

oncoReveal® Nexus 21 Gene Panel

The **Pillar oncoReveal® Nexus 21 Gene Panel** is a robust NGS research 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 AI-empowered VersaTile™ Primer Design tool, for efficient single-tube target enrichment.

oncoReveal® Nexus 21 Gene Panel

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

Genes highlighted in orange 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

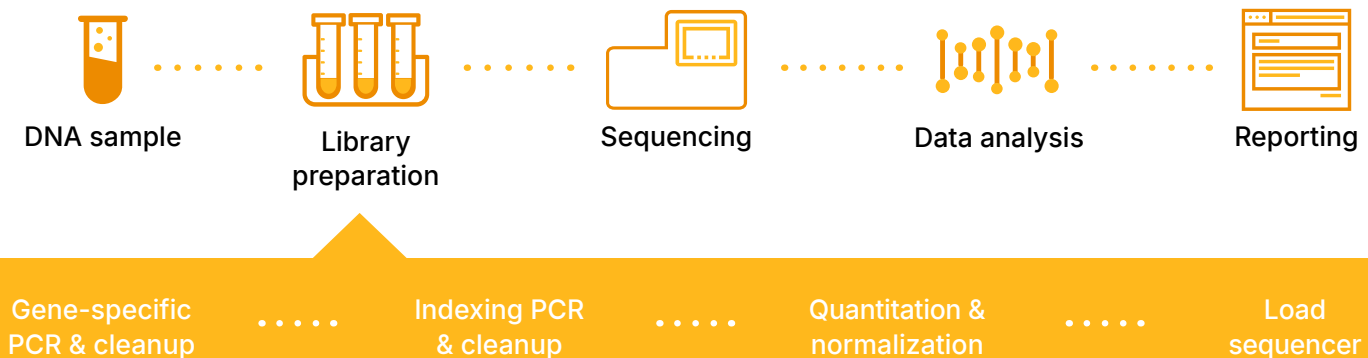
Sensitive and robust chemistry

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

For Research Use Only. Not for use in diagnostic procedures.

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 <i>TP53</i> , <i>FLT3</i> internal tandem duplicates (ITDs) |
| Variant types | SNVs, small and medium indels, ITDs |
| 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 |
| Sequencing platforms | Illumina sequencers |

* 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 |

For more information go to:
illumina.com

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