

Solid Tumor 22 Gene Panel

The **oncoReveal® Solid Tumor 22 Gene Panel** is a robust NGS assay that interrogates 22 genes of interest* relevant to lung and colon cancer. This panel is optimized for use on the Beckman Coulter Biomek NGenius Next Generation Library Prep System, a purpose-built liquid handler for NGS library preparation. 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.

oncoReveal® Solid Tumor 22 Gene Panel

AKT1	EGFR	FGFR2	NOTCH1	STK11
ALK	ERBB2	FGFR3	NRAS	TP53
BRAF	ERBB4	KRAS	PIK3CA	
CTNNB1	FBXW7	MAP2K1	PTEN	
DDR2	FGFR1	MET	SMAD4	

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.

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oncoReveal®

Panel specifications*

Enrichment chemistry	Multiplex PCR using tiled amplicons
Number of pools	1 pool
Number of genes/amplicons	22/103
Number of targets	>1,800 hotspots in 22 genes; 10.3kb total size
Variant types	SNVs, indels
Average amplicon size	147bp
Recommended DNA input range	10ng to 80ng
Sample types	DNA from tissue, blood, or FFPE
Mapping rate	97.4% ± 2.5%
% on-target aligned reads	96.8% ± 1.3%
Coverage uniformity (% targets with >0.2X mean coverage)	99.8% ± 0.7%
Recommended reads per sample	~475,000 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 22 Gene Panel (24 reactions)	HDA-ST-1001-24

Pillar Index Kit options	Reactions	Part number
Pillar TSCA Index Primers Kit A	32 Combinations, 96 reactions	IDX-AI-1001-96

TO ORDER OR LEARN MORE:
pillarbiosci.com

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