

## CFTR Monoclonal Mouse Antibody (CFTR/1342)

## **Product Description**

This antibody recognizes a protein of 165-170 kDa, 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.

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the <u>CF® Dye Brochure</u> for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

**Stock status:** Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email <u>order@biotium.com</u> to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 1342, Anti-CFTR (CFTR/1342)

## Call us : 800-304-5357 Email: techsupport@biotium.com

## Product attributes

Product attributes			
Antibody number	#1342		
Antibody reactivity (target)	CFTR		
Antibody type	Primary		
Host species	Mouse		
Clonality	Monoclonal		
Clone	CFTR/1342		
Isotype	lgG2a		
Molecular weight	165-170 kDa		
Synonyms	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		
Human gene symbol	CFTR		
Entrez gene ID	1080 (Human)		
SwissProt	P13569 (Human)		
Unigene	489786, 621460, 661104 (Human)		
Immunogen	Recombinant human full-length CFTR		
Verified antibody applications	IHC (FFPE) (verified)		
Antibody target cellular localization	Plasma membrane		
Species reactivity	Human, Mouse		
Antibody application notes	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunofluorescence: 0.5-1 ug/mL, Immunohistology (formalin): 0.5-1 ug/mL, Staining of formalin-fixed tissues is enhanced by boiling tissue sections in 10 mM Tris, 1 mM EDTA pH 9.0 for 10-20 min followed by cooling at RT for 20 min, Western blotting 0.5-1 ug/mL, Optimal dilution for a specific application should be determined by user		
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Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	CF®405S Features
BNC88	CF®488A	490/515	488	GFP, FITC	CF®488A Features
BNC68	CF®568	562/583	532, 561	RFP, TRITC	CF®568 Features
BNC94	CF®594	593/614	561	Texas Red®	CF®594 Features
BNC40	CF®640R	642/662	633-640	Cy®5	CF®640R Features
BNC47	CF®647	650/665	633-640	Cy®5	CF®647 Features
BNC74	CF®740	742/767	633-685	775/50	CF®740 Features
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified, BSA-free	N/A	N/A	N/A	

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