

Recombinant Mouse ABCA1 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51410

Size: 10ug, 100ug

Protein Name: Phospholipid-transporting ATPase ABCA1 (EC 7.6.2.1) (ATP-binding cassette sub-family A member 1) (ATP-binding cassette transporter 1) (ABC-1) (ATP-binding cassette 1)

Synonym: Abca1, Abc1

UniProt ID: P41233

UniProt Link: www.uniprot.org/uniprotkb/P41233/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 2261 AA

Molecular Weight: 254 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MACWPQLRLLLWKNLTFRRRQTCQLLLEVAWPLFIFLILISVRLSYPPYEQHECHFPNKAMPSAGTLP
WVQGIICNANNPCFRYPTPGEAPGVVGNFNKSIVSRLFSDAQRLLLYSQRDTSIKDMHKVLRMLRQI
KHPNSNLKLQDFLVDNETFSGFLQHNLSLPRSTVDSLLQANVGLQKVFLQGYQLHLASLCNGSKLEE
IIQLGDAEVSALCGLPRKKLDAEAERVLRYNMDILKPVVTKLNSTSHLPTQHLEATTVLLDSLGGLAQE
LFSTKSWSDMRQEVMTNVTNSSSSSTQIYQAVSRIVCGHPEGGLKIKSLNWDNNDNYKALFGGN
NTEEDVDTFYDNSTTPYCNDLMKNLESSPLSRIIWKALKPLLVGKILYTPDTPATRQVMAEVNKTQFQ
LAVFHDLEGMWEELSPQIWTFMENSQEMDLVRTLLDSRGNDQFWEQKLDGLDWTAAQDIMAFKLN
PEDVQSPNGSVYTWREAFNETNQAIQTISRMECVNLNKLPIPTTEVRLINKSMELLDERKFWAGIVF
TGITPDSVELPHHVKYKIRMDIDNVERTNKKIDGYWDGPGRADPFEDMRYVWGGFAYLQDVVEQAI
RVLTGSEKKTGVYVQQMPYPCYVDDIFLRVMSRSMPLFMTLAWIYSVAVIISIVYEKEARLKETMRI
MGLDNGILWFSWFVSSLIPLLVSAGLLVVILKLGNNLLPYSDPSVVFVFLSVFAMVTILQCFLISTLFSRA
NLAAACGGIIFTLYLPYVLCVAWQDYVGFSSIKIFASLLSPVAFGFGCEYFALFEEQGIGVQWDNLFES
PVEEDGFNLTTAVSMMLFDTFLYGVMTWYIEAVFPGQYGIPRPWYFPCTKSYWFGEEIDEKSHPGS
SQKGVSEICMEEEPHTLRLGVSIQNLVKVYRDGMKVAVDGLALNFYEGQITSFLGHNGAGKTTTMSI
LTGLFPPTSGTAYILGKDIRSEMSSIRQNLGVCPQHNVLFDMLTVEEHIWFYARLKGLSEKHVKAEME
QMALDVGLPPSKLKSQTSQSLSGGMQRKLSVALAFVGGSKVVILDEPTAGVDPYSRRGIWELLKYR
QGRITILSTHMDADILGDRIAIISHGKLCCVGSLSFLKNQLGTGYLTLVKKDVESSLSSCRNSSST



VSCLKKEDSVSQSSSDAGLGSDHESDTLTIDVSAISNLIRKRVSEARLVEDIGHELTYVLPYEAKEGA
FVELFHEIDRLSDLGISSYGISETTLEEIFLKVAEESGVDAETSDGTLPARRNRRAFGDKQSC LHPFT
EDDAVDPNDSDIDPESRETDLISGMDGKGSYQLKGWKL TQQQFVALLWKRLLIARRSRKGFFAQIV
LPAVFVCIALVFLIVPPFGKYPSLELQPW MYNEQYTFVSNDAPE DMGTQELLNALT KD PFGFTRCM
EGNPIPDTPCLAGEEDWTISPVPQSIVDLFQNGNWTMKNPSPACQCSSDKIKKMLPVCPPGAGGLP
PPQRKQKTADILQNL TGRNISDYLVKTYVQIIAKSLKNKIWVNEFRYGGFSLGVSNSQALPPSHEVND
AIKQMKKLLKLT KDSSADRFLSSLGRFMAGLDTKNNVKVWFNNKGWHAISSFLN VINNAILRANLQK
GENPSQYGITAFNHPLNLTKQQLSEVALMTTSDV LVSICVIFAMSFVPASFVVFLIQERVSKAKHLQF
ISGVKPVIIYWLSNFVWDMCNYVVPATLVIIIFICFQQKSYVSSTNLPVLALLLLLYGWSITPLMYPASFV
FKIPSTAYVVLTSVNLFIGINGSVATFVLELFTNNKLN DINDILKSVFLIFPHFCLGRGLIDMVKNQAMAD
ALERFGENRFVSPLSWDLVGRNLFAMAVEGVVFFLITVLIQYRFFIRPRPVKAKLPPLNDEDEDVRRE
RQRILDGGGQNDILEIKELTKIYRRKRKPAVDRICIGIPPGEFCG LLGVNGAGKSTTFKMLTG DTPVTR
GDAFLNKNLSILSNIHEVHQNMGYCPQFDAITELLTGREHVEFFALLRGVPEKEVGKVGGEWAIRKLGLV
KYGEKYASNYSGGNKRKLSTAMALIGGPPVFLDEPTTGMDPKARRFLWNCALSIVKEGRSVVLT S
HSMEECEALCTRM AIMVNGRFRCLGSGVQHLKNRFGDGYTIVVRIAGSNPDLKPVQEFFGLAFPGSVL
KEKHRNMLQYQLPSSLSSLARIFSILSQSKKRLHIEDYSVSQT TLDQVFVNFAKDQSDDDHLKDLSLH
KNQTVVDVAVLTSFLQDEKVKESYV

3. Buffer Composition

Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

5. Product Description

This product is recombinant Phospholipid-transporting ATPase ABCA1 (EC 7.6.2.1) (ATP-binding cassette sub-family A member 1) (ATP-binding cassette transporter 1) (ABC-1) (ATP-binding cassette 1) produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

Protein Function: Catalyzes the translocation of specific phospholipids from the cytoplasmic to the extracellular/lumenal leaflet of membrane coupled to the hydrolysis of ATP. Thereby, participates in phospholipid transfer to apolipoproteins to form nascent high density lipoproteins/HDLs. Transports preferentially phosphatidylcholine over phosphatidylserine. May play a similar role in the efflux of intracellular cholesterol to apolipoproteins and the formation of nascent high density lipoproteins/HDLs. Translocates phospholipids from the outer face of the plasma membrane and forces it through its gateway and annulus into an elongated hydrophobic tunnel in its extracellular domain.

Subcellular Localization: Cell membrane ; Multi-pass membrane protein . Endosome .

6. Notes



- Avoid repeated freeze-thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer-composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.