Test ID: FIBAG

Fibrinogen Antigen, Plasma

Useful for
- Evaluation of fibrinogen deficiency
- Measuring fibrinogen in patients with elevated plasma levels of fibrin degradation products, patients receiving heparin, and in patients with antibodies to thrombin (following surgical use of topical bovine thrombin)
- Identifying afibrinogenemia, hypofibrinogenemia and dysfibrinogenemia when ordered in combination with fibrinogen activity (FIB / Fibrinogen, Plasma)

Clinical Information

Fibrinogen (clotting factor I) is an essential protein responsible for blood clot formation. In the final step of the coagulation cascade, thrombin converts soluble fibrinogen into insoluble fibrin strands that crosslink and form a clot.

Fibrinogen is synthesized in the liver and has a biological half-life of 3 to 5 days in the circulating plasma. Fibrinogen deficiencies can be congenital or acquired and lead to prolonged coagulation times. Isolated fibrinogen deficiency is an extremely rare inherited coagulation disorder.

Acquired fibrinogen deficiency is most commonly caused by, acute or decompensated intravascular coagulation and fibrinolysis (DIC). Other causes of fibrinogen deficiency include advanced liver disease, L-asparaginase therapy, or fibrinolytic agents (eg, streptokinase, urokinase, tissue plasminogen activator).

Specimen Required

Specimen Type
Plasma Na Cit

Collection Container / Tube
Light-blue top (3.2% sodium citrate at 9:1 ratio)

Submission Container / Tube
Plastic vial

Specimen Volume
1 mL

Reference Values

196-441 mg/dL

Analytic Time
Same day/1 day

03/2016

Content and values subject to change. See the Mayo Medical Laboratories Test Catalog for current information.
**INTERPRETATION**

- This method measures the total amount of fibrinogen protein (ie, fibrinogen antigen) present in the plasma.
- Adequate fibrinogen antigen levels in a context of low fibrinogen activity suggests a dysfibrinogenemia.
- Fibrinogen antigen levels <100 mg/dL are associated with an increased risk of bleeding.

**CAUTIONS**

Differentiation of congenital from acquired defects of fibrinogen requires clinical correlation and the results of standard clotting-based fibrinogen activity (**FIB / Fibrinogen, Plasma**) testing.

Fibrinogen is an acute phase reactant; plasma levels can be increased by inflammatory illnesses, nephrotic syndrome, liver disease, pregnancy, estrogen therapy, and/or compensated intravascular coagulation.

**CLINICAL REFERENCE**