

## Datasheet for ABIN7563534

# ATP8A1 Protein (AA 1-1164) (His tag)



## Overview

Quantity:	1 mg
Target:	ATP8A1
Protein Characteristics:	AA 1-1164
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This ATP8A1 protein is labelled with His tag.

## **Product Details**

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Purpose:	Custom-made recombinant Atp8a1 Protein expressed in mammalian cells.
Sequence:	MPTMRRTVSE IRSRAEGYEK TDDVSEKTSL ADQEEVRTIF INQPQLTKFC NNHVSTAKYN
	VITFLPRFLY SQFRRAANSF FLFIALLQQI PDVSPTGRYT TLVPLLFILA VAAIKEIIED IKRHKADNAV
	NKKQTQVLRN GAWEIVHWEK VAVGEIVKVT NGEHLPADLL SLSSSEPQAM CYIETSNLDG
	ETNLKIRQGL PATSDIKDID SLMRISGRIE CESPNRHLYD FVGNIRLDGH GTVPLGADQI
	LLRGAQLRNT QWVHGIVVYT GHDTKLMQNS TSPPLKLSNV ERITNVQILI LFCILIAMSL
	VCSVGSAIWN RRHSGKDWYL HLHYGGASNF GLNFLTFIIL FNNLIPISLL VTLEVVKFTQ
	AYFINWDLDM HYEPTDTAAM ARTSNLNEEL GQVKYIFSDK TGTLTCNVMQ FKKCTIAGVA
	YGHVPEPEDY GCSPDEWQSS QFGDEKTFND PSLLDNLQNN HPTAPIICEF LTMMAVCHTA
	VPEREGDKII YQAASPDEGA LVRAAKQLNF VFTGRTPDSV IIDSLGQEER YELLNVLEFT
	SARKRMSVVV RTPSGKLRLY CKGADTVIYE RLAETSKYKE ITLKHLEQFA TEGLRTLCFA
	VAEISESDFE EWRAVYHRAS TSVQNRLLKL EESYELIEKN LQLLGATAIE DKLQDQVPET
	IETLMKADIK IWILTGDKQE TAINIGHSCR LLKRNMGMIV INEGSLDGTR ETLSRHCTTL

GDALRKENDF ALIIDGKTLK YALTFGVRQY FLDLALSCKA VICCRVSPLQ KSEVVEMVKK
QVKVITLAIG DGANDVSMIQ TAHVGVGISG NEGLQAANSS DYSIAQFKYL KNLLMVHGAW
NYNRVSKCIL YCFYKNIVLY IIEIWFAFVN GFSGQILFER WCIGLYNVMF TAMPPLTLGI
FERSCRKENM LKYPELYKTS QNALDFNTKV FWVHCLNGLF HSVILFWFPL KALQYGTVFG
NGKTSDYLLL GNFVYTFVVI TVCLKAGLET SYWTWFSHIA IWGSIALWVV FFGIYSSLWP
AVPMAPDMSG EAAMLFSSGV FWVGLLSIPV ASLLLDVLYK VIKRTAFKTL VDEVQELEAK
SQDPGAVVLG KSLTERAQLL KNVFKKNHVN LYRSESLQQN LLHGYAFSQD ENGIVSQSEV
IRAYDTTKQR PDEW 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:

- Made to order protein from design to production by highly experienced protein experts.
- · Protein expressed in mammalian 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, anti-tag ELISA, Western Blot and analytical SEC (HPLC)

#### Grade:

custom-made

### **Target Details**

Target:	ATP8A1
Alternative Name:	Atp8a1 (ATP8A1 Products)
Background:	Phospholipid-transporting ATPase IA (EC 7.6.2.1) (ATPase class I type 8A member 1)

(Chromaffin granule ATPase II) (P4-ATPase flippase complex alpha subunit ATP8A1),FUNCTION: Catalytic component of a P4-ATPase flippase complex which catalyzes the hydrolysis of ATP coupled to the transport of aminophospholipids from the outer to the inner leaflet of various membranes and ensures the maintenance of asymmetric distribution of phospholipids (PubMed:20224745, PubMed:16618126). Phospholipid translocation seems also to be implicated in vesicle formation and in uptake of lipid signaling molecules. In vitro, its ATPase activity is selectively and stereospecifically stimulated by phosphatidylserine (PS) (PubMed:20224745, PubMed:16618126). The flippase complex ATP8A1:TMEM30A seems to play a role in regulation of cell migration probably involving flippase-mediated translocation of phosphatidylethanolamine (PE) at the cell membrane (PubMed:23269685). Acts as aminophospholipid translocase at the cell membrane in neuronal cells, the activity is associated with hippocampus-dependent learning (PubMed:22007859). May play a role in brain connectivity (PubMed:27287255). {ECO:0000269|PubMed:2618618126, ECO:0000269|PubMed:23269685, ECO:0000269|PubMed:27287255}.

Molecular Weight: 131.4 kDa
UniProt: P70704

## **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.

Restrictions: For Research Use only

## Handling

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