

THROMBOPHILIA  
(ASSOCIATED  
WITH  
FACTOR V  
DEFICIENCY)

## Orderable - FVL

Turnaround Time: 4 weeks

### Alternate Name(s):

Factor V  
Familial Thrombophilia  
Prothrombin/Factor V Prothrombin



**Laboratory:**  
Molecular Diagnostics Lab



**Requisition:**  
[MOLECULAR DIAGNOSTIC  
REQUISITION](#)

### Specimen:

1 x 4 mL K<sub>2</sub> or K<sub>3</sub> EDTA Lavender top Vacutainer tube-may be a frozen aliquot



**Method of Analysis:**  
Analysis of FV Leiden mutation at the 1601G locus utilizes an Agena iPLEX custom panel followed by SpectroCHIP® Array detection using the MassARRAY System (Agena)

### Collection Information:

Blood samples may be maintained at room temperature or a frozen aliquot is also acceptable.

### Reference Ranges:

See report



**Test Schedule:**  
As required,  
Monday to Friday 0800-  
1600 hours

### Interpretive Comments:

Resistance to activated protein C (APC) is a major cause of familial thrombophilia, and can be corrected by an anticoagulant activity expressed by purified factor V. It has been suggested that a point mutation in the gene coding for factor V is responsible for APC resistance (PMID:7909098, 8208267). This point mutation, (F5:c.1601G>A), occurring towards the 3' end of exon 10 of the factor V gene, is predicted to cause a missense mutation in the APC cleavage site, (F5:p.Arg534Gln) and confers an increase in the relative risk of a first episode of venous thrombosis of x7 for heterozygote carriers, x35 for heterozygote carriers taking oral contraceptive medication, and x80 for individuals homozygous for the Factor V Leiden mutation(PMID:11529700).

### Storage and Shipment:

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Must be received in testing laboratory within 5 days of collection, shipped at room temperature by courier/overnight delivery.