Test Definition: FACTV
Coag Factor V Assay, P

Overview

Useful For
Diagnosing congenital deficiencies (rare) of coagulation factor V
Evaluating acquired deficiencies associated with liver disease, factor V inhibitors, myeloproliferative disorders, and intravascular coagulation and fibrinolysis
Investigation of prolonged prothrombin time or activated partial thromboplastin time

Special Instructions
- [Coagulation Guidelines for Specimen Handling and Processing]

Method Name
Optical Clot-Based

NY State Available
Yes

Specimen

Specimen Type
Plasma Na Cit

Advisory Information
Coagulation testing is highly complex, often requiring the performance of multiple assays and correlation with clinical information. For that reason we suggest ordering Coagulation Consultations.

Necessary Information
If priority specimen, mark request form, give reason, and request a call-back.

Specimen Required
See [Coagulation Guidelines for Specimen Handling and Processing] in Special Instructions.

Patient Preparation: Patient must not be receiving Coumadin or heparin therapy.

Specimen Type: Platelet-poor plasma

Collection Container/Tube: Light-blue top (citrate)

Submission Container/Tube: Plastic vial

Specimen Volume: 1 mL

Collection Instructions:
1. Centrifuge, remove plasma, and centrifuge plasma again.
2. Aliquot plasma into separate plastic vial leaving 0.25 mL in the bottom of centrifuged vial.
3. Freeze plasma immediately (no longer than 4 hours after collection) at -20 degrees C, or, ideally at< or =-40 degrees C.

Additional Information:

1. Double-centrifuged specimen is critical for accurate results as platelet contamination may cause spurious results.
2. Each coagulation assay requested should have its own vial.

Forms

If not ordering electronically, complete, print, and send a Coagulation Test Request (T753) with the specimen.

Specimen Minimum Volume

0.5 mL

Reject Due To

<table>
<thead>
<tr>
<th>Gross hemolysis</th>
<th>Reject</th>
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<tbody>
<tr>
<td>Gross lipemia</td>
<td>Reject</td>
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<tr>
<td>Gross icterus</td>
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Specimen Stability Information

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<tr>
<th>Specimen Type</th>
<th>Temperature</th>
<th>Time</th>
<th>Special Container</th>
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<tbody>
<tr>
<td>Plasma Na Cit</td>
<td>Frozen</td>
<td>14 days</td>
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Clinical and Interpretive

Clinical Information

Factor V is a vitamin K-independent protein synthesized in the liver and in other tissues (endothelium, megakaryocytes/platelets). In its thrombin-activated form (factor Va), it serves as an essential cofactor in the prothrombinase enzyme complex, which converts prothrombin to thrombin (the prothrombinase complex consists of the enzyme, activated factor X, factor Va cofactor, a phospholipid surface, and calcium).

Deficiency of factor V may cause prolonged prothrombin time and activated partial thromboplastin time. Deficiency may result in a bleeding diathesis. Plasma biological half-life varies from 12 to 36 hours.

Platelets contain 20% to 25% of the factor V in blood. Factor V (also known as labile factor) is highly susceptible to proteolytic inactivation, with the potential for spuriously decreased assay results.

Reference Values

Adults: 70-165%

Normal, full-term newborn infants may have borderline low or mildly decreased levels (> or =30% to 35%) which reach adult levels within 21 days postnatal. Healthy premature infants (30-36 weeks gestation) may have borderline low or mildly decreased levels.*

*See Pediatric Hemostasis References section in Coagulation Guidelines for Specimen Handling and Processing.
Special Instructions.

**Interpretation**

Acquired deficiencies are much more common than congenital.

Congenitally deficient homozygotes generally have levels < or =10% to 20%.

Congenitally deficient heterozygotes generally have levels < or =50%.

Congenital deficiency may occur in combined association with factor VIII deficiency.

**Cautions**

Factor V (labile factor) is highly susceptible to proteolytic inactivation, with the potential for spuriously decreased assay results. In normal individuals, after freeze-thaw of citrate plasma, factor V activity typically may be 10% to 20% less than observed in a fresh plasma specimen, and in occasional individuals, a more marked decrease of factor V activity occurs. Normal results can be regarded as reliable, but decreased factor V activity results need to be correlated with other clinical and laboratory information. Repeat testing may be necessary.

**Clinical Reference**


**Performance**

**Method Description**


**PDF Report**

No

**Day(s) and Time(s) Test Performed**

Monday through Friday
Analytic Time
1 day

Maximum Laboratory Time
2 days

Specimen Retention Time
7 days

Performing Laboratory Location
Rochester

Fees and 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 Regional Manager. For assistance, contact Customer Service.

Test Classification
This test has been modified from the manufacturer's instructions. Its performance characteristics were determined by Mayo Clinic in a manner consistent with CLIA requirements. This test has not been cleared or approved by the U.S. Food and Drug Administration.

CPT Code Information
85220

LOINC® Information

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