

## Datasheet for ABIN7563630

# ATP8B1 Protein (AA 1-1251) (His tag)



#### Overview

| Quantity:                     | 1 mg  |
|-------------------------------|---|
| Target:                       | ATP8B1  |
| Protein Characteristics:      | AA 1-1251                                     |
| Origin:                       | Mouse   |
| Source:                       | HEK-293 Cells                                 |
| Protein Type:                 | Recombinant                                   |
| Purification tag / Conjugate: | This ATP8B1 protein is labelled with His tag. |

#### **Product Details**

| 1 Todact Details |  |
|------------------|--|
| Purpose:         | Custom-made recombinant Atp8b1 Protein expressed in mammalian cells.         |
| Sequence:        | MSTERDSETT FDEESQPNDE VVPYSDDETE DELEDQGSTV EPEQNRVNRE AEKKRETFRK            |
|                  | DCTWQVKAND RKFHEQPHFM NTKFFCIKES KYASNAIKTY KYNGFTFLPM NLFEQFKRAA            |
|                  | NFYFLILLIL QAIPQISTLA WYTTLVPLLL VLGITAIKDL VDDVARHKMD KEINNRTCEV IKDGRFKIIK |
|                  | WKDIQVGDVI RLKKNDFIPA DILLLSSSEP NSLCYVETAE LDGETNLKFK MALEITDQYL            |
|                  | QIEDNLATFD GFIECEEPNN RLDKFTGTLF WKNQSFPLDA DKILLRGCVI RNTDVCHGLV            |
|                  | IFAGADTKIM KNSGKTRFKR TKIDYLMNYM VYTIFIVLIL VSAGLAIGHA YWEAQVGNYS            |
|                  | WYLYDGENAT PSYRGFLNFW GYIIVLNTMV PISLYVSVEV IRLGQSHFIN WDLQMYYAEK            |
|                  | DTPAKARTTT LNEQLGQIHY IFSDKTGTLT QNIMTFKKCC INGTIYGDHR DASQHSHSKI            |
|                  | ELVDFSWNTF ADGKLAFYDH YLIEQIQSGK EPEVRQFFFL LSICHTVMVD RIDGQINYQA            |
|                  | ASPDEGALVN AARNFGFAFL ARTQNTITVS ELGSERTYNV LAILDFNSDR KRMSIIVRTP            |
|                  | EGSIRLYCKG ADTVIYERLH RMNPTKQETQ DALDIFASET LRTLCLCYKE IEEKEFTEWN            |
|                  | NKFMAASVAS SNRDEALDKV YEEIEKDLIL LGATAIEDKL QDGVPETISK LAKADIKIWV            |

LTGDKKETAE NIGFACELLT EDTTICYGED INSLLHTRME NQRNRGGVSA KFAPPVYEPF FPPGENRALI ITGSWLNEIL LEKKTKRSKI LKLKFPRTEE ERRMRSQSRR RLEEKKEQRQ KNFVDLACEC SAVICCRVTP KQKAMVVDLV KRYKKAITLA IGDGANDVNM IKTAHIGVGI SGQEGMQAVM SSDYSFAQFR YLQRLLLVHG RWSYIRMCKF LRYFFYKNFA FTLVHFWYSF FNGYSAQTAY EDWFITLYNV LYSSLPVLLM GLLDQDVSDK LSLRFPGLYV VGQRDLLFNY KRFFVSLLHG VLTSMVLFFI PLGAYLQTVG QDGEAPSDYQ SFAVTVASAL VITVNFQIGL DTSYWTFVNA FSIFGSIALY FGIMFDFHSA GIHVLFPSAF QFTGTASNAL RQPYIWLTII LTVAVCLLPV VAIRFLSMTI WPSESDKIQK HRKRLKAEEQ WKRRQSVFRR GVSSRRSAYA FSHQRGYADL ISSGRSIRKK RSPLDAIIAD GTAEYRRTVE S 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. If you are looking for a specific domain and are interested in a partial protein or a different

Specificity:

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

ATP8B1 Target:

| Alternative Name:   | Atp8b1 (ATP8B1 Products)   |
|---------------------|--|
| Background:         | Phospholipid-transporting ATPase IC (EC 7.6.2.1) (ATPase class I type 8B member 1) (P4-            |
|                     | ATPase flippase complex alpha subunit ATP8B1),FUNCTION: Catalytic component of a P4-               |
|                     | ATPase flippase complex which catalyzes the hydrolysis of ATP coupled to the transport of          |
|                     | phospholipids, in particular phosphatidylcholines (PC), from the outer to the inner leaflet of the |
|                     | plasma membrane (By similarity). May participate in the establishment of the canalicular           |
|                     | membrane integrity by ensuring asymmetric distribution of phospholipids in the canicular           |
|                     | membrane (PubMed:21820390). Thus may have a role in the regulation of bile acids transport         |
|                     | into the canaliculus, uptake of bile acids from intestinal contents into intestinal mucosa or both |
|                     | and protect hepatocytes from bile salts (PubMed:14976163, PubMed:21820390,                         |
|                     | PubMed:20126555). Involved in the microvillus formation in polarized epithelial cells, the         |
|                     | function seems to be independent from its flippase activity (By similarity). Participates in       |
|                     | correct apical membrane localization of CDC42, CFTR and SLC10A2 (PubMed:26416959).                 |
|                     | Enables CDC42 clustering at the apical membrane during enterocyte polarization through the         |
|                     | interaction between CDC42 polybasic region and negatively charged membrane lipids provided         |
|                     | by ATP8B1 (PubMed:26416959). Together with TMEM30A is involved in uptake of the synthetic          |
|                     | drug alkylphospholipid perifosine (By similarity). Required for the preservation of cochlear hair  |
|                     | cells in the inner ear (PubMed:19478059). According PubMed:20852622 is proposed to act as          |
|                     | cardiolipin transporter during inflammatory injury, the function is questioned by                  |
|                     | PubMed:21475228 (PubMed:20852622, PubMed:21475228). {ECO:0000250 UniProtKB:043520                  |
|                     | ECO:0000269 PubMed:14976163, ECO:0000269 PubMed:19478059,  |
|                     | ECO:0000269 PubMed:20126555, ECO:0000269 PubMed:20852622,  |
|                     | ECO:0000269 PubMed:21475228, ECO:0000269 PubMed:21820390,  |
|                     | ECO:0000269 PubMed:26416959}.  |
| Molecular Weight:   | 143.8 kDa  |
| UniProt:            | Q148W0   |
| 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  |
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### 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  |