

## Overview

### Useful For

Detection and quantification of oxymorphone and noroxymorphone in urine

### Method Name

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

### 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 testing, order OXYCX / Oxycodone with Metabolite Confirmation, Chain of Custody, Random, Urine.

Additional drug panels and specific requests are available; call 800-533-1710 or 507-266-5700.

### Additional Testing Requirements

If urine creatinine is required or adulteration of the sample is suspected, the following test should also be ordered ADULT / Adulterants Survey, Random, Urine.

### Specimen Required

**Supplies:** Sarstedt Aliquot Tube 5 mL (T914)

**Collection Container/Tube:** Plastic urine container

**Submission Container/Tube:** Plastic, 5-mL tube

**Specimen Volume:** 3 mL

#### Collection Instructions:

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

#### Additional Information:

1. No specimen substitutions.
2. STAT requests are **not accepted** for this test.
3. Submitting less than 1 mL will compromise our 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**

2.5 mL

**Reject Due To**

Gross hemolysis	OK
Gross icterus	OK

**Specimen Stability Information**

Specimen Type	Temperature	Time	Special Container
Urine	Refrigerated (preferred)	28 days	
	Frozen	28 days	
	Ambient	14 days	

**Clinical & Interpretive****Clinical Information**

Oxymorphone is metabolized in the liver to noroxymorphone and excreted via the kidney primarily as the glucuronide conjugates. Oxymorphone is also a metabolite of oxycodone and, therefore, the presence of oxymorphone could also indicate exposure to oxycodone.

The detection interval for opiates is generally 2 to 3 days after last ingestion.

**Reference Values**

Negative

Cutoff concentrations by liquid chromatography tandem mass spectroscopy:

Oxymorphone: 25 ng/mL

Noroxymorphone: 25 ng/mL

**Interpretation**

This procedure reports the total urine concentration; this is the sum of the unconjugated and conjugated forms of the parent drug.

**Cautions**

Other drugs in the opioid class, such as fentanyl, meperidine, methadone, and opiate antagonists such as naloxone, are not detected.

**Clinical Reference**

- Jutkiewicz EM, Traynor JR. Opioid analgesics. In: Brunton LL, Knollmann BC, eds. Goodman and Gilman's: The Pharmacological Basis of Therapeutics. 14th ed. McGraw-Hill Companies, Inc; 2023:chap 23
- Baselt, RC. Disposition of Toxic Drugs and Chemical in Man. 10th ed. Biomedical Publications; 2014
- Hackett LP, Dusci LJ, Ilett KF, Chiswell GM. Optimizing the hydrolysis of codeine and morphine glucuronides in urine.

Ther Drug Monit. 2002;24(5):652-657

4. 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

Confirmation with quantification by liquid chromatography/mass spectrometry.(Unpublished Mayo method)

### PDF Report

No

### Day(s) Performed

Monday through Friday

### Report Available

2 to 5 days

### Specimen Retention Time

14 days

### 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 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

80365

G0480 (if appropriate)

### LOINC® Information

Test ID	Test Order Name	Order LOINC® Value
OXYMU	Oxymorphone Confirmation, U	94305-0

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Result ID	Test Result Name	Result LOINC® Value
62622	Oxymorphone-by LC-MS/MS	17395-5
36024	Oxymorphone Interpretation	69050-3
42014	Noroxymorphone-by LC-MS/MS	90894-7