative	
CREA	100mg/dl 20mg/dl	0mg/dl 10mg/dl

NOTE:

The Urine Adulteration Test Strips (Urine) 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.

Creatinine: Normal Creatinine levels are between 20 and 350 mg/dL. Under rare conditions, certain kidney diseases show dilute urine.

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.

Glutaraldehyde: 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.

Specific Gravity: Elevated levels of protein in urine may cause abnormally high Specific Gravity values.

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.

QUALITY CONTROL

The Quality Control Of DOA:

- Internal procedural controls are included in the test. A colored band appearing in the control region (C) is considered an internal positive procedural control, confirming sufficient specimen volume and correct procedural technique.
- External controls are not supplied with this kit. It is recommended that positive and negative controls be tested as a good laboratory practice to confirm the test procedure and to verify proper test performance.

The Quality Control Of Adulteration Strips:

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

LIMITATIONS OF THE TEST

- The Drugs of Abuse Integrated Cup(Urine) is for professional in vitro diagnostic use, and should be only used for the qualitative detection of drugs of abuse.
- This assay provides a preliminary analytical test result only. A more specific alternative chemical method must be used in order to obtain a confirmed analytical result. Gas chromatography/mass spectrometry (GC/MS) has been established as the preferred confirmatory method by the National Institute on Drug Abuse (NIDA). Clinical consideration and professional judgment should be applied to any test result, particularly when preliminary positive results are indicated.
- There is a possibility that technical or procedural errors as well as other substances and factors may interfere with the test and cause false results.
- Adulterants, such as bleach and/or alum, in urine specimens may produce erroneous results regardless of the analytical method used. Therefore, please preclude the possibility of urine adulteration prior to testing.
- A positive result indicates the presence of a drug/metabolite only, and does not indicate or measure intoxication.
- A negative result does not at any time rule out the presence of drugs/metabolites in urine, as they may be present below the minimum detection level of the test.
- This test does not distinguish between drugs of abuse and certain medications.

The Limitations Of Adulteration Strips:

The Urine Adulteration Test Strips (Urine) 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.

- Creatinine:** Normal Creatinine levels are between 20 and 350 mg/dL. Under rare conditions, certain kidney diseases show dilute urine.
- 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.
- Glutaraldehyde:** 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.
- Specific Gravity:** Elevated levels of protein in urine may cause abnormally high Specific Gravity values.
- 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.

PERFORMANCE CHARACTERISTICS

A. Accuracy

The accuracy of the Drugs of Abuse Integrated Cup(Urine) was established by running urine samples against GC/MS.

Specimen	AMP	AMP	AMP300	BAR	BUP10	BUP5*	BZO	BZO200
Positive	96.1%	95.8%	94.8%	97.8%	100%	100%	95.3%	97.4%
Negative	100%	100%	100%	98.1%	98.1%	100%	92.9%	98.2%
Total	98.1%	98.1%	97.6%	98%	99.4%	100%	93.9%	97.8%

Specimen	COC	COC100	COT	EDDP	EDDP100	FYL	KET	MDMA
Positive	98.2%	98.2%	97.7%	95.8%	96%	96.8%	97.9%	96.8%
Negative	98.1%	98.1%	97.9%	100%	100%	100%	98.1%	100%
Total	98.2%	98.2%	97.8%	98.1%	98.1%	97.5%	98.0%	98.3%

Specimen	MET	MET500	MET300	MTD	MOP	MOP100	OPI	OXY
Positive	96.8%	96.9%	96.8%	96.1%	96.8%	96.1%	97.6%	96.1%
Negative	100%	100%	100%	100%	97.9%	100%	98.4%	100%
Total	98.3%	98.3%	98.4%	98.1%	97.3%	98.1%	98.1%	98.1%

Specimen	PCP	PPX	TCA	THC	THC50	THC25	TML	K2
Positive	97.8%	97.8%	92.1%	96.1%	96.8%	96.8%	98.4%	98.9%
Negative	100%	100%	100%	100%	98.3%	98.3%	100%	100%
Total	98.9%	99.0%	96.8%	98.1%	97.5%	97.5%	99.1%	99%

*NOTE: BUP was based on LC/MS data instead of GC/MS

B. Sensitivity

The sensitivity of The Drugs of Abuse Integrated Cup (Urine) was determined by testing GC/MS confirmed controls at negative, -50% cut-off, -25% cut-off, +25% cut-off, +50% cut-off and 3 times cut-off concentrations. The results are summarized below:

Drug Conc. (Cut-off Range)	n	ACE		AMP		AMP300		BAR		BUP10		BUP5		BZO		BZO200	
		-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+
Negative	50	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0
50% Cut-off	50	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0
75% Cut-off	50	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0
Cut-off	50	19	31	16	34	20	30	11	39	25	25	21	29	17	33	11	39
125% Cut-off	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50
150% Cut-off	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50
3x Cut-off	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50

Drug Conc. (Cut-off Range)	n	COC		COC150		COC100		COT		EDDP		EDDP100		FYL		KET	
		-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+
Negative	50	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0
50% Cut-off	50	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0
75% Cut-off	50	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0
Cut-off	50	11	39	24	26	23	27	13	37	24	26	25	23	23	27	16	34
125% Cut-off	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50
150% Cut-off	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50
3x Cut-off	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50

Drug Conc. (Cut-off Range)	n	MDMA		MET		MET500		MET300		MTD		MOP		MOP100		OPI2000	
		-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+
Negative	50	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0
50% Cut-off	50	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0
75% Cut-off	50	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0
Cut-off	50	25	25	23	27	10	40	17	33	6	44	18	32	20	30	13	37
125% Cut-off	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50
150% Cut-off	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50
3x Cut-off	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50

Drug Conc. (Cut-off Range)	n	OXY		PCP		PPX		TCA		THC		THC50		THC25		TML	
		-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+
Negative	50	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0
50% Cut-off	50	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0
75% Cut-off	50	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0
Cut-off	50	19	31	9	41	20	30	9	41	17	33	17	33	11	39	11	39
125% Cut-off	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50
150% Cut-off	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50
3x Cut-off	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50

Drug Conc. (Cut-off Range)	K2	
	-	+
Negative	50	0
50% Cut-off	50	0
75% Cut-off	50	0
Cut-off	14	36
125% Cut-off	0	50
150% Cut-off	0	50
3x Cut-off	0	50

C. Specificity

The following tables list the concentrations of compounds (ng/mL) above which the Drugs of Abuse Integrated Cup (Urine) identified positive results at 5 minutes.

Compound	Concentration (ng/mL)	Identified Positive Results
Acetaminophen 5000 related compounds		
Acetaminophen	5,000	Mephentermine hemisulfate salt 15,625
Acetophenetidine	7,500	Methodone 50,000
Amphetamine 1000 related compounds		
D - Amphetamine	1000	D-Methamphetamine 12,500
L - Amphetamine	20000	3,4-Methylenedioxyethylampheta 25,000
DL - Amphetamine	3000	Nordoxepin hydrochloride 25,000
Phentermine	30000	Phencyclidine 5,000
Hydroxyamphetamine	8000	Promazine 8,000
Methylenedioxyamphetamine	20000	Promethazine 25,000
d-Methamphetamine	>100,000	Ecstasy 500 related compounds
		3,4-Methylenedioxy-methamphet 500
		d-Amphetamine >100,000

l-Methamphetamine	>100,000	l-Amphetamine	>100,000
Ephedrine	>100,000	d-methamphetamine	>100,000
Methylenedioxyethylamphetamine	>100,000	l-methamphetamine	>100,000
3,4-methylenedioxy-methamphetamine	>100,000	3,4-Methylenedioxyamphetamine	2,500
Amphetamine 300 related compounds		3,4-Methylenedioxyethylampheta	156
D - Amphetamine	300	Paramethoxyamphetamine	50,000
L - Amphetamine	6000	Paramethoxymethamphetamine	>100,000
DL - Amphetamine	600	Methamphetamine 1000 related compounds	
Phentermine	7500	d-Methamphetamine	1,000
Hydroxyamphetamine	2000	Chloroquine	25,000
Methylenedioxyamphetamine	6000	Fenfluramine	12,500
d-Methamphetamine	>100000	l-Methamphetamine	10,000
l-Methamphetamine	>100000	Mephentermine hemisulfate salt	31,250
Ephedrine	>100000	3,4-Methylenedioxyethylampheta	50,000
Methylenedioxyethylamphetamine	>100000	3,4-Methylenedioxy-methamphet	313
3,4-methylenedioxy-methamphetamine	>100000	Paramethoxymethamphetamine	625
Barbiturates 300 related compounds		(-)-Ephedrine	4,000
Oxazepam	300	Methamphetamine 500 related compounds	
Alprazolam	150	d-Methamphetamine	500
Bromazepam	1,000	Chloroquine	12,500
Chlordiazepoxide	375	Fenfluramine	12,500
Clobazam	100	l-Methamphetamine	3,125
Clonazepam	2,500	Mephentermine hemisulfate salt	25,000
Clorazepate	625	MDEA	12,500
Desalkflurazepam	500	MDMA	1,875
Diazepam	500	PMMA	625
Estazolam	1,000	(-)-Ephedrine	2,000
Fentanyl	>100,000	Methamphetamine 300 related compounds	
Flunitrazepam	>50,000	d-Methamphetamine	300
Flurazepam	>100,000	Chloroquine	7,500
Lorazepam	10,000	Fenfluramine	12,500
Lormetazepam	2,500	l-Methamphetamine	10,000
Medazepam	>100,000	Mephentermine hemisulfate salt	31,250
Midazolam	10,000	MDEA	50,000
Nitrazepam	250	MDMA	313
Norchlordiazepoxide	250	PMMA	625
Nordiazepam	500	(-)-Ephedrine	2,000
Przepam	>100,000	Morphine 300 related compounds	
Temazepam	250	Morphine	300
Triazolam	1,000	Acetylcodeine	150
Buprenorphine 10 related compounds		Buprenorphine	3,125
Buprenorphine	10	Codeine	250
Buprenorphine-3-β-D-Glucuronid	10	Diacytyl Morphin	250
Norbuprenorphine	50	Dihydrocodeine	586
Norbuprenorphine-3-β-D-Glucur	100	Ethylmorphine	200
Buprenorphine 5 related compounds		Hydrocodone	12,500
Buprenorphine	5	Hydromorphone	12,500

Buprenorphine-3-β-D-Glucuronid	5	6-Monoacetylmorphine	250
Norbuprenorphine	25	Morphine-3-glucuronid	2,500
Norbuprenorphine-3-β-D-Glucuronid	50	Nalorphine	25,000
Benzodiazepines 300 related compounds		Thebaine	25,000
Oxazepam	300	Morphine 100 related compounds	
Alprazolam	150	Morphine	100
Bromazepam	1,000	Codeine	100
Chlordiazepoxide	375	Diacetylmorphine (Heroin)	100
Clobazam	100	Ethylmorphine	100
Clonazepam	2,500	Hydromorphone	500
Clorazepate	625	Hydrocodone	500
Desalkflurazepam	500	6-Monoacetylmorphine	100
Diazepam	500	Morphine-3-β -d-glucuronide	2,000
Estazolam	1,000	Oxycodone	20,000
Fentanyl	>100,000	Oxymorphone	20,000
Flunitrazepam	>50,000	Promethazine	>100,000
Flurazepam	>100,000	Rifampicine	8,400
Lorazepam	10,000	Thebaine	8,400
Lormetazepam	2,500	Trimipramine	20,000
Medazepam	>100,000	Methylphenidate	300
Midazolam	10,000	Methadone 300 related compounds	
Nitrazepam	250	Methadone	300
Norchlordiazepoxide	250	(-)-alpha-methadol	2,000
Nordiazepam	500	Opiates2000 related compounds	
Prazepam	>100,000	Morphine	2,000
Temazepam	250	Acetylcodeine	1,563
Triazolam	1,000	Buprenorphine	25,000
Benzodiazepines 200 related compounds		Codeine	500
Oxazepam	200	Diacetylmorphine (Heroin)	1,250
Alprazolam	75	Dihydrocodeine	1,563
Bromazepam	400	Ethylmorphine	800
Chlordiazepoxide	1,667	Hydromorphone	25,000
Clobazam	40	Hydrocodone	50,000
Clonazepam	1,600	Merperidine	>100,000
Clorazepate	2,220	6-Monoacetylmorphine	1,250
Desalkflurazepam	225	Morphine-3-β-d-glucuronide	12,500
Diazepam	225	Nalorphine Hydrochloride	>100,000
Estazolam	3,333	Oxycodone	>100,000
Fentanyl	>100,000	Oxymorphone	>100,000
Flunitrazepam	250	Rifampicine	>100,000
Flurazepam	>100,000	Thebaine	50,000
Lorazepam	1000	Oxycodone 100 related compounds	
Lormetazepam	1000	Oxycodone	100
Medazepam	>100,000	Hydrocodone	25,000
Midazolam	>100,000	Hydromorphone	50,000
Nitrazepam	25,000	Naloxone	50,000
Norchlordiazepoxide	200	Oxymorphone	250

Nordiazepam	350	Phencyclidine 25 related compounds	
Prazepam	>100,000	Phencyclidine	25
Temazepam	40	Hydrocodone	12,500
Triazolam	5,000	Hydromorphone	6,250
		4-hydroxyphencyclidine	75
		Propoxyphene 300 related compounds	
Cocaine 300 related compounds		D-Propoxyphene	300
Benzoylcegonine	300	D-Norpropoxyphene	5,000
Cocaine HCl	750	Tricyclic Antidepressants related compounds	
Cocaethylene	12500	Nortriptyline HCl	1,000
Egonine	32000	Amitriptyline	1,500
Norcocaine	100,000	Clomipramine	>100,000
Cocaine 200 related compounds		Cyclobenzaprine	12,500
Benzoylcegonine	200	Desipramine	188
Cocaine HCl	600	Doxepin	2,000
Cocaethylene	8500	Imipramine	2,500
Egonine	20000	Maprotiline	750
Norcocaine	65000	Nortriptyline	3,125
Cocaine 150 related compounds		Nordoxepin	500
Benzoylcegonine	150	Doxepin	500
Cocaine HCl	500	Promazine	1,000
Cocaethylene	7500	Promethazine	6,250
Egonine	15000	Nortriptyline	1000
Norcocaine	50000	Protryptiline	6,250
Cotinine 200 related compounds		Prozine	1,250
(-)-Cotinine	200	Trimipramine	>100,000
(-)-Nicotine	6,250	Marijuana 200 related compounds	
EDDP 100 related compounds		11-nor-Δ9-THC-9-COOH	200
EDDP	100	11-nor-Δ8-THC-9-COOH	200
Meperidine	>100,000	Δ8-Tetrahydrocannabinol	30,000
Methadone	>100,000	Δ9-Tetrahydrocannabinol	30,000
Norfentanyl	>100,000	Cannabinol	20,000
Phencyclidine	>100,000	Marijuana 50 related compounds	
Promazine	50,000	11-nor-Δ9-THC-9-COOH	50
Promethazine	25,000	11-nor-Δ8-THC-9-COOH	50
Prothipendyl	50,000	11-hydroxy-Δ9-Tetrahydrocannabinol	50
Prozine	12,500	Δ8-Tetrahydrocannabinol	15,000
EDDP 300 related compounds		Δ9-Tetrahydrocannabinol	15,000
EDDP	300	Cannabinol	20,000
Meperidine	>100,000	Cannabidiol	>100,000
Methadone	>100,000	Marijuana 25 related compounds	
Norfentanyl	>100,000	11-nor-Δ9-THC-9-COOH	25
Phencyclidine	>100,000	11-nor-Δ8-THC-9-COOH	15
Promazine	80,000	Δ8-Tetrahydrocannabinol	7,500
Promethazine	75,000	Δ9-Tetrahydrocannabinol	7,500
Prothipendyl	80,000	Cannabinol	10,000
Prozine	37,500	Tramadol 100 related compounds	

Fentanyl 200 related compounds		Tramadol	25
Fentanyl and metabolites	10	(+/-)Chlorpheniramine	15
Fentanyl	200	Dimenhydrinate	7,500
Norfentanyl	>10.000	Diphenhydramine	7,500
Ketamine 1000 related compounds		Phencyclidine	10,000
Ketamine	1,000	(+)-Chlorpheniramine	>100,000
Norketamine	1,000	K2 50 related compounds	
Dextromethorphan	500	JWH-018-5-Pentanoic acid	50
Dextrorphan tartrate	500	JWH-073-4-Butanoic acid	50
D-Norpropoxyphene	31,250		
EDDP	800		
Meperidine	12,500		

A study was conducted to determine the cross-reactivity of the test with compounds spiked into drug-free PBS stock. The following compounds demonstrated no false positive results on the Drugs of Abuse Integrated Cup (Urine) when tested at concentrations up to 100 µg/mL.

(-)-Ephedrine (Except MET)	Chlorpheniramine	Oxalic Acid
(+)-Naproxen	Creatine	Penicillin-G
(+/-)-Ephedrine (Except MET)	Dextromethorphan (Except KET)	Pheniramine
4-Dimethylaminoantipyrine	Dextrorphan tartrate (Except KET)	Phenothiazine
Acetaminophen	Dopamine	Procaine
Acetone	Erythromycin	Protonix
Albumin	Ethanol	Pseudoephedrine
Amitriptyline (Except TCA)	Furosemide	Quinidine
Ampicillin	Glucose	Ranitidine
Aspartame	Guaiacol Glyceryl Ether	Sertraline
Aspirin	Hemoglobin	Tyramine
Benzocaine	Ibuprofen	Vitamin C (Ascorbic Acid)
Bilirubin	Imipramine (Except TCA)	Trimiprazine
b-Phenylethyl-amine	Isoproterenol	Venlafaxine
Caffeine	Lidocaine	
Chloroquine (Except MET)	Methodone (Except MTD)	

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GLOSSARY OF SYMBOLS

	Catalog number		Temperature limitation
	Consult instructions for use		Batch code
	In vitro diagnostic medical device		Use by
	Manufacturer		Contains sufficient for <n> tests
	Do not reuse		Authorized representative in the European Community
	CE marking according to IVD Medical Devices Directive 98/79/EC		

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