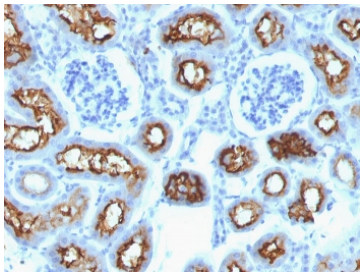
CFTR Antibody / Mouse Tissue Reactive Antibody [clone CFTR/1342] (V7666)

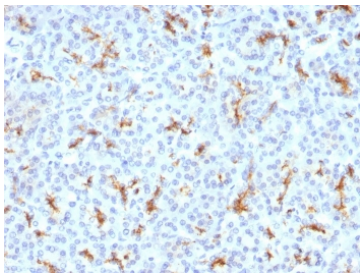
Catalog No.	Formulation	Size
V7666-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7666-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7666SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

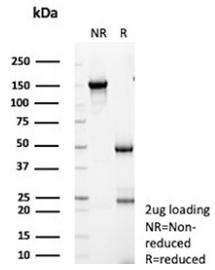
Availability	1-3 business days
Species Reactivity	Human, Mouse
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2a, kappa
Clone Name	CFTR/1342
Purity	Protein G affinity chromatography
UniProt	P13569
Localization	Cell surface, cytoplasmic
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml
Limitations	This CFTR Antibody / Mouse Tissue Reactive Antibody is available for research use only.



CFTR Antibody Mouse Kidney IHC. Immunohistochemistry analysis of Cystic fibrosis transmembrane conductance regulator / CFTR expression in FFPE mouse kidney tissue using mouse monoclonal antibody clone CFTR/1342. This Mouse Tissue Reactive Antibody demonstrates clear apical membranous HRP-DAB brown staining in renal tubular epithelial cells, while surrounding interstitial regions show minimal signal; nuclei are counterstained blue. This CFTR antibody supports detection of CFTR in mouse tissue models and enables comparison with human epithelial expression patterns. Antigen retrieval was performed by boiling sections in 10 mM Tris buffer with 1 mM EDTA, pH 9, for 10-20 min followed by cooling at room temperature.



CFTR Antibody Pancreas IHC. Immunohistochemistry analysis of Cystic fibrosis transmembrane conductance regulator / CFTR expression in FFPE human pancreatic tissue using mouse monoclonal antibody clone CFTR/1342. HRP-DAB brown staining is observed with apical membranous and luminal accentuation in ductal epithelial cells, while surrounding acinar tissue shows minimal signal; nuclei are counterstained blue. This CFTR antibody complements mouse tissue findings by enabling comparison between human and mouse epithelial expression patterns. Antigen retrieval was performed by boiling sections in 10 mM Tris buffer with 1 mM EDTA, pH 9, for 10-20 min followed by cooling at room temperature.



CFTR Antibody SDS-PAGE. SDS-PAGE analysis of purified CFTR antibody, clone CFTR/1342, under non-reducing (NR) and reducing (R) conditions with 2 ug protein loading. The non-reduced sample shows a predominant band corresponding to intact immunoglobulin, while the reduced sample resolves into bands consistent with heavy and light chains, confirming structural integrity and purity of this CFTR antibody.

Description

Cystic fibrosis transmembrane conductance regulator (CFTR) is a membrane-associated ATP-binding cassette transporter that functions as a cAMP-regulated chloride and bicarbonate channel in epithelial tissues. Cystic fibrosis transmembrane conductance regulator (CFTR) is primarily localized to the apical membrane of epithelial cells in organs such as kidney, pancreas, airway, and intestine, where it regulates ion transport and fluid homeostasis. CFTR Antibody / Mouse Tissue Reactive Antibody is designed to support detection of CFTR in both mouse and human tissues, enabling comparative analysis across experimental models and translational studies. For a widely cited CFTR antibody used across multiple study types, see our M3A7 clone.

CFTR antibody, also referred to as cystic fibrosis transmembrane conductance regulator antibody or ABCC7 antibody, recognizes a multi-domain membrane protein composed of two nucleotide-binding domains and multiple transmembrane segments that form the ion channel pore. In tissue-based applications, CFTR is typically detected with apical membranous and luminal staining in epithelial cells, reflecting its role in directing ion transport across polarized epithelial surfaces. This distribution is particularly evident in renal tubular epithelium and pancreatic ductal structures, where CFTR contributes to fluid secretion and epithelial function.

This CFTR Antibody / Mouse Tissue Reactive Antibody is supported by immunohistochemistry data demonstrating clear epithelial staining in both FFPE mouse kidney and FFPE human pancreas tissues. In mouse kidney, staining highlights renal tubular epithelial cells with apical localization, while in human pancreas, staining is observed in ductal epithelial cells with luminal accentuation. The ability to detect CFTR in both species supports its use in studies that bridge mouse model systems with human tissue analysis, providing continuity between experimental and translational research workflows.

Mutations in CFTR are the underlying cause of cystic fibrosis, a genetic disorder characterized by impaired chloride transport and altered epithelial function. Changes in CFTR expression and localization can be evaluated in tissue sections, providing insight into epithelial organization and disease-related alterations. The ability to examine CFTR in both mouse and human tissues is particularly valuable for studies investigating disease mechanisms and therapeutic approaches using animal models.

In addition to its established role in epithelial ion transport, CFTR contributes to broader cellular processes including regulation of other ion channels, vesicle trafficking, and epithelial differentiation. Its conserved function and distinct localization pattern make it well suited for comparative tissue studies. A CFTR antibody can be used to evaluate CFTR expression in both mouse and human tissues, supporting investigations into epithelial biology, ion transport mechanisms, and disease-related changes across model systems.

This antibody is part of a broader antibody panel offered by NSJ Bioreagents.

Application Notes

Optimal dilution of the CFTR Antibody / Mouse Tissue Reactive Antibody should be determined by the researcher.

Immunogen

Human recombinant protein was used as the immunogen for this CFTR antibody.

Storage

Store the CFTR antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

CFTR antibody, Cystic fibrosis transmembrane conductance regulator antibody, ABCC7 antibody, CFTR mouse IHC antibody, CFTR immunohistochemistry antibody