PILLAR BIOSCIENCES

oncoReveal®

HRD v2 Panel

The **oncoReveal® HRD v2 Panel** is designed for detection of SNVs, indels, and BRCA1 & BRCA2 exon level CNVs. 33 HRD-related genes can be assessed in either FFPE or blood samples. The panel uses proprietary Stem-Loop Inhibition-Mediated amplification (SLIMamp®) technology, a tiled amplicon-based library prep chemistry, designed by Pillar's AI-empowered VersaTile™ Primer Design tool, for efficient single-tube target enrichment.

oncoReveal® HRD v2 Panel (33 genes)

ARID1A	BRCA2	ESR1	FEN1	PPP2R1A	RAD51D
ATM	BRIP1	FANCA	KRAS	PTEN	RAD54L
ATR	CDK12	FANCC	MRE11A	RAD50	TP53
BARD1	CHEK2	FANCD2	NBN	RAD51	
BRAF	CTNNB1	FANCE	PALB2	RAD51B	
BRCA1	ERBB2	FANCF	PIK3CA	RAD51C	

Genes marked in green indicate full CDS coverage

Simple NGS library prep workflow

Maintain control of samples and results with single-tube, tiled amplification that can be performed in-house by any NGS lab

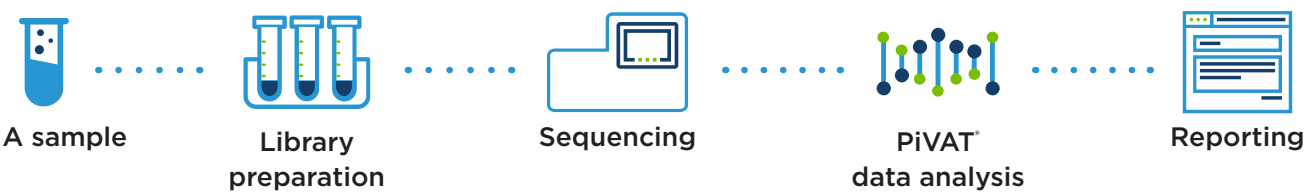
Sensitive and robust chemistry

Achieve variant detection as low as 1% VAF† even with limited DNA input or poor sample quality

Reduced fully-loaded lab costs

Improve lab efficiency and reduce "no calls", repeat testing, and difficult interpretation decisions

Simple, one-day workflow



Gene-specific PCR & cleanup · Indexing PCR & cleanup · Quantitation & normalization · Load sequencer

† VAF, variant allele frequency

For Research Use Only. Not for use in diagnostic procedures.

Panel specifications*

Enrichment chemistry	Multiplex PCR using tiled amplicons
Number of pools	1 pool
Number of genes/amplicons	33/1,314
Number of targets	Full CDS coverage and exon-level CNVs for BRCA1 & BRCA2 genes, hotspots in 31 additional HRD-related genes; 114.5kb total size
Variant types	SNVs, indels, exon level CNVs for BRCA1 & BRCA2
Average amplicon size	157bp
Recommended DNA input range	20ng to 80ng
Sample types	DNA from tissue, blood, or FFPE
Mapping rate	97.9% ± 1.7%
% on-target aligned reads	91.1% ± 0.8%
Coverage uniformity (% targets with >0.2X mean coverage)	92.5% ± 0.9%
Recommended Reads Per Sample	~6.5 million to 7.5 million paired-end reads
Total assay time (from DNA to sequencer)	<8 hours

* Mapping rate, percentage of on-target aligned reads, and coverage uniformity metrics are based on internal testing performed using reference standard materials

Ordering information

Select the panel AND one of the index kit options listed below.

Panel	Part number
oncoReveal® HRD v2 Panel (24 reactions)	HDA-HR-1002-24

Pillar Index Kit options	Reactions	Part number
Pillar Custom Index Primers Kit A	32 Combinations, 96 reactions	IDX-PI-1001-96
Pillar Custom Index Primers Kit D	96 Combinations, 192 reactions	IDX-PI-1004-192

TO ORDER OR LEARN MORE:
pillarbiosci.com

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