

# TP53 Panel

The **oncoReveal® TP53 Panel** is a robust NGS assay designed to detect somatic mutations within the entire coding region of the tumor suppressor gene, TP53. 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	1/19
Number of targets	Full CDS of TP53 plus 10bp of flanking introns; 1.9kb total panel size
Variant types	SNVs, small and medium indels
Average amplicon size	155bp
DNA input range	20ng to 80ng
Sample types	DNA from tissue or FFPE
Mapping rate	95.9% ± 2.1%
% on-target aligned reads	94.0% ± 3.3%
Coverage uniformity (% targets with >0.2X mean coverage)	100%
Recommended reads per sample	~95,000 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

### 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 fully- loaded lab costs

Improve lab efficiency and reduce “no calls”, repeat testing, and difficult interpretation decisions

<sup>†</sup> VAF, variant allele frequency  
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## Simple, one-day workflow

Gene-specific  
PCR & cleanupIndexing PCR  
& cleanupQuantitation &  
normalizationLoad  
sequencer

## Ordering information

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

Panel	Part number
oncoReveal® TP53 Panel (24 reactions)	HDA-TP-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](https://pillarbiosci.com)

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