Overview

Useful For
Diagnosing deficiency of coagulation factor X, congenital or acquired
Evaluating hemostatic function in liver disease
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.

Specimen Type: Platelet-poor plasma
Collection Container/Tube: Light-blue top (citrate)
Submission Container/Tube: Plastic vial
Specimen Volume: 1 mL

Collection Instructions:
1. Within 4 hours of collection, centrifuge, transfer all plasma into a plastic vial, and centrifuge plasma again. Aliquot plasma into separate plastic vial leaving 0.25 mL in the bottom of centrifuged vial.
2. 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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</thead>
<tbody>
<tr>
<td>Gross lipemia</td>
<td>Reject</td>
</tr>
<tr>
<td>Gross icterus</td>
<td>Reject</td>
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</table>

Specimen Stability Information

<table>
<thead>
<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>
<td></td>
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Clinical and Interpretive

Clinical Information

Factor X is a vitamin K-dependent serine protease that is synthesized in the liver. Its biological half-life is 24 to 48 hours. Factor X participates in both intrinsic and extrinsic pathways of coagulation (final common pathway) by serving as the enzyme (factor Xa) in the prothrombinase complex.

Congenital factor X deficiency is rare. Acquired deficiency associated with liver disease, warfarin therapy, vitamin K deficiency, systemic amyloidosis and inhibitors (rare). Deficiency may cause prolonged prothrombin time and activated partial thromboplastin time.

Reference Values

Adults: 70-150%

Normal, full-term newborn infants or healthy premature infants may have decreased levels (> or =15-20%) which may not reach adult levels for > or =180 days postnatal.*

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

Interpretation

Acquired deficiency is more common than congenital deficiency.

Homozygotes: <25%
Heterozygotes: 25% to 50%

**Cautions**
Liver disease, warfarin therapy, or vitamin K deficiency may lower factor X levels.

**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**
3 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

85260

LOINC® Information

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<td>Coag Factor X Assay, P</td>
<td>3218-5</td>
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