

# 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 NGeniusS 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

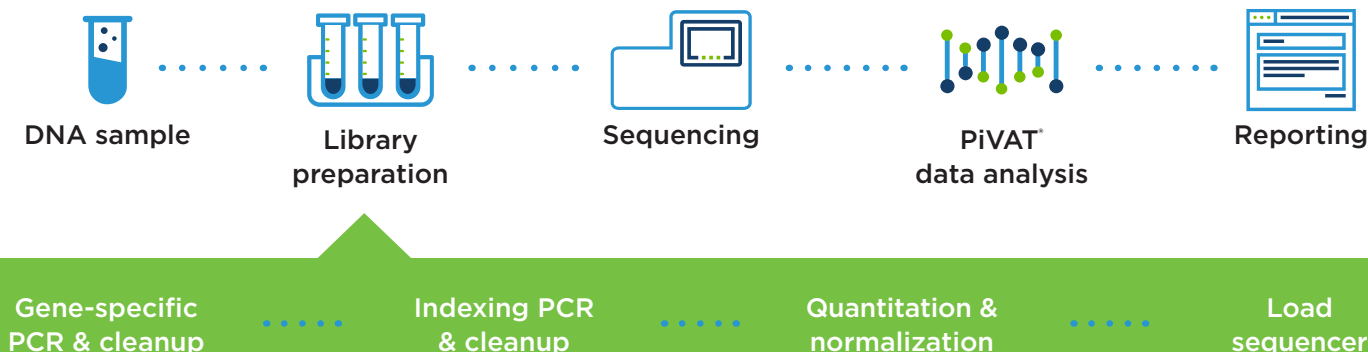
### Sensitive and robust chemistry

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



\* VAF, variant allele frequency  
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## 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% $\pm$ 2.5%
% on-target aligned reads	96.8% $\pm$ 1.3%
Coverage uniformity (% targets with >0.2X mean coverage)	99.8% $\pm$ 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](https://www.pillarbiosci.com)

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