Hereditary Thrombophilia

Hereditary thrombophilia is an inherited condition that causes blood clots. The most common blood clots occur in veins, usually in the deep veins of the legs. This condition can also cause blood clots in arteries.

Clark, you have **two copies** of a genetic variant we tested.

People with this result have an increased risk of developing blood clots (deep vein thrombosis) and pulmonary embolism, and may have an early onset (before age 50) of these conditions.

The test may not be able to determine a result for everyone. This can be caused by a number of factors, which we'll review with you next.

How To Use This Test

The first step in diagnosis of hereditary thrombophilia is to rule out other causes.

Your doctor will work with you to determine if you have any other risk factors for blood clots. If you have other risk factors, or if you have any unusual symptoms, see your doctor.

Review the Scientific Details that back up our test

See Scientific Details

See Frequently Asked Questions

Intended Uses

- Tests the **Factor V Leiden** variant in the F5 gene and the **Prothrombin 20210A** variant in the F2 gene

Limitations

- This test cannot rule out all possible causes for hereditary thrombophilia.
- This test cannot rule out all possible causes for blood clots in veins or arteries.

Important Effectives

- Your results could affect future test and common and treatment decisions for you and your family.
- Those persons who have Factor V Leiden/Prothrombin 20210A variant(s), the effects increase to a significant degree.

You have an **increased risk** of developing harmful blood clots based on your genetic result.

It is important to discuss the result with a healthcare professional.

We detected two copies of Factor V Leiden variant in the F5 gene.

This variant is also known as Factor V R506Q. It is located in the F5 gene, which is most commonly associated with **Thrombophilia**.

See Scientific Details

People with this result are more likely to develop harmful blood clots than people without this result.

The chance of a blood clot developing in a **lifetime** is between 5% and 10% for those with this result. Lifestyle and other factors can affect your risk. Treatments are effective. Other factors also influence your risk.

Since you share DNA with your family members, they may also have this result. Your doctor may want to test other family members for this variant. Each sibling likely has a 50% chance of having one or two copies of this variant.

Major surgery

Undergoing major surgery increases the risk of developing blood clots.

Major surgery

Prolonged immobility

Fun

Oral contraceptives

Obesity

See Scientific Details for more information

About Hereditary Thrombophilia

Hereditary thrombophilia is a predisposition to developing harmful blood clots. Harmful blood clots are most commonly found in the deep veins of the legs (deep vein thrombosis). Blood clots can also occur in the arteries.

What is thrombosis?

Thrombosis is the formation of a blood clot, and the risk of developing thrombosis is increased by a number of factors.

Typical signs and symptoms of harmful blood clots

- Pain, tenderness, swelling, or redness in one or both legs
- Chest pain
- Shortness of breath, coughing up blood, or rapid breathing
- Hereditary thrombophilia may also be associated with miscarriage, stillbirth, or pre-eclampsia

Read more on: Mayo Clinic | Genetics Home Reference (Factor V Leiden) | Genetics Home Reference (Prothrombin)

How common is the condition?

Hereditary thrombophilia is relatively common. Research shows that as many as 1 in 20 people of European descent have a genetic predisposition to harmful blood clots.

Causes of hereditary thrombophilia

- **Prothrombin mutations**
- **Factor V Leiden mutations**
- **Deficiencies of natural anticoagulants**

References: [1] [2] [3] [4] [5] [6] [7] [8] [9] [10] [11] [12] [13] [14] [15] [16] [17] [18] [19] [20] [21] [22] [23] [24] [25] [26] [27] [28] [29] [30] [31] [32] [33] [34] [35] [36] [37] [38] [39] [40]