

CONFUSING COAGULATION TEST NAMES REFERENCE GUIDE

Factor X activity, Chromogenic or Anti-Xa heparin assay?

Factor X activity assay (rarely ordered) F_10

- 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

Coagulation Factor X Chromogenic Activity Assay FXCH

Monitoring oral anticoagulant therapy, especially in patients whose plasma contains lupus anticoagulants and in patients receiving the drug Argatroban

Heparin anti-Xa assay (Ordered Often) HEPU

- Direct measurement of Unfractionated heparin concentration
- Allows patients to reach a therapeutic range more rapidly
- No interferences from Lupus anticoagulant or other factor deficiencies as were found with aPTT measurements.

Heparin anti-Xa assay HEPN

Useful for measuring heparin concentration:

- In patients treated with low molecular weight heparin preparations
- In presence of prolonged baseline activated partial thromboplastin time (APTT) (eg, lupus anticoagulant, "contact factor" deficiency, etc.)
- When unfractionated heparin dose needed to achieve desired APTT prolongation is unexpectedly higher (>50%) than expected

Which Factor V assay do I need?

Factor V Leiden Mutation test (Ordered Often) **LEIDE**

- Direct mutation analysis should be reserved for patients with clinically suspected thrombophilia and: -Activated protein C (APC)-resistance proven or suspected by a low APC-resistance ratio. Family history of the factor V (FV Leiden) mutation

Factor V activity assay (rarely ordered) FACT5

- 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.
 - Mayo Code: FACTV
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Is it Protein C activity assay or the C-Reactive Protein test?

Protein C Activity (PACT) *ordered as part of the Thrombophilia profile*

- As an initial test for evaluating patients suspected of having congenital protein C deficiency, including those with personal or family histories of thrombotic events.
- Detecting and confirming congenital Type I and Type II protein C deficiencies, detecting and confirming congenital homozygous protein C deficiency, and identifying decreased functional protein C of acquired origin (eg, due to oral anticoagulant effect, vitamin K deficiency, liver disease, ICF/DIC)
- Mayo code: CFX

C-Reactive Protein (CRP) marker for inflammation

- Detecting systemic inflammatory processes.
- Detecting infection and assessing response to antibiotic treatment of bacterial infections.
- Differentiating between active and inactive disease forms with concurrent infection
- RMC Code: CRP

Commonly Used Coagulation Profiles Available: Mayo Medical Laboratory

- **Thrombophilia Profile (CHYPE)**
 - Evaluating patients with thrombosis or hypercoagulability states
 - Detecting a lupus-like anticoagulant; dysfibrinogenemia; disseminated intravascular coagulation/intravascular coagulation and fibrinolysis
 - Detecting a deficiency of antithrombin, protein C, or protein S
 - Detecting activated protein C resistance (and the factor V R506Q [Leiden] mutation if indicated)
- **Lupus Anti-Coagulation Profile (CLUP)**
 - Confirming or excluding presence of lupus anticoagulant (LAC) distinguishing LAC from specific coagulation factor inhibitors and nonspecific inhibitors
 - Investigation of a prolonged activated thromboplastin time, especially when combined with other coagulation studies
- **von Willebrand Profile (VONW)**
 - Detection of deficiency or abnormality of von Willebrand factor and related deficiency of factor VIII coagulant activity
 - Subtyping von Willebrand disease as Type 1 (most common), Type 2 variants (less common), or Type 3 (rare)