


Anti-CFTR antibody ab131553

★★★★★ [1 Abreviews](#) [9 References](#) [2 Images](#)

Overview

Product name	Anti-CFTR antibody
Description	Rabbit polyclonal to CFTR
Host species	Rabbit
Specificity	From Mar 2024, QC testing of replenishment batches of this polyclonal changed. All tested and expected application and reactive species combinations are still covered by our Abcam product promise. However, we no longer test all applications. For more information on a specific batch, please contact our Scientific Support who will be happy to help. You may also be interested in our alternative recombinant antibody, ab219337 .
Tested applications	Suitable for: ICC/IF Unsuitable for: IHC-P
Species reactivity	Reacts with: Human Predicted to work with: Sheep, Rabbit, Cow, Pig, Chimpanzee, Macaque monkey, Gorilla 
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising

agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.

Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

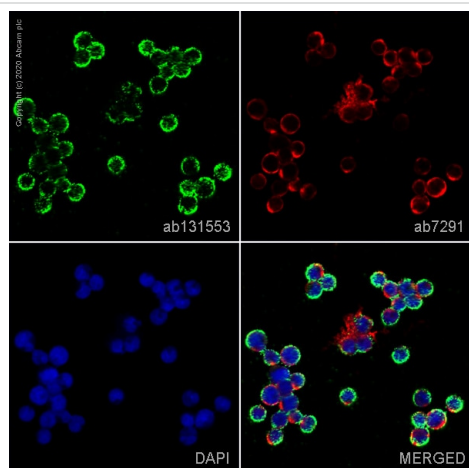
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab131553 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF	★★★★★ (1)	Use a concentration of 5 µg/ml.

Application notes Is unsuitable for IHC-P.

Target

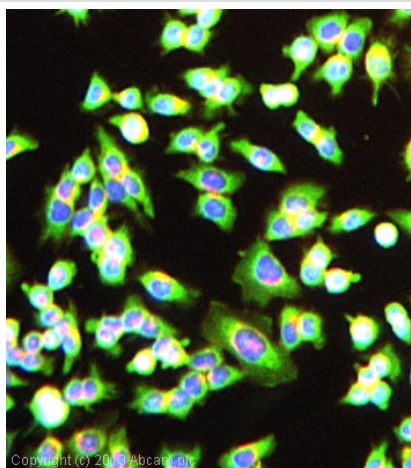
Function	Involved in the transport of chloride ions. May regulate bicarbonate secretion and salvage in epithelial cells by regulating the SLC4A7 transporter.
Tissue specificity	Found on the surface of the epithelial cells that line the lungs and other organs.
Involvement in disease	<p>Defects in CFTR are the cause of cystic fibrosis (CF) [MIM:219700]; also known as mucoviscidosis. CF is the most common genetic disease in the Caucasian population, with a prevalence of about 1 in 2'000 live births. Inheritance is autosomal recessive. CF is a common generalized disorder of exocrine gland function which impairs clearance of secretions in a variety of organs. It is characterized by the triad of chronic bronchopulmonary disease (with recurrent respiratory infections), pancreatic insufficiency (which leads to malabsorption and growth retardation) and elevated sweat electrolytes.</p> <p>Defects in CFTR are the cause of congenital bilateral absence of the vas deferens (CBAVD) [MIM:277180]. CBAVD is an important cause of sterility in men and could represent an incomplete form of cystic fibrosis, as the majority of men suffering from cystic fibrosis lack the vas deferens.</p>
Sequence similarities	<p>Belongs to the ABC transporter superfamily. ABCC family. CFTR transporter (TC 3.A.1.202) subfamily.</p> <p>Contains 2 ABC transmembrane type-1 domains.</p> <p>Contains 2 ABC transporter domains.</p>
Domain	The PDZ-binding motif mediates interactions with GOPC and with the SLC4A7, SLC9A3R1/EBP50 complex.
Post-translational modifications	<p>Phosphorylated; activates the channel. It is not clear whether PKC phosphorylation itself activates the channel or permits activation by phosphorylation at PKA sites.</p> <p>Ubiquitinated, leading to its degradation in the lysosome. Deubiquitination by USP10 in early endosomes, enhances its endocytic recycling.</p>
Cellular localization	Early endosome membrane.



Immunocytochemistry/ Immunofluorescence - Anti-CFTR antibody (ab131553)

ab131553 staining Cystic fibrosis transmembrane conductance regulator in MOLT4 cells. The cells were fixed with 100% methanol (5 min), permeabilized with 0.1% PBS-Tween for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1%PBS-Tween for 1h. The cells were then incubated overnight at 4°C with ab131553 at 5 µg/ml and **ab7291**, Mouse monoclonal [DM1A] to alpha Tubulin - Loading Control. Cells were then incubated with **ab150081**, Goat polyclonal Secondary Antibody to Rabbit IgG - H&L (Alexa Fluor® 488), pre-adsorbed at 1/1000 dilution (shown in green) and **ab150120**, Goat polyclonal Secondary Antibody to Mouse IgG - H&L (Alexa Fluor® 594), pre-adsorbed at 1/1000 dilution (shown in pseudocolour red). Nuclear DNA was labelled with DAPI (shown in blue).

Image was acquired with a confocal microscope (Leica-Microsystems TCS SP8) and a single confocal section is shown.



Immunocytochemistry/ Immunofluorescence - Anti-CFTR antibody (ab131553)

ICC/IF image of ab131553 stained HCT116 cells. The cells were 100% methanol fixed (5 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (**ab96899**, 5µg/ml) overnight at +4°C. The secondary antibody (green) was **ab96899**, DyLight® 488 goat anti-rabbit IgG (H+L) used at a 1/250 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

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