MAYO CLINIC LABORATORIES

Test Definition: 11_IS

Factor XI Inhibitor Screen, Plasma
(Non-Orderable)

Overview

Useful For

Only orderable as part of a profile. For more information see:
11INE / Factor XI Inhibitor Evaluation, Plasma
ALBLD / Bleeding Diathesis Profile, Limited, Plasma
APROL / Prolonged Clot Time Profile, Plasma

Detecting the presence of a specific factor inhibitor directed against coagulation factor XI

Special Instructions

- Coagulation Guidelines for Specimen Handling and Processing

Method Name

Only orderable as part of a profile. For more information see:
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ALBLD / Bleeding Diathesis Profile, Limited, Plasma
APROL / Prolonged Clot Time Profile, Plasma

Optical Clot-Based

NY State Available

Yes

Specimen

Specimen Type

Plasma Na Cit

Specimen Required

Only orderable as part of a profile. For more information see:
11INE / Factor XI Inhibitor Evaluation, Plasma
ALBLD / Bleeding Diathesis Profile, Limited, Plasma
APROL / Prolonged Clot Time Profile, Plasma

For more information see Coagulation Guidelines for Specimen Handling and Processing.

Specimen Minimum Volume

Platelet-poor plasma: 2 mL

Reject Due To

Gross hemolysis	Reject
Gross lipemia	Reject
Gross icterus	Reject

Specimen Stability Information

Specimen Type	Temperature	Time	Special Container
Plasma Na Cit	Frozen	14 days	

Clinical & Interpretive

Clinical Information

Patient plasma, normal pooled plasma (NPP), and a mixture of patient plasma and NPP are each tested for a specific factor, incubated at 37 degrees C for 1 hour, and then retested for the same factor. In addition, a new mixture of patient plasma and NPP is prepared using the incubated plasmas and tested after the 1-hour incubation. The percentage of the recovered factor for each individual plasma and mixture being tested is calculated and compared. The procedure demonstrates the effect of a specific coagulation factor inhibitor on that factor present in normal pooled plasma, over a specific period of time.

An inhibitor directed against a coagulation factor may arise due to multiple exposures from transfusions in a patient deficient in that factor (as in the case of persons with hemophilia), in response to certain diseases, or be drug induced. Nonspecific inhibitors may also be present in patients that will prolong screening tests (eg, prothrombin time and activated partial thromboplastin time). This test is used to qualitatively identify an inhibitor to a specific coagulation factor.

Reference Values

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Negative

Interpretation

When testing is complete, if factor activity results fall within clinically normal ranges, an interpretive comment will be provided noting that inhibitor testing was not indicated and, therefore, not performed. If factor activity indicates the performance of inhibitor screen testing, an interpretive comment will be provided noting the presence or absence of a factor XI inhibitor.

Cautions

Occasionally, a potent lupus-like anticoagulant may cause false-positive testing for a specific factor inhibitor (eg, factor VIII or IX).

Clinical Reference

1. Bowie EJW, Thompson JH Jr, Didisheim P, Owen CA Jr. Mayo Clinic Laboratory Manual of Hemostasis. WB Saunders Company; 1971: 111-115
2. Kottke-Marchant K. Laboratory Hematology Practice. Wiley Blackwell Publishing; 2012
3. Hoffman R, Benz EJ Jr, Silberstein LE, Heslop H, Weitz J, Salama ME. Hematology: Basic Principles and Practice. 8th ed. Elsevier; 2022

Performance

Method Description

The factor XI inhibitor screen is performed on the Instrumentation Laboratory ACL TOP. The assay consists of measuring the factor XI activity (activated partial thromboplastin time based assay) before and after incubation of a mixture of normal plasma and patient's plasma for 1 hour at 37 degrees C. Interpretation of the presence or absence of the indication of a factor XI inhibitor is determined by comparing the factor XI activity results and the calculated expected values.(Owen CA Jr, Bowie EJW, Thompson JH Jr. The Diagnosis of Bleeding Disorders. 2nd ed. Little Brown and Company; 1975:143-145; Meijer P, Verbruggen HW, Spannagi M. Clotting factors and inhibitors: Assays and Interpretation. In: Kottke-Marchant K, ed. Laboratory Hematology Practice. Wiley Blackwell Publishing; 2012:435-446)

PDF Report

No

Day(s) Performed

Monday through Friday

Report Available

1 to 3 days

Specimen Retention Time

7 days

Performing Laboratory Location

Mayo Clinic Laboratories - Rochester Main Campus

Fees & 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 account representative. 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 US Food and Drug Administration.

CPT Code Information

85335

LOINC® Information

Test ID	Test Order Name	Order LOINC® Value
11_IS	Factor XI Inhib Scrn	80603-4

Result ID	Test Result Name	Result LOINC® Value
7804	Factor XI Inhib Scrn	80603-4