Gene test information

FIBRINOGEN-GAMMA POLYMORPHISM (FGG 10034C>T)

- **Background**

  Thrombin-induced conversion of fibrinogen to fibrin plays an essential role in hemostasis and results in the stabilization of thrombi. A C/T polymorphism at nucleotide 10034 of the fibrinogen gamma gene (FGG 10034C>T) leads to an alteration in the expression of fibrinogen gamma, without affecting total fibrinogen levels. This alteration results in an increased susceptibility to venous thrombosis.

- **Fibrinogen gamma (FGG 10034C>T) genotypes**

Genotype	Frequency	Commentary
FGG 10034 CC	60%	Wild type genotype. No FGG 10034T variant present detectable..
FGG 10034 CT	35%	Heterozygous for the FGG 10034T variant. The risk for venous thrombosis is about 30% higher compared to the wild type genotype.
FGG 10034 TT	5%	Homozygous for the FGG 10034T variant. The risk of venous thrombosis is increased about 2-fold compared to the wild type genotype.

- **Indications for testing**

  Estimation of individual risk for venous thrombosis.

References:

Grünbacher G et al. The fibrinogen gamma (FGG) 10034C>T polymorphism is associated with venous thrombosis. Thromb Res. 2007;121:33-6.

Uitte de Willige S et al. Genetic variation in the fibrinogen gamma gene increases the risk for deep venous thrombosis by reducing plasma fibrinogen gamma' levels. Blood. 2005;106:4176-83.

Labor für Molekularbiologische Analytik
Univ.-Doz. Prof. Dr. Wilfried Renner
Schaftal 50
8044 Kainbach bei Graz
Tel +43 (0) 664 124 2483
Fax +43 (0) 316 39 19 63
www.labor-renner.at
office@labor-renner.at