

HRD_{pro}

Variants profiling and HRD score in breast, ovary and prostate cancer



4bases HRD pro is a **CE-IVD kit** for the identification of mutations in genes related to the homologous recombination and repair (HRR) pathway.

HRD pro enables the detection of variants associated with **homologous recombination deficiency (HRD)**, a key mechanism driving genomic instability in cancer. HRD leads to error-prone DNA repair pathways, increasing susceptibility to PARP inhibitors and platinum-based chemotherapy.

The kit is validated for germline and somatic analysis (SNVs, indels, CNVs, CNAs, HRD Score) of DNA extracted from blood samples and cancer tissues (fresh, frozen or FFPE).

HRD pro allows to detect variants linked to 23 genes:

List of genes of HRD pro kit

ATM	MSH2	RAD51C	BRIPI	RAD54L
BARD1	CHEK1	RAD51D	TP53	MSH6
BRCA1	BRCA2	FANCL	BRIPI	NBN
RAD51B	PALB2	MRE11	CHEK2	CDK12
PTEN	MLH1	RAD50		

From DNA to Final data in less than 2,5 days with less than 3 hours hands-on time.



From gDNA



PCR UDI



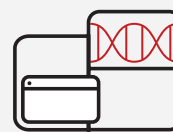
Hybridization



Enrichment PCR



Final library



NGS



to FINAL DATA

HRD pro analysis on 4eVAR platform, goes beyond detecting somatic variants in HRR pathway genes — it also analyzes **copy number alterations (CNA)** and **loss of heterozygosity (LOH)**, key features for accurate **HRD score** calculation and comprehensive genomic instability profiling.

With a dedicated, optimized analysis pipeline, HRD pro delivers a robust and reliable HRD score, supporting **treatment stratification** and identifying patients most likely to benefit from **targeted therapies**.

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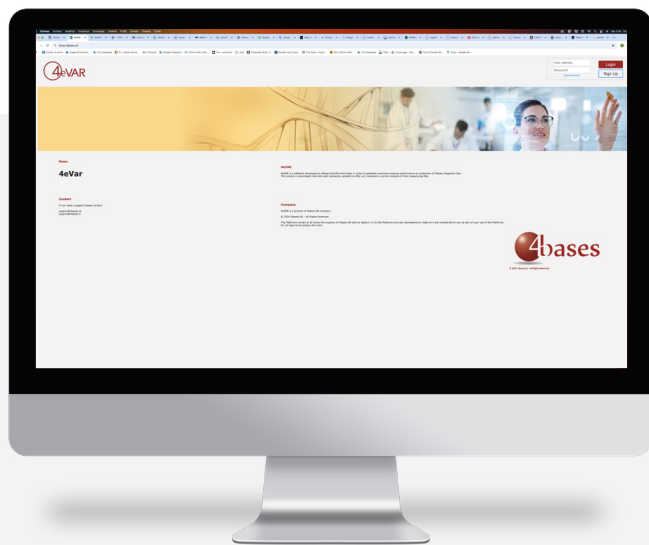
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Specifications

Sample type	DNA extracted from tissues, blood or body fluids
Input	Minimum of 50 ng DNA per sample
Panel size	About 250 Kb
Variant called	SNPS, indels, CNVs, CNAs
Instrument Type	Illumina, MGI, Oxford Nanopore Technologies, Ion Torrent, Element Biosciences
Data Analysis	4eVAR

Cod. kit

Product	Cod.	Tests number
HRD pro	C3080-16	16
HRD pro	C3080-96	96



4eVAR: Comprehensive output files for analysis and reporting

- Quality metrics
- Alignment
- CNVs status
- Full variant table
- Genotype
- Coverage
- HRD score and CNA report
- Customizable report

Data Analysis

Product	Cod.	Tests number
4eVAR	A6060-C3080-16	16
4eVAR	A6060-C3080-96	96

If you wish to learn more:



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