

## **MGMT & MLH1 Methylation Panel**

The **oncoReveal® MGMT & MLH1 Methylation Panel** is a robust NGS assay that interrogates CpG sites within MGMT and MLH1 that have undergone bisulfite conversion for methylome analysis. 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	2/5
Variant types	Methylation status of >60 CpG sites
Average amplicon size	127bp
Recommended DNA input range	5ng to 20ng
Sample types	Bisulfite or enzymatically converted DNA
Mapping rate	90.0%
% on-target aligned reads	80.0%
Coverage uniformity (% targets with >0.2X mean coverage)	90.0%
Recommended reads per sample	~24,000 paired-end reads
Total assay time (from DNA to sequencer)	<5 hours

<sup>\*</sup> 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<sup>†</sup> 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

<sup>&</sup>lt;sup>†</sup>VAF, variant allele frequency

### Simple, one-day workflow



Gene-specific PCR & cleanup

Indexing PCR & cleanup

Quantitation & normalization

Load sequencer

### **Ordering information**

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

Panel	Part number
oncoReveal® MGMT & MLH1 Methylation Panel (24 reactions)	HDA-HR-1010-24

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

