



Pillar® INHERIT/Reveal™ Thalassemia Panel

The INHERIT/Reveal Thalassemia Panel is specifically designed to cover mutations in the hemoglobin alpha chain (HBA1 and HBA2) and beta chain (HBB), which are responsible for alpha and beta thalassemia. The panel uses proprietary Stem-Loop Inhibition-Mediated amplification (SLIMamp®) technology for efficient single-tube target enrichment. Additionally, known long deletions (10-30kb) are detected by gapPCR.

Panel attributes

Enrichment chemistry	Multiplex PCR using tiled amplicons
Number of pools	1 pool
Number of genes/amplicons	3/125
Number of targets	HBA1 and HBA2 hotspots; HBB full CDS and splice sites, 3' UTRs, 5' UTRs with promoter regions and pathogenic intronic regions
Variant types	SNVs, small and medium indels, large deletions, CNVs
Average amplicon size	156bp (131bp-175bp range; excludes GAP PCR amplicons)
Input DNA range	5ng to 80ng (20ng recommended)
Sample types	Genomic DNA
Mapping rate	99.7% ± 0.1%
% on-target aligned reads	99.5% ± 0.1%
Coverage uniformity (% targets with >0.2X mean coverage)	96.5% ± 2.4%
Total assay time (from DNA to sequencer)	<8 hours
Sequencing platforms	Illumina®, MGISEQ™, and Ion Torrent™ platforms

Simple NGS library prep workflow

Maintain control of your 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[†] (for somatic panels) without UID[‡] even with limited DNA input or poor sample quality

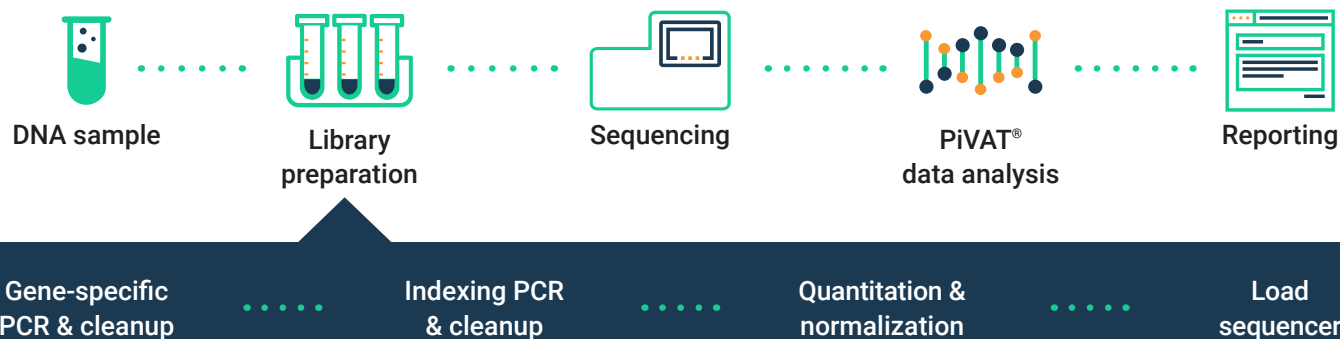
Reduced fully-loaded costs

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

[†] VAF, variant allele frequency

[‡] UID, unique ID; also known as unique molecular ID (UMI)

Simple, one-day workflow



Ordering information

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

Panel	Part number
INHERIT/Reveal Thalessemia Panel	HDA-TH-1001-24

Pillar Index Kit options	Part number
Pillar Kit A, indices PI501-8, PI701-4 (32 combinations)	IDX-PI-1001-96
Pillar Kit B, indices PI501-8, PI705-8 (32 combinations)	IDX-PI-1002-96
Pillar Kit C, indices PI501-8, PI709-12 (32 combinations)	IDX-PI-1003-96
Pillar Kit D, indices PI501-8, PI701-12 (96 combinations)	IDX-PI-1004-192
Pillar Kit E, indices PI501-8, PI701-12 (96 combinations)	IDX-PI-1004-384

Ion Torrent Index Kit options	Part number
Pillar Biosciences IonXpress Indexing Kit A (24 combinations) <i>Includes ION Common Index</i>	IDX-TI-1001-96

MGI Index Kit options	Part number
Pillar Biosciences MGI Indexing Kit A (24 combinations) <i>Includes BGI Common Index</i>	IDX-BI-1001-96

Order or learn more at
pillar-biosciences.com



**PILLAR
BIOSCIENCES**

For Research Use Only. Not for use in diagnostic procedures.
©2019 Pillar Biosciences, and ISO 13485:2016-certified company. Pillar®, SLiMamp®, PiVAT® and ONCO/Reveal™ are trademarks of Pillar Biosciences, Inc. Illumina® is a trademark of Illumina, Inc. Ion Torrent™ is a trademark of Thermo Fisher Scientific. MGISEQ™ is a trademark of MGI Tech Co, Ltd.
MK-0015-1

Pillar Biosciences, Inc.
12 Michigan Dr
Natick, MA 01760
(800) 514-9307
info@pillar-biosciences.com