Enrich EFFICIENCY

KAPA HyperCap Fixed Panels increase sequencing efficiency

Access relevant content faster and with greater sequencing efficiency. The KAPA HyperCap Fixed Panels are catalog gene panels for target enrichment research applications which are readily available from stock. Based on Roche's renowned content and probe design expertise, the KAPA HyperCap Fixed Panels offer high sequencing efficiency and answers that matter to your research questions.

KAPA HyperCap Heredity Panel

- Covers 3332 genes strongly associated with hereditary genetics and oncology
- Offers a compact capture target size of less than 10 Mb
- Achieves >98% of target coverage at 30x with 10M high quality (HQ) clusters

KAPA HyperCap Oncology Panel

- Covers 13 genes strongly associated with somatic oncology in a 214 Kb capture target
- Covers additional hotspot variants available in commercial FFPET and cfDNA controls
- Achieves >97.5% of target coverage at 1000x with 50M HQ clusters from 10 ng cfDNA

Benefits of KAPA HyperCap Fixed Panels

Relevant content	from Roche's renowned content and design expertise to sequence what matters
Sequencing efficiency	by extensive validation and optimized protocols that address challenging input quality
Fast delivery	with quick shipping from stock through Roche's global distribution network

KAPA HyperCap Heredity Panel offers high performance

Elevate sequencing efficiency

- Achieve a fine balance of high specificity (80.9% reads on-target), high uniformity (1.42 Fold-80 base penalty) and low PCR duplication (2.2%)
- Maximize your sequencing efficiency to cover 98.5% of the target bases by 30x and achieve a mean coverage of 92.6x
- Uncover efficiencies across the sample preparation process with the streamlined and automation-friendly KAPA HyperCap Workflow

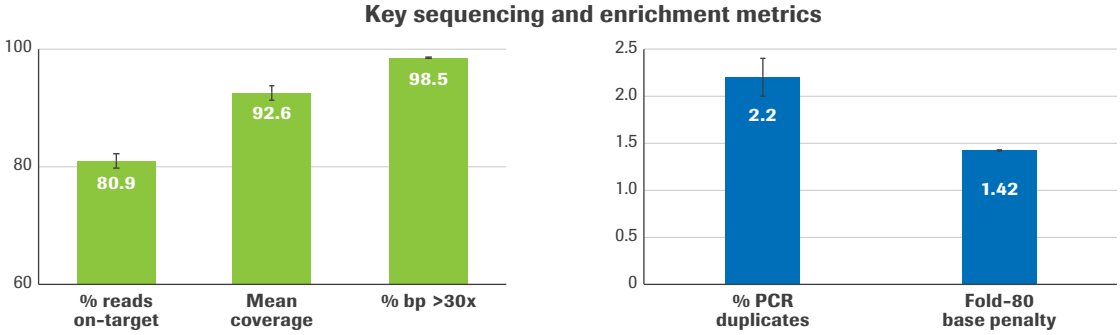

Figure 1. Key sequencing metrics with the KAPA HyperCap Heredity Panel. Eight-plex pre-capture multiplexing with the standard KAPA HyperCap Workflow v3 including the KAPA HyperPlus Kit from 100 ng gDNA (16 coriell cell lines in duplicate). Final libraries were sequenced on a NovaSeq™ 6000 system and downsampled to 10 M HQ filtered clusters (2 x 100 bp) prior to analysis.

Sequence what matters

- Rely on Roche's renowned content and design expertise to focus on relevant up-to-date content
- Cover more than 85% of the total ClinVar Pathogenic and likely pathogenic content at >30x by targeting those carefully selected 3332 genes in a sequencing efficient 10 Mb capture target
- Achieve high percentage of bases covered by 30x for the ACMG 73 genes and the ENSEMBL and RefSeq transcripts of the 3332 genes targeted by the KAPA HyperCap Heredity Panel

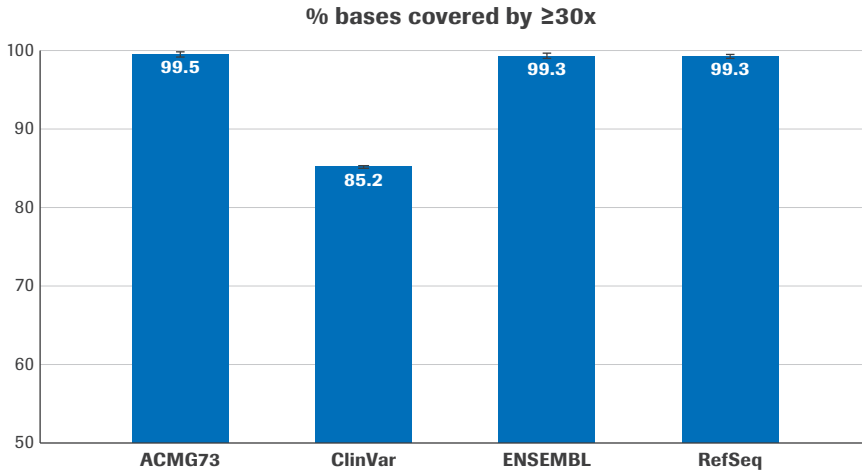

Figure 2. Percent bases covered at 30x and above in key genomic databases using the KAPA HyperCap Heredity Panel. Twelve-plex pre-capture multiplexing with the standard KAPA HyperCap Workflow v3 and the KAPA HyperPrep Kit from 100 ng gDNA (96 replicates, NA12878). Final libraries were sequenced on a NovaSeq™ 6000 system and downsampled to 10 M high-quality filtered clusters (2 x 100 bp) prior to analysis.

Data on file.
For Research Use Only. Not for use in diagnostic procedures.

KAPA HyperCap Oncology Panel excels with difficult samples

Access the information hidden in low-quality FFPET samples

- Unlock the potential of challenging samples with the extensively optimized KAPA HyperCap FFPET DNA Workflow and the accuracy provided by the KAPA Universal UMI Adapter
- Sequence with confidence low quantity and low quality FFPET DNA samples by achieving high percentage of error-free positions over your target (>94%)
- Achieve uniform and deep sequencing coverage with greater than 92% of bases covered within 0.5x – 2x of the median and greater than 88% of exon bases covered by more than 300x

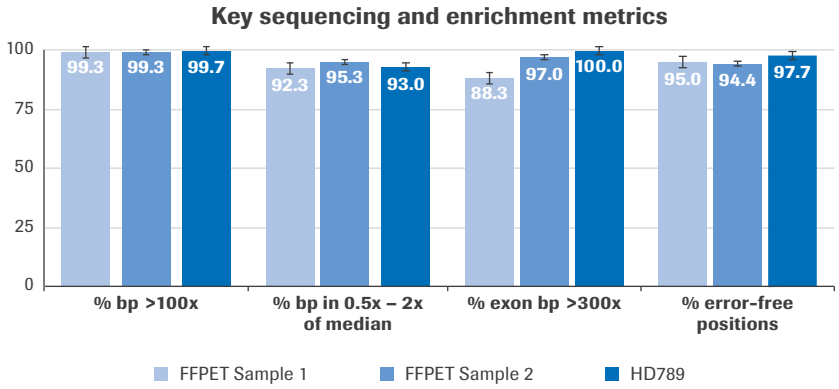

Figure 3. Key sequencing metrics with the KAPA HyperCap Oncology Panel. Two real-world low-quality FFPET DNA samples were compared with the Horizon™ HD789 control FFPE DNA sample. Sample libraries (in duplicates) were prepared following the KAPA HyperCap FFPET DNA Workflow from 10 ng FFPE DNA with the KAPA HyperPlus Kit. Following single library hybridization and capture, the final libraries were sequenced on a NextSeq™ 550 system and downsampled to 10 M HQ filtered clusters (2 x 150 bp) prior to analysis.

Achieve deep sequencing from 10 ng of cfDNA

- Retrieve sufficient unique molecules with high percentage of duplex molecule recovery for deep and efficient cell-free DNA sequencing with the KAPA Universal UMI Adapter
- Achieve high genome equivalent recovery rates and cover more than 97.5% of your target bases with at least 1000x from just 10 ng of cfDNA with the KAPA HyperCap cfDNA Workflow

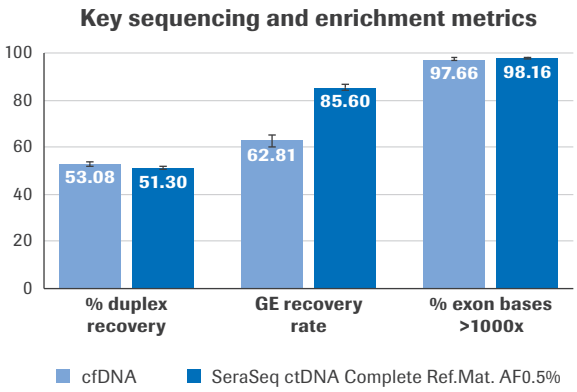

Figure 4. Five healthy donor cfDNA samples were tested in duplicate (average is shown), in parallel with SeraSeq® ctDNA Complete™ Reference Material AF0.5% (duplicates) starting from 10 ng of input. The KAPA HyperCap cfDNA Workflow was followed using the KAPA HyperPrep Kit and single sample library hybridization and captures. Final libraries were sequenced on a NovaSeq™ 6000 system. Fifty (50) million high-quality filtered clusters (2 x 150 bp) were analyzed per sample.

Data on file.
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KAPA HyperCap Probes increase sequencing efficiency

The KAPA HyperCap Fixed Panels are part of the KAPA HyperCap Probes portfolio which includes KAPA HyperExome Probes for highly efficient Whole-Exome Sequencing and custom probes such as the KAPA HyperChoice and HyperExplore Probes. All these high-performing products share key features and benefits:

Better by design — Roche's renowned probe design and selection algorithms enable access to difficult genomic regions and are freely accessible in the HyperDesign Tool

Stronger enrichment — with high fidelity probes manufactured using KAPA HiFi DNA Polymerase

Consistent quality — with probe presence and concentration QC by NGS

High efficiency — by robust validation with KAPA library preparation kits to deliver high uniformity and low duplicate rates

Ordering information for KAPA HyperCap Fixed Panels

Roche cat. no.	Description	Pack size
09462473001	KAPA HyperCap Heredity panel 12 rxn	12 reactions
09462481001	KAPA HyperCap Heredity panel 24 rxn	24 reactions
09462490001	KAPA HyperCap Heredity panel 48 rxn	48 reactions
09462503001	KAPA HyperCap Heredity panel 96 rxn	96 reactions
09462511001	KAPA HyperCap Heredity panel 192 rxn	192 reactions
09462384001	KAPA HyperCap Oncology panel 12 rxn	12 reactions
09462457001	KAPA HyperCap Oncology panel 24 rxn	24 reactions
09462465001	KAPA HyperCap Oncology panel 48 rxn	48 reactions

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Published by:

Roche Sequencing Solutions, Inc.
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Pleasanton, CA 94588

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MC--07966 08/21