PILLAR BIOSCIENCES

oncoReveal®

Multi-Cancer v4 with CNV Panel

The **oncoReveal® Multi-Cancer v4 with CNV Panel** is a robust NGS assay that interrogates genes of interest* across multiple solid tumor cancer types. 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. In addition to SNVs and indels, the assay detects CNVs in 14 genes.

oncoReveal® Multi-Cancer v4 with CNV Panel (60 genes)

ABL1	CDKN2A	FBXW7	GNAS	KIT ●	NPM1	PTPN11	SRC
AKTI	CSF1R	FGFR1 ●	HNF1A	KRAS ●	NRAS	RAC1	STK11
ALK	CTNNB1	FGFR2 ●	HRAS	MAP2K1	NTRK1	RB1	TP53
APC	DDR2	FGFR3 ●	IDH1	MET ■	NTRK2	RET	VHL
ATM	EGFR ■	FLT3 ●	IDH2	MLH1	NTRK3	ROS1	
BRAF	ERBB2 ■	FOXL2	JAK2	MPL	PDGFRA ●	SMAD4	
CCNE1 ●	ERBB4	GNA11	JAK3	MYC ■	PIK3CA ●	SMARCB1	
CDH1	EZH2	GNAQ	KDR ●	NOTCH1	PTEN	SMO	

CNVs detected and verified by NIST reference standard are indicated by ■ CNVs can also be detected in genes indicated by ●

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.

Multi-Cancer v4 with CNV Panel

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Panel specifications*

Enrichment chemistry	Multiplex PCR using tiled amplicons
Number of pools	1 pool
Number of genes/amplicons	60/341
Number of Targets	Hotspots in 60 genes, CNVs for 14 genes; 33.1 kb total size
Variant types	SNVs, small and medium indels, and CNVs
Average amplicon size	143bp
Recommended DNA input range	5ng to 80ng DNA
Sample types	DNA from tissue, blood, or FFPE
Mapping rate	99.23% ± 0.3%
% on-target aligned reads	99.5% ± 0.1%
Coverage uniformity (% targets with >0.2X mean coverage)	98.2% ± 0.7%
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

Ordering information

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

Panel	Part number
oncoReveal® Multi-Cancer v4 with CNV Panel (24 reactions)	HDA-HS-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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