



Plasminogen Activator Inhibitor-1, 4G/5G Genotyping (PAI-1 Polymorphism)

Patient ID SA00153879	Patient Name SAMPLE REPORT, FPAIG N		Birth Date 1974-12-31	Sex F	Age <b>47</b>
Order Number SA00153879	Client Order Number SA00153879	Ordering Physician CLIENT, CLIENT	Report Notes		
Account Information C7028846 DLMP Rochester		Collected 26 Jul 2022 08:00			

## **PAI-1 Gene Polymorphism**

## PAI-1 Locus 4G/5G Polymorphism

Y035

Patient DNA was evaluated for the PAI-1 4G/5G promoter polymorphism, which is a single base pair guanine (4G/5G) deletion/insertion polymorphism, using polymerase chain reaction (PCR) technology and restriction fragment length polymorphism (RFLP).

Results Y03

5G/5G

Homozygous for the 5G insertion allele.

Interpretation Y035

This individual has two copies of the 5G allele, also known as the 5G/5G genotype of the plasminogen activator inhibitor type 1 (PAI-1) gene. The 5G/5G genotype is associated with the lowest PAI-1 activity and antigen levels compared to those individuals that have either the 4G/4G or 4G/5G genotype. Elevated PAI-1 levels are associated with an increased risk of coronary artery disease, venous thromboembolic disease and possibly complications of pregnancy such as recurrent abortion.

Comments Y035

Simultaneous Risks: If a patient possesses two or more

congenital or acquired risk factors, the risk of disease may rise to more than the sum of the risk ratios for the individual risk factors. For instance, a combination of the 4G/4G genotype and the insulin resistance syndrome may confer an increase in cardiovascular disease risk over that conferred by the presence of an isolated PAI-1 4G/4G polymorphism.

Recommendations for Genetic Counseling: The PAI-1 4G allele is an inherited characteristic. If the polymorphism is present in a heterozygous or homozygous fashion, we recommend that the patient and their family consider genetic counseling to obtain additional information on inheritance and to identify other family members at risk. Testing Characteristics: Genetic testing by PCR provides exceptionally high sensitivity and specificity. Incorrect genotyping results can be caused by rare polymorphisms in primer binding sites and to misidentification of specimens by collectors or laboratory personnel. This assay analyzes only the PAI 4G/5G locus and does not measure genetic abnormalities elsewhere in the genome.

This test was developed and its performance characteristics determined by LabCorp. It has not been cleared or approved by the Food and Drug Administration.

References:

Barcellona D. Thromb Haemost. 2003;90:1061.; Dossenbach-Glaninger. Clin Chem. 2003;49:1081.; Kohler et al. NEJM. 2000;342:1792.; Margaglione M et al. Arterioscl Thromb and Vasc Bio. 1998;18:152.

**Received:** 27 Jul 2022 09:17 **Reported:** 28 Jul 2022 15:16

## **Performing Site Legend**

Code	Laboratory	Address	Lab Director	CLIA Certificate
Y035	Esoterix Coagulation	8490 Upland Dr., Suite 100, Englewood , CO 80112		