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

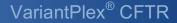| Description	Part Number	Storage Conditions
VariantPlex® CFTR GSP1 - 8 reactions	SA0079-8-1	-20°C ± 10°C
VariantPlex® CFTR GSP2 - 8 reactions	SA0079-8-2	

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

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.

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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