

Overview

Useful For

Detection and identification of prescription or over-the-counter drugs frequently found in drug overdose or used with a suicidal intent

Qualitatively identifying drugs present in the specimen; quantification of identified drugs, when available, may be performed upon client request

This test is **not intended for** therapeutic drug monitoring or compliance testing.

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

This test is **not useful for** drugs of abuse or illicit drug testing, including benzodiazepines, opioids, barbiturates, cocaine, and amphetamine type stimulants.

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.

Additional Tests

Test Id	Reporting Name	Available Separately	Always Performed
COCH	Chain of Custody Processing	No	Yes

Special Instructions

- [Emergency/Overdose](#)

Method Name

Gas Chromatography Mass Spectrometry (GC-MS)

NY State Available

Yes

Specimen

Specimen Type

Serum Red

Specimen Required

Supplies: Chain-of-Custody Kit (T282)

Container/Tube: Chain-of-Custody Kit containing the specimen containers, seals, and documentation required.

Preferred: 10-mL Red top (serum gel/SST are not acceptable)

Acceptable: 5-mL Red top

Submission Container/Tube: Plastic vial

Specimen Volume: 2.75 mL

Collection Instructions:

1. Centrifuge and aliquot serum into plastic vial within 2 hours of collection.
2. Cap, seal, and submit with the associated documentation to satisfy the legal requirements for chain-of-custody testing.

Additional Information: See [Emergency/Overdose](#).

Forms

1. [Chain of Custody Request](#) is included in the Chain-of-Custody Kit (T282).
2. If not ordering electronically, complete, print, and send a [Therapeutics Test Request](#) (T831) with the specimen.

Specimen Minimum Volume

1.1 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)	14 days	
	Frozen	14 days	
	Ambient	3 hours	

Clinical & Interpretive

Clinical Information

This test looks for a broad spectrum of prescription and over-the-counter drugs. It is designed to detect drugs that have toxic effects, as well as known antidotes or active therapies that a clinician can initiate to treat the toxic effect. The test is intended to help physicians manage an apparent overdose or intoxicated patient, to determine if a specific set of symptoms might be due to the presence of drugs. This test is not appropriate for drugs of abuse or illicit drug testing, including benzodiazepines, opioids, barbiturates, cocaine, and amphetamine type stimulants.

Drugs of toxic significance that are not detected by this test are digoxin, lithium, and many drugs of abuse or illicit drugs, some benzodiazepines, and most opiates.

Chain of custody is a record of the disposition of a specimen to document the personnel 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.

For more information see [Emergency/Overdose](#) for detection limits for drugs detected in this test.

**Reference Values**

Drugs detected are presumptive. Additional testing may be required to confirm the presence of any drugs detected.

**Interpretation**

The drugs that are detected by this test are listed in [Emergency/Overdose](#) section of Drug Testing.

The pharmacology of each drug determines how the test should be interpreted. A detailed discussion of each drug is beyond the scope of this text. If you wish to have a report interpreted, call 800-533-1710 and ask for a toxicology consultant.

Each report will indicate the drugs detected.

**Cautions**

Specimens collected in serum gel tubes are not acceptable, as the drug/analyte can absorb on 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 C-AD, 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**

Screening is by gas chromatography mass spectroscopy.(Unpublished Mayo method)

**PDF Report**

No

**Day(s) Performed**

Monday through Sunday

**Report Available**

3 to 4 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 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

80307

LOINC® Information

Test ID	Test Order Name	Order LOINC® Value
DSSX	Drug Scrn, Prescription/OTC, CoC, S	20785-2

Result ID	Test Result Name	Result LOINC® Value
36185	Drugs detected:	20785-2
36186	Chain of Custody	77202-0