Datasheet for ABIN7043096

anti-CFTR antibody (Cytosolic)

2 Images

Go to Product page

Overview

Quantity:	25 µL
Target:	CFTR
Binding Specificity:	AA 1468-1480, Cytosolic
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This CFTR antibody is un-conjugated
Application:	Immunofluorescence (IF), Immunohistochemistry (IHC), Western Blotting (WB), Immunoprecipitation (IP), Immunochromatography (IC)

Product Details

Purpose:	A Rabbit Polyclonal Antibody to Cystic Fibrosis Transmembrane Conductance Regulator
Immunogen:	Immunogen: Synthetic peptide Immunogen Sequence: (C)KEETEEEVQDTRL, corresponding to amino acid residues 1468-1480 of human CFTR
Isotype:	IgG
Specificity:	Cytoplasmic, C-terminal part
Cross-Reactivity:	Human, Mouse, Rat
Predicted Reactivity:	Mouse,rat,pig - 13,14 amino acid residues identical
Characteristics:	Anti-CFTR Antibody (ABIN7043096, ABIN7044127 and ABIN7044128) is a highly specific

Product Details

	antibody directed against an epitope of the human protein. The antibody can be used in western blot, immunoprecipitation, immunohistochemistry, and immunocytochemistry applications. It has been designed to recognize CFTR from mouse, rat, and human samples.
Purification:	Affinity purified on immobilized antigen.
Grade:	KO Validated

Target Details

Target:	CFTR
Alternative Name:	CFTR (CFTR Products)
Background:	Cystic fibrosis transmembrane conductance regulator, ATP-binding cassette sub-family C member 7, ABCC7, cAMP-dependent Cl- channel,The cystic fibrosis transmembrane conductance regulator (CFTR) is the most dominant Cl- channel in several epithelial tissues, especially in lung and colon. Remarkably, CFTR is a member of the ATP-binding cassette (ABC) transporter superfamily that uses ATP hydrolyzation as the driving force for the translocation of a wide variety of substrates including sugars, amino acids, proteins and hydrophobic compounds, across cellular membranes. The CFTR is unique among ABC transporters in that it is a cAMP-regulated Cl- channel. It shares the superfamily topology of 12 transmembrane domains with two nucleotide-binding domains (NBDs) and a regulatory (R) domain in the large third intracytoplasmic loop that is phosphorylated in multiple sites by PKA. Mutations in the CFTR gene cause channel dysfunction in several ways, ranging from complete loss of surface expression to diminished Cl- secretion. Defects in the CFTR gene cause cystic fibrosis (CF), the most common genetic disease among Caucasians, as well as a form of male sterility.Regulation of the CFTR channel is accomplished through the activation of surface receptors that couple to adenyl cyclase, raise cAMP cellular levels and thus activate PKA. This has been demonstrated for the adenosine and ß2 adrenergic receptor and the vasopressin hormone among others.Besides enhanced Cl- conductance, activation of CFTR also leads to the regulation of other ion channels. The best-studied case is its interaction with the epithelial Na+ channels (ENaC), although it can probably regulate other ion channels as well (Kir1.1 for example). The mechanism by which CFTR regulates other ion channels is not clear, but it may involve protein-protein interactions via molecules that interact with its C-terminal PDZ binding motif, such as the NHERF adaptor protein. Alternative names: CFTR, Cystic fibrosis transmembrane conductance regulator, ATP-binding cassette sub-family C member 7, ABCC7, cAMP-dependent Cl- channel

Target Details

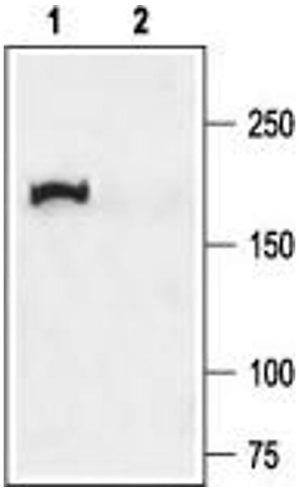
Gene ID:	1080
NCBI Accession:	NM_000492
UniProt:	P13569

Application Details

Application Notes:	Antigen preadsorption control: 1 µg peptide per 1 µg antibody Application Dilutions Immunohistochemistry paraffin embedded sections ihc: N/A Application Dilutions Western blot wb: 1:200
Comment:	Cited Application: IP|IHC|ICC|IFC Negative Control: (ABIN7235200) Blocking Peptide: (ABIN7235200)
Restrictions:	For Research Use only

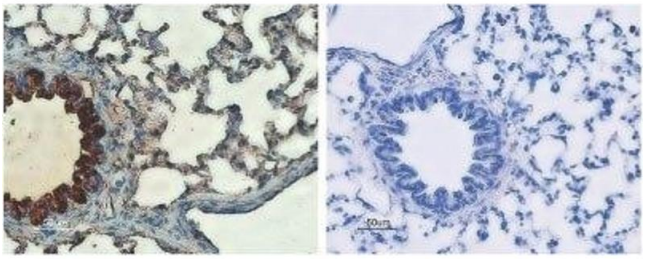
Handling

Format:	Lyophilized
Reconstitution:	0.2 mL double distilled water (DDW).
Concentration:	1 mg/mL
Buffer:	PBS pH 7.4
Storage:	4 °C,-20 °C
Storage Comment:	Storage before reconstitution: The antibody ships as a lyophilized powder at room temperature. Upon arrival, it should be stored at -20°C. Storage after reconstitution: The reconstituted solution can be stored at 4°C for up to 1 week. For longer periods, small aliquots should be stored at -20°C. Avoid multiple freezing and thawing. Centrifuge all antibody preparations before use (10000 x g 5 min).



Western Blotting

Image 1. Western blot analysis of rat lung membranes: - 1. Anti-CFTR Antibody (ABIN7043096, ABIN7044127 and ABIN7044128), (1:200).2. Anti-CFTR Antibody, preincubated with CFTR Blocking Peptide (#BLP-CL006).



Immunohistochemistry

Image 2. Expression of CFTR in rat lungs - Immunohistochemical staining of rat lungs sections using Anti-CFTR Antibody (ABIN7043096, ABIN7044127 and ABIN7044128) (left panel). Strong staining of bronchial epithelial cells (red) and lighter staining of alveolar cells (red-brown) is apparent. There is also positive staining of macrophages while smooth muscle and endothelium are negative. Counterstain of cell nuclei appears blue. A negative control is shown in the right panel.