



Anti-Human CFTR Monoclonal Antibody

Product Code: CABh-24042

Clone: 3B1-H1

For Research Use Only (RUO)

Alternate Names	BC35, ABCC7, CF, CFTR/MRP, MRP7, TNR-dJ760C5.1, CF transmembrane conductance regulator
Isotype	IgG2a
Conjugate	Unconjugated
Background	Human Cystic Fibrosis Transmembrane Conductance Regulator (CFTR), is a 12-transmembrane ATP-binding cassette (ABC) transporter-class ion channel protein but uniquely acts as an ion channel regulated by ATP binding and phosphorylation. CFTR functions as a chloride and bicarbonate ion channel in epithelial cells. It plays a critical role in maintaining fluid balance across tissues such as the lungs, pancreas, and intestines. Mutations in the CFTR gene lead to cystic fibrosis, a genetic disorder characterized by thick mucus buildup, chronic lung infections, and impaired digestion. Human CFTR protein has ~85% sequence homology with mouse CFTR.

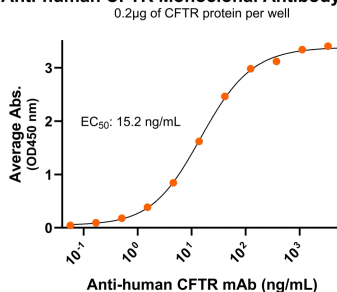
Product Details

Specificity	Human
Antibody Type	Monoclonal antibody
Host Species	Mouse
Immunogen	CFTR extracellular loop 4, the exact sequence of the immunogen is proprietary.; UniProt # P13569
Formulation / Storage buffer	0.22µm filtered PBS, pH 7.4
Shipping	Frozen Dry Ice
Purification	Affinity Enrichment
Stability & Storage	-80°C
Verified Application	ELISA
Recommended Usage	ELISA: starting concentration 1 µg/mL

Bioactive Data, Detection of Antigen by:

ELISA

Anti-human CFTR Monoclonal Antibody, ELISA



Immobilized human CFTR fragment at 2 µg/mL (100 µL/well) can bind mouse Anti-Human CFTR Monoclonal Antibody (Cat. No. CABh-24042) with half maximal effective concentration (EC50) range of 7.6-30.4 ng/mL (QC tested).

Antigen Details

Structure	12-transmembrane ion channel protein
Function	Critical role in maintaining fluid balance across tissues such as the lungs, pancreas, and intestines
Ligand / Receptor	None
Cell Type	Epithelial cells of many organs
Molecular Family	ATP-binding cassette transporter-class ion channel
Gene ID	P13569