ARG62460
anti-CFTR antibody [MM13-4]

Package: 100 µl
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [MM13-4] recognizes CFTR
Tested Reactivity	Hu
Tested Application	FACS, ICC/IF, IP, WB
Specificity	This antibody recognizes CFTR, Mr 170kDa. Two additional proteins were detected, Mr 52 and 38 kDa, in CFTR-transfected BHK cell lysates.
Host	Mouse
Clonality	Monoclonal
Clone	MM13-4
Isotype	IgG1
Target Name	CFTR
Species	Human
Immunogen	Synthetic peptide (RKGYRQRLELSD) corresponding to residues 25-36 of human cystic fibrosis transmembrane conductance regulator (CFTR)
Conjugation	Un-conjugated
Alternate Names	ATP-binding cassette sub-family C member 7; TNR-CFTR; ABC35; CFTR/MRP; CF; EC 3.6.3.49; dJ760C5.1; Channel conductance-controlling ATPase; cAMP-dependent chloride channel; ABCC7; Cystic fibrosis transmembrane conductance regulator; CFTR; MRP7

Application Instructions

Application Note	FACS: 2 µg for 1 million cells WB: 10 µg/ml * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

Form	Liquid
Purification	Protein G purified
Buffer	PBS (pH 7.6), 0.25M NaCl and 0.1% Sodium azide
Preservative	0.1% Sodium azide
Concentration	0.2 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links	GeneID: 1080 Human Swiss-port # P13569 Human
Gene Symbol	CFTR
Gene Full Name	cystic fibrosis transmembrane conductance regulator (ATP-binding cassette sub-family C, member 7)
Background	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]
Function	Involved in the transport of chloride ions. May regulate bicarbonate secretion and salvage in epithelial cells by regulating the SLC4A7 transporter. Can inhibit the chloride channel activity of ANO1. Plays a role in the chloride and bicarbonate homeostasis during sperm epididymal maturation and capacitation. [UniProt]
Research Area	Cell Biology and Cellular Response antibody; Metabolism antibody
Calculated Mw	168 kDa
PTM	N-glycosylated. Phosphorylated; cAMP treatment promotes phosphorylation and activates the channel (PubMed:12588899, PubMed:17036051, PubMed:8910473). Dephosphorylation decreases the ATPase activity (in vitro) (PubMed:8910473). Phosphorylation at PKA sites activates the channel (PubMed:10792060, PubMed:12519745, PubMed:12588899, PubMed:25330774). Phosphorylation at PKC sites enhances the response to phosphorylation by PKA (PubMed:12588899). Phosphorylated by AMPK; this inhibits channel activity (PubMed:12519745). Ubiquitinated, leading to its degradation in the lysosome (PubMed:19398555). Deubiquitination by USP10 in early endosomes enhances its endocytic recycling to the cell membrane (PubMed:19398555). Ubiquitinated by RNF185 during ER stress (PubMed:24019521).
Cellular Localization	Early endosome membrane