Factor II (Prothrombin) 20210 G -->A

This test is used in the evaluation of patients with deep vein thrombosis or pulmonary embolism, women with premature myocardial infarction, a family history of deep vein thrombosis or the prothrombin 20210A mutation, or the presence of another known genetic hypercoagulability condition.

Testing Method and Background

This test utilizes the eSensor® Thrombophilia Risk Test (TRT) is an in vitro diagnostic for the detection and genotyping of Factor II (Prothrombin) G20210A, Factor V (Factor V Leiden) G1691A and MTHFR (human 5, 10 methylenetetrahydrofolate reductase gene) C677T and A1298C using isolated genomic DNA. The eSensor® technology uses a solid-phase electrochemical method for determining the genotyping status.

Inherited Thrombosis is associated with congenital predisposing risk factors such as Factor II (Prothrombin, FII)1 and Factor V (Leiden, FV) proteins involved in the blood coagulation enzyme activity cascade. The FII and FV mutations are present in ~2% and 5% of individuals with N. European ancestry respectively, but at much lower levels in other populations. Factor V Leiden is inherited in an autosomal dominant manner.

Highlights of Factor II (Prothrombin) Testing

Targeted Region

FII: Genotyping of the 20210 G -->A mutation

- **Add on Thrombophilia Risk Testing**
  Same blood specimen can be used for genotyping Factor V (Factor V Leiden) 1691G>A and MTHFR (human 5, 10 methylenetetrahydrofolate reductase gene) C677T and A1298C mutations.

Ordering Information

Get started (non-HFHS): Print a Genetic Hereditary Disorder requisition form online at www.HenryFord.com/HFCPD

Get started (HFHS): Order through Epic using test " Prothrombin 20210 G -->A " (DNA2100016)

Specimen requirements:

- Peripheral Blood - 1-3ml in lavender top tube (EDTA) **Specimen stability: Ambient - 72 hours; Refrigerated - 1 week**
- Saliva specimen - Oragene self-collection kit
- Extracted DNA - from a CLIA-certified Laboratory

Cause for Rejection: Clotted, hemolyzed, or frozen specimens, improper anticoagulant, tubes not labeled with dual patient identification, non-dedicated tubes.

TAT: 5-7 business days (after Prior Authorization obtained)

Mail test material to:
Henry Ford Center for Precision Diagnostics
Pathology and Laboratory Medicine
Clinic Building, K6, Core Lab, E-655
2799 W. Grand Blvd., Detroit, MI 48202

CPT Codes: 81240, G0452

Contact us: Client Services, Account and Billing Set-up, and connect with a Molecular Pathologist at (313) 916-4DNA (4362)

For more information on Comprehensive Molecular Services, visit our website
www.HenryFord.com/HFCPD

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