
Lab Dept: Coagulation

Test Name: PLASMINOGEN

General Information

Lab Order Codes: PLAG

Synonyms: Plasminogen, Blood; Plasminogen, Chromogenic; Plasminogen Functional Assay; Plasminogen Immunologic Assay

CPT Codes: 85415 – Fibrinolytic factors; plasmin, activator

Test Includes: Plasminogen Activity

Logistics

Test Indications: Plasmin (the active form of Plasminogen) is part of the fibrinolytic system. It lyses fibrinogen and fibrin. Deficiencies are associated with arterial and venous thromboses. The Chromogenic (activity) assay detects the functionality of the molecule.

Lab Testing Section: Coagulation - Sendouts

Referred to: Fairview University Medical Center (Fairview/Atlas test: PLASCH)

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 2 - 7 days

One to two times per week. Note: This test is not analyzed on Saturday and Sunday.

Special Instructions: N/A

Specimen

Specimen Type: Whole blood

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

Draw Volume: 2.7 mL blood in a 3 mL tube; Minimum: 1.8 mL in a 2 mL tube
Please respect fill line on specimen tubes.

Processed Volume: Specimens will be processed at reference lab facility if received within 4 hours of collection. Otherwise, specimens need to be processed at referring facility and provide minimum of two 0.5 mL specimens frozen at -70. Follow directions below under [Special Processing](#).

Collection: A clean venipuncture is essential. **Do Not** use the first 2 mL of blood collected.

Patient's with hematocrits >55% must have a special tube made to adjust for the hematocrit: contact laboratory for special tube.

Mix thoroughly by gentle inversion. Deliver immediately to the laboratory.

Special Processing: Lab Staff: **Do Not** centrifuge. **Do Not** freeze. Send to reference lab in original Vacutainer® at room temperature if within 4 hours of collection. Forward promptly.

If specimen is >4 hours old prior to shipment, process specimen as follows:

Spin sample collected in blue top tube(s) for 5 minutes on the Stat Spin centrifuge, remove plasma and transfer to a 4 mL BCS sample cup(s), spin remaining plasma again for 5 minutes in the Stat Spin Centrifuge. Transfer plasma into two labeled 10x75 mL plastic tubes with a minimum of 0.5 mL in each. Freeze at -70 and send specimens on dry ice to Fairview University.

Patient Preparation: None

Sample Rejection: Improper tube; clotted samples; underfilled tubes; overfilled tubes; mislabeled or unlabeled specimens

Interpretive

Reference Range:

Age:	Range (%):
0 days:	42 – 72%
1 – 4 days:	48 – 68%
5 – 29 days:	53 – 76%
30 – 89 days:	48 – 70%
90 – 179 days:	63 – 85%
180 – 364 days:	78 – 104%
≥1 year:	80 – 120%

Critical Values:	N/A
Limitations:	N/A
Methodology:	Chromogenic (Synthetic Substrate) Activity Assay
References:	Fairview University Diagnostic Laboratory Web Page February 2014 Harmening DH (1997) Clinical Hematology and Fundamentals of Hemostasis
Updates:	5/21/2004: Test no longer includes Plasminogen antigen. The Chromogenic or activity portion is recommended. If there is a clinical reason for ordering the antigen, please contact the laboratory. References for the antigenic portion have been removed from this listing. Draw volume changed from 4.5 mL to 2.7 mL blood. 5/24/2010: Tubing patient specimens is no longer prohibited. 6/15/2011: Ref range update. 2/24/2014: Fairview specimen processing update. 1/28/2016: CPT update