

Product Information

MemDX™ Membrane Protein Human CFTR (CF transmembrane conductance regulator) Full Length

Cat. No.: **MPC0991K**

This product is for research use only and is not intended for diagnostic use.

This product is a 167.9 kDa Human CFTR membrane protein expressed in HEK293. The protein is for research use only and is not approved for use in humans or in clinical diagnosis.

Product Specifications

Host Species

Human

Target Protein

CFTR

Protein Length

Full length

Protein Class

Transporter; Ion channel

Molecular Weight

167.9 kDa

TMD

10

Sequence

MQRSPLEKASVVS KLFFSWTRPILRKGYRQRLELSDIYQIPSVDSADNLS
EKLEREWDRELASKKNPKLINALRRCFFWRFMFYGIFLYLGEVTKAVQPL
LLGRIIASYDPDNKEERSIAIYLGIGLCLLFIVRTL LHPAIFGLHHIGM
QMRIAMFSLIYKTKLKLSSRVLDKISIGQLVSLLSNNLNKFDEGLALAHF
VWIAPLQVALLMGLIWELLQASAF CGLGFLIVLALFQAGLGRMMM KYRDQ
RAGKISERLVITSEMIENIQSVKAYCWEEAMEKMIENLRQTELKLRKAA
YVRYFNSSAFFFSGFFVFLSVLPYALIKGIILRKIFTTISFCIVLRMAV
TRQFPWAVQTWYDSLGAINKIQDFLQKQEYKTLEYNLTTTEVVMENVTAF
WEEGFGELEFEKAKQNNNNRKT SNGDDSLFFSNFSL LGTPVLKDINFKIER
GQLLAVAGSTGAGKTSLLMVIMGELEPSEGKIKHSGRISFCSQFSWIMPG
TIKENIIFGVSYDEYRYSVIKACQLEEDISKFAEKDNIVLGEGGITLSG
GQRARISLARAVYKDADLYLLDSPFGYLDVLTEKEIFESCVC KLMANKTR
ILVT SKMEHLKKADKILILHEGSSYFYGT FSELQNLQPDFSSKLMGCDSF
DQFSAERNRSILTETLHRFSLEGDAPVSWTETKKQSFKQTGEFGEKRKNS
ILNPINSIRKFSIVQKTPLQMNGIEEDSDEPLERRLSLVPDSEQGEAILP
RISVISTGPTLQARRRQSVLNLMT HSVNQGQNIHRKTTASTRKVSLAPQA
NLTELDIYSRRLSQETGLEISEEINEEDLKECFFDDMESIPAVTTWNTYL
RYITVHKSLIFVLWCLVIFLA EVAASLVVLWLLGNTPLQDKGNSTHSRN
NSYAVIITSTSSYYVFYIYGVADTLLAMGFFRGLPLVHTLITVSKILHH

KMLHSLVLPQPMSTLNTLKAGGILNRFSDIAILDLLPLTIFDFIQLLLI
VIGAIIVAVLQPYIFVATVPVIVAFIMLRAYFLQTSQQLKQLESEGRSP
IFTHLVTSKGLWTLRAFGRPYFETLFHKALNLHTANWFLYLSTLRWFQ
MRIEMIFVIFFIATVFISILTTGEGEGRVGIILTLAMNIMSTLQWAVNSS
IDVDSLMSRVSRVFKFIDMPTEGKPTKSTKPYKNGQLSKVMIENSHVKK
DDIWPSGGQMTVKDLTAKYTEGGNAILENISFSISPGQRXXXXXXXXXXXX
XX
XX
XX
XX
XX
PHRNSSKCKSKPQIAALKEETEEVQDTRL

Product Description

Expression Systems

HEK293

Tag

Based on specific requirements

Protein Format

Detergent or based on specific requirements

Form

Liquid

Storage

Aliquot and store at -20°C or lower. For long term storage, we recommend to store at -70°C or lower. Avoid freeze/thaw cycles.

Target

Target Protein

CFTR

Full Name

CF transmembrane conductance regulator

Introduction

This gene encodes a member of the ATP-binding cassette (ABC) transporter superfamily. The encoded protein functions as a chloride channel, making it unique among members of this protein family, and controls ion and water secretion and absorption in epithelial tissues. Channel activation is mediated by cycles of regulatory domain phosphorylation, ATP-binding by the nucleotide-binding domains, and ATP hydrolysis. Mutations in this gene cause cystic fibrosis, the most common lethal genetic disorder in populations of Northern European descent. The most frequently occurring mutation in cystic fibrosis, DeltaF508, results in impaired folding and trafficking of the encoded protein. Multiple pseudogenes have been identified in the human genome.

Alternative Names

CF; MRP7; ABC35; ABCC7; CFTR/MRP; TNR-CFTR; dJ760C5.1; cystic fibrosis transmembrane conductance regulator; cAMP-dependent chloride channel; channel conductance-controlling ATPase; cystic fibrosis transmembrane conductance regulating; cystic fibrosis transmembrane conductance regulator (ATP-binding cassette sub-family C, member 7); CFTR; CF transmembrane conductance regulator

Gene ID

[1080](#)

UniProt ID

[Q20BH0](#)