

4 Gene Methylation Panel

The **oncoReveal™ 4 Gene Methylation Panel** is a robust NGS assay that interrogates CpG sites within BRCA1, BRCA2, RAD51C, and XRCC3 that have undergone bisulfite conversion for methylome analysis. The assay uses proprietary Stem-Loop Inhibition-Mediated amplification (SLIMamp®) technology, a tiled amplicon-based library prep chemistry for efficient single-tube enrichment of targets.

oncoReveal[™] 4 Gene Methylation Panel

Gene
BRCA1
BRCA2
RAD51C
XRCC3

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⁺ without UIDs⁺ even with limited DNA input or poor sample quality

Reduced fullyloaded 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

Panel specifications*

Enrichment chemistry Multiplex PCR using tiled amplicons 1 pool Number of pools 1 pool Number of genes/amplicons 4 genes / 12 amplicons Variant types Methylation status of >80 CpG sites Average amplicon size 120bp Recommended DNA input range 5-60ng (10ng recommended) Sample types Bisulfite or enzymatically coverted DNA Mapping rate 95% % on-target aligned reads 90% Coverage uniformity (% targets with >0.2X mean coverage) Recommended Reads Per Sample -50,000 paired-end reads		
Number of genes/amplicons Variant types Methylation status of >80 CpG sites Average amplicon size Recommended DNA input range Sample types Bisulfite or enzymatically coverted DNA Mapping rate 95% % on-target aligned reads Coverage uniformity (% targets with >0.2X mean coverage) 90%	Enrichment chemistry	Multiplex PCR using tiled amplicons
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Coverage uniformity (% targets with >0.2X mean coverage) 90%	Mapping rate	95%
(% targets with >0.2X mean coverage)	% on-target aligned reads	90%
Recommended Reads Per Sample ~50,000 paired-end reads	, ,	90%
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Total assay time (from DNA to sequencer) <8 hours	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™ 4 Gene Methylation Panel	HDA-HR-1009-24

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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