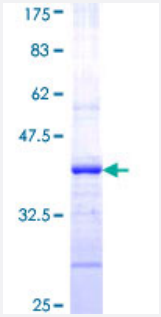
CFTR (Human) Recombinant Protein (Q01)

Catalog # H00001080-Q01 Size 25 ug, 10 ug

Applications



Specification

Product Description	Human CFTR partial ORF (NP_000483, 1381 a.a. - 1480 a.a.) recombinant protein with GST-tag at N-terminal.
Sequence	YQIIRRTLKQAFADCTVILCEHRIEAMLECQQFLVIEENKVRQYDSIQKLLNERSLFRQAISPSDRVKL FPHRNSSKCKSKPQIAALKEETEEEVQDTRL
Host	Wheat Germ (in vitro)
Theoretical MW (kDa)	36.74
Interspecies Antigen Sequence	Mouse (71); Rat (66)
Preparation Method	*in vitro* wheat germ expression system
Purification	Glutathione Sepharose 4 Fast Flow
Quality Control Testing	12.5% SDS-PAGE Stained with Coomassie Blue.
Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — CFTR

Entrez GeneID	1080
GeneBank Accession#	NM_000492
Protein Accession#	NP_000483
Gene Name	CFTR
Gene Alias	ABC35, ABCC7, CF, CFTR/MRP, MRP7, TNR-CFTR, dJ760C5.1
Gene Description	cystic fibrosis transmembrane conductance regulator (ATP-binding cassette sub-family C, member 7)
Omim ID	219700 277180 602421
Gene Ontology	Hyperlink
Gene Summary	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
Other Designations	ATP-binding cassette sub-family C, member 7|cystic fibrosis transmembrane conductance regulator

Publication Reference

- Cystic Fibrosis Transmembrane Conductance Regulator Attaches Tumor Suppressor PTEN to the Membrane and Promotes Anti Pseudomonas aeruginosa Immunity.

  Riquelme SA, Hopkins BD, Wolfe AL, DiMango E, Kitur K, Parsons R, Prince A.

  Immunity 2017 Dec; 47(6):1169.

  Application: ELISA, Human, Human 16HBE cell lysates

Pathway

- ABC transporters
- Vibrio cholerae infection

Disease

- Abnormalities
- Acute Disease
- Acute-Phase Reaction
- Adenocarcinoma
- Adrenal hyperplasia
- Alcoholism
- alpha 1-Antitrypsin Deficiency
- Alpha-1-antitrypsin deficiency
- Aspergillosis
- Asthenozoospermia
- Asthma
- Azoospermia
- Bacterial Infections
- Body Weight
- Bronchial Hyperreactivity
- Bronchiectasis

- Burkholderia Infections
- Carcinoma
- Cardiovascular Diseases
- Child Nutrition Disorders
- Cholangitis
- Chromosome Aberrations
- Chromosome Deletion
- Chronic Disease
- Crohn Disease
- Cryptorchidism
- Cystic fibrosis
- Dental Caries
- Diabetes Complications
- Diabetes Mellitus
- Diabetic Nephropathies
- Disease Progression
- Disease Susceptibility
- Edema
- Esophageal Neoplasms
- Exocrine Pancreatic Insufficiency
- Functional Laterality
- Gastrointestinal Diseases
- Gaucher disease
- Genetic Diseases
- Genetic Predisposition to Disease
- Growth Disorders

- Head and Neck Neoplasms
- Hepatitis
- Hepatitis C
- HIV Infections
- Hyperglycemia
- Hyperlipidemias
- Hyperparathyroidism
- Hypersensitivity
- Hypertension
- Ileus
- Infant
- Infection
- Infertility
- Inflammatory Bowel Diseases
- Intestinal Obstruction
- Intussusception
- Klinefelter Syndrome
- Liver Cirrhosis
- Liver Diseases
- Lung Diseases
- Lung Neoplasms
- Maxillary Sinusitis
- Mycobacterium Infections
- Nasal Polyps
- Neoplasms

- Nutrition Disorders
- Oligospermia
- Osteoporosis
- Pancreatic cancer
- Pancreatic Diseases
- Pancreatic Neoplasms
- Pancreatitis
- Paranasal Sinus Diseases
- Pneumonia
- Polycystic Kidney
- Polycystic kidney disease
- Prostate cancer
- Prostatic Neoplasms
- Protein-Energy Malnutrition
- Proteinuria
- Pseudomonas Infections
- Psychiatric Status Rating Scales
- Psychological Tests
- Pulmonary Disease
- Recurrence
- Respiratory Insufficiency
- Respiratory Tract Diseases
- Respiratory Tract Infections
- Rhinitis
- Sarcoidosis
- Sex Chromosome Aberrations

- Sinusitis
- Staphylococcal Infections
- Steatorrhea
- Stress
- Translocation
- Typhoid Fever
- Urogenital Abnormalities
- Uterine Diseases