

Nexus 21 Gene Panel

The **oncoReveal® Nexus 21 Gene Panel** is a robust NGS assay designed to interrogate 21 genes relevant to both blood cancers and solid organ cancers. 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® Nexus 21 Gene Panel

ALK	EGFR	H3-3A (H3F3A)	JAK2	MET	NPM1	TP53
BRAF	ERBB2	IDH1	KIT	MPL	NRAS	PDGFRA
CALR	FLT3	IDH2	KRAS	MYD88	POLE	TERT (promoter)

Genes marked in green indicate full CDS coverage

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

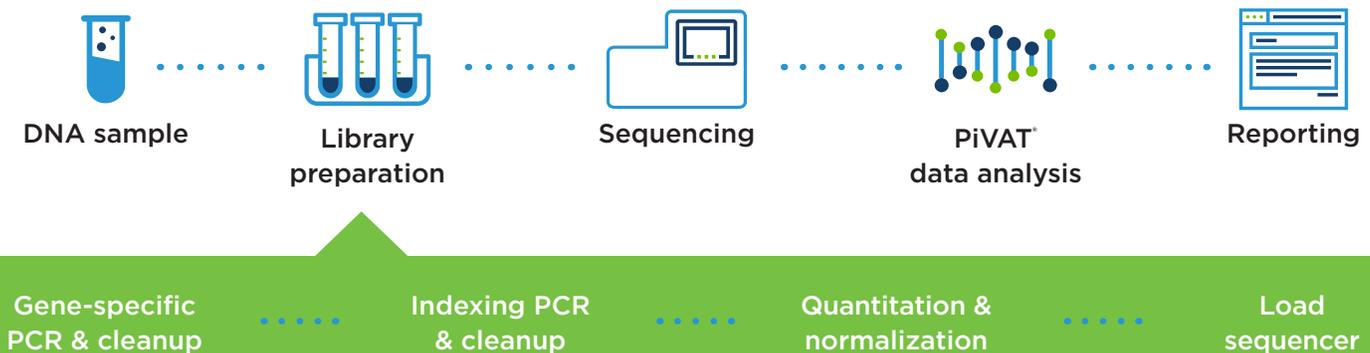
Sensitive and robust chemistry

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	21/112
Number of targets	Hotspots in 20 genes, full CDS coverage of TP53, FLT3-ITDs
Variant types	SNVs, small and medium indels, ITDs (internal tandem duplicates)
Average amplicon size	162bp
Recommended DNA input range	20ng to 60ng
Sample types	DNA from blood, FFPE
Mapping rate	>99%
% on-target aligned reads	>99%
Coverage uniformity (% targets with >0.2X mean coverage)	>95%
Recommended Reads Per Sample	>615,000 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® Nexus 21 Gene Panel (24 reactions)	HDA-HS-1012-24

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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