## CFTR monoclonal antibody (CF3)

Cystic Fibrosis (CF) is a common lethal genetic disease caused by mutations of the gene coding for the cystic fibrosis transmembrane conductance factor, a cAMP regulated chloride channel. Approximately 70% of all CF cases share the deletion of a phenylalanine at position 508 ( $\delta$  F508) which results in abnormal chloride transport. Since the CF mutation is lethal, most often by lung and liver disease, it raises the question of why this genetic disease remains as common as it is. One possible explanation is that Salmonella typhi has been shown to use CFTR to enter intestinal epithelial cells and that delta F508 heterozygote and homozygote mice showed 86% and 100% reductions in *S. typhi* intestinal submucosal uptake.

This antibody is covered by our Worry-Free Guarantee.

Citations: 4

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**Ordering Information** 

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ALX-804-214-R100

100µl

Manuals, SDS & CofA

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## **Handling & Storage**

**Handling** Avoid freeze/thaw cycles.

Long Term Storage -20°C

Shipping Blue Ice

## Regulatory Status RUO - Research Use Only

## **Product Details**

Alternative Name Cystic fibrosis transmembrane conductance regulator, ABCC7

**Application** ICC, IP, WB

**Application Notes** Detects a band of ~170kDa by Western blot.

Functional Application: inhibits epithelial uptake of *S. typhi* in some mouse cell lines.

Clone CF3

**Cross-reacts** with related proteins in mouse cell line Heb7a that doesn not contain

CFTR mRNA.

**Formulation** Liquid. Diluted ascites containing 0.05% sodium azide.

**Host** Mouse

Immunogen Synthetic peptide corresponding to aa 103-117(G103RIIASYDPDNKEER117) in the first

extracellular loop of human and rabbit CFTR (cystic fibrosis transmembrane

conductance regulator). This sequence is highly conserved in mouse, sheep, bovine

and Xenopus laevis CFTR.

**Isotype** IgM

Recommendation
Dilutions/Conditions

Immunocytochemistry (1:500; staining of CFTR in mouse epithelial cells results in cell surface staining, consistent with localization at the plasma membrane. Antibody also detects one or more immunologically related proteins in murine cell line Heb7a that does not contain CFTR mRNA.)Western Blot (1:500)Suggested dilutions/conditions may not be available for all applications.Optimal conditions must be determined individually for each application.

Species Reactivity Human, Mouse

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