

# One Step Drug of Abuse Test

(Combo Strip)

For Forensic Use Only

## INTENDED USE

The One Step Drug of Abuse Test is a lateral flow chromatographic immunoassay for the qualitative detection of Fentanyl and Xylazine in substance or urine at the following cut-off concentration:

TEST	CALIBRATOR	CUT-OFF
Fentanyl (FEN10)	Fentanyl	10 ng/mL
Xylazine (XYL500)	Xylazine	500ng/mL

This assay provides only a preliminary qualitative test result. Use a more specific alternate quantitative analytical method to obtain a confirmed analytical result. Gas chromatography/mass spectrometry (GC/MS) or Liquid chromatography/mass spectrometry (LC/MS) is the preferred confirmatory method.<sup>1</sup> Apply clinical and professional judgment to Fentanyl and Xylazine test result, particularly when a preliminary positive result is obtained.

## SUMMARY AND EXPLANATION OF THE TEST

The One Step Drug of Abuse Test is a competitive immunoassay utilizing highly specific reactions between antibodies and antigens for the detection of Fentanyl and Xylazine in substance or urine without the use of an instrument.

### FENTANYL (FEN10)

Fentanyl is a potent, synthetic opioid analgesic with a rapid onset and short duration of action. It is a strong agonist at the  $\mu$ -opioid receptors. Historically, it has been used to treat breakthrough pain and is commonly used in pre-procedures as a pain reliever as well as an anesthetic in combination with a benzodiazepine. Fentanyl is approximately 80 to 100 times more potent than morphine and roughly 15 to 20 times more potent than heroin. Fentanyl and its derivatives are used recreationally. Deaths have resulted from both recreational and improper medical use.

The FEN10 assay contained within the One Step Drug of Abuse Test yields a positive result when the concentration of Fentanyl in specimen exceeds 10 ng/mL.

### XYLAZINE (XYL500)

Xylazine is not a controlled substance; it is marketed as a veterinary drug and used as a sedative, analgesic and muscle relaxant. In humans, it could cause central nervous system depression, respiratory depression, bradycardia, hypotension, and even death. Most of the non-fatal cases required medical intervention. Over recent years xylazine has emerged as an adulterant in recreational drugs, such as heroin or speedball (a cocaine and heroin mixture). Its chronic use is reported to be associated with physical deterioration and skin ulceration. Literature shows some similar pharmacologic effects between xylazine and heroin in humans. These similar pharmacologic effects may create synergistic toxic effects in humans. Therefore, fatalities among drug users may increase due to the use of xylazine as an adulterant. Xylazine alone has proven harmful to humans and even more when it is combined with drugs of abuse.

The XYL500 assay contained within the One Step Drug of Abuse Test yields a positive result when the concentration of Xylazine in specimen exceeds 500 ng/mL.

## PRINCIPLE

The One Step Drug of Abuse Test is an immunoassay based on the principle of competitive binding. Drugs which may be present in the specimen compete against their respective drug conjugate for binding sites on their specific antibody. During testing, a specimen migrates upward by capillary action. A drug, if present in the specimen below its cut-off concentration, will not saturate the binding sites of its specific antibody. The antibody will then react with the drug-protein conjugate and a visible colored line will show up in the test line region of the specific drug strip. The presence of drug above the cut-off concentration will saturate all the binding sites of the antibody. Therefore, the colored line will not form in the test line region.

A drug-positive specimen will not generate a colored line in the specific test line region of the strip because of drug competition, while a drug - negative 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.

## REAGENTS

The test contains a membrane strip coated with drug-protein conjugates (purified bovine albumin) on the test line, a goat polyclonal antibody against gold-protein conjugate at the control line, and a dye pad which contains colloidal gold particles coated with mouse monoclonal antibody specific to individual drug on the list in the Intended Use section.

## PRECAUTIONS

- For Forensic Use Only.
- Do not use after the expiration date.
- The test panel should remain in the sealed pouch until use. The test is for single use.
- While urine is not classified by OSHA or the CDC as a biological hazard unless visibly contaminated with blood, the use of gloves is recommended to avoid unnecessary contact with the specimen.
- The used test device and the specimen should be discarded according to federal, state and local regulations.

## STORAGE AND STABILITY

Store as packaged in the sealed pouch at 4-30° C (39-86° F). The test is stable through the expiration date printed on the sealed pouch. The test device must remain in the sealed pouch until use. DO NOT FREEZE. Do not use beyond the expiration date.

## SPECIMEN COLLECTION AND PREPARATION

### Substances or Urine Assay

If the substance you are testing is in liquid form, or if you are testing substances or urine, proceed to the respective Step 1 (see directions below) which corresponds to your device. 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 allowed to settle to obtain a clear specimen for testing.

If the substance you are testing is in powder form, place substance in a container and add water to the substance and mix well. Proceed to the respective Step 1 (see directions below) which corresponds to your device.

If the substance you are testing is in pill format, crush or scrape some of the pill into a container. Add water to the substance and mix well. Proceed to the respective Step 1 (see directions below) which corresponds to your device.

## MATERIALS

### Materials Provided

- Test device
- Desiccants
- Package insert

### Materials Required But Not Provided

- Timer
- Disposable gloves

## DIRECTIONS FOR USE

Allow the test device substance, or urine specimen to come to room temperature [15-30°C (59-86°F)] prior to testing.

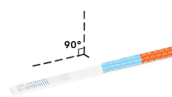
### [ For Strip ]

- Remove the strip from the foil wrapper or the desiccated container (bring the container to the room temperature before opening to avoid condensation of moisture in container). Label the strip with patient or control identifications.
- Immerse the strip into the prepared specimen with the arrow end pointing toward the urine. Do not cover over the MAX (maximum) line. You may leave the strip in the specimen or you may take the strip out after a minimum of 15 seconds in the specimen and lay the strip flatly on a non - absorptive clean surface.
- Read result at 3 to 5 minutes. **DO NOT READ RESULT AFTER 5 MINUTES.**

1 DIP 15 SEC.



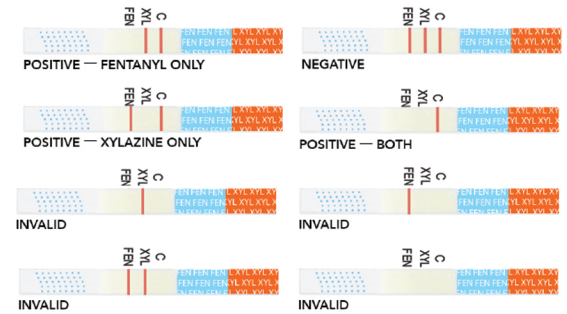
2 LAY FLAT



3 WAIT 3-5 MINUTES



## INTERPRETATION OF RESULTS



( Please refer to the previous illustration )

**NEGATIVE:** Three lines appear.\* One color line should be in the control region (C), and another apparent color line adjacent should be in the test region (XYL and FEN). This negative result indicates that the drug concentration is below the detectable level.

\* **NOTE:** The shade of color in the test line region (XYL and FEN) will vary, but it should be considered negative whenever there is even a faint distinguishable color line.

**POSITIVE:** One color line appears in the control region (C). No line appears in the test region (XYL or FEN). This positive result indicates that the drug concentration is above the detectable level.

**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 cup. If the problem persists, discontinue using the lot immediately and contact your supplier.

## QUALITY CONTROL

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

## LIMITATIONS

- The test provides only a qualitative, preliminary analytical result. A secondary analytical be used to obtain a confirmed result. Gas chromatography/mass spectrometry ( GC/MS ) is the preferred confirmatory method.
- There is a possibility that technical or procedural errors, as well as other interfering substances in the specimen may cause erroneous results.
- A Positive result does not indicate intoxication of the donor, the concentration of drug in the urine or the route of drug administration.
- 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.
- Test does not distinguish between drugs of abuse and certain medications.
- A positive test result may be obtained from certain foods or food supplements.
- The test device is NOT intended to determine the purity, composition, or if the substance being examined is safe to use.
- A positive or negative test result is NOT an indication that the substance being examined is safe to use. Many factors come into play when examining the samples, including but not limited to mixture of multiple substances, solubility, and pH of the sample.
- The test shall not encourage the use, supply, or production of illegal drugs or controlled substances in any way. The test is intended for harm reduction purposes. Follow the advice of your local harm reduction or public health agency.
- Not for testing Cocaine.
- There is a possibility that technical or procedural errors as well as other substances and factors may interfere with the test strip (Liquid / Powder) and cause false results.
- A positive result indicates the presence of drugs only and does not indicate quantity.
- A negative result does not at any time rule out the presence of drugs, as they may be present below the minimum detection level of the test.

## PERFORMANCE CHARACTERISTICS

### Reproducibility For FEN10

Reproducibility studies were carried out using commercially available stock solutions of the drug analytes listed. The results are listed in the following table.

FENTANYL CONCENTRATION (ng/mL)	TOTAL NUMBER OF DETERMINATIONS	RESULT	PRECISION
No Drug Present	60	60 negative	>99%
5	60	60 negative	>99%
15	60	60 positive	>99%

### Reproducibility For XYL500

Reproducibility studies were carried out using commercially available stock solutions of the drug analytes listed. The results are listed in the following tables.

FENTANYL CONCENTRATION (ng/mL)	TOTAL NUMBER OF DETERMINATIONS	RESULT	PRECISION
No Drug Present	60	60 negative	>99%
250	60	60 negative	>99%
750	60	60 positive	>99%

### Analytical Sensitivity For FEN10

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

DRUG CONCENTRATION CUT-OFF RANGE	n	FEN	
		-	+
0% Cut-Off	30	30	0
-50% Cut-Off	30	30	0
-25% Cut-Off	30	30	0
Cut-Off	30	3	27
+25% Cut-Off	30	0	30
+50% Cut-Off	30	0	30

### Analytical Sensitivity For XYL500

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

DRUG CONCENTRATION CUT-OFF RANGE	n	FEN	
		-	+
0% Cut-Off	30	30	0
-50% Cut-Off	30	30	0
-25% Cut-Off	30	30	0
Cut-Off	30	2	28
+25% Cut-Off	30	0	30
+50% Cut-Off	30	0	30

### Analytical Sensitivity For FEN10

The following table lists the concentration of compounds (ng/mL) that were detected positive in substances or urine by the One Step Fentanyl Drug of Abuse Test at a read time 3 to 5 minutes.

Compound Name	Positive result at	Cross-reactivity (%)
Acetyl- $\alpha$ -methyl fentanyl	50ng/ml	20%
Acryl fentanyl	40ng/ml	25%
$\alpha$ -methyl fentanyl	10ng/ml	100%
Benzyl fentanyl	25ng/ml	40%
$\beta$ -hydroxythio fentanyl	10ng/ml	100%
Cyclopropyl fentanyl	10ng/ml	100%
4-Fluoroisobutyl fentanyl	10000ng/ml	0.1%
Methoxyacetyl fentanyl	125ng/ml	8%
4-methoxybutyl fentanyl (para)	4000ng/ml	0.25%
4'-methyl acetyl fentanyl	250ng/ml	4%
3'-methyl Fentanyl	10ng/ml	100%
N-methyl norfentanyl	15ng/ml	66.7%
o-Fluorofentanyl	25ng/ml	40%
p-Fluorobutyl fentanyl	20ng/ml	50%
Tetrahydrofuran fentanyl	5000ng/ml	0.2%
2-Thiofuranyl fentanyl	500ng/ml	2%
4-Piperidone	25000ng/ml	0.04%
2',4'-dimethoxy Fentanyl	25ng/ml	40%
3',4'-dimethoxy Fentanyl	5ng/ml	200%
meta-fluoro Acrylfentanyl	25ng/ml	40%
para-chloro Furanyl fentanyl 3-furancarboxamide	50ng/ml	20%
Thiophene fentanyl 3-thiophenecarboxamide	250ng/ml	4%
3'-Fluorofentanyl	12.5ng/ml	80%
ortho-fluoro Valeryl fentanyl	5000ng/ml	0.2%
4-methyl Fentanyl	50ng/ml	20%
Cyclopropaneacetyl fentanyl	25ng/ml	40%
para-Chloroacetyl fentanyl	50ng/ml	20%
para-hydroxy Butyl fentanyl	15ng/ml	66.7%
2'-Fluoro ortho-Fluorofentanyl	100ng/ml	10%
meta-methoxy Furanyl fentanyl	250ng/ml	4%
3'-fluoro ortho-Fluorofentanyl	50ng/ml	20%
2',3'-dimethoxy Fentanyl	10ng/ml	100%
2',6'-dimethoxy Fentanyl	25ng/ml	40%
3',5'-dimethoxy Fentanyl	2.5ng/ml	400%
Acetyl norfentanyl	1000ng/ml	1%

### Analytical Specificity For XYL500

The following table lists the concentration of compounds (ng/mL) that were detected positive in urine by the One step Xylazine Test at a read time of 3 to 5 minutes.

Drug	Concentration
Xylazine	Positive at 500ng/ml
Clonidine hydrochloride	Positive at 100 $\mu$ g/ml
Doxylamine	Positive at 50 $\mu$ g/ml
Diclofenac Sodium Salt	Positive at 2000 $\mu$ g/ml
Levamisole	Positive at 500 $\mu$ g/ml
Caffeine	Negative at $\leq$ 10mg/mL
Diphenhydramine	Negative at $\leq$ 30mg/ml
4-Dimethylaminoantipyrine	Negative at $\leq$ 10mg/mL
Cocaine	Negative at $\leq$ 10mg/mL
Methamphetamine	Negative at $\leq$ 50mg/ml
MDMA	Negative at $\leq$ 50mg/ml
Fentanyl	Negative at $\leq$ 10mg/mL
Phenacetin	Negative at $\leq$ 10mg/ml
Phenelzine sulfate salt	Negative at $\leq$ 10mg/mL
Lidocaine	Positive at 10mg/ml
Quinine	Negative at $\leq$ 100 $\mu$ g/ml
Oxalic Acid	Negative at $\leq$ 10mg/mL
Oxymetazoline	Negative at $\leq$ 10mg/mL
Heroin	Negative at $\leq$ 10mg/mL
21-Hydroxy progesterone	Negative at $\leq$ 10mg/mL
Ketoprofen	Negative at $\leq$ 10mg/mL
Acetaminophen	Negative at $\leq$ 10mg/mL
Benzocaine	Negative at $\leq$ 10mg/mL
Procaine	Negative at $\leq$ 10mg/mL
Theophylline	Negative at $\leq$ 10mg/mL

## EFFECT OF URINARY SPECIFIC GRAVITY

Urine samples of normal, high, and low specific gravity ranges from 1.000 - 1.025 were spiked with drug at 50% below and 50% above cut-off levels respectively and tested using One Step Fentanyl Drug of Abuse Test. The results demonstrate that varying ranges of specimen specific gravity do not interfere with the performance of the test.

## EFFECT OF URINARY PH

The pH of an aliquoted negative urine pool was adjusted to pH ranges of 4.0, 5.0, 6.0, 7.0, 8.0 and 9.0, and spiked with drug at 50% below and 50% above cut-off levels. The spiked, pH-adjusted urine was tested with the One Step Fentanyl Drug of Abuse Test. The results demonstrate that varying ranges of pH do not interfere with the performance of the test.

## INTERFERENCE

A study was conducted to determine the cross-reactivity of the test with compounds in either drug-free substances or urine, or drug positive substances or urine containing Fentanyl.

The following compound shows no cross-reactivity when tested with the One Step Fentanyl Drug of Abuse Test at concentrations of 10 $\mu$ g/ml.

**Carfentanil**

The following compounds show no cross-reactivity when tested with the One Step Fentanyl Drug of Abuse Test at concentrations of 1 00µg/ml.

Acebutolol  
 Acetopromazine-d6  
 Acetyl-L-cysteine  
 Acetylsalicylic Acid ( Aspirin )  
 Acetaminophen  
 O6-Acetylmorphine Acetazolamide  
 N-Acetylprocainamide  
 Acetone  
 Acetophenetidin  
 Albumin,Human recombinant  
 Alprenolol hydrochloride  
 Alprazolam  
 Allopurinol  
 Alphenal  
 Amiloride  
 Aminophenazon  
 Amiodarone Hydrochloride Tablets  
 Ampicillin(Ampicillin)  
 Amitriptyline  
 Aminophylline  
 Amantadine Hydrochloride  
 Amphotericin B  
 Ammonium Chloride  
 Amphetamine Sulfate  
 Amikacin  
 Amikacin sulfate  
 p-Aminobenzoic Acid  
 DL-Aminoglutethimide  
 Anamycin sulfate  
 Aniline  
 Antipyrine  
 Apomorphine  
 Aprobital  
 Aspartame  
 L-Ascorbic Acid  
 L-Aspartic Acid  
 D-Aspartic Acid  
 DL-Aspartic Acid  
 Atenolol  
 Atropine  
 Baclofen  
 Benzphetamine  
 Barbituric Acid  
 Berberine  
 Benzocaine  
 Benzyl alcohol  
 Benzoyllecgonine  
**Benzoyl fentanyl (Phenyl fentanyl)**  
 Bendroflumethiazide  
 Beclomethasone  
 Benzalkonium bromide  
 Benzthiazide  
 Benzylamine Hydrochloride  
 Bisacodyl  
**Brorphine**  
 Bromazepam  
 Bupivacaine  
 Buprenorphine  
 Buprenorphine-3P-D-glucuronide  
 Bupropion hydrochloride  
 Buspirone  
 Butacaine  
 Butabarbital  
 Butyrophenone  
 Butethal  
 Caffeine  
 Carbamazepine  
 Carisoprodol  
 Cefaclor  
 Ceftriaxone  
 Cefotaxime  
 Cefoxitin  
 Cefuroxime Axetil (Zinnat)  
 Cefadroxil  
 Cephradine  
 Chloroquine  
 Chlorpheniramine  
 Chlorpromazine  
 Chlorpropamide  
 Chlorprothixene  
 Chlorthalidone  
 Chlorzoxazone  
 Chloral Hydrate  
 Cimetidine  
 Cinchonidine  
 Cinoxacin  
 Cicospirin  
 Citric acid  
 Clenbuterol Hydrochloride  
 Clindamycin  
 Clobetasone Butyrate  
 Clomipramine  
 Clorazepate Dipotassium  
 Clonazepam  
 Clobazam  
 Cloxacillin  
**Cholesterol**  
 (-)-Cotinine  
 Cocaethylene  
 Cocaine Hydrochloride  
 Codeine  
 Creatinine  
 Chlorothiazide  
 Camphor  
 Clonidine hydrochloride  
 Canrenoic acid  
 Captopril  
 Clozapine  
 Chloramphenicol  
 Cortisone  
 a-Chymotrypsin  
 Cetirizine Hydrochloride Tablets  
 Cyclobenzaprine Hydrochloride  
 L-Cystine  
 Cyproheptadine Hydrochloride  
 Cyclopentobarbital  
 Chlorothiazide  
 Camphor  
 Clonidine hydrochloride  
 Canrenoic acid  
 Captopril  
 Clozapine  
 Chloramphenicol  
 Cortisone  
 a-Chymotrypsin  
 Cetirizine Hydrochloride Tablets  
 Dantrolene sodium  
 Dextromethorphan hydrobromide  
 Dexamethasone  
 Deoxyepinephrine  
 Deferoxamine Mesylate  
**Despropionyl ortho-Fluorofentanyl**  
 Diazoxide  
 Dielidrin  
 Desipramine  
 Desoximetason  
 Dimethyl Isosorbide  
 Diazepam  
 Diflorasone Diacetate  
 Diflunisal  
 Dipyrindamole  
 Dipyrone  
 5,5-Diphenylhydantoin  
 D,L-3,4-Dihydroxymandelic acid  
 Dihydralazine  
 Disopyramide  
 Dopamine  
 Dobutamine  
 Doxepin  
 Doxycycline Hytclate Doxylamine  
 Droperidol  
 Ecgonine methylester

Ephedrine-(+/-)  
 Erythromycin  
 Eserine  
 Estazolam  
 Estradiol, 17B-  
 Estriol  
 Estrone  
 Estrone-3-sulfate  
 Etoposide  
 Ethacrynic Acid  
 Ethambutol  
 Ethyl-p-aminobenzoate  
 Ethylenediamine Tetraacetate  
 Etodolac  
**Etonitazene**  
 Ethyl Morphine  
 R(-)-Epinephrine  
 Emetine dihydro-chloride hydrate  
 Ethyl acetate  
 Famotidine  
 Fenfluramine  
 Ferrous Sulfate  
 Fenoprofen  
 Flufenamic Acid  
 Flunitrazepam  
 Clobazam  
 Fluphenazine dihydrochloride  
 Flurandrenolide  
 Flurazepam  
 Furosemide  
 Gentamicin Sulfate  
 Glutathione reduced  
 Glybenclamide  
 Griseofulvin  
 Halcinonide  
 Hemoglobin  
 Heroin  
 Hexachlorophene  
 Hypnoval (Cyclobarbital)  
 Hippuric Acid  
 Histamine  
 Hydralazine  
 (l R,9S)-(-)-p-Hydrastine  
 Hydroflumethiazide  
 Hydromorphone  
 Hydrocodone  
 Hydroxocobalamin hydrochloride  
 a-Hydroxyhippuric acid  
 Hydroxyzine dihydrochloride  
 a-Hydroxyalprazolam  
 Hydroxyprogesterone  
 p-Hydroxymethamphetamine  
 Hydrocortisone  
 Hydrochlorothiazide  
 (+/-)-4-Hydroxyamphetamine HCL  
 Hydroxyurea  
 Haloperidol  
 Ibuprofen  
**Ilfomifensine**  
 Imipramine  
 Imidazole  
 Indapamide  
 Indomethacin  
 Ipratropium Bromide  
 Isonicotinic Acid  
 Isoxsuprine Isoproterenol-(+/-)  
**Isonitazene**  
 Ketamine  
 Kynurenine Acid  
 Labetalol  
 Lactose  
 Levorphanol  
 Lidocaine  
 Lithium Carbonate  
 Lorazepam glucuronide  
 Mannitol  
 Maprotiline  
 Mebendazole  
 Meclofenamic Acid  
 Medazepam  
 Mefenamic Acid  
 Melanin  
 Meperidine  
 Meprobamate  
 Merperidine  
 Metaraminol Methamphetamine

D-methamphetamine  
 o-Methoxyaniline HCL  
 Methoxyphenamine  
 Methylene Blue  
 Methylphenidate  
 Meticrane  
 Metoclopramide Hydrochloride  
 Metronidazole  
 4-Methylumbelliferyl B-D-glucuronide  
 hydrate  
 Mianserin  
 Milrinone  
 Minaprine  
 Morphine  
 Methyl saliylate  
 Methoxyamine hydrochloride  
 Metaproterenol hemisulfate salt  
 Nabumetone  
 Nadolol  
 Nafcellin  
 Nalbuphine  
 Nalorphine hydrochloride  
 Naphthol  
 Naproxen  
 Naphazoline hydrochloride  
 1-Naphthylacetic acid  
 1 Naloxone hydrochloride  
 Nalmefene  
 Neomycin Sulfate  
 Nialamide  
 Niacinamide  
 (+/-) Nicotine  
 Nimesulide  
 Nitrazepam  
 Nifedipine  
 Nicotinic Acid  
 Nitrofurantoin  
 Norchlordiazepoxide  
 Norclomipramine  
 Nordiazepam  
 Nordoxepin  
 Norfloxacin  
 Norethindrone  
 Norpropoxyphene  
 Noscapine  
**Norcarfentanil**  
 Norfludiazepam  
 Nortriptyline Hydrochloride  
 Nyldrin  
 OxymorphoneOfloxacin  
 Oxazepam  
 Oxymetazoline  
 Oxyphenbutazone  
 Oxypurinol  
 Octopamine  
 Orphenadrine hydrochloride  
 Oxalic Acid  
 Pargyline  
 Picrotoxin  
 Potassium chloride  
 Propionylpromazine  
 Pancuronium Bromide  
 Papaverine  
 Paracetamol tablets  
 Paclitaxel  
 PCP Morpholine Analog  
 Pentobarbital  
 Pentylentetrazole  
 Pentoxifylline  
 Perphenazine  
 Phenazine  
 Penicillin  
 Phenacetin  
 Lithium Carbonate  
 Phencyclidine(PCP)  
 Phenformin  
 Pheniramine  
 Phenobarbital  
 Phenothiazine  
 Phenol  
 Phenolphthalien  
 Phentermine  
 P-phenylene  
 Phenylephrine-L  
 Phenylbutazone  
 Phenylethylamine

Phenylpropanolamine  
 Phenyltoloxamine  
 Pilocarpine  
 Pimozide  
**Piperidylthiambutene**  
 Pipecolic Acid  
 Piroxicam  
 Potassium Iodide  
 Prazepam  
 Prednisolone Acetate  
 Prilocaine  
 Primaquine diphosphate  
 Primidone  
 Proadifen  
 Probenecid  
 Procainamide hydrochloride  
 Procaine  
 Procyclidine  
 Promazine  
 Promethazine  
 Propoxyphene,d-  
 Propranolol  
 Protriptyline  
 Pseudoephedrine HCL  
 Pyridine-2-Aldoxime  
 Pyridoxine  
 Pyrilamine  
 2, 3-pyridine dicarboxylic acid  
 Quinine  
 Quinidine  
 Quinacrine  
 Sodium chloride  
 Ritodrine  
 Roxithromycin tablets  
 Ranitidine  
 Riboflavin  
 Salbutamol (Albuterol)  
 Salicylic Acid  
 Secobarbital  
 Serotonin  
 Sertaline  
 Sodium Cromogliclate  
 Sodium Formate  
 Stearic magnesium  
 Sulfamethazine  
 Sulfamethoxazole  
 Sulfisoxazole  
 Sulindac  
 Sulfathiazole  
 Sulfanilamide  
 Tamoxifen Citrate  
 Tannic Acid  
 Tenoxicam  
 Terfenadine

A study was conducted to determine the cross-reactivity of the test with compounds in either drug-free urine or drug positive urine containing Xylazine. The following compounds show no cross-reactivity when tested with the One Step Xylazine Test at concentrations of 100µg / mL.

Acebutolol Hydrochloride  
 N-Acetylprocainamide  
 Acetophenetidin  
 Albumin, Human recombinant  
 Alprazolam  
 Alphenal  
 Amoxicillin  
 Ampicillin  
 Amitriptyline Hydrochloride  
 Tablets  
 S(+)-Amphetamine  
 R(-)-Amphetamine  
 Amobarbital  
 (±)Amphetamine  
 R(-)-Apomorphine  
 Aprobarbital  
 Aspirin  
 Aspartame  
 L-Ascorbic Acid  
 Atropine  
 6-Acetylmorphine  
 Acetylsalicylic acid  
 Benzphetamine  
 Benzilic acid  
 SS Benzoic Acid  
 Bilirubin,Mixed Isomers  
 Bromazepam  
 Brompheniramine maleate  
 Buprenorphine  
 Butalbital  
 Butabarbital  
 Cannabinol  
 Cetirizine Hydrochloride  
 Chlordiazepoxide HCL  
 Chlorothiazide  
 Chloroquine  
 Chlorpheniramine Maleate  
 Chloramphenicol  
 ChloralHydrate  
 Cholesterol  
 Chlorothiazide  
 Clomipramine  
 Clomzepate dipotassium  
 Clonazepam  
 Clobazam  
 Clozapine

(-) Cotinine	Injection
Cocaeethylene	Ketamine hydrochloride
Codeine	JWH-018 pantanoic acid
Cortisone	JWH-073 butanoic acid
Cyclopentobarbital	Labetalol Hydrochloride
Citalopram hydrobromide	Levorphanol
Dextromethorphan	Loperamide Hydrochloride
Desalkylflurazepam	Lormetazepam
Desipramine	(±)-MDEA
Delorazepam	(±)-MDA
Diazepam	Meprobamate
Diclofenac Sodium salt	(±)Methadone
Dicyclomine	S(+)-D-methamphetamine
Diflunisal	L-methamphetamine
Digoxin	Methylphenidate
Dihydrocodeine HCL	(±)-MDPV
Dopamine	Methyprylon
Dihydromorphine	Midazolam
Ecgonine methylester	Morphine
Ecgonine HCL	Morphine-3β-D-glucuronide
Efavirenz	Morphine sulfate salt solution
Emetine dihydrochloride hydrate	Nalidixic acid
Ephedrine-(+/-) hydrochloride	Naloxone
(-) -Ephedrine HCL	Naltrexone hydrochloride
[1R,2S] (-) Ephedrine	Nicotinamide (vitamin B3)
Erythromycin	Nimesulide
Physostigmine	Nitrazepam
Estazolam	Nifedipine
β-Estradiol	Norcodeine
(±)-EDDP	Nordiazepam
Bata-D-glucuromicle	Nordoxepin hydrochloride
EthylMorphine	Norfloxacin Capsule
Fenoprofen	Norethisterone Tablets
Flunitrazepam	d-Norpropoxyphene maleate salt
Furosemide	Noscapine
Gentisic acid	Nortriptyline Hydrochloride
D-Glucuronic acid	Noroxymorphone HCL
Glutethimide	Nylidrin hydrochloride
Guaifenesin	Norchlordiazepoxide
Gabapentin	Norfentanyl
Hemoglobin porcine	Normorphine
Hydralazine hydrochloride	Oxymorphone
Hydromorphone	Papaverine
Hydrocodone	PCP
α-Hydroxyhippuric acid	Pentobarbital
21-Hydroxy progesterone	Pentazocine
p-Hydroxymethamphetamine	Perphenazine
Hydrocortisone	Penicillin G Sodium salt
Hydrochlorothiazide	Phenobarbital
Ibuprofen	Phentermine HCL
Imipramine	Phenylethylamine
Isoxsuprine hydrochloride	
Isoproterenol Hydrochloride	

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