

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, amphetamine type stimulants.

Special Instructions

- [Prescription and Over-the-Counter Drug Screening List and Limits of Detection](#)

Method Name

Gas Chromatography Mass Spectrometry (GC-MS)

NY State Available

Yes

Specimen

Specimen Type

Serum Red

Ordering Guidance

This test is not performed using chain of custody. For chain-of-custody testing, order DSSX / Drug Screen, Prescription/Over the Counter, Chain of Custody, Serum.

Specimen Required

Supplies: Sarstedt Aliquot Tube, 5 mL (T914)

Collection Container/Tube: Red top (serum gel/SST tubes are **not** acceptable)

Submission Container/Tube: Plastic vial

Specimen Volume: 2.75 mL

Collection Instructions: Within 2 hours of collection, centrifuge and aliquot serum into plastic vial.

Forms

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	
	Ambient	3 hours	
	Frozen	14 days	

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, or 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 some opioids.

For detection limits for drugs detected in this test see [Prescription and Over-the-Counter Drug Screening List and Limits of Detection](#).

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 [Prescription and Over-the-Counter Drug Screening List and Limits of Detection](#).

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 a clinical interpretation is required, contact Mayo Clinic Laboratories at 800-533-1710 and ask to speak to 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 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

Screening is by gas chromatography mass spectroscopy.(Unpublished Mayo method)

PDF Report

No

Day(s) Performed

Monday through Sunday

Report Available

3 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 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
DSS	Drug Screen, Prescription/OTC, S	20785-2

Result ID	Test Result Name	Result LOINC® Value
31168	Chain of Custody	77202-0
31072	Drugs detected:	20785-2