



## Xpert FII & FV Genotype Panel G109

### INTENDED USE:

Xpert FII & FV Genotype Panel G109 is intended for *in vitro* use as a quality control to monitor analytical performance of FII & FV detection on the GeneXpert® System. Xpert FII & FV Genotype Panel G109 is formulated to monitor the detection of mutations Factor II G20210A and Factor V Leiden G1691A, the most common genetic risk factors for thrombotic events.

### PRODUCT SUMMARY and PRINCIPLE:

Xpert FII & FV Genotype Panel G109 consists of a suspension of synthetic Factor II and Factor V DNA in a proprietary matrix with preservatives. Genotypes wildtype, heterozygous, and homozygous mutant of the 2 mutations Factor II G20210A and Factor V Leiden G1691A are represented in the four-bottle kit. Two bottles of Xpert FII & FV Heterozygous Control contain heterozygous DNA for both Factor II and Factor V. One bottle of Xpert FII & FV Normal Control contains wild type Factor II and Factor V DNA. One bottle of Xpert FII & FV Mutant Control contains homozygous mutant Factor II and Factor V DNA.

Quality controls can be used for routine monitoring of test systems, validation, verification, proficiency assessment, and training procedures. Routine use of quality controls assists the laboratory in identifying shifts, trends, and increased frequency of random errors caused by variations in the test system, such as failing reagents or malfunctioning equipment. Early investigation can prevent failed assay runs<sup>1</sup>.

### COMPOSITION:

Xpert FII & FV Genotype Panel G109 is comprised of four bottles containing 0.5mL each of synthetic Factor II and Factor V DNA suspended in a non-infectious matrix with carrier DNA, preservatives and stabilizers.

Specific mutations present are described below.

Analyte:	Mutation:
FII	G20210A (c.*97G>A)
FV Leiden	G1691A (c.1601G>A)

### STORAGE and STABILITY:

Upon receipt and after opening, the material should be stored at 2° – 8°C. Do not freeze. Unopened Xpert FII & FV Genotype Panel G109 material is stable through the expiration date printed on each bottle when stored refrigerated (2° – 8°C). Opened material tightly capped and returned to the refrigerator (2° – 8°C) shortly after use is stable for sixty (60) days from the date of opening.

1. ISO 15189: Medical laboratories – Particular requirements for quality and competence.

### INSTRUCTIONS FOR USE:

Process Xpert FII & FV Genotype Panel G109 as you would a whole blood specimen:

1. Allow Xpert FII & FV Genotype Panel G109 to come to room temperature (18° – 25°C).
2. Thoroughly mix the solution prior to opening by inverting the bottle several times or placing on an automated mixer immediately before use.
3. Follow manufacturer's test instructions for clinical specimens.
4. Tightly recap each bottle after use and store refrigerated (2° – 8°C).
5. Controls should be tested routinely as a matter of Good Laboratory Practice (GLP) and according to guidelines or requirements of local, state, and/or federal regulations or accrediting organizations.

### PRECAUTIONS and WARNINGS:

- Xpert FII & FV Genotype Panel G109 is for use on the GeneXpert® System only. Please contact MMQCI for controls to be used for other test systems that detect mutations Factor II G20210A and Factor V Leiden G1691A.
- This product is intended for *in vitro* analytical testing and is provided for Research Use only, not for use in diagnostic procedures.
- This product contains 23% ethanol (v/v) and could be flammable. Keep away from open flames.
- This product does not contain any biological material of human or animal origin. Universal Precautions are NOT required when handling this product.
- Quality control materials should be used in accordance with local, state, federal regulations and accreditation requirements.
- The laboratory should follow Good Laboratory Practice (GLP) and establish its own performance characteristics for Xpert FII & FV Genotype Panel G109 in demonstrating adequate system performance.

### EXPECTED VALUES:

Analyte	G116a01 Normal Control	G10801 FII & FV Heterozygous Control	G116b01 Mutant Control
FII G20210A	FII NORMAL	FII HET	FII HOMOZYGOUS
FV Leiden G1691A	FV NORMAL	FV HET	FV HOMOZYGOUS

Other Factor II and Factor V mutations are not detected in the Xpert FII & FV Genotype Panel G109.

### ORDERING INFORMATION:

Xpert FII & FV Genotype Panel G109  
**Part Number: G109**  
Kit contains: 4 x 0.5mL bottles  
(2 x Heterozygous, 1 x Normal & 1 x Mutant)