xGen® Lockdown® Panels

Ready-to-use panels for targeted next generation sequencing

Convenient, predesigned xGen Lockdown enrichment panels enable you to quickly begin generating data across an array of genomics applications and disease areas. xGen Lockdown Panels consist of individually synthesized and quality controlled xGen Lockdown Probes. These 120-nucleotide, biotin-labeled DNA probes have been designed to provide the highest level of performance.

xGen Exome Research Panel

The xGen Exome Research Panel consists of 429,826 individually synthesized and quality controlled probes covering 39 Mb of target region and 51 Mb of end-to-end tiled space, offering the most compact, high coverage exome target enrichment panel commercially available. The high quality of these probes, combined with optimized hybridization reagents and protocols, provides comprehensive and uniform coverage of the human exon coding regions in the hg19 genome build.

benefits

Ensure confidence in your data through use of predesigned and validated designs.

Generate the highest level of performance with optimized content for your application.

Accelerate your research with panels available for immediate shipment.

Conveniently expand predesigned panels by adding supplementary custom xGen Lockdown Probes.

Discover more at
www.idtdna.com/xGen

xGen Acute Myeloid Leukemia Cancer Panel

The xGen Acute Myeloid Leukemia Cancer Panel delivers targeted enrichment of >260 genes associated with AML for rapid and focused identification of disease-related variants. Capture target sequences were defined by sequencing the genomes and exomes of 200 AML patients to deliver a highly relevant panel.

xGen Pan-Cancer Panel

The xGen Pan-Cancer Panel captures 127 commonly reported mutated genes implicated across 12 tumor tissue types. This panel's design was based on the findings of The Cancer Genome Atlas network's systematic analysis of >3000 tumors from these 12 cancer types.

xGen Inherited Diseases Panel

The xGen Inherited Diseases Panel is specifically designed for targeted enrichment of genes and SNPs associated with 21 inherited diseases, such as autism spectrum disorders, cardiomyopathy, and neuromuscular disorders defined in the HGMD(r) database.

xGen Human ID Research Panel

The xGen Human ID Research Panel enables unique identification of individual samples from a larger population. This 229-probe panel provides target enrichment of a distinctive set of SNPs in 76 genomic regions, including high minor-allele frequency SNPs and gender marker SNPs, enabling discrimination power of >1 in 5 million samples. Recommended as a spike-in panel, it can be used to track and manage samples in longitudinal studies.

xGen Human mtDNA Research Panel

The xGen Human mtDNA Research Panel provides complete coverage of the 16 kb human mitochondrial genome using 138 xGen Lockdown Probes. Recommended for use as a spike-in panel to larger capture panels, the mtDNA Research Panel does not affect target specificity and coverage uniformity of the original panel.

Target capture workflow

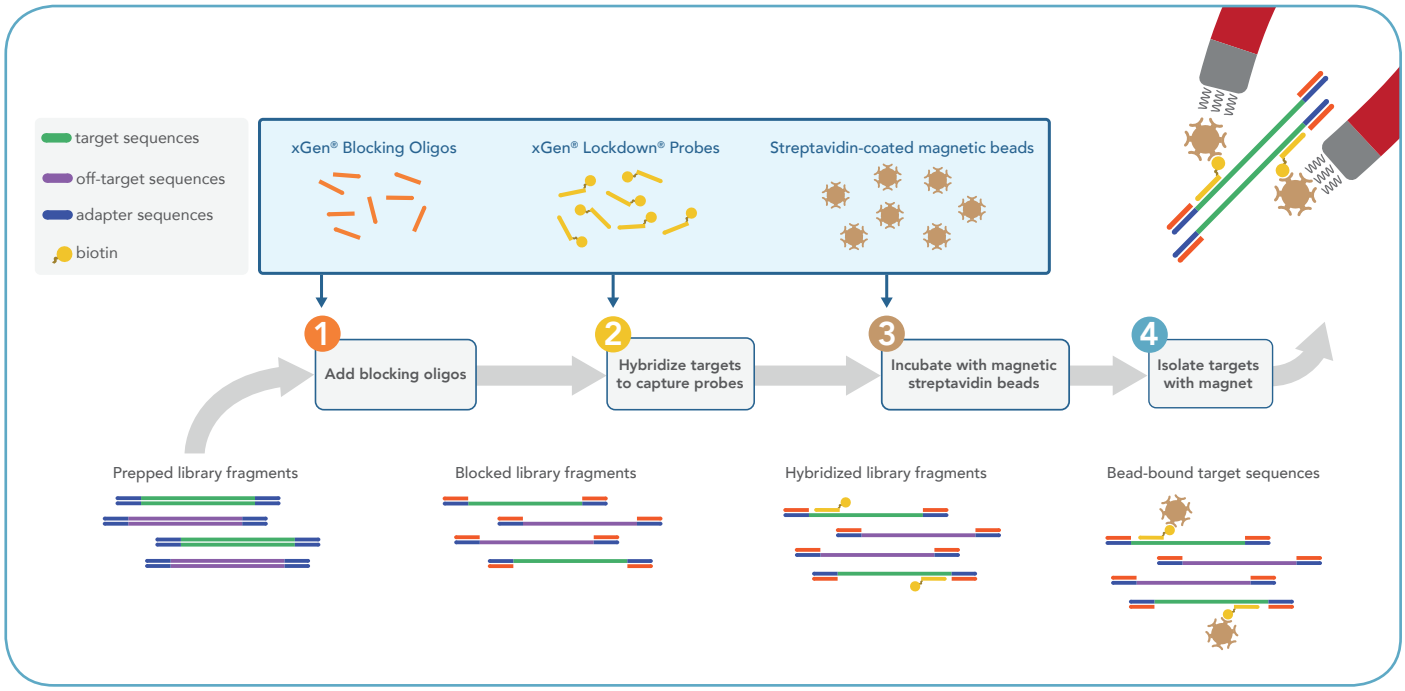

Figure 1. xGen® target capture workflow. xGen Blocking Oligos improve enrichment performance by binding to platform-specific adapters to prevent cross-reactivity between library fragments. xGen Lockdown® Probes bind to target regions of interest during in-solution hybrid capture. Targeted regions are then pulled out of solution using streptavidin beads.

Ordering information

xGen® Lockdown® Panels

Product	Unit size	Catalog #
xGen® Exome Research Panel	16 reactions 96 reactions	1056114 1056115
xGen® Acute Myeloid Leukemia Cancer Panel	16 reactions 96 reactions	1016303 1016302
xGen® Pan-Cancer Panel	16 reactions 96 reactions	1056205 1056204
xGen® Inherited Diseases Panel	16 reactions 96 reactions	1016352 1016351
xGen® Human ID Research Panel	16 reactions 96 reactions	1075702 1075703
xGen® Human mtDNA Research Panel	16 reactions 96 reactions	1075705 1075706

www.idtdna.com/LockdownPanels

For Research Use Only. Not for use in diagnostic procedures.

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