COAGULATION

The physiological coagulation cascade involves extensive biochemical pathways including intrinsic and extrinsic coagulation pathways. Genetic mutations in specifi c genes can manifest as different pathologies. The most common mutations are the Arg506Gly (G1691A) mutation of the factor V gene (factor V Leiden), responsible for activated protein C resistance, and the G20210A in the 3'-untranslated region of the prothrombin gene (factor II). While the contribution of the C677T variant of methylenetetrahydrofolate reductase (MTHFR) in the pathogenesis of venous thromboembolism is still debated, it has frequently been identifi ed as being involved in the pathogenesis of cardiovascular diseases. A second function- al single nucleotide polymorphism, A1298C, has been described for MTHFR gene. It is associated with reduced enzyme activity although to a lesser extent than that seen with C677T. Experteam offers a complete system for allelic discrimination (genotpyping) of factor V Leiden (G1691A), prothrombin G20210A, MTHFR C677T and A1298C by Real Time PCR.

Plasminogen activator inhibitor type 1(PAI-1) is an important component of the coagulation system that down-regulates fibrinolysis in the circulation. Elevated circulating levels of PAI-1, have been related to the development of myocardial infarction. There is evidence that a single nucleotide insertion/deletion (4G/5G) polymorphism in the promoter region of the PAI-1 gene is associated with circulating PAI-1 levels.

Code	Name of kit	Technical specs	Amount of tests	Info	Additional info
FC01RQ	Factor II coagulation Kit-RQ	Real Time PCR kit	40	CE/IVD	G20210A mut.
FC.02RQ	Factor V coagulation Kit-RQ	Real Time PCR kit	40	CE/IVD	G1691A mut.
FC.04RQ	MTHFR Kit - RQ	Real Time PCR kit	40	CE/IVD	C677T and A1298C mut.
FC.08RQ	Factor V coagulation Kit 2 -RQ	Real Time PCR kit	40	CE/IVD	H1299R mut
FC.09RQ	Factor V coagulation Kit 3 -RQ	Real Time PCR kit	40	CE/IVD	Y1702C mut.
FC.11RQ	PAI 1 coagulation kit - RQ	Real Time PCR kit	40	CE/IVD	SNP rs1799768