

IMPROVED TARGET ENRICHMENT WORKFLOW

Accelerate your NGS studies with our xGen™ Hybridization and Wash Kit and protocol



Robust workflow

Expect quality-driven superior results with our revised, end-to-end capture workflow



Complete kit

Execute your NGS study with a complete solution using our upgraded kit



Higher throughput

Expand your throughput options using our protocols to run plates manually or on automated workstations

The xGen Hybridization and Wash Kit has been developed to work with xGen Lockdown™ Probes and Panels and xGen Blocking Oligos for a complete, high-quality target enrichment solution. This hybridization capture workflow is compatible with DNA libraries prepared using any traditional ligation-based methods, such as TruSeq® and Nextera® DNA library preparation kits (Illumina).

xGEN NGS TARGET CAPTURE WORKFLOW

Prepare libraries

IDT library prep kits and IDT adapters

Target enrichment

xGen Hybridization and Wash Kit

Add blockers

xGen Blocking Oligos

Capture & wash

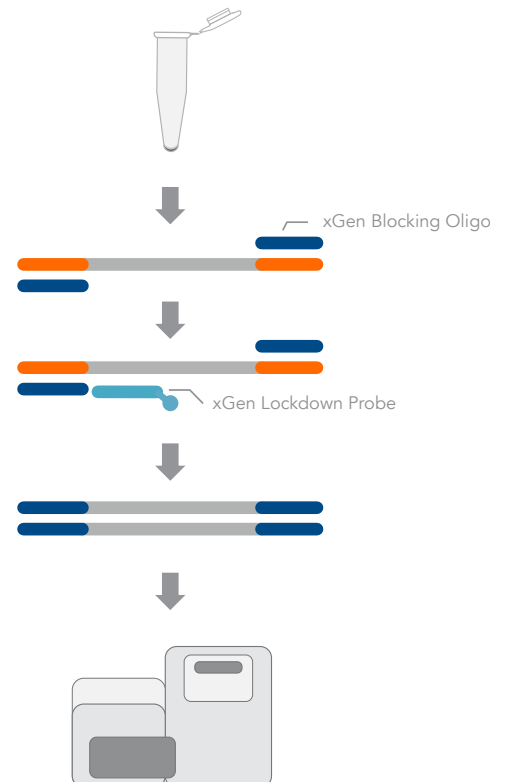
xGen Lockdown Panels, xGen Lockdown Probes, NGS Discovery Pools, xGen Exome Research Panel v2, xGen Gene Capture Pools

Amplify DNA

xGen Library Amplification Primer Mix

Sequence libraries and analyze data

Illumina platforms



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xGen Lockdown Panels consist of individually synthesized, and quality-controlled xGen Lockdown Probes. Mass spectrometry and OD measurements are taken for each probe to ensure appropriate representation of the correctly manufactured probes in the pool. This delivers high on-target rates and deep, uniform coverage even across difficult GC-rich regions (Figure 2). IDT provides both custom and stocked panels, including the **xGen Exome Research Panel v2**. This panel spans a 34 Mb target region (19,433 genes) of the human genome and covers 38 Mb of variable tiled probe space.

Kit contents	xGen Hybridization and Wash Kit (new kit)	xGen Lockdown Reagents (legacy kit)
2X Hybridization Buffer	✓	✓
Hybridization Buffer Enhancer	✓	✓
2X Bead Wash Buffer	✓	✓
10X Wash Buffer I	✓	✓
10X Wash Buffer II	✓	✓
10X Wash Buffer III	✓	✓
10X Stringent Wash Buffer	✓	✓
Dynabeads™ M-270 Streptavidin	✓	
Human Cot DNA	✓	
Supported workflows		
Manual, tube-based	✓	✓
Manual, plate-based	✓	
Optimized for automation	✓	

The xGen Hybridization and Wash Kit replaces IDT's legacy xGen Lockdown Reagents. This expanded kit is now comprehensive—it takes you from beginning to end of the entire hybridization capture workflow. A newly optimized protocol, the **xGen hybridization capture of DNA libraries**, provides support for both 96-well plate and individual tube formats. An automated NGS target enrichment protocol is also available for high-throughput labs with liquid handling instruments.

Realize a potential 30%* savings in overall consumable reagent cost using the new xGen Hybridization and Wash Kit, compared with the legacy kit.

ORDERING INFORMATION

Product	Size	Catalog #
xGen Hybridization and Wash Kit	16 rxn	1080577
	96 rxn	1080584
Related Products	Size	Catalog #
xGen Library Amplification Primer Mix	16 rxn	1077675
	96 rxn	1077676
	192 rxn	1077677
IDT library prep kit	16 rxn	www.idtdna.com/library-prep
	96 rxn	
IDT NGS adapters	Varies	www.idtdna.com/NGS-adapters
NGS Discovery Pools	Varies	www.idtdna.com/NGS-Discovery-Pools

* 30% cost savings based on previous xGen Lockdown Reagent workflow and purchasing recommended, third-party reagents at list price.

> FOR MORE INFORMATION, VISIT WWW.IDTDNA.COM/XGEN.

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