MAYO CLINIC LABORATORIES

# 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

See Adulterant Survey Algorithm in Special Instructions.

### Special Instructions

- Adulterant Survey Algorithm

### Method Name

Spectrophotometry (SP)

### NY State Available

Yes

## Specimen

### Specimen Type

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:**

1. 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.
2. 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 | |
| | Frozen | 14 days | |
| | Ambient | 72 hours | |

## Clinical & Interpretive

### Clinical Information

Specimen adulteration is the manipulation of a sample that may cause falsely negative test results for the presence of drugs of abuse. Common adulterants that may affect testing are water, soap, bleach, vinegar, oxidants, and salt. The 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

See Adulterant Survey Algorithm in Special Instructions.

### 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. Available at: www.samhsa.gov/sites/default/files/workplace/frn_vol_82_7920_.pdf
2. US Department of Health and Human Services, Substance Abuse and Mental Health Services Administration (SAMHSA): Drug-Free Workplace Guidelines and Resources Updated June 7, 2021. Accessed September 27, 2021. Available at: www.samhsa.gov/workplace/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: Creatinine plus ver 2, Specimen

Validity Test Nitrite, Specimen Validity Test Oxidant, Specimen Validity Test pH, Specimen Validity Test Specific Gravity. Roche Diagnostics; 12/2016)

### 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
Rochester

## 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.

### CPT Code Information
81005

### 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 |