MAYO CLINIC LABORATORIES

Test Definition: FPF2V

Prothrombin (F2) G20210A Variant

Overview

Method Name

Polymerase Chain Reaction/Fluorescence Monitoring

NY State Available

Yes

Specimen

Specimen Type

Whole blood

Specimen Required

Container/Tube:

Preferred: Yellow top (ACD)

Acceptable: Lavender EDTA, Pink (K2EDTA)

Specimen Volume:3 mL

Collection Instructions: Collect blood in a yellow top (ACD) tube and submit 3 mL blood refrigerated.

Specimen Minimum Volume

1.0 mL

Reject Due To

Hemolysis	NA
Lipemia	NA
Icterus	NA
Other	Plasma or serum; collection of specimen in sodium heparin tubes.

Specimen Stability Information

Specimen Type	Temperature	Time	Special Container
Whole blood	Refrigerated (preferred)	7 days	
	Ambient	72 hours	

Clinical and Interpretive

Clinical Information

The Factor II, c.*97G>A (G20210A) pathogenic variant is a common genetic risk factor for venous thrombosis

associated with elevated prothrombin levels leading to increased rates of thrombin generation and excessive growth of fibrin clots. The expression of Factor II thrombophilia is impacted by coexisting genetic thrombophilic disorders, acquired

thrombophilic disorders (eg, malignancy, hyperhomocysteinemia, high factor VIII levels), and circumstances including: pregnancy, oral contraceptive use, hormone replacement therapy,

selective estrogen receptor modulators, travel, central venous catheters, surgery, and organ transplantation.

INCIDENCE: Approximately 2 percent of Caucasians and 0.3 percent of African Americans are heterozygous; homozygosity occurs in 1 in 10,000 individuals.

INHERITANCE: Incomplete autosomal dominant.

PENETRANCE: The risk of thrombosis is increased 2-4 fold for heterozygotes and further increased for homozygotes.

CAUSE: Homozygosity or heterozygosity for F2 c.*97G>A (G20210A).

PATHOGENIC VARIANT TESTED: F2 c.*97G>A (G20210A).

CLINICAL SENSITIVITY FOR VENOUS THROMBOSIS: Approximately 10 percent.

Reference Values

Negative

Performance

PDF Report

No

Performing Laboratory Location

ARUP Laboratories

Fees and 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 Regional Manager. For assistance, contact Customer Service.

Test Classification

This test was developed and its performance characteristics determined by ARUP Laboratories. The U. S. Food and Drug Administration has not approved or cleared this test; however, FDA clearance or approval is not currently required for clinical use. The results are not intended to be used as the sole means for clinical diagnosis or patient management decisions.

CPT Code Information

81240

LOINC® Information

Test ID	Test Order Name	Order LOINC Value
FPF2V	Prothrombin (F2) G20210A Variant	24475-6

Result ID	Test Result Name	Result LOINC Value
Z5769	PT PCR Specimen	31208-2
Z5770	Prothrombin (F2) G20210A Variant	24475-6