

BRCA1 & BRCA2 plus CNV Panel

The **oncoReveal® BRCA1 & BRCA2 plus CNV Panel** is designed for the detection of exon-level copy number variation (CNV) across the entire coding region of the BRCA1 and BRCA2 genes. The assay is designed with shorter amplicons to allow for detection of mutations from FFPE samples, while also being compatible with intact genomic DNA from blood samples. The assay sequences the full coding region plus 10bp of flanking introns. 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.

Panel specifications*

Enrichment chemistry	Multiplex PCR using tiled amplicons
Number of pools	1 pool
Number of genes/amplicons	2/283
Number of targets	Full CDS of BRCA1 and BRCA2 with flanking intronic regions (10bp), ~16.9kb total size
Variant types	Exon level CNVs, SNVs, small and medium indels
Average amplicon size	156bp
Recommended DNA input range	20ng to 80ng
Sample types	DNA from tissue, blood, or FFPE
Mapping rate	99.0% ± 0.3%
% on-target aligned reads	98.6% ± 0.2%
Coverage uniformity (% targets with >0.2X mean coverage)	98.0% ± 0.1%
Recommended reads per sample	~1.4 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

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

[†] VAF, variant allele frequency

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

Simple, one-day workflow

Gene-specific
PCR & cleanupIndexing PCR
& cleanupQuantitation &
normalizationLoad
sequencer

Ordering information

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

Panel	Part number
oncoReveal® BRCA1 & BRCA2 plus CNV Panel (24 reactions)	HDA-BR-1003-24

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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