SCREEN® *Multi-Drug*

One Step Screen Test Panel (Urine) Package Insert

English

Package insert for testing of any combination of the following drugs:

Amphetamine 300, Amphetamine 500, Amphetamine, Barbiturates, Benzodiazepines 200, Benzodiazepines, Buprenorphine, Clonazepam, Cocaine 150, Cocaine, Cotinine, Fentanyl, Ketamine, Marijuana 20, Marijuana, Marijuana 150, Methadone, EDDP 100 (Methadone metabolite), EDDP 300 (Methadone metabolite), Methamphetamine 300, Methamphetamine 500, Methamphetamine, Methylenedioxymethamphetamine, Morphine 300, Opiate 2000, Oxycodone, Phencyclidine, Propoxyphene, Tramadol and Tricyclic Antidepressants.

Including Specimen Validity Tests (S.V.T.) for Oxidants/Pyridinium Chlorochromate (OX/PCC), Specific Gravity (S.G.), pH, Nitrite (NIT), Glutaraldehyde (GLUT) and Creatinine (CRE).

A rapid, one step screen test for the simultaneous, qualitative detection of multiple drugs and metabolites in human urine. For medical and other professional in vitro diagnostic use only.

INTENDED USE & SUMMARY

Urine based screen tests for multiple drugs of abuse range from simple immunoassay tests to complex analytical procedures. The speed and sensitivity of immunoassays have made them the most widely accepted method to screen urine for multiple drugs of abuse.

The Multi-Drug One Step Screen Test Panel (Urine) is a lateral flow chromatographic immunoassay for the qualitative detection of following drugs without the need of instruments.[1]

Test	Calibrator	Cut-off (ng/mL)
Amphetamine (AMP 300)	d-Amphetamine	300
Amphetamine (AMP 500)	d-Amphetamine	500
Amphetamine (AMP)	d-Amphetamine	1,000
Barbiturates (BAR)	Secobarbital	300
Benzodiazepines (BZO 200)	Oxazepam	200
Benzodiazepines (BZO)	Oxazepam	300
Buprenorphine (BUP)	Buprenorphine	10
Clonazepam (ACL)	7-Aminoclonazepam	100
Cocaine (COC 150)	Benzoylecgonine	150
Cocaine (COC)	Benzoylecgonine	300
Cotinine (COT)	Cotinine	100
Fentanyl (FTY)	Norfentanyl	20
Ketamine (KET)	Ketamine	1,000
Marijuana (THC 20)	11-nor-Δ^9-THC-9 COOH	20
Marijuana (THC)	11-nor-Δ^9-THC-9 COOH	50
Marijuana (THC 150)	11-nor-Δ^9-THC-9 COOH	150
Methadone (MTD)	Methadone	300
Methadone metabolite (EDDP 100)	2-Ethylidene-1,5-dimethyl-3,3-dipheylpyrrolidine (EDDP)	100
Methadone metabolite (EDDP 300)	2-Ethylidene-1,5-dimethyl-3,3-dipheylpyrrolidine (EDDP)	300
Methamphetamine (MET 300)	d-Methamphetamine	300
Methamphetamine (MET 500)	d-Methamphetamine	500
Methamphetamine (MET)	d-Methamphetamine	1,000
Methylenedioxymethamphetamine (MDMA)	d,l-Methylenedioxymethamphetamine	500
Morphine (MOP 300)	Morphine	300
Opiate (OPI 2000)	Morphine	2,000
Oxycodone (OXY)	Oxycodone	100
Phencyclidine (PCP)	Phencyclidine	25
Propoxyphene (PPX)	Propoxyphene	300
Tramadol (TRA)	Tramadol	100
Tricyclic Antidepressants (TCA)	Nortriptyline	1,000

This test will detect other related compounds, please refer to the Analytical Specificity table in this package insert.

Configurations of the Multi-Drug One Step Screen Test Panel (Urine) come with any combination of the above listed drug analytes with or without S.V.T. This assay provides only a preliminary analytical test result. A more specific alternate chemical method must be used in order to obtain a confirmed analytical result. Gas chromatography/mass spectrometry (GC/MS) is the preferred confirmatory method. Clinical consideration and professional judgment should be applied to any drug of abuse test result, particularly when preliminary positive results are indicated.

S.V.T. SUMMARY

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

PRINCIPLE

The Multi-Drug One Step Screen Test Panel (Urine) is an immunoassay based on the principle of competitive binding. Drugs which may be present in the urine specimen compete against their respective drug conjugate for binding sites on their specific antibody.

During testing, a urine specimen migrates upward by capillary action. A drug, if present in the urine specimen below its cut-off concentration, will not saturate the binding sites of its specific antibody coated on the particles. The antibody coated particles will then be captured by the immobilized drug conjugate and a visible colored line will show up in the test line region of the specific drug strip. The colored line will not form in the test line region if the drug level is above its cut-off concentration because it will saturate all the binding sites of the antibody coated on the particles.

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 or a specimen containing a drug concentration less than the cut-off will generate a line in the test line region. 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.

S.V.T. PRINCIPLE

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

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

- **Oxidants/PCC** (Pyridinium chlorochromate) tests for the presence of oxidizing agents such as bleach and hydrogen peroxide. Pyridinium Chlorochromate is a commonly used adulterant.[2] Normal human urine should not contain oxidants or PCC.
- **Specific gravity** tests for sample dilution. The normal range is from 1.003 to 1.030. Values outside this range may be the result of specimen dilution or adulteration.
- **pH** tests for the presence of acidic or alkaline adulterants in urine. Normal pH levels should be in the range of 4.0 to 9.0. Values outside of this range may indicate the sample has been altered.
- **Nitrite** tests for commonly used commercial adulterants such as Klear or Whizzies. They work by oxidizing the major cannabinoid metabolite THC-COOH.[3] Normal urine should contain no trace of nitrite. Positive results generally indicate the presence of an adulterant.
- **Glutaraldehyde** tests for the presence of an aldehyde. Adulterants such as UrinAid and Clear Choice contain glutaraldehyde which may cause false negative screening results by disrupting the enzyme used in some immunoassay tests.[2] Glutaraldehyde is not normally found in urine; therefore, detection of glutaraldehyde in a urine specimen is generally an indicator of adulteration.
- **Creatinine** is a waste product of creatine, an amino acid contained in muscle tissue and found in urine.[1] A person may attempt to foil a test by drinking excessive amounts of water or diuretics such as herbal teas to "flush" the system. Creatinine and specific gravity are two ways to check for dilution and flushing, which are the most common mechanisms used in an attempt to circumvent drug testing. Low creatinine and specific gravity levels may indicate dilute urine. The absence of creatinine (< 5 mg/dL) is indicative of a specimen not consistent with human urine.

REAGENTS

Each test contains specific drug antibody-coupled particles and corresponding drug-protein conjugates. A goat antibody is employed in each control line.

S.V.T. REAGENTS

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

PRECAUTIONS

- For medical and other professional *in vitro* diagnostic use only. Do not use after the expiration date.
- The test panel should remain in the sealed pouch until use.
- All specimens should be considered potentially hazardous and handled in the same manner as an infectious agent.
- The used test panel should be discarded according to local regulations.

STORAGE AND STABILITY

Store as packaged in the sealed pouch either at room temperature or refrigerated (2-30°C). The test panel is stable through the expiration date printed on the sealed pouch. The test panel must remain in the sealed pouch until use. **DO NOT FREEZE**. Do not use beyond the expiration date.

SPECIMEN COLLECTION AND PREPARATION

Urine Assay

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

Specimen Storage

Urine specimens may be stored at 2-8°C for up to 48 hours prior to testing. For prolonged storage, specimens may be frozen and stored below -20°C. Frozen specimens should be thawed and mixed well before testing. When tests include S.V.T., storage of urine specimens should not exceed 2 hours at room temperature or 4 hours refrigerated prior to testing. For best results, test specimens immediately following collection.

MATERIALS

Materials Provided

- Test panels
- SVT/Adulterant color chart (if applicable)
- Package insert

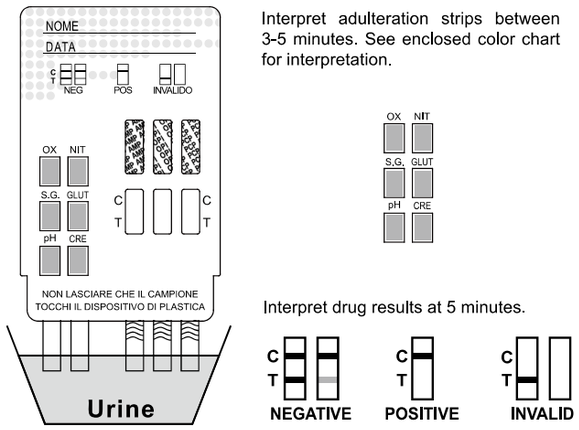
Materials Required But Not Provided

- Specimen collection container
- Timer

DIRECTIONS FOR USE

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

1. Remove the test card from the sealed pouch and use it as soon as possible. Remove the cap from the end of the test card. With arrows pointing toward the urine specimen, immerse the strip(s) of the test card vertically in the urine specimen for at least 10-15 seconds. **Immerse the strip(s) to at least the level of the wavy lines, but not above the arrow(s) on the test card.**
2. Replace the cap and place the test card on a non-absorbent flat surface, start the timer and wait for the colored line(s) to appear.
3. Read the adulteration strip between 3 and 5 minutes by comparing the colors on the adulteration strip to the enclosed color chart. If the result indicates adulteration, do not interpret the drug test results. Either retest the urine or collect another specimen.
4. **Read the drug strip results at 5 minutes.** Do not read results after 10 minutes.



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

Interpret drug results at 5 minutes.

INTERPRETATION OF RESULTS

(Please refer to the illustration above)

NEGATIVE:* A colored line in the control line region (C) and a colored line in the test line region (T) for a specific drug indicate a negative result. This indicates that the drug concentration in the urine specimen is below the designated cut-off level for that specific drug.

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

POSITIVE: A colored line in the control line region (C) but no line in the test line region (T) for a specific drug indicates a positive result. This indicates that the drug concentration in the urine specimen exceeds the designated cut-off for that specific drug.

INVALID: Control line fails to appear. Insufficient specimen volume or incorrect procedural techniques are the most likely reasons for control line failure. Review the procedure and repeat the test using a new test panel. If the problem persists, discontinue using the lot immediately and contact your local distributor.

SVT/ADULTERANT INTERPRETATION

(Please refer to the color chart)

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

QUALITY CONTROL

A procedural control is included in the test. A colored line appearing in the control line region (C) is considered an internal procedural control. It confirms sufficient specimen volume, adequate membrane wicking and correct procedural technique.

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

LIMITATIONS

1. The Multi-Drug One Step Screen Test Panel (Urine) provides only a preliminary analytical result. A more specific chemical method must be used to obtain a confirmed result. Gas chromatography/mass spectrometry (GC/MS) is the preferred confirmatory method.[4, 5]
2. It is possible that technical or procedural errors, as well as other interfering substances in the urine specimen may cause erroneous results.
3. Adulterants, such as bleach and/or alum, in urine specimens may produce erroneous results regardless of the analytical method used. If adulteration is suspected, the test should be repeated with another urine specimen.
4. A positive result indicates presence of the drug or its metabolites but does not indicate level of intoxication, administration route or concentration in urine.
5. A negative result may not necessarily indicate drug-free urine. Negative results can be obtained when drug is present but below the cut-off level of the test.
6. The test does not distinguish between drugs of abuse and certain medications.
7. A positive result might be obtained from certain foods or food supplements.

S.V.T. ADULTERATION LIMITATIONS

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

PERFORMANCE CHARACTERISTICS

Accuracy

A side-by-side comparison was conducted using the Multi-Drug One Step Screen Test Panel (Urine) and commercially available drug rapid tests. Testing was performed on approximately 300 specimens previously collected from subjects present for drug screen testing. Presumptive positive results were confirmed by GC/MS. The following results were tabulated:

% Agreement with Commercial Kit

Specimen	AMP 300	AMP 500	AMP	BAR	BZO 200	BZO	BUP**	ACL	COC 150	COC
Positive	>99%	*	97%	>99%	*	90%	88%	*	>99%	95%
Negative	>99%	*	>99%	99%	*	97%	>99%	*	>99%	>99%
Total	>99%	*	98%	99%	*	94%	97%	*	>99%	98%

Specimen	COT	FTY	KET	THC 20	THC	THC 150	MTD	EDDP 100	EDDP 300	MET 300
Positive	>99%	*	*	*	98%	*	>99%	*	*	*
Negative	>99%	*	*	*	>99%	*	>99%	*	*	*
Total	>99%	*	*	*	99%	*	>99%	*	*	*

Specimen	MET 500	MET	MDMA	MOP 300	OPI 2000	OXY	PCP	PPX	TRA	TCA
Positive	>99%	98%	>99%	>99%	99%	96%	98%	>99%	*	95%
Negative	80%	>99%	99%	>99%	>99%	99%	>99%	>99%	*	>99%
Total	87%	99%	99%	>99%	>99%	98%	>99%	>99%	*	99%

*** NOTE:** Commercial kit unavailable for comparison testing.

**** NOTE:** BUP was compared to the self-reported use of Buprenorphine.

% Agreement with GC/MS

Specimen	AMP 300	AMP 500	AMP	BAR	BZO 200	BZO	BUP*	ACL	COC 150	COC
Positive	>99%	95%	97%	92%	98%	97%	98%	>99%	99%	96%
Negative	99%	>99%	95%	98%	99%	95%	>99%	>99%	99%	90%
Total	99%	98%	96%	95%	99%	96%	>99%	>99%	99%	93%

Specimen	COT*	FTY*	KET	THC 20	THC	THC 150	MTD	EDDP 100	EDDP 300	MET 300
Positive	>99%	99%	>99%	87%	96%	91%	99%	98%	>99%	97%
Negative	>99%	90%	95%	99%	97%	96%	94%	>99%	94%	>99%
Total	>99%	93%	95%	95%	96%	96%	96%	99%	96%	98%

Specimen	MET 500	MET	MDMA	MOP 300	OPI 2000	OXY	PCP	PPX	TRA*	TCA**
Positive	>99%	99%	97%	>99%	98%	99%	>99%	94%	99%	>99%
Negative	97%	94%	>99%	94%	97%	98%	96%	99%	96%	89%
Total	98%	96%	98%	97%	98%	99%	97%	96%	97%	91%

*** NOTE:** BUP, COT, FTY and TRA were based on LC/MS data instead of GC/MS.

**** NOTE:** TCA was based on HPLC data instead of GC/MS.

Analytical Sensitivity

A drug-free urine pool was spiked with drugs to the concentrations at ± 50% cut-off and ± 25% cut-off. The results are summarized below.

Drug Conc. (Cut-off range)	AMP 300		AMP 500		AMP		BAR		BZO 200		BZO		BUP		ACL	
	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+
0% Cut-off	30	0	30	0	30	0	30	0	60	0	30	0	90	0	90	0
-50% Cut-off	30	0	30	0	30	0	30	0	60	0	30	0	90	0	90	0
-25% Cut-off	27	3	25	5	22	8	27	3	60	0	27	3	75	15	82	8
Cut-off	13	17	11	19	12	18	22	8	22	38	11	19	60	30	39	51
+25% Cut-off	4	26	5	25	2	28	8	22	2	58	5	25	31	59	0	90
+50% Cut-off	0	30	0	30	0	30	2	28	0	60	0	30	0	90	0	90

Drug Conc. (Cut-off range)	COC 150		COC		COT		FTY		KET		THC 20		THC	
	-	+	-	+	-	+	-	+	-	+	-	+	-	+
0% Cut-off	30	0	30	0	90	0	90	0	90	0	30	0	30	0
-50% Cut-off	30	0	30	0	90	0	90	0	90	0	30	0	30	0
-25% Cut-off	24	6	30	0	90	0	85	5	90	0	27	3	12	18
Cut-off	14	16	4	26	46	44	49	41	57	33	24	6	1	29
+25% Cut-off	7	23	0	30	5	85	13	77	3	87	17	13	1	29
+50% Cut-off	0	30	0	30	0	90	0	90	0	90	5	25	0	30

Drug Conc. (Cut-off range)	THC 150		MTD		EDDP 100		EDDP 300		MET 300		MET 500		MET	
	-	+	-	+	-	+	-	+	-	+	-	+	-	+
0% Cut-off	90	0	30	0	90	0	90	0	30	0	30	0	30	0
-50% Cut-off	90	0	29	1	90	0	90	0	30	0	30	0	30	0
-25% Cut-off	90	0	24	6	90	0	90	0	27	3	23	7	30	0
Cut-off	46	44	21	9	37	53	51	39	15	15	13	17	18	12
+25% Cut-off	5	85	2	28	8	82	14	76	4	26	8	22	1	29
+50% Cut-off	0	90	0	30	0	90	0	90	0	30	0	30	0	30

Drug Conc. (Cut-off range)	MDMA		MOP 300		OPI 2000		OXY		PCP		PPX		TCA		TRA	
	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+
0% Cut-off	30	0	30	0	30	0	30	0	30	0	30	0	30	0	90	0
-50% Cut-off	30	0	30	0	30	0	30	0	30	0	30	0	30	0	90	0
-25% Cut-off	26	4	25	5	25	5	30	0	19	11	24	6	29	1	90	0
Cut-off	17	13	17	13	15	15	18	12	16	14	17	13	18	12	61	29
+25% Cut-off	4	26	1	29	6	24	6	24	6	24	7	23	5	25	21	69
+50% Cut-off	0	30	0	30	0	30	0	30	0	30	0	30	0	30	2	88

Analytical Specificity

The following tables lists the concentration of compounds (ng/mL) that are detected positive in urine by the Multi-Drug One Step Screen Test Panel (Urine) at 5 minutes.

AMPHETAMINE 300	
d-Amphetamine	300
d,l-Amphetamine	390
l-Amphetamine	50,000
p-Hydroxyamphetamine	1,560
p-Hydroxynorephedrine	100,000
3,4-Methylenedioxyamphetamine (MDA)	1,560
β-Phenylethylamine	100,000
Phenylpropanolamine (d,l-Norephedrine)	100,000
Tyramine	100,000
AMPHETAMINE 500	
d-Amphetamine	500
d,l-Amphetamine	1,500
3,4-Methylenedioxyamphetamine (MDA)	800
Phentermine	1,500
β-Phenylethylamine	50,000
Tryptamine	50,000
Tyramine	25,000

KETAMINE	
Ketamine	1,000
Pentobarbital	50,000
Secobarbital	100,000
Norketamine	50,000
MARIJUANA 20	
11-nor-Δ^9-THC-9 COOH	20
Cannabinol	12,500
11-nor-Δ^8-THC-9 COOH	20
Δ^8-THC	10,000
Δ^9-THC	12,500
MARIJUANA	
11-nor-Δ^9-THC-9 COOH	50
11-nor-Δ^8-THC-9 COOH	30
Cannabinol	20,000
Δ^8-THC	15,000
Δ^9-THC	15,000
MARIJUANA 150	

AMPHETAMINE	
d-Amphetamine	1,000
d,l-Amphetamine	3,000
l-Amphetamine	50,000
d,l-3,4-Methylenedioxyamphetamine (MDA)	2,000
Phentermine	3,000
BARBITURATES	
Secobarbital	300
Alphenal	150
Amobarbital	300
Aprobarbital	200
Butabarbital	75
Butalbital	2,500
Butethal	100
Cyclopentobarbital	600
Pentobarbital	300
Phenobarbital	100
BENZODIAZEPINES 200	
Oxazepam	200
Alprazolam	30
7-Aminoclonazepam	4,000
7-Aminoflunitrazepam	390
7-Aminonitrazepam	625
Bromazepam	390
Chlordiazepoxide	300
Clobazam	48
Clorazepate	97
Desalkylflurazepam	1,560
Diazepam	97
Estazolam	125
Flunitrazepam	25,000
α-Hydroxyalprazolam	30
d-Lorazepam	3,125
Midazolam	195
Nitrazepam	780
Norchlordiazepoxide	780
Nordiazepam	780
Temazepam	33
Triazolam	150
BENZODIAZEPINES	
Oxazepam	300
Alprazolam	196

11-nor-Δ^9-THC-9 COOH	150
11-nor-Δ^8-THC-9 COOH	500
Cannabinol	25,000
Δ^8-THC	25,000
Δ^9-THC	25,000
METHADONE	
Methadone	300
Doxylamine	50,000
EDDP 100	
2-Ethylidene-1,5-dimethyl-3,3-diphenylpyrrolidine (EDDP)	100
EDDP 300	
2-Ethylidene-1,5-dimethyl-3,3-diphenylpyrrolidine (EDDP)	300
METHAMPHETAMINE 300	
d-Methamphetamine	300
d,l-Amphetamine	100,000
Chloroquine	25,000
Ephedrine	100,000
(1R,2S)-l-Ephedrine	100,000
l-Epinephrine	50,000
Fenfluramine	12,500
p-Hydroxymethamphetamine	25,000
Mephentermine	50,000
l-Methamphetamine	3,125
3,4-Methylenedioxymethamphetamine (MDMA)	780
Trimethobenzamide	25,000
METHAMPHETAMINE 500	
d-Methamphetamine	500
d,l-Amphetamine	75,000
d-Amphetamine	50,000
Chloroquine	12,500
(1R,2S)-l-Ephedrine	50,000
p-Hydroxymethamphetamine	15,000
Mephentermine	25,000
l-Methamphetamine	4,000
3,4-Methylenedioxymethamphetamine (MDMA)	1,000
l-Phenylephrine	100,000
β-Phenylethylamine	75,000
METHAMPHETAMINE	
d-Methamphetamine	1,000
p-Hydroxymethamphetamine	30,000
Mephentermine	50,000
l-Methamphetamine	8,000

Bromazepam	1,562
Chlordiazepoxide	1,562
Clobazam	98
Clonazepam	781
Clorazepate	195
Delorazepam	1,562
Desalkylflurazepam	390
Diazepam	195
Estazolam	2,500
Flunitrazepam	390
α-Hydroxyalprazolam	1,262
d,l-Lorazepam	1,562
RS-Lorazepam glucuronide	156
Midazolam	12,500
Norchlordiazepoxide	195
Nordiazepam	390
Temazepam	98
Triazolam	2,500
BUPRENORPHINE	
Buprenorphine	10
Buprenorphine 3-D-glucuronide	15
Norbuprenorphine	20
Norbuprenorphine 3-D-glucuronide	200
CLONAZEPAM	
7-Aminoclonazepam	100
Alprazolam	6
7-Aminoflunitrazepam	6
7-Aminonitrazepam	5
Bromazepam	6
Chlordiazepoxide	24
Clobazam	6
Clonazepam	49
Clorazepate	50
Delorazepam	100
Desalkylflurazepam	12
Diazepam	25
Estazolam	2
Flunitrazepam	100
α-Hydroxyalprazolam	5
α-Hydroxymidazolam	10
α-Hydroxytriazolam	1
d,l-Lorazepam	400

d,l-3,4-Methylenedioxymethamphetamine (MDMA)	2,000
METHYLENEDIOXYMETHAMPHETAMINE (MDMA)	
d,l-3,4-Methylenedioxymethamphetamine (MDMA)	500
d,l-3,4-Methylenedioxyamphetamine (MDA)	3,000
3,4-Methylenedioxyethylamphetamine (MDEA)	300
MORPHINE 300	
Morphine	300
Codeine	300
Ethylmorphine	6,250
Hydrocodone	50,000
Hydromorphone	3,125
Levorphanol	1,500
6-Monoacetylmorphine (6-MAM)	400
Morphine 3-β-D-glucuronide	1,000
Norcodeine	6,250
Normorphine	100,000
Oxycodone	30,000
Oxymorphone	100,000
Procaine	15,000
Thebaine	6,250
OPIATE 2000	
Morphine	2,000
Codeine	2,000
Ethylmorphine	5,000
Hydrocodone	12,500
Hydromorphone	5,000
Levorphanol	75,000
6-Monoacetylmorphine (6-MAM)	5,000
Morphine 3-β-D-glucuronide	2,000
Norcodeine	12,500
Normorphine	50,000
Oxycodone	25,000
Oxymorphone	25,000
Procaine	150,000
Thebaine	100,000
OXYCODONE	
Oxycodone	100
Hydrocodone	6,250
Hydromorphone	50,000
Levorphanol	50,000
Naloxone	37,500
Naltrexone	37,500

Lorazepam glucuronide	10,000
Midazolam	200
Nitrazepam	12
Norchlordiazepoxide	50
Nordiazepam	6
Oxazepam	98
Oxazepam glucuronide	10,000
Temazepam	12
Temazepam glucuronide	5,000
Triazolam	24
COCAINE 150	
Benzoylecgonine	150
Cocaine	400
Cocaethylene	6,250
Ecgonine	12,500
Ecgonine methylester	50,000
COCAINE	
Benzoylecgonine	300
Cocaine	780
Cocaethylene	12,500
Ecgonine	32,000
COTININE	
l-Cotinine	100
S-l-Nicotine	12,500
FENTANYL	
Fentanyl	100
Alfentanyl	562,500
Buspirone	12,500
Fenfluramine	37,500
Norfentanyl	20
Sufentanyl	57,500

Oxymorphone	200
PHENCYCLIDINE	
Phencyclidine	25
4-Hydroxyphencyclidine	12,500
PROPOXYPHENE	
d-Propoxyphene	300
d-Norpropoxyphene	300
TRAMADOL	
Cis-tramadol	100
n-Desmethyl-cis-tramadol	195
o-Desmethyl-cis-tramadol	6,250
Phencyclidine	100,000
Procyclidine	100,000
d,l-O-Desmethyl venlafaxine	25,000
TRICYCLIC ANTIDEPRESSANTS	
Nortriptyline	1,000
Amitriptyline	1,500
Clomipramine	12,500
Desipramine	200
Doxepin	2,000
Imipramine	400
Maprotiline	2,000
Nordoxepin	1,000
Promazine	1,500
Promethazine	25,000
Trimipramine	3,000

Cross-Reactivity

A study was conducted to determine the cross-reactivity of the test with compounds in either drug-free urine or Amphetamine 300, Amphetamine 500, Amphetamine, Barbiturates, Benzodiazepines 200, Benzodiazepines, Buprenorphine, Clonazepam, Cocaine 150, Cocaine, Cotinine, Fentanyl, Ketamine, Marijuana 20, Marijuana, Marijuana 150, Methadone, EDDP 100 (Methadone metabolite), EDDP 300 (Methadone metabolite), Methamphetamine 300, Methamphetamine 500, Methamphetamine, Methylenedioxymethamphetamine, Morphine 300, Opiate 2000, Oxycodone, Phencyclidine, Propoxyphene, Tramadol and Tricyclic Antidepressants positive urine. The following compounds show no cross-reactivity when tested with the Multi-Drug One Step Screen Test Panel (Urine) at a concentration of 100 µg/mL.

Non Cross-Reacting Compounds

4-Acetamidophenol	Dicyclomine	Lidocaine	Phenothiazine
Acetone	Diflunisal	Lindane	Prednisolone
Acetophenetidin	Digoxin	Lithium	Prednisone
Acetylsalicylic acid	4-Dimethylaminoantipyrine	Loperamide	d,l-Propanolol
Albumin	Diphenhydramine	l-Thyroxine	Quinacrine
alpha-Naphthaleneacetic Acid	5,5-Diphenylhydantoin	Meperidine	Quinidine
Aminopyrine	EMDP	Meprobamate	Quinine
Amoxapine	Erythromycin	l-Methamphetamine [(-) Deoxyephedrine]	R(-) Deprenyl
Amoxicillin	β-Estradiol	Methaqualone	Riboflavin
Ampicillin	Estrone-3-sulfate	Methoxyphenamine	Salicylic acid
Apomorphine	Ethyl alcohol	Methylphenidate	Serotonin
Ascorbic acid	Ethyl-p-aminobenzoate	Methyprylon	Seroquel
Aspartame	Etodolac	Metoprolol	Sertraline
Atropine	Famprofazone	N-Acetylprocainamide	Sodium Chloride
Benzilic acid	Fenoprofen	Nalidixic acid	Sulfamethazine
Benzoic acid	Fluoxetine	Nalorphine	Sulindac
Benzydamine	Furosemide	Naproxen	Tetracycline
Brompheniramine	Gentisic acid	Niacinamide	Tetrahydrocortison-3-acetate
Caffeine	d-Glucose	Nifedipine	Tetrahydrozoline
Cannabidiol	Guaiacol Glyceryl Ether	Nimesulide	Theophylline
Chloral Hydrate	Hemoglobin	Norethindrone	Thiamine
Chloramphenicol	Hydralazine	Noscapine	Thioridazine
Chloroquine	Hydrochlorothiazide	d,l-Octopamine	Tolbutamide
Chlorothiazide	Hydrocortisone	Orphenadrine	Trans-2-phenylcyclopropylamine
Chlorpromazine	o-Hydroxyhippuric acid	Oxalic acid	Trazodone
Chlorprothixene	3-Hydroxytyramine	Oxolinic acid	Triamterene
Cholesterol	Hydroxyzine	Oxymetazoline	Trifluoperazine
Cimetidine	Ibuprofen	Papaverine	Trimethoprim
Clonidine	Iproniazid	Pemoline	d,l-Tryptophan
Cortisone	Isoproterenol	Penicillin	d,l-Tyrosine
Creatinine	Isoxsuprine	Pentazocine	Uric acid
Deoxycorticosterone	Kanamycin	Phenelzine	Verapamil
Dextromethorphan	Ketoprofen	Pheniramine	Zomepirac
Diclofenac	Labetalol		

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SVT/Adulterant Color Chart

Abnormal	Abnormal
Normal	Normal

OX PCC	Oxidants/Pyridinium chlorochromate
S.G.	Specific gravity
pH	pH

NIT	Nitrite
GLUT	Glutaraldehyde
CRE	Creatinine

Index of Symbols

	Consult instructions for use
IVD	For *in vitro* diagnostic use only
30°C 2°C	Store between 2-30°C

Σ	Tests per kit
	Use by
LOT	Lot Number

	Manufacturer
	Do not reuse
REF	Catalog #

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CE

Number: 1156072901
Effective date: 2012-xx-xx