



Inherited Hypercoagulability Testing

Each year in the United States approximately 500,000 hospitalizations and 50,000 deaths occur as a result of venous thrombosis and pulmonary embolism. As many as fifty percent of cases of venous thrombosis are attributable to known genetic risk factors for hypercoagulability. The two most common of these are the factor V Leiden mutation and the prothrombin (factor II) 20210A mutation, followed in frequency by deficiencies of protein S, protein C and antithrombin. Venous thrombosis is multigenic, and up to a third of individuals affected with inherited thrombosis have two or more genetic defects. Identification of individuals with a genetic predisposition for hypercoagulability creates an opportunity for the prevention of a serious health problem, and inherited hypercoagulability testing at Kimball Genetics is a cost effective tool in health promotion.

Indications for Inherited Hypercoagulability Testing:

- Venous thrombosis
- Pulmonary embolism
- Transient ischemic attack or premature stroke
- Premature myocardial infarction in women (prothrombin mutation)
- Peripheral vascular disease, particularly lower extremity occlusive disease
- Cerebral sinus thrombosis
- Multiple spontaneous abortions
- History of a thrombotic event
- Family history of thrombosis
- Relative known to have a genetic risk factor
- Prior to major surgery, pregnancy, oral contraceptive use or estrogen therapy if there is a personal or family history of thrombosis
- Previous finding of activated protein C resistance by laboratory analysis (factor V Leiden)

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

Inherited Hypercoagulability Testing Services:

■ Factor V Leiden DNA Test or 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 III Activity, Protein C/Factor IX Antigen Ratio, and Protein S/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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