

Pre-Designed NGS Cancer Gene Panels

Powered by the TargetPlex[™] Noise-Canceling Technology

The TargetPlex Pre-Designed NGS Cancer Gene Panels allows translational and disease oncology researchers the ability to accelerate their research by surveying hotspots and/or whole coding regions in oncogenes and tumor suppressor genes with supperior workflow efficiency using a targeted amplicon



enrichment method. Our conveniently predesigned and wet-lab validated next-generation sequencing (NGS) cancer gene panels give researchers the ability to focus on data generation and analysis, not on the labor-intensive target selection, multiplexing primer design, and extensive downstream panel optimization.

The Pre-Designed NGS Cancer Gene Panels were specifically designed to achieve a rapid and simple **FFPE-Direct™ Workflow** which is capable of unleashing higher mutation detection than previously possible from archived formalin-fixed, paraffin-embedded (FFPE) tissues samples. This novel workflow allows researchers the ability to sequence challenging samples by enabling the preparation of DNA directly from FFPE slides for NGS library construction without the need for deparaffinization, DNA purification, or downstream DNA quantification. This kit is also suitable for use with fresh tissue sections up to 15 µm thick, or cytology smears.



While hybridization-based target capture selection methods require 7 to 72 hours to complete both target selection and library preparation, **FFPE-Direct**[™] makes it possible to complete the entire process in about 3.5 hours using addition-only steps and convenient thermal cycler reaction set-up.



The **FFPE-Direct[™] Workflow** has significant hand-on time savings and higher target enrichment efficiency leading to more sensitive detection of mutations from research FFPE samples than ever before possible. Leveraging the TargetPlex[™] Noise Cancelling Technology, the FFPE-Direct[™] workflow eliminates amplification by-products that significantly impede downstream sequencing efficiency. Due to the higher efficiency of the TargetPlex[™] technology, lower sequencing depth is needed compared to a

standard multiplex PCR enrichment workflow, allowing for higher barcoded/indexed samples per sequencing run and fewer off-target sequences.

Key Features of the TargetPlex[™] NGS DNA Library Preparation Kit:

- · Compatible with Illumina and Thermo Fisher (Ion Torrent) sequencers
- · Levarges the novel TargetPlex[™] Noise Canceling Technology
- \cdot Capable of mutation allelic frequency detection down to ~1%
- · Ideal for FFPE DNA samples with limited DNA amount
- \cdot No deparaffinization of FFPE sections required
- \cdot No column or bead-based DNA purification required
- \cdot 3.5 hours protocol with minimial sample loss
- · Allows for repeat testing (if needed)
- · 8 Indexes or barcode adaptors are included
- · MagClean magnetic clean-up beads (Not included, YST0202)



Product Name	Product Description	Reactions in kit*	Cat # for Illumina Sequencing	Cat # for Ion Torrent Sequencing
TargetPlex FFPE-Direct™ NGS Fucused Lung Cancer Panel**	Hotspot regions, including ~ 1,200 COSMIC mutations of 8 oncogenes with deep coverage of EGFR, KRAS, BRAF, NRAS, PIK3CA, PDGFRA, KIT, and ALK in 2 primer pools with a total of 54 amplicons. Detects down to 1 % AF.	8	YST0095-01	YST0095-01
TargetPlex FFPE-Direct™ NGS 21-Gene Cancer Hotspot Panel**	Hotspot regions, including ~ 2,000 COSMIC mutations of 21 oncogenes and tumor suppressor genes in 1 pimer pool with a total of 205 amplicons.	8	YST0052-01	YST0052-01
TargetPlex FFPE-Direct™ NGS 50-Gene Cancer Hotspot Panel**	Hotspot regions, including ~ 3,300 COSMIC mutations of 50 oncogenes and tumor suppressor genes 1 primer pool with a total of 207 amplicons.	8	YST0147-01	YST0147-01
TargetPlex FFPE-Direct™ NGS 78-Gene Pan-Can- cer Hot Spot Panel**	Hotspot regions, including ~ 7,000 COSMIC mutations of 78 oncogenes and tumor suppressor genes in 3 pimer pools with a total of 378 amplicons.	8	YST0075-01	YST0075-01
TargetPlex™ NGS BRCA 1 and BRCA2 whole Gene Panel**	Whole BRAC1 and BRCA2 gene coding reagions in 2 primer pools (136 and 138, respectively) with a total of 274 amplicons.	8	YST0205-01	YST0205-01
TargetPlex™ NGS 51-Gene-Fusion RNA Panel**	This RNA fusion panel targets 51 fusion transcripts related to lung cancer, including ALK, ROS, RET and NTRK1 fusion. Requires RT to prepare cDNA, not included.	8	YST0206-01	YST0206-01
TargetPlex™ NGS DNA Library Preparation Kit	Compatible with all TargetPlex panels (primer pools). The kit including PCR master mix, 8 adaptors/indeces, ligase and libray amp primers. Sufficient for a 2 primer pool panel.	8	YST0067-01	YST0068-01

* larger and bulk size kits are available. Please inquire or visit our website product page.

** FOR RESEARCH USE ONLY.



Email: info@sensecarebio.com Phone: +1 510-861-2542

sensecarebio.com