

## 36-2051: Anti-CFTR (Cystic Fibrosis Transmembrane Conductance Regulator) Monoclonal Antibody (Clone: CFTR/1643)

Clonality :	Monoclonal
Clone Name :	CFTR/1643
Application :	FACS,IHC
Reactivity :	Human
Gene :	CFTR
Gene ID :	1080
Uniprot ID :	P13569
Alternative Name :	ABC35; ATP Binding Cassette Superfamily C Member 7 (ABCC7); cAMP-dependent chloride channel; CFTR; CFTR/MRP; Channel conductance-controlling ATPase; Cystic Fibrosis Transmembrane Conductance Regulator; MRP7; TNR CFTR
lsotype :	Mouse IgG2b, kappa
Immunogen Information	Recombinant fragment (around aa 258-385) of human CFTR protein (exact sequence is proprietary)

#### **Description**

Recognizes a protein of 165-170kDa, identified as cystic fibrosis transmembrane conductance regulator (CFTR). CFTR is composed of two membrane-spanning domains (MSD), two nucleotide-binding domains (NBD), and an R domain. It is structurally similar to multidrug resistance (Mdr1) protein and both are members of the superfamily of ATP-binding cassette (ABC) transporters, also known as traffic ATPases, which are implicated in the movement of various substrates. The CFTR protein is a small conductance adenosine 3',5'-cyclic monophosphate (cAMP)-activated chloride ion channel found in the apical membranes of epithelia within the pancreas, airway, intestine, bile duct, sweat gland, and male genital ducts. CFTR is a valuable marker of human pancreatic duct cell development and differentiation.

#### **Product Info**

Amount :	20 μg / 100 μg
Content :	200µg/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Storage condition :	Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months.

### **Application Note**

Flow Cytometry (1-2ug/million cells);,Immunohistochemistry (Formalin-fixed) (1-2ug/ml for 30 minutes at RT),(Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95 & degC followed by cooling at RT for 20 minutes),

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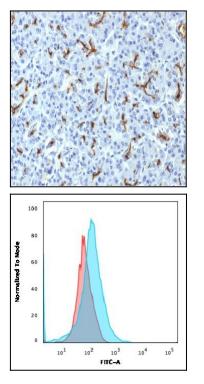


Fig.1: Formalin-fixed, paraffin-embedded human Pancreas stained with CFTR Mouse Monoclonal Antibody (CFTR/1643).

Fig. 2: Flow Cytometric Analysis of MOLT-4 cells using CFTR Mouse Monoclonal Antibody (CFTR/1643) followed by goat anti-Mouse IgG-CF488 (Blue); Isotype Control (Red).

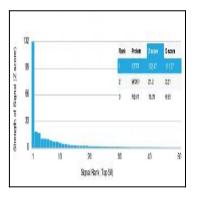


Fig. 3: Analysis of Protein Array containing >19,000 full-length human proteins using CFTR Mouse Monoclonal Antibody (CFTR/1643) Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (Monoclonal Antibody) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProtTM array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProtTM are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a Monoclonal Antibody to its intended target. A Monoclonal Antibody is considered to specific to its intended target, if the Monoclonal Antibody has an S-score of at least 2.5. For example, if a Monoclonal Antibody binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that Monoclonal Antibody to protein X is equal to 29.