Lab Dept: Coagulation

Test Name: FIBRINOGEN

General Information

Lab Order Codes: FIB

Synonyms: Clauss Fibrinogen; Plasma Fibrinogen

CPT Codes: 85384 – Fibrinogen; activity

Test Includes: Fibrinogen level reported in mg/dL.

Logistics

Test Indications: Used for identifying congenital afibrinogenemia, dysfibrinogenemia, disseminated intravascular coagulation (DIC), fibrinolytic activity and severe liver disease. This test is sensitive to functional fibrinogen, and insensitive to non-clottable fibrinogen and fibrin derivatives.

Lab Testing Sections: Coagulation

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours; Testing performed at Minneapolis and St. Paul Laboratories.

Turnaround Time: 2 hours

Special Instructions: Deliver immediately to the laboratory; Indicate when specimen is drawn from a line or a heparin lock.

Specimen

Specimen Type: Whole blood

Container: Light Blue top tube (Buffered Na Citrate 3.2%)

Draw Volume: 1.8 mL blood (in 2 mL tube) or 2.7 mL blood (in a 3 mL tube).

Processed Volume: 0.9 mL plasma
Collection:
- A clean venipuncture is essential, avoid foaming.
- Entire sample must be collected with single collection, pooling of sample is unacceptable.
- Capillary collection is unacceptable.
- Patient’s with a hematocrit level >55% must have a special tube made to adjust for the hematocrit; contact lab for a special tube.
- Mix thoroughly by gentle inversion. Deliver immediately to the laboratory at room temperature via courier or pneumatic tube.

Off campus collections:
- Must be tested within 4 hours.
- Do not refrigerate.
- If not received in our lab within 4 hours of collection, sample must be centrifuged and *platelet-poor plasma removed from cells and transferred to an aliquot tube. Freeze at -20°C and deliver to the lab on dry ice within 2 weeks.
*Validation of your lab’s centrifuge for platelet poor plasma is required.

Special Processing: Lab staff: Centrifuge in Stat Spin for 5 minutes or 10 minutes at 3000 rpm at room temperature. For primary tube testing, leave plasma on cells OR remove plasma and place in a 4 mL plastic cup; allow for 100 mL of dead space.
Test within:
- Four (4) hours when stored in the capped tube above the packed cells 18 to 24°C.
- Four (4) hours as plasma that has been separated from cells by centrifugation when stored 2 to 8°C or 18 to 24°C.
- Two (2) weeks when stored -20°C.
- Six (6) months when stored -70°C (rapidly frozen).
- Plasma must be frozen if testing cannot be completed within four (4) hours.
- Frozen plasmas are thawed at 37°C for three (3) minutes, test immediately.

Patient Preparation: None

Sample Rejection: Improper tube; clotted samples; overfilled tubes; under-filled tubes; mislabeled or unlabeled specimens

Interpretive
Reference Range: 200 – 400 mg/dL
Critical Values: <80 mg/dL
Limitations: N/A
Methodology: Electromagnetic clot detection
**References:** Harmening DH (1997) Clinical Hematology and Fundamentals of Hemostasis

**Updates:**

2/17/2005: Critical value previously listed as <100 mg/dL.
9/15/2014: Off campus collection info added.

7/11/2023: Updated critical value to <80 mg/dL, updated reference range to 200-400 mg/dL.

7/18/23: Updated special processing instructions. Testing performed at MPLS and STP labs.