

FH panel

For the genetic characterization of Familial Hypercholesterolemia



FH panel

FH Panel is the NGS-based kit for the molecular profiling of Familial Hypercholesterolemia (FH).

FH panel allow complete characterization of 9 genes involved in Familial Hypercholesterolemia and the identification of polygenic FH SNPs and SNPs for the prediction of statin response.

Familial hypercholesterolemia is a genetic disorder that affects about 1 in 250 people and increases the likelihood of having coronary heart disease at a younger age.

The importance of an NGS test is reflected in the timeliness of diagnosis and in the possibility of predicting the therapeutic path.

FH panel is a kit for the analysis of the FH gene through a molecular protocol based on NGS technologies. The kit is validated for germline analysis (SNPs, indels) of DNA extracted from body tissues (blood or others).

TECHNOLOGY

FH panel kit contains all reagents required for the preparation of a specific bidirectional library of amplicons designed for the NGS analysis using Nanopore sequencers.

WORKFLOW

The FH panel kit is part of a DNA-to-variant solution that offers streamlined content, easy-to-perform library preparation, push-button sequencing systems, and simplified data analysis.

Library preparation follows a straightforward, PCR-based protocol that can be completed in as little as 5 hours, with < 1.5 hours hands-on time. Resulting libraries can be normalized, pooled, and then loaded on to a flow cell for sequencing.

Prepared libraries are sequenced on any compatible Nanopore sequencers.

SOFTWARE ANALYSIS

4eVAR is our proprietary analysis software. The analysis is designed based on the characteristics and technologies of the kit, in order to increase accuracy of results, and to have the complete control on the entire process.

Table 1: List of target genes in FH panel

APOB	LDLR	PCSK9	LDLRAP1	STAP1
APOE	ABCG5	ABCG8	LIPA	

SAMPLE PER RUN

Flowcell	Samples per flowcell 100x	Instrument	Flowcells per instrument*
FLO-MIN114	40	MinION	1
		GridION	Up to 5
FLO-PRO114M	200	PromethION 2/2 Solo	Up to 2
		PromethION 24	Up to 24
		PromethION 48	Up to 48

**Multiple flow cells can be used during the same run session, with different libraries, or same library increasing depth*

ORDERING INFORMATION

Product	REF
FH panel	H1111-16 (16 test)
FH panel	H1111-96 (96 test)
BARCODE	
BARCODE ONT Set 16	R8001-16 (96 test)
BARCODE ONT Set 96	R8002-96 (96 test)
ADAPTER	
NANO ADAPTER	M1050-6