



PARAGON GENOMICS  
Excellence In- Excellence Out

## CleanPlex™ Targeted Library Kit

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Simplify your Next-Generation Sequencing (NGS) target enrichment workflow to increase coverage uniformity and on-target reads to more than 98%. The CleanPlex™ Targeted Library Kit uses a multiplex PCR-based workflow which reduces targeted library prep time from over 36 hours to only 2.5 hours while removing up to 99% of non-specific PCR products. CleanPlex™ is currently compatible with Illumina® sequencers but will soon support Ion Torrent sequencers.

#### Be sequence-ready in 2.5 hours

CleanPlex™ Targeted Library Kits simplify the complex NGS target enrichment process into a simple, 2.5-hour process with only 30 minutes of hands-on time. CleanPlex™ Targeted Library Kits:

- Eliminate variability of traditional hybrid capture-based steps
- Accelerate DNA sequencing by 2 days
- Remove DNA fragmentation, ligation, hybridization and chemical modification of primers.

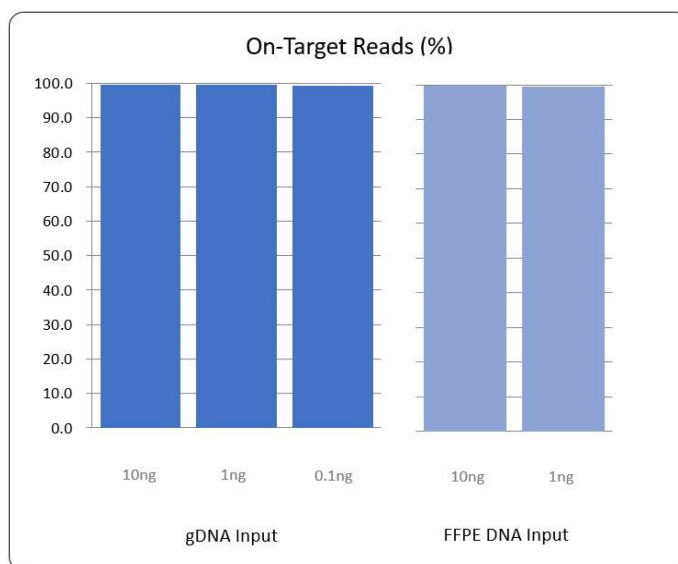
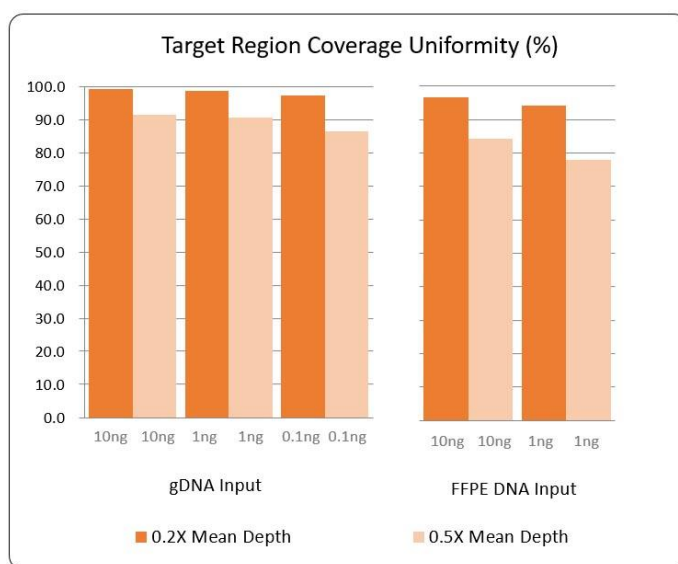
#### Maximize your enrichment

The CleanPlex™ Targeted Library Kit multiplex PCR buffer system has been optimized for:

- Coverage uniformity
- PCR specificity
- Sensitivity
- Target region yield

This results in better NGS data than other methods with >98% coverage uniformity and >98% on-target reads while minimizing GC bias and PCR error rates. Obtain more effective sequencing reads on hard-to-amplify genes or loci and view new ones previously undetected.

### CleanPlex™ Technical Data



\* data based on a multiplex PCR panel with 600 primer pairs. Mean amplicon coverage is between 2000-2500X.

## Find low-frequency alleles by reducing PCR backgrounds

The CleanPlex™ multiplex PCR process uses a unique background cleaning technology that removes up to 99% of the non-specific PCR products which cause high backgrounds in NGS sequencing. The reduction in background noise increases variant calling accuracy enabling the detection of mutations with a frequency as low as 0.5% that might have previously been missed.

### Run precious samples

CleanPlex™ Targeted Library Kits require only 100 pg - 10 ng of DNA making it much easier to enrich DNA-limited samples like FFPE, cfDNA, FNA and liquid biopsy.

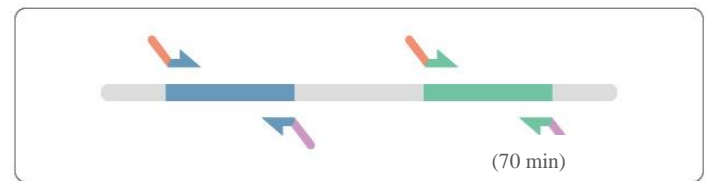
### Take on difficult applications

Tackle difficult applications such as detecting TERT promoter mutations in human cancers and develop new applications which were otherwise impossible.

### Simplify your workflow

The CleanPlex™ Targeted Library Kit workflow easily integrates into current liquid handling and automation routines. All PCR, bead purification and background cleaning reactions happen in a single tube. By using sample barcodes during the second PCR, 384 samples can be sequenced simultaneously. Scale up or down from 7 - 4,000 PCR reactions per tube.

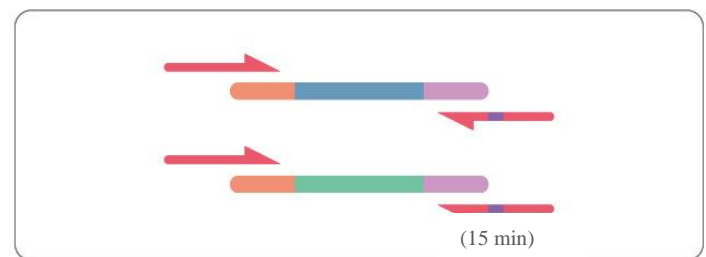
## CleanPlex™ targeted library prep workflow



▼ Multiplex PCR (2 hr)



▼ Degrade & remove non-specific products (5 min)



▼ 2nd PCR (15 min)



## Ordering information

| Product Name                               | SKU    |
|--|--------|
| CleanPlex™ Targeted Library Kit (8 rxns)   | 816001 |
| CleanPlex™ Targeted Library Kit (96 rxns)  | 816002 |
| CleanPlex™ Targeted Library Kit (384 rxns) | 816003 |

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