

## CFTR (Cystic Fibrosis Transmembrane Conductance Regulator) Antibody

Mouse Monoclonal Antibody [Clone CFTR/1643]

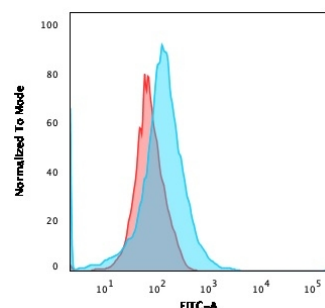
Catalog No	Format	Size
1080-MSM3-P0	Purified Ab with BSA and Azide	200ug/ml
1080-MSM3-P1	Purified Ab with BSA and Azide	200ug/ml
1080-MSM3-P1ABX	Purified Ab WITHOUT BSA and Azide	1.0mg/ml

Applications	Tested Dillution
Flow Cytometry (Flow)	1-2ug/million cells
Immunohistochemistry (IHC)	1-2ug/ml

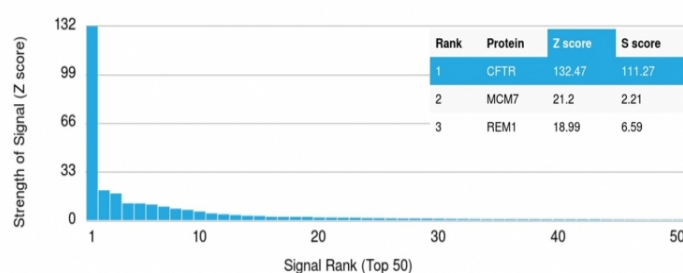
Product Details	
Clone	CFTR/1643
Gene Name	CFTR
Immunogen	Recombinant fragment (around aa 258-385) of human CFTR protein (exact sequence is proprietary)
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG2b / Kappa
Mol. Weight of Antigen	165-170kDa
Cellular Localization	Apical cell membrane, Cell membrane, Early endosome membrane, Endoplasmic reticulum membrane, Nucleus, Recycling endosome membrane
Species Reactivity	Human
Positive Control	Human pancreas, kidney or placenta. MOLT-4 cells.

\*Optimal dilution for a specific application should be determined.

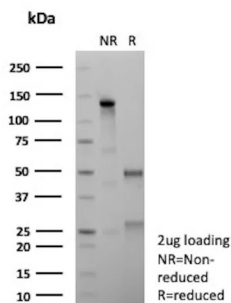
### Product Images for CFTR (Cystic Fibrosis Transmembrane Conductance Regulator) Antibody



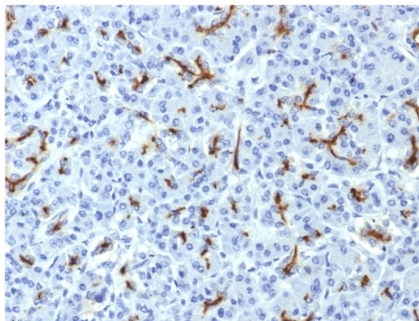
Flow cytometric analysis of PFA-fixed MOLT-4 cells. CFTR-Monospecific Mouse Monoclonal Antibody (CFTR/1643) followed by goat anti-mouse IgG-CF488 (blue); isotype control (red).



Analysis of Protein Array containing >19,000 full-length human proteins using Monospecific Mouse Monoclonal Antibody (CFTR/1643) to CFTR. Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ 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 HuProt™ 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 MAb to its intended target. A MAb is considered to be specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb 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 MAb to protein X is equal to 29.



SDS-PAGE Analysis of Purified CFTR-Monospecific Mouse Monoclonal Antibody (CFTR/1643). Confirmation of Purity and Integrity of Antibody.



Formalin-fixed, paraffin-embedded human pancreas stained with CFTR Mouse Monoclonal Antibody (CFTR/1643).

## Specificity & Comments

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.

## Research Areas

Cardiovascular, Infectious Disease, Signal Transduction, Stem Cell Differentiation

## Known Applications & Suggested Dilutions

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 °C followed by cooling at RT for 20 minutes), Optimal dilution for a specific application should be determined.

## Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis.

There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

## Supplied As

200ug/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 and Stability

Antibody with azide - store at 2 to 8 °C. Antibody without azide - store at -20 to -80 °C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.