Test Definition: ADULT

Adulterants Survey, Random, Urine

Overview

Useful For

Assessment of possible adulteration of a urine specimen submitted for drug of abuse testing

Providing the creatinine concentration for normalization purposes

Testing Algorithm

For information see Adulterant Survey Algorithm.

Special Instructions

- Adulterant Survey Algorithm

Method Name

Spectrophotometry (SP)

NY State Available

Yes

Specimen

Specimen Type

Urine

Ordering Guidance

For situations where chain of custody is required, a Chain-of-Custody Kit (T282) is available. For chain-of-custody information, see ADLTX / Adulterants Survey, Chain of Custody, Random, Urine.

Specimen Required

Container/Tube: Plastic, 60-mL urine bottle

Specimen Volume: 1.5 mL

Collection Instructions:

1. Collect a random urine specimen.
2. No preservative.

Additional Information: Submitting less than 1.5 mL may compromise the ability to perform all necessary testing.

Forms

If not ordering electronically, complete, print, and send a Therapeutics Test Request (T831) with the specimen.

Specimen Minimum Volume

1 mL

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)	14 days	
	Ambient	72 hours	
	Frozen	14 days	

Clinical & Interpretive

Clinical Information

Specimen adulteration is the manipulation of a sample that may cause false-negative test results for the presence of drugs of abuse. Common adulterants that may affect testing are water, soap, bleach, vinegar, oxidants, and salt. Adulteration testing includes assessment of creatinine concentration, pH, urine specific gravity, presence or absence of an oxidant, and presence or absence of nitrite.

Reference Values

Cutoff concentrations
Oxidants: 200 mg/L
Nitrites: 500 mg/L

Interpretation

For information see Adulterant Survey Algorithm.

Cautions

No significant cautionary statements

Clinical Reference

1. US Department of Health and Human Services, Substance Abuse and Mental Health Services Administration (SAMHSA). Mandatory Guidelines for Federal Workplace Drug Testing Programs. Federal Register. 2017 January 23;82(13):FR 7920. Accessed June 8, 2026. Available at //www.federalregister.gov/documents/2023/10/12/2023-21734/mandatory-guidelines-for-federal-workplace-drug-testing-programs
2. US Department of Health and Human Services, Substance Abuse and Mental Health Services Administration (SAMHSA). Drug-Free Workplace: Employer Resources. Updated May 11, 2026. Accessed June 8, 2026. Available at www.samhsa.gov/substance-use/drug-free-workplace/employer-resources

Performance

Method Description

All results are measured using spectrophotometry at wavelengths specified by the reagent manufacturer. The use of a refractometer may also be used in the specific gravity measurement.(Package inserts: Specimen Validity Test Creatinine. Roche Diagnostics; V 3.0, 05/2023; Specimen Validity Test Nitrite. Roche Diagnostics; V 2.0, 05/2022, Specimen Validity Test Oxidant. Roche Diagnostics; V 2.0, 05/2022; Specimen Validity Test pH Roche Diagnostics; V 2.0, 05/2022, Specimen Validity Test Specific Gravity. Roche Diagnostics; V 3.0, 08/2022)

PDF Report
No

Day(s) Performed
Monday through Saturday

Report Available
Same day/1 to 2 days

Specimen Retention Time
2 weeks

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 has been cleared, approved, or is exempt by the US Food and Drug Administration and is used per manufacturer's instructions. Performance characteristics were verified by Mayo Clinic in a manner consistent with CLIA requirements.

LOINC® Information

Test ID	Test Order Name	Order LOINC® Value
ADULT	Adulterants Survey, U	58714-7

Result ID	Test Result Name	Result LOINC® Value
20606	Creatinine, U	2161-8
22312	Specific Gravity	5810-7
23509	pH	2756-5
23511	Oxidants	58714-7
23510	Nitrites	32710-6

30914	Comment	48767-8