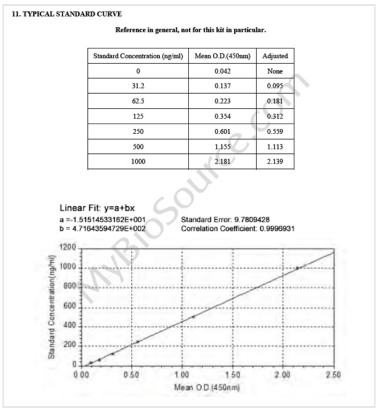
Cystic Fibrosis Transmembrane Conductance Regulator (CFTR) ELISA Kit for Human

PRODUCT OVERVIEW

Product Name	Cystic Fibrosis Transmembrane Conductance Regulator (CFTR), ELISA Kit
Full Product Name	Human Cystic Fibrosis Transmembrane Conductance Regulator ELISA Kit
Product Gene Name	CFTR elisa kit
Species Reactivity	Human
Assay Type	Quantitative Sandwich
Detection Range	62.5pg/ml-2000pg/ml
Sensitivity	10pg/ml
Specificity	This kit recognizes recombinant and natural Human CFTR, no significant cross-reactivity or interference was observed.
Preparation and Storage	Store all reagents at 2-8 degree C
Inter-assay Precision	Inter-assay CV (%) is less than 15%. [CV(%) = SD/mean ×100]. All CV% should be compared by concentration, not compared by OD values.
Intra-assay Precision	Intra-assay CV (%) is less than 15%.
Molecular Weight	168,142 Da
Chromosome Location	Chromosome: 7; NC_000007.13 (117120017..117308719). Location: 7q31.2
OMIM	219700
3D Structure	ModBase 3D Structure for P13569
Related Product Information for CFTR elisa kit	Background: This Quantitative Sandwich ELISA kit is for lab reagent/research use only, not for drug, household, therapeutic or test applications! This kit is intended to be used to determine the level of CFTR (hereafter termed "analyte") in undiluted original Human serum, plasma or tissue homogenates samples. For other sample types please contact tech support to determine compatibility with this assay. This kit is not suitable for assaying non-biological sources of substances.
Other Notes	Small volumes of CFTR elisa kit vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for CFTR purchase	MBS013883 is a ready-to-use microwell, strip plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the Cystic Fibrosis Transmembrane Conductance Regulator (CFTR) ELISA Kit target analytes in biological samples. The concentration gradients of the kit standards or positive controls render a theoretical kit detection range in biological research samples containing CFTR. The ELISA analytical biochemical technique of the MBS013883 kit is based on CFTR antibody-CFTR antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect CFTR antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, CFTR. Appropriate sample types may include undiluted body fluids and/or tissue homogenates, secretions. Quality control assays assessing reproducibility identified the intra-assay CV (%) and inter-assay CV(%).



Typical Testing Data/Standard Curve (for reference only) of CFTR elisa kit

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for CFTR. It may not necessarily be applicable to this product.

NCBI GI #	180286
NCBI GeneID	1080
NCBI Accession #	AAA51980.1
UniProt Primary Accession #	P13569
UniProt Secondary Accession #	Q20BG8; Q20BH2; Q2I0A1; Q2I102
UniProt Related Accession #	P13569
NCBI Official Full Name	CFTR, partial
NCBI Official Synonym Full Names	cystic fibrosis transmembrane conductance regulator (ATP-binding cassette sub-family C, member 7)
NCBI Official Symbol	CFTR
NCBI Official Synonym Symbols	CF; MRP7; ABC35; ABCC7; CFTR/MRP; TNR-CFTR; dJ760C5.1
UniProt Protein Name	Cystic fibrosis transmembrane conductance regulator
UniProt Synonym Protein Names	ATP-binding cassette sub-family C member 7; Channel conductance-controlling ATPase (EC:3.6.3.49); cAMP-dependent chloride channel
Protein Family	Cystic fibrosis transmembrane conductance regulator
UniProt Gene Name	CFTR
UniProt Synonym Gene Names	ABCC7; CFTR
UniProt Entry Name	CFTR_HUMAN
NCBI Protein Information	cystic fibrosis transmembrane conductance regulator; cAMP-dependent chloride channel; channel conductance-controlling ATPase
NCBI Summary for CFTR	This gene encodes a member of the ATP-binding cassette (ABC) transporter superfamily. ABC proteins transport various molecules across extra- and intra-cellular membranes. ABC genes are divided into seven distinct subfamilies (ABC1, MDR/TAP, MRP, ALD, OABP, GCN20, White). This protein is a member of the MRP subfamily that is involved in multi-drug resistance. The encoded protein functions as a chloride channel and controls the regulation of other transport pathways. Mutations in this gene are associated with the autosomal recessive disorders cystic fibrosis and congenital bilateral aplasia of the vas deferens. Alternatively spliced transcript variants have been described, many of which result from mutations in this gene. [provided by RefSeq, Jul 2008]

UniProt Comments for CFTR	CFTR: a member of the MRP subfamily of ATP-binding cassette (ABC) transporters. ABC proteins transport various molecules across extra- and intra-cellular membranes. Functions as a chloride channel and controls the regulation of other transport pathways. Mutations have been observed in patients with the autosomal recessive disorders cystic fibrosis (CF) and congenital bilateral aplasia of the vas deferens (CBAVD). Alternative splice Protein type: Transporter; Membrane protein, multi-pass; Channel, chloride; Transporter, ABC family; Hydrolase; EC 3.6.3.49; Membrane protein, integral Chromosomal Location of Human Ortholog: 7q31.2 Cellular Component: recycling endosome; microvillus; cytoplasmic vesicle membrane; cell surface; protein complex; early endosome membrane; basolateral plasma membrane; early endosome; apical plasma membrane; cytoplasm; plasma membrane Molecular Function: bicarbonate transmembrane transporter activity; chloride channel activity; protein binding; chloride channel inhibitor activity; enzyme binding; chloride transmembrane transporter activity; channel-conductance-controlling ATPase activity; ATP-binding and phosphorylation-dependent chloride channel activity; ATP binding; PDZ domain binding Biological Process: intracellular pH elevation; response to drug; response to peptide hormone stimulus; cholesterol transport; iodide transport; transepithelial chloride transport; water transport; membrane hyperpolarization; respiratory gaseous exchange; positive regulation of vasodilation; vasodilation; cholesterol biosynthetic process; cellular response to hormone stimulus; bicarbonate transport; response to estrogen stimulus; transport; response to cytokine stimulus; transmembrane transport; sperm capacitation; lung development Disease: Vas Deferens, Congenital Bilateral Aplasia Of; Bronchiectasis With Or Without Elevated Sweat Chloride 1; Cystic Fibrosis; Pancreatitis, Hereditary
Research Articles on CFTR	**1.** CFTR channel is central to defining the mechanisms of action of prospective cystic fibrosis drugs.
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