Lab Dept:	**Coagulation**
Test Name:	**PROTHROMBIN 20210A MUTATION**

General Information

Lab Order Codes:	PTMU
Synonyms:	PT Mutation; Factor 2 by Invader; Factor 2 Mutation; Prothrombin 20210A Genetic Mutation; PTNT
CPT Codes:	81240 – F2, gene analysis, 20210G>variant
Test Includes:	Prothrombin 20210A Mutation

Logistics

Test Indications:	Direct mutation analysis for the Pt G20210A allele should be reserved for patients with clinically suspected thrombophilia. There may be additional indications for direct Pt G20210A mutation testing, such as in determining the duration of anticoagulant therapy of venous thromboembolism patients and screening for women contemplating hormone therapy.
Lab Testing Section:	Coagulation - Sendouts
Referred to:	Mayo Medical Laboratories (Test: PTNT)
Phone Numbers:	MIN Lab: 612-813-6280 STP Lab: 651-220-6550
Test Availability:	Daily, 24 hours
Turnaround Time:	3 – 5 days, test set up Monday – Friday.
Special Instructions:	A Mayo Coagulation Request Form (Mayo Supply T675) must accompany the specimen to the reference lab for processing. Mayo will not process the specimen without the appropriate information. Children's laboratory has forms available.

Specimen

Specimen Type:	Whole blood
Container:	Blue top (Sodium Citrate) tube Alternate: Lavender top (EDTA) tube, Yellow (ACD) Solution B

Draw Volume:	3 mL (Minimum: 1 mL) blood
Processed Volume:	Specimen will be processed by reference lab facility.
Collection:	A clean venipuncture is essential. Mix thoroughly by gentle inversion.
Special Processing:	Lab Staff: **Do Not** centrifuge. Send in original Vacutainer® tube. Store and ship at ambient temperature. Include Coagulation Patient Infomartin Sheet (Mayo Supply T675). Mayo will not process the specimen without this information. Forward promptly.
Patient Preparation:	None
Sample Rejection:	Specimens other than blood; anticoagulants other than ACD, EDTA or sodium citrate, no patient information form submitted

Interpretive

Reference Range:	Negative An interpretive report will sent and will include sample information, assay information, background information, and conclusions drawn from the test results (normal, heterozygous prothrombin [PT] G20210A, homozygous PT G20210A).
Critical Values:	N/A
Limitations:	This direct mutation analysis will not detect individuals with thrombophilia caused by mechanisms other than prothrombin (Pt) G20210A mutation. Genetic counseling is recommended before testing asymptomatic family members. Special Coagulation Clinic/Laboratory, Thrombophilia Center and/or Medical Genetics consultations are available and may be especially helpful in complex cases or in situations in which the diagnosis is atypical or uncertain. Genetic counseling is recommended before testing asymptomatic family members.
Methodology:	Direct Mutation Analysis
References:	Mayo Medical Laboratory (February 2017)
Updates:	3/25/2004: Test moved to Mayo Medical Laboratories from Fairview University Diagnostic Laboratories. Note: Change in CPT coding. 1/23/2006: CPT 2006 updates 2/12/2013: CPT update 2/28/2017: Tube update.