



Prothrombin (Factor II) DNA Test

The prothrombin (factor II) mutation 20210A is a major risk factor for venous thrombosis and certain arterial thrombotic conditions. It is present in 1-3% of the general population and after the factor V Leiden mutation it is the most common genetic risk factor for venous thrombosis. DNA testing for the prothrombin mutation is recommended as part of the diagnostic work-up of all patients with deep vein thrombosis, pulmonary embolism, cerebral vein thrombosis, and premature ischemic stroke and also of women with premature myocardial infarction. This testing should also be included in an evaluation of patients with a family history of these conditions. Kimball Genetics provides the Prothrombin (Factor II) DNA Test alone, in combination with the Factor V Leiden DNA Test, or as part of panels including coagulation tests for other hypercoagulability disorders.

Indications for Prothrombin (Factor II) DNA Testing:

- Venous thrombosis
- Pulmonary embolism
- Premature myocardial infarction in women
- Premature ischemic stroke in the absence of hypertension, diabetes or hypercholesterolemia
- Cerebral vein thrombosis
- History of a thrombotic event
- Family history of thrombosis
- Relative known to have the prothrombin (factor II) mutation
- Prior to major surgery, pregnancy, oral contraceptive use or estrogen therapy if there is a personal or family history of thrombosis
- Presence of another known genetic hypercoagulability in an individual with a history of thrombosis

Special Aspects of our Service

- Rapid turnaround time
- Detailed reports with genetic interpretation, recommendations, and education
- Genetic consultation by board-certified genetic counselors and geneticists

Prothrombin (Factor II) Mutation/Inherited Hypercoagulability Testing Services:

■ Prothrombin (Factor II) DNA Test

Specimen requirements: 5 ml whole blood in an EDTA tube (lavender top)

Turnaround time: 1 business day

■ Combined Factor V Leiden/Prothrombin (Factor II) DNA Test

Specimen requirements: 5 ml whole blood in an EDTA tube (lavender top)

Turnaround time: 1 business day

■ Inherited Hypercoagulability Panels

Panel A - for patients not on Coumadin therapy
Factor V Leiden DNA Test, Prothrombin (Factor II) DNA Test, Antithrombin Activity, Protein C Activity, and Protein S Activity

Panel B - for patients on Coumadin therapy
Factor V Leiden DNA Test, Prothrombin (Factor II) DNA Test, Antithrombin Activity, Protein C Antigen, Protein S Antigen, Protein C Antigen/Factor IX Antigen Ratio, and Protein S Antigen/Factor IX Antigen Ratio

Specimen requirements: 5 ml blood in an EDTA tube (lavender top) and 3 ml frozen citrated plasma in 1 ml aliquots

Turnaround time: 3-4 days (Panel A)
4-6 days (Panel B)

Note: Any of these tests may also be ordered individually.

Please call Kimball Genetics for more information.

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