



KAPA HyperCap Heredity Panel

Better by Design

Combining more than a decade of probe design experience with a high-fidelity probe manufacturing process, the **KAPA HyperCap Heredity Panel** enables comprehensive, in-depth access to hereditary disease genomic content. This compact panel for hybridization-based target enrichment offers greater sequencing efficiency, high on-target rates, and low PCR duplication rates. Order this 10 Mb hybrid capture panel today and start investigating heredity disease tomorrow.

- Enrich for 3332 genes strongly associated with hereditary genetic diseases and oncology, including ClinVar pathogenic and likely pathogenic variants
- Maximize sequencing efficiency with >98% target coverage at 30X with (10 M high-quality clusters)
- Streamline targeted sequencing with the HyperCap Workflow v3, driven by KAPA HyperPrep or KAPA HyperPlus Library Prep Kits



Project: KAPA HyperCap Fixed Panels, Pleasanton, CA 2021 For Research Use Only. Not for use in diagnostic procedures.

Enrich for 3332 genes strongly associated with hereditary genetic diseases and oncology

- Enrich for more than 85% of ClinVar pathogenic and likely pathogenic content at >30X by targeting 3332 carefully selected genes with a sequencing-efficient 10 Mb capture panel
- Achieve a high percentage of bases covered at ≥30X for disease-associated genes from key genomic databases
 (Figure 1)



% bases covered by ≥30X

Figure 1. Percent of bases in key genomic databases covered at ≥30X using the KAPA HyperCap Heredity Panel. Target-enriched libraries were created following the standard KAPA HyperCap Workflow v3 with the KAPA HyperPrep Kit, using 100 ng of gDNA as input (96 library replicates; NA12878 DNA) and 12-plex pre-capture multiplexing for hybrid capture. Final libraries were sequenced on a NovaSeq[™] 6000 system (2 x 100 bp) and downsampled to 10 M high-quality filtered clusters prior to analysis.

Maximize sequencing efficiency with >98% target coverage at 30X with 10 M high-quality clusters



Key sequencing and enrichment metrics

Figure 2. Key sequencing metrics generated with the KAPA HyperCap Heredity Panel. Target-enriched libraries were created following the standard KAPA HyperCap Workflow v3 with the KAPA HyperPlus Kit, using 100 ng of gDNA as input (duplicate samples using gDNA from 16 Coriell cell lines) and 8-plex pre-capture multiplexing. Final libraries were sequenced on a NovaSeq[™] 6000 system (2 x 100 bp) and downsampled to 10 M high-quality filtered clusters prior to analysis.

Streamline target enrichment with KAPA HyperCap Workflow v3

KAPA HyperCap Workflow v3 delivers complex libraries by combining the high conversion rate of KAPA HyperPrep or KAPA HyperPlus Kits with KAPA Target Enrichment, creating a streamlined, single-vendor supported workflow.

- Multiplex up to 16 samples in the same capture, and potentially post-capture multiplex more samples in the same sequencing lane with KAPA UDI Primer Mixes,1-384
- Reduce workflow complexity and hands-on time with KAPA Universal Enhancing Oligos, eliminating the need for adapter-matched blocking oligos
- Automate the entire KAPA HyperCap Workflow v3 without the need for a SpeedVac—now with all hybridization and bead wash steps a 55°C



Explore KAPA Target Enrichment Probes: Better by Design

- KAPA Target Enrichment Probes are manufactured with KAPA HiFi DNA Polymerase and demonstrate extremely high sequence fidelity, high on-target rates, and high accuracy and reproducibility
- The concentration and presence of each probe in every probe pool is confirmed by NGS-based QC
- Production lots of up to 100,000 capture reactions ensure the highest reproducibility for your routine testing workflows



Ordering information

Product Name	Capture Reactions	Catalog No.
KAPA HyperCap Heredity Panel	12	09462473001
	24	09462481001
	48	09462490001
	96	09462503001
	192	09462511001



Learn more at: https://go.roche.com/HyperCapHP

Request an evaluation of the KAPA HyperCap Heredity Panel at: https://go.roche.com/HyperCapEval

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