

Product datasheet for **MC224062**

Atp8b1 (NM_001001488) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Tag Free
Symbol:	Atp8b1
Synonyms:	AI451886; FIC1; lc
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC224062 representing NM_001001488 Red=Cloning site Blue=ORF Orange=Stop codon

TTTGTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**

ATGAGCACAGAAAGAGACTCGGAAACAACATTTGATGAGGAGTCTCAGCCCAACGATGAAGTGGTCCCCT
ACAGTGATGATGAACTGAAGACGAACTTGAAGATCAGGGGTCCACGGTTGAACCAAGCAAGTCAAGCAATGAC
CGAAAGTCCACGAACAACCTCATTTCATGAACACCAAGTTCTTTGTATTAAGGAGAGCAATATGCGA
GTAATGCAATTAACATACAAGTACAATGGATTACCTTTCTACCCATGAATTTGTTTGAGCAGTTTAA
GAGGGCAGCCAACCTTCTATTTCTCATCTCCTGATCCTGCAGGCAATTCCTCAATCTCCACCCTGGCA
TGGTATACCACACTTGACCTCTGCTTTTGGTGCTGGGCATCACGGCCATCAAGACCTGGTAGATGATG
TGGCTCGTCATAAAATGGACAAGGAAATCAACAATAGGACGTGTGAAGTCATTAAGGATGGCAGGTTCAA
AATCATCAAGTGGAAAGATATCCAGTTGGAGATGTCATCCGCCTGAAGAAGATGATTTTATTCCAGCT
GACATCCTGCTGTTGTCCAGTTCAGAGCCTAACAGCCTCTGCTATGTAGAAACGGCTGAGCTCGACGGAG
AAACCAATTTGAAGTTCAAAATGGCCCTGGAAATCACGGACCAATATCTCCAAATAGAAGATAAATTGGC
AACATTTGATGGTTTCATCGAATGTGAAGAACCAACAATCGGTTAGACAAGTTCACAGGAACGCTGTTT
TGGAAGAACCAAGCTTTCCTTTGGATGCTGATAAAATCCTGTTACGAGGTTGTGTGATAAGGAACACCG
ATGTCTGCCATGGCCTGGTCATTTTGCAGGTGCTGACACAAAGATAATGAAGAATAGTGGGAAAACAG
ATTTAAAGAACCAAAATTGATTACTTGATGAACATACATGGTGTACACGATCTTATTGTTCTCATCCTG
GTTTCTGCCGGCTCGCCATTGGCCACGCCTATTGGGAAGCCCAAGTTGGCAATTTCTCTGGTACCTCT
ATGATGGAGAAAATGCCACACCGTCTACCGGGGATTCTGAATTTCTGGGGCTACATCATTGTATTGAA
CACCATGGTGCCCATTTCTCTATGTGAGTGTGAAGTGTCCGTCTGGGACAGAGTCATTTATCAAC
TGGGACCTGCAGATGTAATGCTGAGAAGGACACTCTGCCAAGGCGAGGACCAACCTTGAATGAGC
AGCTAGGGCAGATTCATTACATCTTCTCTGATAAGACGGGGACACTCACGCAAAATATCATGACCTTCAA
AAAGTGTGCTAATAACGGGACTATCTATGGAGACCATCGAGATGCTTCTCAACACAGCCACAGCAAAATC
GAGCTAGTGGACTTTAGCTGGAATACATTTGCCGATGGAAAGCTTGCATTTTATGACCATTACCTTATCG



AGCAAATACAGTCAGGGAAGAGCCAGAAGTACGACAGTTCTTCTTTTCTTTGCTTCGATTTGCCATACGGT
CATGGTGGACAGAAATTGATGGTCAGATCACTACCAGGCGGCTTCTCTGATGAAGGCGCCTGGTAAAC
GCCGCCAGGAACCTCGGCTTTGCCTTTCTCGCCGGACGCAGAACCATCACCGTCAGCGAACTGGGCT
CAGAGAGGACCTACAACGCTCCTTGCCATTTTGATTTCAACAGCGACCGAAAGCGGATGTCTATCATCGT
GAGGACCCCAAGGTAGTATCCGGCTGTACTGTAAAGGTGCTGACACCGTGATTTATGAACGGCTCCAT
CGGATGAATCCTACGAAGCAAGAAACACAGGATGCCCTGGATATCTTTGCAAGTGAGACTCTCAGGACCC
TGTGCTGTGCTACAAGGAAATTAAGAAAAAGATTTACAGAATGGAATAATAAGTTTATGGCCGCCAG
CGTGGCTCAAGCAACCGAGACGAAGCGTTGGATAAAGTGTACGAGGAGATTGAGAAAGACTTGATTCTC
TTGGGAGCTACTGCTATTGAAGACAAGCTACAGGATGGAGTCCAGAAACCATTTCAAACTTGCAAAAG
CTGACATTAAGATCTGGGTACTACCGGAGACAAAAAGGAACTGCAGAAAACATAGGTTTTGCCTGTGA
ACTCTTGACGGAAGACACTACTATCTGCTACGGAGAGGACATAAATCTCTTCTCACACCGAGTGGAG
AATCAGAGAAACAGAGGTGGAGTCTCTGCGAAATTTGCACCTCCTGTGTATGAACCCCTTTTCCACCTG
GAGAAAACCGTGCCTTAATCATCACTGGCTCCTGGCTGAATGAAATCCTTCTAGAGAAGAAGACCAAGAG
AAGTAAGATCCTGAAGCTGAAGTTCCCAAGGACAGAGGAGAGGCGGATGCGGAGCCAGAGCCGAGAG
CGGCTGGAAGAGAAGAGAGCAGCGGCAAAAGAACTTCGTGGACCTGGCTGCGAGTGACGCGCCGTCA
TCTGCTGCCGCGTCACGCCAAGCAGAAGGCCATGGTGGTGGACCTGGTGAAGAGGTACAAGAAAGCCAT
CACCTGGCCATCGGAGACGGGGCCAAATGATGTCAACATGATCAAACTGCCACATTTGGTGTGGAATA
AGTGGACAAGAAGGGATGCAAGCTGTATGTCCAGTGACTATTCTTTGCTCAGTTCAGATATCTGCAGC
GGTGTGCTGGTCCACGGCCGGTGGTCTTACATAAGGATGTGCAAGTTCTACGATACTTCTTTTACAA
GAACCTTGCCCTTTACTTTAGTTTCACTTTCTGGTACTCCTTCTTCAATGGCTACTCAGCCAGACGGCGTAT
GAGGATTGGTTTATCACCTCTACAACGTGCTGTACTCCAGTTTGCTGTGCTCCTCATGGGGCTGCTGG
ATCAGGACGTGAGTGACAAGCTGAGCCTCCGATTCCCTGGGCTGTATGTAGTGGGCGAGAGGACTTGCT
GTTCAACTATAAGAGATTCTTTGTCAGTTTGTGTCATGGGCTTAACTCAATGGTCTCTTCTTCATA
CCGCTTGGTGTCTTATCTGCAACAGTGGGACAGGATGGGAGGCGCCTTCAGACTACAGTCTTCGCCG
TCACGGTGGCTCCGCTCTAGTGATAACGGTCACTTCCAGATTGGCTTGATCTTCATCTGACTTT
TGTGAATGCCTTTTCAATTTTCCGCGAGCATCGCACTGTACTCGGCATCATGTTGATTTCACAGTGCT
GGGATACAGTTCCTTTCCGTCGCGATTTTCAAGTACAGGTTACAGCTTCCAATGCCCTGAGACAGCCAT
ACATCTGGCTGACCATCATCCTGACGGTTGCCGTGTGCTTACTACCTGTGCTGCCATCCGTTTCTGTG
CATGACCATTTGGCCCTCAGAAAGTGATAAGATCCAGAAGCATCGAAAGCGATTGAAGGCTGAAGAGCAG
TGGAACCGGCGCAGAGCGTGTCCGGAGGGGAGTATCTCCAGGCGCTCAGCCTATGCCTTTTCCGATC
AGAGAGGCTACGACAGCTCATCTCTCTGGCCGAGCATCCGCAAGAAGCGCTCGCCCTGGATGCCAT
CATCGCGGATGGCACGGCTGAGTACCGGCGCACAGTGGAGAGCTGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:

SgfI-MluI

ACCN:

NM_001001488

Insert Size:

3756 bp

OTI Disclaimer:	Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery. Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	1. Centrifuge at 5,000xg for 5min. 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. 3. Close the tube and incubate for 10 minutes at room temperature. 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_001001488.3</u>, <u>NP_001001488.2</u>
RefSeq Size:	6440 bp
RefSeq ORF:	3756 bp
Locus ID:	54670
UniProt ID:	<u>Q148W0</u>
Cytogenetics:	18 E1

Gene Summary:

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. Phospholipid translocation seems also to be implicated in vesicle formation and in uptake of lipid signaling molecules. May play a role in asymmetric distribution of phospholipids in the canicular membrane. Plays a role in bile salt homeostasis. In cooperation with ABCB4 may be involved in establishing integrity of the canalicular membrane thus protecting hepatocytes from bile salts. Involved in the microvillus formation in polarized epithelial cells; the function seems to be independent from its flippase activity. Required for the preservation of cochlear hair cells in the inner ear. Required for the preservation of cochlear hair cells in the inner ear. According PubMed:20852622 is proposed to act as cardiolipin transporter during inflammatory injury; the function is questioned by PubMed:21475228.[UniProtKB/Swiss-Prot Function]