



# Test Definition: FROS2

Fructose, Qualitative, Semen

## Overview

### Useful For

Establishing the origin of azoospermia in patients with azoospermia and low volume ejaculates

### Method Name

Qualitative

### NY State Available

No

## Specimen

### Specimen Type

Semen

### Specimen Required

**Patient Preparation:** Patient should have 2 to 7 days of sexual abstinence at the time of semen collection.

**Submit only 1 of the following specimens:**

**Specimen Type:** Semen

**Collection Container/Tube:** Sterile container

**Submission Container/Tube:** Plastic container

**Specimen Volume:** Total ejaculate

**Collection Instructions:** **Do not dilute specimen.** Freeze specimen at -20 degrees C.

**Specimen Type:** Seminal plasma

**Container/Tube:** Plastic vial

**Specimen Volume:** 0.5 mL

**Collection Instructions:**

1. After semen collection, wait 30 to 40 minutes until the semen is liquefied, then centrifuge the semen for 10 minutes at maximum centrifuge speed.
2. Remove top 3/4 of specimen with a pipet and place in a plastic vial. Freeze specimen at -20 degrees C.
3. Discard remainder of centrifuged specimen.

### Specimen Minimum Volume

0.5 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
Semen	Frozen		

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

Fructose is produced in the male reproductive tract by the seminal vesicles and is released into the semen during ejaculation. Fructose is the energy source for sperm motility.

**Reference Values**

Positive

**Interpretation**

[A positive \(indicated by color change\) fructose is considered normal.](#)

A semen specimen that contains no sperm (azoospermia) and is fructose negative may indicate an absence of the seminal vesicles, absence of the vas deferens in the area of the seminal vesicles, or an obstruction at the level of the seminal vesicles.

**Cautions**

This test should be performed in conjunction with a semen analysis to determine semen volume, pH, sperm concentration, motility, and grade of forward progression.

Fructose test must be on a separate ejaculate.

**Clinical Reference**

1. Lipshultz LI, Howards SS, Niederberger CS, eds: In: Infertility in the Male. 4th ed. Cambridge University Press 2009
2. Risz B, Agarwal A, Sabanegh ES, eds: Male Infertility in Reproductive Medicine: Diagnosis and Management. CRC Press; 2019

**Performance****Method Description**

A qualitative method using resorcinol will detect the presence or absence of fructose. (Keel BA, Webster BW: Handbook of the Laboratory Diagnosis and Treatment of Infertility. CRC Press: 1990:49)

**PDF Report**

No

**Day(s) Performed**

Friday

**Report Available**

1 to 7 days

**Specimen Retention Time**

Not retained

**Performing Laboratory Location**

Mayo Clinic Laboratories - Rochester Main Campus

**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**

82757

**LOINC® Information**

Test ID	Test Order Name	Order LOINC® Value
FROS2	Qualitative Fructose,Semen	13943-6

Result ID	Test Result Name	Result LOINC® Value
FRUCS	Fructose, Semen/Seminal P	13943-6
CLSM	Collection Site	56816-2
VOLSM	Semen Volume	3160-9
CMT49	Comment	48767-8