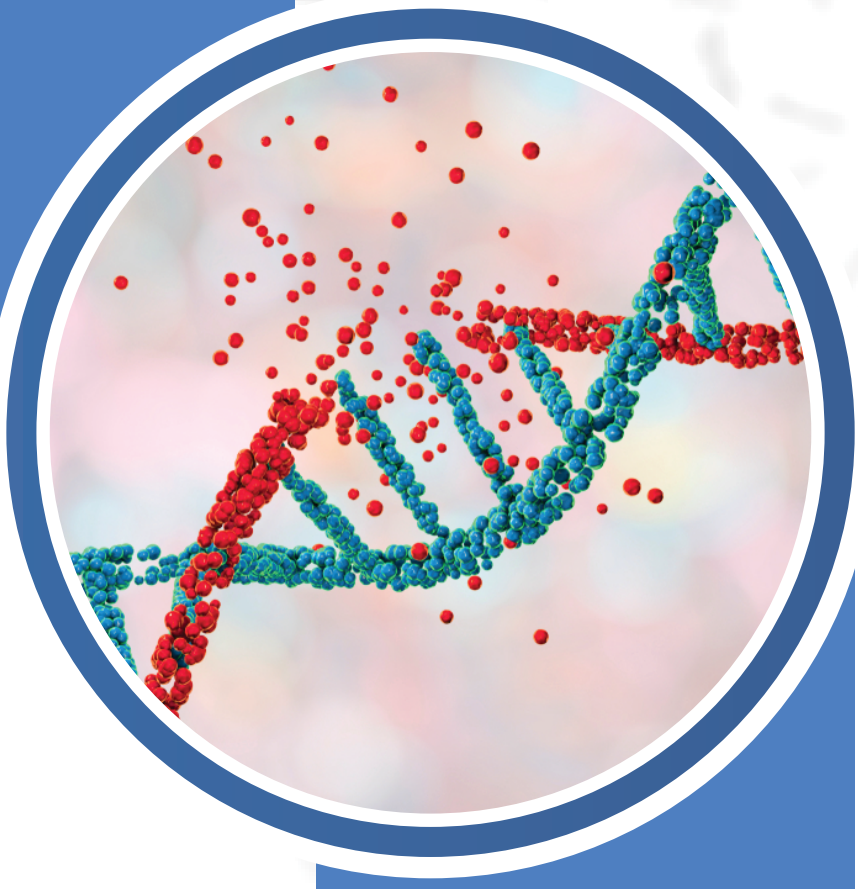
uncoded
DNA & BEYOND

HRR

Homologous Recombination Repair Gene Panel



RUO

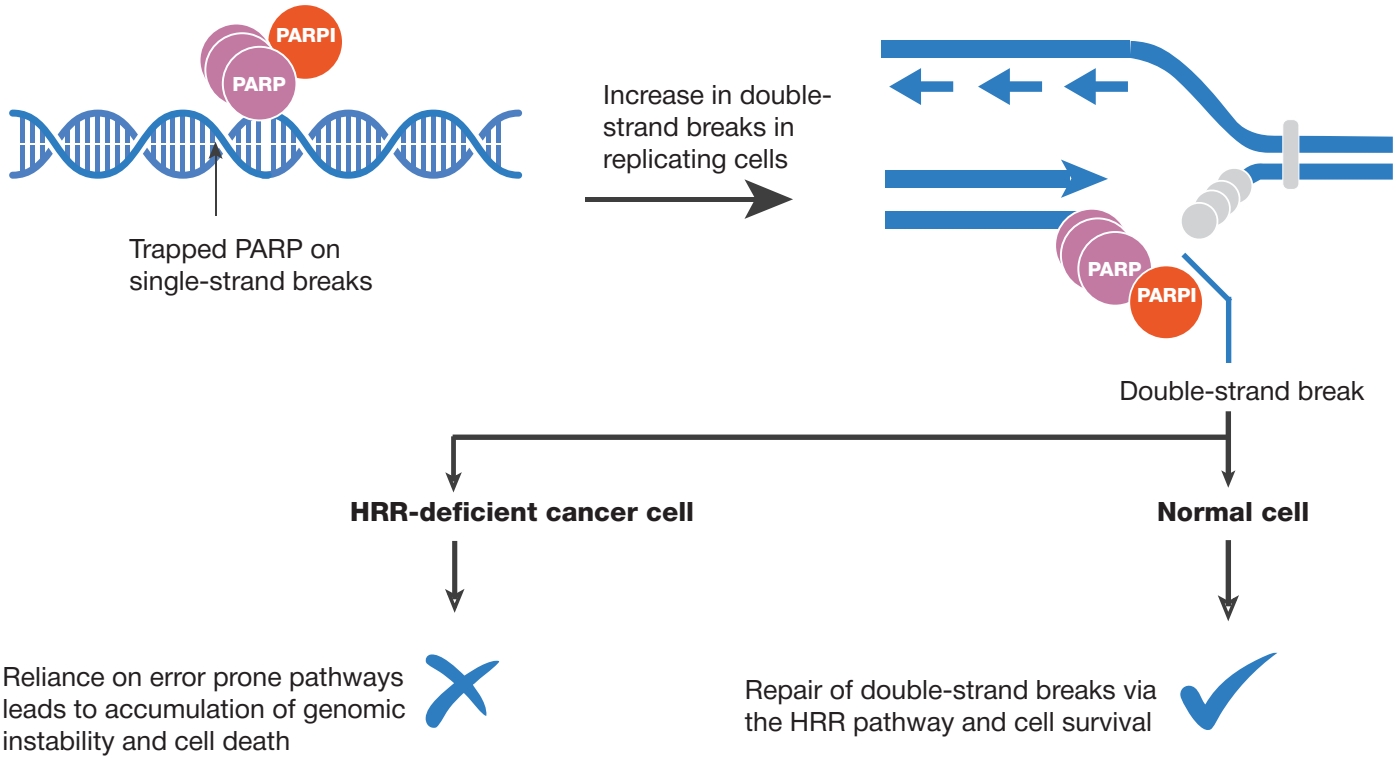
Redefining cancer genomics with a comprehensive view of HRR gene alterations

Comprehensive HRR profiling across 40+ key genes in one panel

The Uncoded HRR NGS Panel is designed to offer a broad and detailed view of the homologous recombination repair (HRR) pathway for advanced research applications. A recent 2025 pan-cancer analysis of 9,262 Asian tumour samples reported that 21.3% carried pathogenic alterations in HRR genes, highlighting the substantial presence of HRR-related genomic changes in the region (PMCID: PMC12107993). This underscores the value of comprehensive HRR gene profiling for expanding understanding of genome instability, DNA repair mechanisms, and tumour biology.

Unlike conventional tests targeting only BRCA1/2, Uncoded HRR panel analyzes over 40 clinically relevant genes, enabling broader insights of major HRR pathway alterations for research in cancer development, progression, and therapy response.

HRR genes form the cell's natural DNA repair system. When mutated, they weaken tumor cells, enabling targeted therapy with PARP inhibitors. The Uncoded HRR NGS Panel precisely detects major mutations, guiding the use of PARP inhibitors and other DNA damage response therapies. Currently, PARP inhibitors are transforming breast and ovarian cancer treatment and are expanding to other cancers, making comprehensive HRR profiling essential.



With broad gene coverage, high accuracy, and enriched genetic insights, the Uncoded HRR NGS Panel supports a more holistic precision oncology research framework beyond single-gene methods.

This library preparation kit provides a simplified, efficient, and dependable starting point for advanced sequencing studies.

Gene List				
APC	*CHEK1*	*MSH6*	*RAD51B*	*SMAD4*
ATM	*CHEK2*	*MUTYH*	*RAD51C*	*STK11*
BARD1	*DICER1*	*NBN*	*RAD51D*	*TP53*
BMPR1A	*EPCAM*	*NF1*	*RAD54*	*TSC1*
BRCA1	*FANCD2*	*NF2*	*RB1*	*TSC2*
BRCA2	*FANCL*	*PALB2*	*RET*	*VHL*
BRIP1	*MEN1*	*PMS2*	*SDHAF2*	*WT1*
CDH1	*MLH1*	*POLE*	*SDHB*	
CDK12	*MRE11*	*PPP2R2A*	*SDHC*	
CDKN2A	*MSH2*	*PTEN*	*SDHD*	

Discover the whole story behind DNA repair.

A single kit that maps 40+ HRR genes with unmatched clarity.

- **Comprehensive HRR Coverage:** 47 genes with complete CDS regions, including BRCA1/2, PLB2, RAD51C/D, ATM, CHEK2, CDK12, etc.
- **Extensive Variant Detection:** Enables detection of germline variants for a targeted genetic profile with SNVs and Indels.
- **Flexible Sample Compatibility:** Works seamlessly with Blood and Tumor FFPE samples.
- **Low Input Requirement:** Compatible with gDNA and requires a minimal input of just 50 ng.

Uncoded: Setting a New Benchmark in Library Preparation

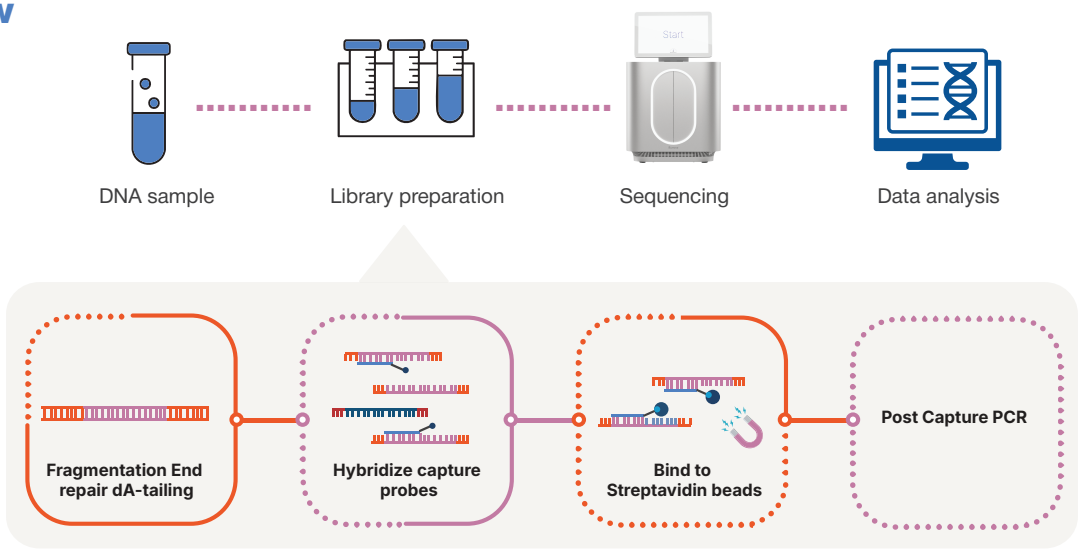
Effortless Library Preparation
A streamlined, intuitive workflow that minimizes hands-on time and keeps your sequencing pipeline moving with ease.

Precision-Driven Chemistry
Advanced reagent design ensures consistent, high-fidelity libraries—giving you confidence in every data point.

Cost Effective Solutions
Reduces costs by optimizing reagents and simplifying procedures.

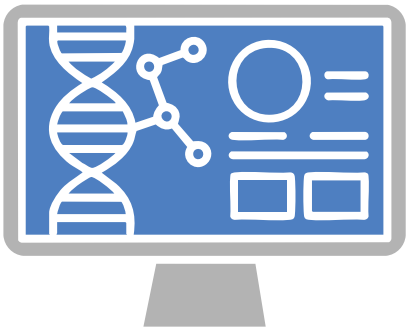
Reliable Across Inputs
With Uncoded, you get a singular, streamlined workflow. We are one stop provider, from high-quality library preparation kits to data analysis.

Workflow



Data Anaysis Platform

Powered by a Cloud-Based NGS Interpretation Solution



Our cloud-based NGS data analysis software is designed to support comprehensive interpretation of HRR sequencing data. It enables automated variant calling, annotation, and classification—helping researchers streamline workflows and identify key genomic alterations with confidence.

The platform supports multiple input formats and delivers high-throughput, reproducible analysis across HRR gene panels, ensuring fast, accurate, and scalable data interpretation.

DNA Performance	
Panel Size	189.4 Kb
Targets covered at minimum 1000×	>99.21%
On Target	>98.5%
Fold 80	<1.4

Ordering Information

Catalog No.	Product Name	Samples
10313	HRR Panel	24

uncoded
DNA & BEYOND

R&D & MANUFACTURING FACILITY

E-48/3, First Floor Okhla Phase II,
New Delhi – 110020, India

uncoded@premaslifesciences.com

premas life sciences