MAYO CLINIC LABORATORIES

Test Definition: PCPS

Phencyclidine Confirmation, Serum

Overview

Useful For

Confirming drug exposure involving the stimulant phencyclidine

Special Instructions

- Clinical Toxicology CPT Code Client Guidance

Method Name

Liquid Chromatography Tandem Mass Spectrometry (LC-MS/MS)

NY State Available

Yes

Specimen

Specimen Type

Serum Red

Ordering Guidance

Additional drug panels and specific requests are available; call 800-533-1710.

Specimen Required

Supplies: Sarstedt Aliquot Tube, 5 mL (T914)
Collection Container/Tube: Red top (Serum gel/SST are **not acceptable**)
Submission Container/Tube: Plastic vial
Specimen Volume: 1 mL Serum
Collection Instructions: Within 2 hours of collection, centrifuge and aliquot serum into a plastic vial.

Specimen Minimum Volume

Serum: 0.5 mL

Reject Due To

Gross hemolysis	OK
Gross lipemia	OK
Gross icterus	OK

Specimen Stability Information

Specimen Type	Temperature	Time	Special Container
Serum Red	Refrigerated (preferred)	28 days	
	Ambient	48 hours	
	Frozen	28 days	

Clinical & Interpretive

Clinical Information

Phencyclidine (PCP) affects diverse neural pathways and interacts with cholinergic, adrenergic, gamma-aminobutyric acid (GABA) secreting, and serotoninergic receptors, as well as opiate neuronal receptors and gamma receptors while its principle psychoactive effects are thought to come from its inhibitory effects on the N-methyl-D-aspartate (NMDA) receptor. It has analgesic, anesthetic, and stimulatory effects, giving bizarre behavior, ranging from depression through catatonia, euphoria, violent rage, and hallucinations. Most fatalities result from its hypertensive effect.

Reference Values

Negative
Positive results are reported with a quantitative result.

Cutoff concentrations:
Phencyclidine: 1.0 ng/mL

Interpretation

This test will identify patients who have taken phencyclidine.

Cautions

Specimens collected in serum gel tubes are not acceptable because the drug can absorb onto the gel and lead to falsely decreased concentrations.

Clinical Reference

1. 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
2. Baselt RC. Disposition of Toxic Drugs and Chemical in Man. 12th ed. Biomedical Publications; 2020

Performance

Method Description

The sample is extracted through protein precipitation, diluted, and then analyzed by liquid chromatography tandem mass spectrometry for the presence of phencyclidine.(Unpublished Mayo method)

PDF Report

No

Day(s) Performed

Thursday

Report Available
3 to 9 days

Specimen Retention Time
14 days

Performing Laboratory Location
Mayo Clinic Laboratories - Rochester Superior Drive

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 was developed and its performance characteristics determined by Mayo Clinic in a manner consistent with CLIA requirements. It has not been cleared or approved by the US Food and Drug Administration.

CPT Code Information
G0480
83992 (if appropriate for select payers)
Clinical Toxicology CPT Code Client Guidance

LOINC® Information

Test ID	Test Order Name	Order LOINC® Value
PCPS	Phencyclidine Confirmation, S	3934-7

Result ID	Test Result Name	Result LOINC® Value
624110	Phencyclidine	3934-7