PILLAR BIOSCIENCES

oncoReveal™

Solid Tumor v2 Panel

The **oncoReveal™ Solid Tumor v2 Panel** is a robust 48-gene assay that simultaneously tests for key mutations present in solid tumors, including NSCLC, colorectal, melanoma, endometrial, pancreatic, GIST, bladder, thyroid, and gliomas. Additionally, genes with potential importance in immuno-oncology such as POLD1 and POLE are analyzed. The panel uses proprietary Stem-Loop Inhibition-Mediated amplification (SLIMamp®) technology, a tiled amplicon-based library prep chemistry for efficient single-tube target enrichment.

oncoReveal™ Solid Tumor v2 Panel (48 genes)

AKT1	CYSLTR2	FBXW7	GNAS	KEAP1	NTRK1	PTEN*	SMAD4
ALK	DDR2	FGFR1	H3F3A (H3-3A)	KIT	PDGFRA	PTPN11	SRSF2
ARAF	EGFR	FGFR2	HIST1H3B (H3C2)	KRAS	PIK3CA	RAC1	STK11
BRAF	EIF1AX	FGFR3	HRAS	MAP2K1	PLCB4	RAF1	TERT
CDKN2A	ERBB2	GNA11	IDH1	MET	POLD1	RET	TP53
CTNNB1	ERBB4	GNAQ	IDH2	NRAS	POLE	SF3B1	TSHR

Genes marked in green indicate full CDS coverage

* indicates full CDS with exception of exon 9, chr10; 89725157-89725229

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 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

‡ UID, unique ID; also known as unique molecular ID (UMI); † 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	48/246
Total panel size	Full CDS coverage of 3 genes; hotspots in 45 additional genes; 25.2kb total size
Variant types	SNVs, small and medium indels
Average amplicon size	154bp
Recommended DNA input range	20ng to 80ng
Sample types	DNA from tissue, blood, or FFPE
Mapping rate	98.0%
% on-target aligned reads	98.0%
Coverage uniformity (% targets with >0.2X mean coverage)	98.0%
Recommended Reads Per Sample	~2 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™ Solid Tumor v2 Panel (24 reactions)	HDA-CH-3003-24

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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Current as of 10.15.2023 | MK-0047 v1.1

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