



TEST: DETECTION OF THE FACTOR XIII V34L GENE POLYMORPHISM BY PCR

PRINCIPLE:

Factor XIII plays an essential role in the coagulation cascade. It is a transglutaminase which cross-links the fibrin and stabilizes the clot in the final stages of clot formation. Low levels of Factor XIII are found in Crohn's disease and ulcerative colitis, whereas elevated levels are found in Alzheimer's disease.

Factor XIII V34L gene polymorphism has been associated with myocardial infarction (protective effect) and has also been shown to correlate with the disease progress of patients with venous leg ulcers.

SPECIMEN COLLECTION AND PREPARATION:

10mL whole blood collected in lavender top EDTA tubes (two 5ml tubes). Specimen should be delivered to the laboratory within 72 hours at room temperature. Peripheral blood specimens that are clotted, have not been collected in EDTA, or frozen are not acceptable.

METHOD:

Polymerase chain reaction (PCR) and reverse hybridization.

REFERENCES:

1. Juhan-Vague, I. *Thromb Haemost* 1999;81:463
2. Anwar, R et al. *Blood* 1999;93:897-905

Normal Range: Reported as Normal (GG), Heterozygous Mutated (GT) or Homozygous Mutated (TT)

Turnaround time: 10 business days