

Essential MPN Panel

The **oncoReveal® Essential MPN Panel** is a robust NGS assay that simultaneously tests for key mutations within the MPL, JAK2, and CALR genes. 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® Essential MPN Panel

Gene	Exon
CALR	exon 9
JAK2	exon 12-15
MPL	exon 10

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

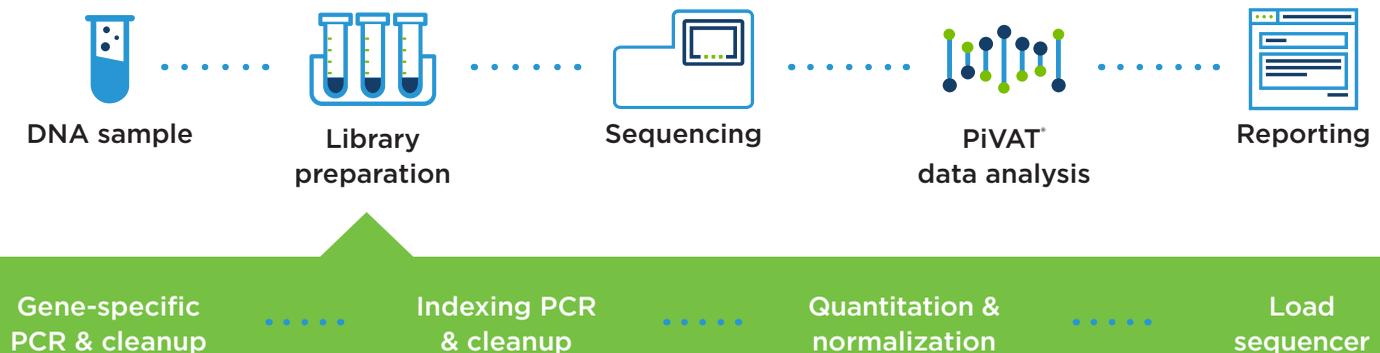
Sensitive and robust chemistry

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	3/7
Number of Targets	CALR (exon 9), JAK2 (exon 12-15), MPL (exon 10); 1.1kb total size
Variant types	SNVs, small and medium indels
Average amplicon size	225bp
Recommended DNA input range	20ng to 60ng
Sample types	DNA from whole blood, PBMCs
Mapping rate	99.8% ± 0.1%
% on-target aligned reads	99.9% ± 0.0%
Coverage uniformity (% targets with >0.2X mean coverage)	100%
Recommended Reads Per Sample	~30,000 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® Essential MPN Panel (48 reactions)	HDA-MY-1002-48

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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