

# GeneRead™ DNaseq Targeted Panels V2

## For targeted enrichment prior to next-generation sequencing

The GeneRead DNaseq Targeted Panels enable enrichment of the coding regions and exon/intron junctions of genes frequently mutated in a particular disease. Using a high-dimension multiplex PCR targeted enrichment approach, DNaseq targeted panels increase the efficiency of sequencing efforts by focusing on the genes most relevant to a specific disease or research area. These panels provide enrichment to enable ultra-deep sequencing and detection of low-frequency mutations in FFPE samples. The GeneRead DNaseq panels can be used with any NGS sequencer.

### Benefits of GeneRead DNaseq Targeted Panels:

- Single panel for all NGS platforms
- Well-suited for FFPE samples
- Use as little as 10 ng starting DNA per PCR pool
- Rapid turn-around time (3 hours)
- One library construction per sample

### Clinically and biologically relevant content

GeneRead DNaseq Targeted Panels focus on specific mutations, exons, and genes that are most relevant to a particular disease. The content of these panels was selected from the College of American Pathologists (CAP) guidelines, NCCN guidelines, late-stage clinical trials, The Cancer Genome Atlas (TCGA), and Ingenuity® Knowledge Base.

### Largest available collection of panels

14 cataloged panels address distinct NGS analysis needs, ranging from precise detection of actionable mutations in solid tumors and hematologic malignancies to mutation profiling for specific cancer types, cardiomyopathy, and inherited genetic diseases.

### Flexible custom panel

Build your own unique panel to fit your research requirements, sample type, gene coverage, and instrument read length, anywhere in the human genome.

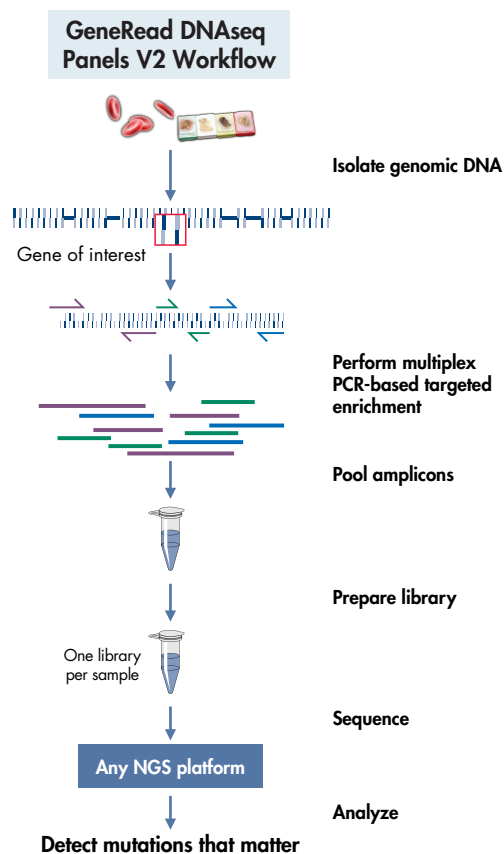


Figure 1. GeneRead DNaseq Targeted Panels V2 workflow.



**Table 1. Wet-bench verified genes panels with high performance**

Type	Panel	# Genes	Size (kb)	# Amplicons	Specificity	Uniformity (0.2x mean)	Experimental coverage
Solid tumors	Tumor Actionable Mutations*	8	7.1	118	98.2%	91%	91%
	Clinically Relevant Tumor†	24	40	602	95.3%	90%	90%
Hematologic malignancies	Myeloid Neoplasms	50	236	2536	97.4%	94%	94%
Disease-specific	Breast Cancer	44	269	2915	96.8%	91%	91%
	Colorectal Cancer	38	183	1954	98.3%	95%	95%
	Liver Cancer	33	191	2052	96.4%	96%	96%
	Lung Cancer	45	333	3586	98.1%	90%	90%
	Ovarian Cancer	32	189	2021	96.6%	96%	96%
	Prostate Cancer	32	167	1837	97.3%	94%	94%
	Gastric Cancer	29	222	2377	98.5%	93%	93%
	Cardiomyopathy	58	250	2657	96.7%	87%	87%
Comprehensive	Carrier Testing	157	665	6943	97.9%	91%	91%
	Cancer Predisposition	143	620	6582	96.8%	93%	93%
	Comprehensive Cancer	160	745	7951	97.7%	92%	92%

\* HotSpot panel.

† Panel of HotSpots and exons of oncogenes, and complete coding regions of tumor suppressor genes.

## Ordering Information

Product	Contents	Cat. no.
GeneRead DNaseq Targeted Panel V2	Set of verified primers for a set of genes (<100) focused on specific areas of research (4- or 1-pool set) (for 12 or 96 samples)	181900
GeneRead DNaseq Targeted HC Panel V2	High content (>100 genes) set of verified primers for genes focused on specific areas of research (4-pool set) (for 12 or 96 samples)	181901
GeneRead DNaseq Custom Panel V2	Combination of primer sets for any gene or genomic region within the human genome (non-verified) (480 samples)	181902
GeneRead DNaseq Mix-n-Match Panel V2	Combination of primer sets for any gene in our pre-verified set of more than 550 genes (96 samples)	181905
GeneRead DNaseq Panel PCR Kit V2	PCR kit for use with GeneRead DNaseq Targeted Panels V2	Varies
GeneRead DNA QuantiMIZE Array Kit	Set of verified primers for 30 or 63 samples	180642

For up-to-date licensing information and product-specific disclaimers, see the respective QIAGEN kit handbook or user manual. QIAGEN kit handbooks and user manuals are available at [www.qiagen.com](http://www.qiagen.com) or can be requested from QIAGEN Technical Services or your local distributor.

## Find out more at [www.qiagen.com/search/generad-dnaseq-gene-panels-v2](http://www.qiagen.com/search/generad-dnaseq-gene-panels-v2)!

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