Datasheet for ABIN7563990

ATP7A Protein (AA 1-1491) (His tag)

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Overview

Quantity:	1 mg
Target:	ATP7A
Protein Characteristics:	AA 1-1491
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This ATP7A protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Purpose:	Custom-made recombinat Atp7a Protein expressed in mammalien cells.
Sequence:	MEPSVDANSI TITVEGMTCI SCVRTIEQQI GKVNGVHHIK VSLEEKSATI IYDPKLQTPK TLQEAIDDMG FDALLHNANP LPVLTNTVFL TVTAPLTLPW DHIQSTLLKT KGVTGVKISP QQRSAVVTII PSVVSASQIV ELVPDLSLDM GTQEKKSGAC EEHSTPQAGE VMLKMKVEGM TCHSCTSTIE GKVGKLQGVQ RIKVSLDNQE ATIVFQPHLI TAEEIKKQIE AVGFPAFIKK QPKYLKLGAI DVERLKNTPV KSSEGSQQKS PSYPSDSTTM FTIEGMHCKS CVSNIESALS TLQYVSSIVV SLENRSAIVK YNASLVTPEM LRKAIEAISP GQYRVSIASE VESTASSPSS SSLQKMPLNI VSQPLTQEAV ININGMTCNS CVQSIEGVIS KKPGVKSIHV SLANSTGTIE FDPLLTSPET LREAIEDMGF DAALPDMKEP LVVIAQPSLE TPLLPSSNEL ENVMTSVQNK CYIQVSGMTC ASCVANIERN LRREEGIYSV LVALMAGKAE VRYNPAVIQP RVIAEFIREL GFGAMVMENA GEGNGILELV VRGMTCASCV HKIESTLTKH KGIFYCSVAL ATNKAHIKYD PEIIGPRDII HTIGSLGFEA SLVKKDRSAN HLDHKREIKQ WRGSFLVSLF FCIPVMGLMV

	YMMVMDHHLA TLHHNQNMSN EEMINMHSAM FLERQILPGL SIMNLLSLLL CLPVQFCGGW YFYIQAYKAL KHKTANMDVL IVLATTIAFA YSLVILLVAM FERAKVNPIT FFDTPPMLFV FIALGRWLEH IAKGKTSEAL AKLISLQATE ATIVTLNSEN LLLSEEQVDV ELVQRGDIIK VVPGGKFPVD GRVIEGHSMV DESLITGEAM PVAKKPGSTV IAGSINQNGS LLIRATHVGA DTTLSQIVKL VEEAQTSKAP IQQFADKLSG YFVPFIVLVS IVTLLVWIII GFQNFEIVET YFPGYNRSIS RTETIIRFAF QASITVLCIA CPCSLGLATP TAVMVGTGVG AQNGILIKGG EPLEMAHKVK VVVFDKTGTI THGTPVVNQV KVLVESNKIS RNKILAIVGT AESNSEHPLG AAVTKYCKKE LDTETLGTCT DFQVVPGCGI SCKVTNIEGL LHKSNLKIEE NNIKNASLVQ IDAINEQSST SSSMIIDAHL SNAVNTQQYK VLIGNREWMI RNGLVISNDV DESMIEHERR GRTAVLVTID DELCGLIAIA DTVKPEAELA VHILKSMGLE VVLMTGDNSK TARSIASQVG ITKVFAEVLP SHKVAKVKQL QEEGKRVAMV GDGINDSPAL AMANVGIAIG TGTDVAIEAA DVVLIRNDLL DVVASIDLSR KTVKRIRINF VFALIYNLVG IPIAAGVFLP IGLVLQPWMG SAAMAASSVS VVLSSLFLKL YRKPTYDNYE LHPRSHTGQR SPSEISVHVG IDDTSRNSPR LGLLDRIVNY SRASINSLLS DKRSLNSVVT SEPDKHSLLV GDFREDDDTT L **Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.**
Characteristics:	Key Benefits: • Made to order protein - from design to production - by highly experienced protein experts. • Protein expressed in mammalien cells and purified in one-step affinity chromatography • The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins. • State-of-the-art algorithm used for plasmid design (Gene synthesis). This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein. If you are not interested in a full length protein, please contact us for individual protein fragments. The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.
Purity:	> 90 % as determined by Bis-Tris Page, Western Blot
Grade:	custom-made

Target Details

Target:	ATP7A
Alternative Name:	Atp7a (ATP7A Products)
Background:	Copper-transporting ATPase 1 (EC 7.2.2.8) (Copper pump 1) (Menkes disease-associated protein homolog),FUNCTION: ATP-driven copper (Cu(+)) ion pump that plays an important role in intracellular copper ion homeostasis (PubMed:25639447, PubMed:27337370, PubMed:18650808). Within a catalytic cycle, acquires Cu(+) ion from donor protein on the cytoplasmic side of the membrane and delivers it to acceptor protein on the lumenal side. The transfer of Cu(+) ion across the membrane is coupled to ATP hydrolysis and is associated with a transient phosphorylation that shifts the pump conformation from inward-facing to outward-facing state (By similarity). Under physiological conditions, at low cytosolic copper concentration, it is localized at the trans-Golgi network (TGN) where it transfers Cu(+) ions to cuproenzymes of the secretory pathway (PubMed:27337370, PubMed:18650808, PubMed:16371425, PubMed:12488345). Upon elevated cytosolic copper concentrations, it relocalizes to the plasma membrane where it is responsible for the export of excess Cu(+) ions (By similarity). May play a dual role in neuron function and survival by regulating cooper efflux and neuronal transmission at the synapse as well as by supplying Cu(+) ions to enzymes such as PAM, TYR and SOD3 (PubMed:25639447, PubMed:15634787, PubMed:16371425, PubMed:12488345). In the melanosomes of pigmented cells, provides copper cofactor to TYR to form an active TYR holoenzyme for melanin biosynthesis (PubMed:18650808). {ECO:0000250|UniProtKB:Q04656}.
Molecular Weight:	162.0 kDa
UniProt:	Q64430
Pathways:	Transition Metal Ion Homeostasis, Ribonucleoside Biosynthetic Process

Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Restrictions:	For Research Use only

Handling

Format:	Liquid

Handling

Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months