xGen™ NGS—helping researchers overcome cancers biggest challenges

Don't limit your research, customize your workflow to your needs

With IDT's xGen solutions researchers can customize their workflow components to their specific needs

Library prep kits—one vendor for all your library prep needs

These library prep kits can be customized to ensure your volume or automation needs are met. Further customization is also available learn more by contacting us at www.idtdna.com/ContactUs.

Adapters & primers—comprehensive offering of high purity adapters and primers

Whether your project requires an off-the-shelf indexing solution or a more sophisticated, fully customized design, we have the products and expertise to deliver the right solution from single indexes to unique molecular identifiers (UMI).

Hybridization capture panels—customize & scale your workflow as needed

The IDT xGen hybridization products include a variety of predesigned cancer specific panels and custom panel options that are available in a range of panel sizes. All supported by an automation-friendly protocol for those working with high-throughput type applications.

Amplicon sequencing—sequence faster with an easy-to-use workflow

Expertly designed research panels using content from peer-reviewed publications and thought leader input. Panels include primers for researching cancer genes, rare disease, and sample tracking applications.

Custom panel options compatible with Illumina® and Oxford Nanopore Technologies™ are also available.

Product spotlight: Enabling ultra-low frequency variant identification in ctDNA with xGen cfDNA & FFPE Library Prep Kit with Custom xGen Hyb Capture Panel

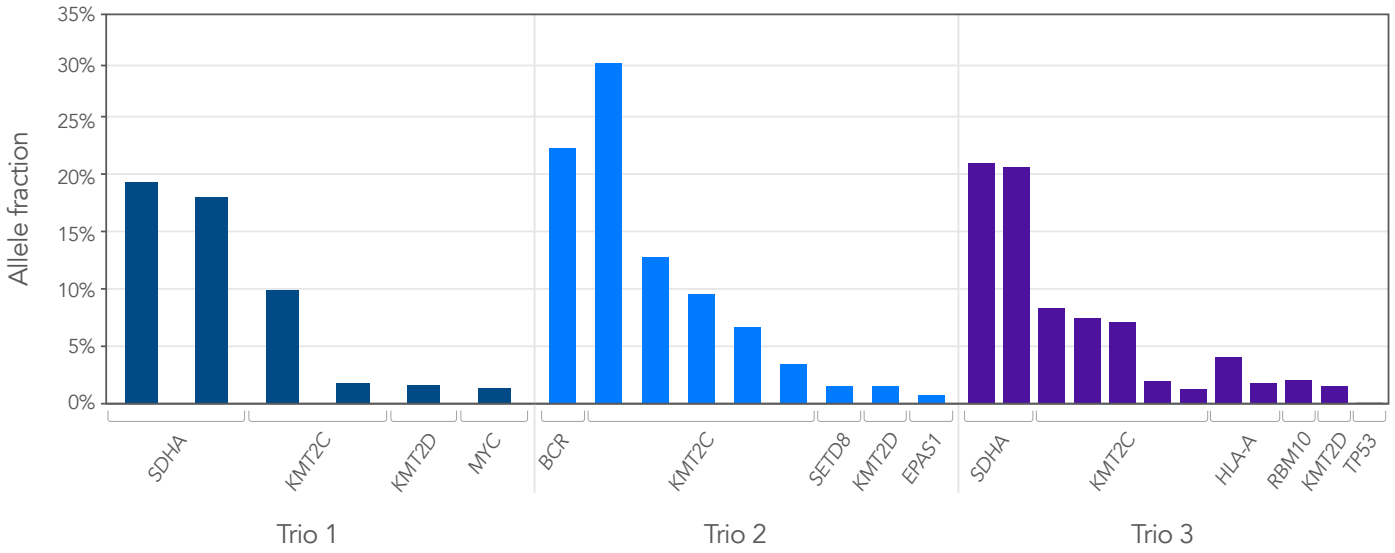

Figure 1. Libraries were generated according to the xGen cfDNA & FFPE DNA Library Prep Kit protocol using 25 ng matched cfDNA from three trios. Libraries (*n* = 3) were captured with subject-specific xGen Custom Hyb Panels. After sequencing, reads were mapped using BWA (0.7.15). Error correction with combined read families was performed as described in the xGen cfDNA & FFPE DNA Library Prep Kit Analysis Guidelines. Finally, variants were called using VarDict (1.5.8); no filters were applied for the error-corrected xGen cfDNA & FFPE DNA Library Prep Kit data. Allele fraction of each tumor-associated variant for each subject is shown.

Mix and match your cancer research workflow components

Target enrichment components for hybridization capture or amplicon sequencing methods.

xGen Library Prep Kits	xGen Adapters & Primers	xGen Hyb Capture Panels
• DNA EZ or MC • cfDNA & FFPE DNA • RNA • Broad-Range RNA • Methyl-Seq • 2S DNA • ssDNA & Low-Input DNA	• Unique Dual Index (UDI) • UDI + UMI • UDI + Stubby Adapters • Combinatorial Dual Index (CDI) • Single Index (SI)	• Custom Hyb Panels • Exome Hyb Panel v2 • Pan Cancer Hyb Panel • AML Cancer Hyb Panel • Inherited Disease Hyb Panel • CNV Backbone Hyb Panel • Hyman ID Hyb Panel

xGen Library Prep Kits	xGen Primers	xGen Amplicon Panels
Amplicon Core Kit	• Unique Dual Index (UDI) • Combinatorial Dual Index (CDI)	• Custom Amplicon Panels • 56G Onco Amp Panel • 57G Pan-Cancer Amp Panel • BRCA1/2 Amp Panel • Colorectal Amp Panel • EGFR Pathway Amp Panel • Lynch Amp Panel • Myeloid Amp Panel • TP53 Amp Panel

Learn more about our cancer research solutions

There are multiple factors to take into consideration when determining the best NGS approach for your cancer research needs. Scan the QR code to request IDT's downloadable brochure that has additional information on our xGen NGS workflows for cancer research.

For more information, visit **www.idtdna.com/NGS**

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