

Product Information

MemDX™ Membrane Protein Human ABCA4 (ATP binding cassette subfamily A member 4)

Full Length

Cat. No.: **MPC0367K**

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

This product is a 255.9 kDa Human ABCA4 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

ABCA4

Protein Length

Full length

Protein Class

Transporter

Molecular Weight

255.9 kDa

TMD

12

Sequence

MGFVRQIQLLLWKNWTLRKRQKIRFVVELVWPLSLFLVLIWLRNANPLYSHHECHFPNKAMPSAGMLPWLGIFCNVNNPCFQSPTPGESPGIVSNYNNLSILARVYRDFQELLMNAPESQHLGRIWTELHILSQFMDTLRTHPERIAGRGIRIRDILKDEETLTFLFIKNIGLSDSVVYLLINSQVRPEQFAHGVPDLALKDIACSEALLERFIIFSQRRGAKTVRYALCSLSQGTQLQWIEDTLYANVDFFKLFRVLPTLLDSRSQGINLRWGGILSDMSPRIQEFHRPSMQDLLWVTRPLMQNGGPETFTKLMGILSDLLCGYPEGGGSRVLSFNWYEDNNYKAFLGIDSTRKDPIYSYDRRTTSFCNALIQSLESNPLTKIAWRAAKPLLMGKILYTPDSPAARRILKNANSTFEELEHVRKLVKAWEEVGPQIWIYFFDNSTQMNMIRDTLGNPTVKDFLNRQLGEEGITAAILNFLYKGPRESQADDMANFDWRDIFNITDRTLRLVNQYLECLVLDKFESYNDETQLTQRALSLEENMFWAGVVFDPMPWTSSLPPhVKYKIRMDIDVVEKTNKIKDRYWDSGPRADPVEDFRYIWGGFAYLQDMVEQGITSQVQAEAPVGIYLLQMPYPCFVDDSFMIILNRCFPIFMVLAWIYSVSMTVKSIVLEKELRLKETLKNQGVSNNAVIWCTWFLDSFSIMSMSIFLLTIFIMHGRILHYSDFILFLFLLAFSTATIMLCFL LSTFFSKASLAAACSGVIYFTLYLPHILCFAWQDRMTAELKKA VSLSPVAFGFGTEYLVRFEQQLGLQWSNIGNSPTEGDEF SFLLSMQMMLLDAVYGLLAWYLDQVFP GDYGTPLPWYFLLQESYWLGGEGCSTREERALEKTEPLTEETEDPEHPEGIHDSFFEREHPGWVPGVCVKNLVKIFEPCGRPAVDRLN

ITFYENQITAF LGHNGAGKTTTSLTGLLPPTSGTVLVGGRDIETSLDA
VRQSLGMCPQHNLFFHHLTVAEHMLFYAQLKGKSQEEAQLEMEAMLEDTG
LHHKRNEEAQDLSSGGMQRKLSVAIAFVGDAKVVLDEPTSGVDPYSRRSI
WDL LK YRSGR TIIMSTHHMDEADLLGDRI AIIAQGRLYCSGTPLFLKNC
FGTGLYLTLVRKMKNISQSRK GSEGTCS CSSKGFSTTCPAHVDDLTPEQV
LDGDVNELMDVVLHHVPEAKLVE CIGQELIFLLPNKNFKHRAYASLFREL
EETLADLGLSSFGISDTPLEEIFLKVTE DSDSGPLFAGGAQQKRENVNPR
HPCLGP REKAGQTPQDSNVCS PGAPAAHPEGQPPPEPEC PGQLNTGTQL
VLQHVQALLVKRFQHTIRSHKDFLAQIVLPATFVFLALMLSIVIPPFGEY
PALTLHPWIYGQYTTFFSMDEPGSEQFTVLADVLLNKPFGNRC LKEGWL
PEYPCGNSTPWKTPSVSPNITQLFQKQKW TQVNPSPSCRCSTREKLTMLP
ECPEGAGGLPPPQRTQRSTEILQDLTD RNISDFLVKTYPALIRSSLKSKF
WVNEQRYGGISIGGKLPVVPITGEALVGFLSDLGRIMNVSGGPITREASK
EIPDFLKHLETEDNIKVWFNNKGW HALVSFLNVAHNAILRASLPKDRSPE
EYGITVISQPLNLTKEQLSEITVLTTSVDAVVAICVIFSMSFVPASFVLY
LIQERVNKS KHLQFISGVSPTTYWVTN FLWDIMNYSVSAGLVVGIFIGFQ
KKAYTSPENLPALVALLLLYGWAVIPMMYPASFLFDVPSTAYVALSCANL
FIGINSSAITFILELFENNR TLLRFNAVLRKLLIVFPHFCLGRGLIDLAL
SQA VTDVYARFGEEHSANPFHWDLIGKNLFAMVVEGVVYFLLTLLVQRHF
FLSQWIAEPTKEPIVDEDDDDVAEERQRIITGGNKTDILRLHELT KIYPGT
SSPAVDRLCVGVRPGECFGLLG VNGAGKTTTTFKMLTGDTTVTSGDATVAG
KSILTNISEVHQNMGYC PQFDAIDELLTGREHLYLYARLRGVPAEEIEKV
ANWSIKSLGLTVYADCLAGTYS GGNKRKLSTAIALIGCPPLVLLDEPTTG
MDPQARRMLWNVIVSIIREGRAVVL TSHSMEECEALCTRLAIMVKGA FRC
MGTIQHLKSKFGDGYIVTMKIKSPKDDLLPDLNPVEQFFQGNFPGSVQRE
RHYNMLQFQVSSSSLARIFQLLLSHKDSLLIEEYSVTQTTL DQVFVNAK
QQTESHDLPLHPRAAGASRQAQD

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

ABCA4

Full Name

ATP binding cassette subfamily A member 4

Introduction

The membrane-associated protein encoded by this gene is a member of the superfamily of ATP-binding cassette (ABC) transporters. ABC proteins transport various molecules across extra- and intracellular membranes. ABC genes are

divided into seven distinct subfamilies (ABC1, MDR/TAP, MRP, ALD, OABP, GCN20, White). This protein is a member of the ABC1 subfamily. Members of the ABC1 subfamily comprise the only major ABC subfamily found exclusively in multicellular eukaryotes. This protein is a retina-specific ABC transporter with N-retinylidene-PE as a substrate. It is expressed exclusively in retina photoreceptor cells, and the gene product mediates transport of an essential molecule, all-trans-retinal aldehyde (atRAL), across the photoreceptor cell membrane. Mutations in this gene are found in patients diagnosed with Stargardt disease, a form of juvenile-onset macular degeneration. Mutations in this gene are also associated with retinitis pigmentosa-19, cone-rod dystrophy type 3, early-onset severe retinal dystrophy, fundus flavimaculatus, and macular degeneration age-related 2.

Alternative Names

FFM; RMP; ABCR; RP19; STGD; ABC10; ARMD2; CORD3; STGD1; retinal-specific phospholipid-transporting ATPase ABCA4; ATP binding cassette transporter; ATP-binding cassette sub-family A member 4; ATP-binding cassette transporter, retinal-specific; ATP-binding cassette, sub-family A (ABC1), member 4; ATP-binding transporter, retina-specific; RIM ABC transporter; RIM protein; photoreceptor rim protein; retina-specific ABC transporter; retinal-specific ATP-binding cassette transporter; stargardt disease protein; ABCA4; ATP binding cassette subfamily A member 4

Gene ID

[24](#)

UniProt ID

[P78363](#)