Test Definition: PN10X

Pain Clinic Survey 10, Chain of Custody, Random, Urine

Overview

Useful For

Detecting drug use involving amphetamines, barbiturates, benzodiazepines, cocaine, methadone, opiates, phencyclidine, and carboxy-tetrahydrocannabinol

This chain-of-custody test is intended to be used in a setting where the test results can be used to make a definitive diagnosis. Chain of custody is required whenever the results of testing could be used in a court of law. Its purpose is to protect the rights of the individual contributing the specimen by demonstrating that it was always under the control of personnel involved with testing the specimen; this control implies that the opportunity for specimen tampering would be limited.

This test is **not intended for use** in employment-related testing.

Reflex Tests

Test Id	Reporting Name	Available Separately	Always Performed
AMPHX	Amphetamines Confirmation, CoC, U	Yes	No
COKEX	Cocaine and metabolite Conf, CoC, U	Yes	No
BARBX	Barbiturates Confirmation, CoC, U	Yes	No
MTDNX	Methadone Confirmation, CoC, U	Yes	No
PCPX	Phencyclidine Confirmation, CoC, U	Yes	No
THCX	Carboxy-THC Confirmation, CoC, U	Yes	No
OPATX	Opiate Confirmation, CoC, U	Yes	No
BNZX	Benzodiazepines Conf, CoC, U	Yes	No

Additional Tests

Test Id	Reporting Name	Available Separately	Always Performed
COCH	Chain of Custody Processing	No	Yes
ADLTX	Adulterants Survey, CoC, U	Yes	Yes

Testing Algorithm

Testing begins with screening tests for alcohol and drugs of abuse. Positives are confirmed and quantitated by definitive methods (gas chromatography mass spectrometry for barbiturates, cocaine and metabolites, methadone, and phencyclidine) at an additional charge. Amphetamines, benzodiazepines, opiates, and tetrahydrocannabinol metabolite that screen positive will be quantified with liquid chromatography tandem mass spectrometry at an additional charge.

Adulterants testing will be performed on all chain of custody urine samples as per regulatory requirements.

Method Name

Only orderable as part of a profile. For more information see PANOX / Pain Clinic Survey 10, Chain of Custody, Urine.

Immunoassay

NY State Available

Yes

Specimen

Specimen Type

Urine

Specimen Required

Only orderable as part of a profile. For more information see PANOX / Pain Clinic Survey 10, Chain of Custody, Urine.

Supplies: Chain of Custody Kit (T282)
Container/Tube: Chain-of-Custody Kit containing the specimen containers, seals, and documentation is required.
Specimen Volume: 30 mL
Collection Instructions: Collect a random specimen without preservative in the container provided, seal, and submit with the associated documentation to satisfy the legal requirements for chain-of-custody testing.
Additional Information: Submitting less than 30 mL will compromise the ability to perform all necessary testing.

Reject Due To

All specimens will be evaluated at Mayo Clinic Laboratories for test suitability.

Specimen Stability Information

Specimen Type	Temperature	Time	Special Container
Urine	Refrigerated (preferred)	7 days	
	Frozen	14 days	

Clinical & Interpretive

Clinical Information

This assay was designed to test for and confirm by gas chromatography mass spectrometry the following:
-Barbiturates
-Cocaine
-Methadone
-Phencyclidine

This assay was designed to test for and confirm by liquid chromatography tandem mass spectrometry the following
-Opiates
-Benzodiazepines
-Carboxy-tetrahydrocannabinol
-Amphetamines

Chain of custody is a record of the disposition of a specimen to document the individuals who collected, handled, and performed the analysis. When a specimen is submitted in this manner, analysis will be performed in such a way that it will withstand regular court scrutiny.

Reference Values

Only orderable as part of a profile. For more information see PANOX / Pain Clinic Survey 10, Chain of Custody, Urine.

Negative
Screening cutoff concentrations:
Amphetamines: 500 ng/mL
Barbiturates: 200 ng/mL
Benzodiazepines: 100 ng/mL
Cocaine (benzoylecgonine-cocaine metabolite): 150 ng/mL
Methadone metabolite: 300 ng/mL
Opiates: 300 ng/mL
Phencyclidine: 25 ng/mL
Tetrahydrocannabinol carboxylic acid: 50 ng/mL

This report is intended for use in clinical monitoring or management of patients. It is not intended for use in employment-related testing.

Interpretation

A positive result derived by this testing indicates that the patient has used one of the drugs detected by these techniques in the recent past.

For information about drug testing, including estimated detection times, see Drug Class Testing on MayoClinicLabs.com.

Cautions

The test **does not screen** for drug classes other than those listed above. More comprehensive screening is available using the serum or urine drug screens (DSSX / Drug Screen, Prescription/Over the Counter, Chain of Custody, Serum or

PDSUX / Drug Screen, Prescription/Over the Counter, Chain of Custody, Urine).

Clinical Reference

1. Physician's Desk Reference (PDR). 60th edition. Medical Economics Company; 2006
2. Bruntman LL. Goodman and Gilman's: The Pharmacological Basis of Therapeutics. 11th ed. McGraw-Hill Book Company; 2006
3. Langman LJ, Bechtel LK, Holstege CP. Clinical toxicology. In: Rifai N, Chiu RWK, Young I, Burnham CAD, Wittwer CT, eds. Tietz Textbook of Laboratory Medicine. 7th ed. Elsevier; 2023:chap 43

Performance

Method Description

The amphetamines, barbiturates, benzodiazepines, cocaine, methadone metabolite, opiates, phencyclidine, and tetrahydrocannabinol metabolite assays are based on the kinetic interaction of microparticles in a solution as measured by changes in light transmission. In the absence of sample drug, soluble drug conjugates bind to antibody-bound microparticles causing the formation of particle aggregates. As the aggregation reaction proceeds in the absence of sample drug, the absorbance increases. When a urine sample contains the drug in question, this drug competes with the drug derivative conjugate for microparticle-bound antibody. Antibody bound to sample drug is no longer available to promote particle aggregation, and subsequent particle lattice formation is inhibited. The presence of sample drug diminishes the increasing absorbance in proportion to the concentration of drug in the sample. Sample drug content is determined relative to the value obtained for a known cutoff concentration of drug.(Package inserts: AMPS2. Roche Diagnostics; V 10.0, 09/2018; BARB. Roche Diagnostics; V 13.0, 09/2021; THC2. Roche Diagnostics; V 13.0, 03/2022; BNZ2. Roche Diagnostics; V 2.0, 04/2024; COC2. Roche Diagnostics; V 9.0, 03/2019; OPI2. Roche Diagnostics; V 16.0, 01/2022; PCP. Roche Diagnostics; V 13.0, 09/2021; EDDP Specific Urine Enzyme Immunoassay, Immunalysis Corp; 09/2018)

PDF Report

No

Day(s) Performed

Monday through Saturday

Report Available

2 to 3 days

Specimen Retention Time

14 days

Performing Laboratory Location

Mayo Clinic Laboratories - Rochester Superior Drive

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Fees & Codes

Fees

- Authorized users can sign in to Test Prices for detailed fee information.
- Clients without access to Test Prices can contact Customer Service 24 hours a day, seven days a week.
- Prospective clients should contact their account representative. For assistance, contact Customer Service.

Test Classification

This test has been modified from the manufacturer's instructions. Its performance characteristics were determined by Mayo Clinic in a manner consistent with CLIA requirements. This test has not been cleared or approved by the US Food and Drug Administration.

CPT Code Information

80307

LOINC® Information

Test ID	Test Order Name	Order LOINC® Value
PN10X	Pain Clinic Survey 10, CoC	69739-1

Result ID	Test Result Name	Result LOINC® Value
36253	Amphetamines	43983-6
36254	Cocaine	43984-4
36255	Opiates	70151-6
36256	Phencyclidine	14310-7
36257	Tetrahydrocannabinol	14312-3
36261	Chain of Custody	77202-0
36258	Barbiturates	70155-7
36259	Benzodiazepines	14316-4
36260	Methadone metabolite	41858-2