



Laboratory Service Manual

Lab Dept: Coagulation

Test Name: FACTOR VIII ASSAY

General Information

Lab Order Codes: F8

Synonyms: AHF; AHG; Antihemophilic Factor; FVIII; VIII C; Factor VIII Activity

CPT Codes: 85240 - Clotting; factor VIII (AHG), one stage

Test Includes: Factor 8 level reported as a %.

Logistics

Test Indications: Useful for the detection of a single factor congenital deficiency for Hemophilia A or von Willebrand's disease or an acquired deficiency due to liver disease or DIC.

Lab Testing Sections: Coagulation

Phone Numbers:

Minneapolis: 612-813-6280

Saint Paul: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 4 hours

Special Instructions: Patient should not be receiving heparin. If so, this should be noted on the request form. Heparin therapy will affect certain coagulation factors or assays, preclude their performance, or cause spurious results. Indicate when specimen is drawn from a line or a heparin lock. Deliver immediately to the laboratory.

Specimen

Specimen Type: Whole blood

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

Draw Volume: 2.7 mL blood

Processed Volume: 0.9 mL plasma



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Collection: Patients with hematocrit levels of >55% must have a special tube made to adjust for the hematocrit. Contact the laboratory for special tube.

Special Processing: Lab Staff: 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 to new BCS sample cup(s) for analysis (as specifically stated in each procedure) leaving approximately 200 mcL in the bottom of the original cup to discard.

Patient Preparation: Avoid heparin therapy for two days prior to the test.

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

Interpretive

Reference Range:

Age	Range
0 – 1 day	61 – 139%
2 – 5 days	55 – 121%
6 – 30 days	58 – 124%
31 – 90 days	56 – 102%
91 – 180 days	55 – 91%
6 months – 5 years	59 – 142%
6 – 10 years	55 – 120%
11 – 16 years	53 – 131%
>16 years	50 – 150%

Critical Values: N/A

Limitations: Interpretation of the results may be limited if patient is receiving anticoagulant therapy or if test is done more than 2 hours after collection. Results will be increased in patients taking oral contraceptives.

Methodology: APTT clotting time correction of factor 8 deficient plasma. Patient dilutions are compared to a known set of standard dilutions and a percentage is determined.



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Contraindications:

Patient on anticoagulant therapy.

References:

Andrew M et al (1987) Development of the Human Coagulation System in the Full-Term Infant, Blood 70:165-72

Andrew M et al (1988) Development of the Human Coagulation System in the Healthy Premature Infant 72:1651-57

Andrew M et al (1992) Development of the Human Coagulation System During Early Childhood 80:1998-2005

Updates:

5/24/2010: Tubing of patient specimens is no longer prohibited.
12/15/2010: Updated processing information.