

Prothrombin (*F2*) G20210A Mutation Analysis by Real-Time PCR

Clinical Indication and Relevance

Please refer to the following references.

1. GeneTests Web “Prothrombin Thrombophilia”
<http://www.ncbi.nlm.nih.gov/bookshelf/br.fcgi?book=gene&part=ptt>
2. Spector EB et al. Technical standards and guidelines: venous thromboembolism (Factor V Leiden and prothrombin 20210G>A testing): a disease-specific supplement to the standards and guidelines for clinical genetics laboratories. *Genet Med.* 7:444-53, 2005.

Methodology

DNA is isolated from the patient sample and the prothrombin gene containing the 20210 mutation site is PCR-amplified and analyzed using an allelic discrimination assay employing primers and TaqMan probes. Results are reported as normal, heterozygous or homozygous for the G20210A mutation.

Sensitivity

N/A

Turn-around Time

Five to ten working days

Sample Requirements

Collect

Peripheral blood (PB): 3-5 mL (1mL minimum), in purple top (sodium EDTA) tube; yellow top (ACD) tube acceptable.

Transport

Ambient or 2-8°C (wet ice or cold packs). Do not freeze.

Stability

Ambient - 8 hours; refrigerated - 48 hours.

Unacceptable Samples

Serum or plasma; frozen peripheral blood; clotted blood; severely hemolyzed samples.

CPT Code(s)

81240: *F2* (prothrombin, coagulation factor II) gene analysis, 20210 G>A variant

G0452-26: Molecular pathology procedure; physician interpretation and report