

## Datasheet for ABIN7555985

# ATP6V0A1 Protein (AA 1-837) (His tag)



#### Overview

Quantity:	1 mg
Target:	ATP6V0A1
Protein Characteristics:	AA 1-837
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This ATP6V0A1 protein is labelled with His tag.

#### **Product Details**

Purpose:	Custom-made recombinant ATP6V0A1 Protein expressed in mammalian cells.
Sequence:	MGELFRSEEM TLAQLFLQSE AAYCCVSELG ELGKVQFRDL NPDVNVFQRK FVNEVRRCEE
	MDRKLRFVEK EIRKANIPIM DTGENPEVPF PRDMIDLEAN FEKIENELKE INTNQEALKR
	NFLELTELKF ILRKTQQFFD EMADPDLLEE SSSLLEPSEM GRGTPLRLGF VAGVINRERI
	PTFERMLWRV CRGNVFLRQA EIENPLEDPV TGDYVHKSVF IIFFQGDQLK NRVKKICEGF
	RASLYPCPET PQERKEMASG VNTRIDDLQM VLNQTEDHRQ RVLQAAAKNI RVWFIKVRKM
	KAIYHTLNLC NIDVTQKCLI AEVWCPVTDL DSIQFALRRG TEHSGSTVPS ILNRMQTNQT
	PPTYNKTNKF TYGFQNIVDA YGIGTYREIN PAPYTIITFP FLFAVMFGDF GHGILMTLFA
	VWMVLRESRI LSQKNENEMF STVFSGRYII LLMGVFSMYT GLIYNDCFSK SLNIFGSSWS
	VRPMFTYNWT EETLRGNPVL QLNPALPGVF GGPYPFGIDP IWNIATNKLT FLNSFKMKMS
	VILGIIHMLF GVSLSLFNHI YFKKPLNIYF GFIPEIIFMT SLFGYLVILI FYKWTAYDAH TSENAPSLLI
	HFINMFLFSY PESGYSMLYS GQKGIQCFLV VVALLCVPWM LLFKPLVLRR QYLRRKHLGT
	LNFGGIRVGN GPTEEDAEII QHDQLSTHSE DADEPSEDEV FDFGDTMVHQ AIHTIEYCLG

Troduct Details	
	CISNTASYLR LWALSLAHAQ LSEVLWTMVI HIGLSVKSLA GGLVLFFFFT AFATLTVAIL
	LIMEGLSAFL HALRLHWVEF QNKFYSGTGF KFLPFSFEHI REGKFEE 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.
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different
	isoform, please contact us regarding an individual offer.
Characteristics:	Key Benefits:
	<ul> <li>Made to order protein - from design to production - by highly experienced protein experts.</li> <li>Protein expressed in mammalian cells and purified in one-step affinity chromatography</li> <li>The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.</li> </ul>
	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, anti-tag ELISA, Western Blot and analytical SEC (HPLC)
Grade:	custom-made
Target Details	
Target:	ATP6V0A1
Alternative Name:	ATP6V0A1 (ATP6V0A1 Products)
Background:	V-type proton ATPase 116 kDa subunit a 1 (V-ATPase 116 kDa subunit a 1) (Clathrin-coated
	vesicle/synaptic vesicle proton pump 116 kDa subunit) (Vacuolar adenosine triphosphatase
	subunit Ac116) (Vacuolar proton pump subunit 1) (Vacuolar proton translocating ATPase 116
	kDa subunit a isoform 1),FUNCTION: Subunit of the V0 complex of vacuolar(H+)-ATPase (V-
	ATPase), a multisubunit enzyme composed of a peripheral complex (V1) that hydrolyzes ATP

and a membrane integral complex (V0) that transports protons across cellular membranes. V-

ATPase is responsible for the acidification of various organelles, such as lysosomes, endosomes, the trans-Golgi network, and secretory granules, including synaptic vesicles (PubMed:33065002, PubMed:34909687, PubMed:33833240). In certain cell types, can be exported to the plasma membrane, where it is involved in the acidification of the extracellular environment (By similarity). Required for assembly and activity of the vacuolar ATPase (By similarity). Through its action on compartment acidification, plays an essential role in neuronal development in terms of integrity and connectivity of neurons (PubMed:33833240). 
{ECO:0000250|UniProtKB:P32563, ECO:0000250|UniProtKB:Q29466, ECO:0000269|PubMed:33065002, ECO:0000269|PubMed:33833240, ECO:0000269|PubMed:34909687}.

Molecular Weight: 96.4 kDa

UniProt: Q93050

Pathways: Transition Metal Ion Homeostasis, Proton Transport

#### **Application Details**

Application Notes: We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

For Research Use only

### Handling

Restrictions:

Format:	Liquid
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