

Product name:	CFTR (Phospho-Ser737) Rabbit Polyclonal Antibody
Cat number:	ABN05689
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	Synthesized peptide derived from human CFTR (Phospho-Ser737)
Reactivity:	Human, Mouse, Rat
Applications:	WB 1:500-1:2000, IHC 1:50-1:200, ICC/IF 1:50-1:200
Molecular Weight:	166kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

This gene encodes a member of the ATP-binding cassette (ABC) transporter superfamily. ABC proteins transport various molecules across extra- and intra-cellular membranes. ABC genes are divided into seven distinct subfamilies (ABC1, MDR/TAP, MRP, ALD, OABP, GCN20, White). This protein is a member of the MRP subfamily that is involved in multi-drug resistance. The encoded protein functions as a chloride channel and controls the regulation of other transport pathways. Mutations in this gene are associated with the autosomal recessive disorders cystic fibrosis and congenital bilateral aplasia of the vas deferens. Alternatively spliced transcript variants have been described, many of which result from mutations in this gene. [provided by RefSeq, Jul 2008], catalytic activity: $\text{ATP} + \text{H}_2\text{O} = \text{ADP} + \text{phosphate}$, disease: 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, disease: 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, domain: The PDZ-binding motif mediates interactions with GOPC and with the SLC4A7, SLC9A3R1/EBP50 complex, function: Involved in the transport of chloride ions. May regulate bicarbonate secretion and salvage in epithelial cells by regulating the SLC4A7 transporter, online information: CFTR entry, online information: Cystic fibrosis mutation db, PTM: Phosphorylated; activates the channel. It is not clear whether PKC phosphorylation itself activates the channel or permits activation by phosphorylation at PKA sites, similarity: Belongs to the ABC transporter family, similarity: Belongs to the ABC transporter family. CFTR transporter (TC 3.A.1.202) subfamily, similarity: Contains 2 ABC transmembrane type-1 domains, similarity: Contains 2 ABC transporter domains, subunit: Interacts with SHANK2 (By similarity). Interacts with SLC9A3R1, MYO6 and GOPC. Interacts with SLC4A7 through SLC9A3R1, tissue specificity: Found on the surface of the epithelial cells that line the lungs and other organs,