

# BRaCA panel

Hereditary variants profiling in Breast and Ovary Cancer



## BRaCA panel

4bases BRaCA panel is a kit for the identification of both of germline mutations in BRCA 1 and BRCA 2 genes.

BRaCA panel is a kit for the analysis of the BRCA1 and BRCA2 genes through a molecular protocol based on Next Generation Sequencing (NGS) technologies. The kit is validated for germline analysis (SNPs, indels, CNVs) of DNA extracted from blood or body tissues samples.

## TECHNOLOGY

BRaCA panel kit contains all reagents required for the preparation of a specific bidirectional library of amplicons designed for the NGS analysis using Illumina or Ion Torrent sequencers.

## WORKFLOW

The BRaCA 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 Ion Torrent sequencers.

## VALIDATION

To demonstrate assay capabilities, clinical samples were run in a clinical setting. DNA quality and quantity of the libraries prepared were verified using Qubit and Agilent Bioanalyzer.

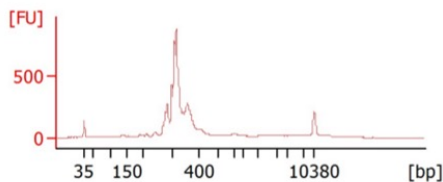


Figure 1. BRaCA panel profiles examples

## 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 BRaCA panel

BRCA1
BRCA2

## SAMPLE PER RUN

Instrument	Samples per run*
	<b>Germline</b>
Ion 316™ Chip/Ion 510™ Chip	14
Ion 318™ Chip/Ion 520™ Chip	28
Ion 530™ Chip	96
Ion PI™ Chip/Ion 540™ Chip	384

\*the estimated maximum number of samples per chip assumes a reading depth of 300x for the germline. The optimal number of samples can be empirically estimated on the local setup.

## ORDERING INFORMATION

Product**	REF
BRaCA panel	H1070-16 (16 test)
BRaCA panel	H1070-96 (96 test)
Barcode	
Barcode Set 1-16	6001
Barcode Set 17-32	6002
Barcode Set 33-48	R6003
Barcode Set 49-64	R6004

\*\*the kit is also available in its version only for research use (RUO).