

## VariantPlex® CFTR

Part # SK0079

### Description

The VariantPlex CFTR panel is an optimized balance of gene-specific primer (GSP) oligonucleotides that is used in conjunction with VariantPlex Reagents (SK0096, SK0098) and Molecular Barcode (MBC) Adapters to produce targeted NGS libraries of all exons of the Cystic Fibrosis Conductance Regulator (CFTR) gene, including 5' and 3' untranslated regions (UTRs).

VariantPlex CFTR libraries contain **105** GSP2 primers with coverage of select intronic variants.

### Contents

| Description                          | Part Number | Storage Conditions |
|--------------------------------------|-------------|--------------------|
| VariantPlex® CFTR GSP1 - 8 reactions | SA0079-8-1  | -20°C ± 10°C       |
| VariantPlex® CFTR GSP2 - 8 reactions | SA0079-8-2  |                    |

### Recommended PCR Cycling:

The recommended number of PCR cycles with this panel are **14** cycles during PCR1 and **22** cycles during PCR2 with this panel. The number of PCR2 cycles may be decreased if you regularly experience library yields greater than 200nM.

### Recommended Reads and Multiplexing

The recommended sequencing depth for VariantPlex CFTR libraries is **500,000** reads per sample. For more information, visit our frequently asked questions resource page at: [www.archerdx.com/faqs](http://www.archerdx.com/faqs)

### Assay Targets

| Gene | Accession | Target Exon                             |
|------|-----------|---|
| CFTR | NM_000492 | All exons with select intronic variants |

## Archer Analysis Settings

Sequencing data produced by this method must be converted to de-multiplexed FASTQ's, and then processed using [Archer Analysis](#) (v4.1 or greater). This provides all secondary analysis (read trimming/cleaning, de-duplication, error correction, alignment, and mutation calling), as well as some tertiary analysis (e.g., annotations and protein effect predictions).

The VariantPlex CFTR assay should be run with the **Germline Variation** pipeline found within the **DNA SNP/InDel** Analysis Type in Archer Analysis (see the software user manual for further details on setting up analyses). The DNA Structural Variations pipeline should be used for detecting large deletions.

The Archer Analysis software is available as a separate download, which can be requested via a webform on the product webpage: <http://analysis.archerdx.com>. VariantPlex CFTR also requires a one-time upload of a Target Region file (a text file, in GTF format, which directs the software on how to analyze data from the panel). The optional Target Mutation file discussed above also requires a one-time upload. Both of these files can be obtained by contacting [tech@archerdx.com](mailto:tech@archerdx.com).

## Limitations of Use

**For Research Use Only.** Not for use in diagnostic procedures. Not intended to be used for treatment of human or animal diseases.

Safety data sheets pertaining to this product are available upon request.

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**ArcherDX, Inc.**  
 2477 55th Street, Suite 202  
 Boulder, CO 80301  
 303-357-9001  
<http://www.archerdx.com>