

Product datasheet for **MC223728**

Atp8a1 (NM_009727) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Atp8a1 (NM_009727) Mouse Untagged Clone
Tag: Tag Free
Symbol: Atp8a1
Synonyms: A1481521; A1853962; APLT; Atp3a2; AW743152; AW822227; B230107D19Rik; ClassI
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC223728 representing NM_009727
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGCCGACCATGCGGAGGACAGTGTCCGAGATCCGCTCGCGCGGAAGTTATGAGAAGACAGATGATG
TTTCAGAGAAGACCTCGCTGGCAGATCAGGAGGAAGTGAAGAACCATCTTCATCAACCAGCCTCAGCTGAC
AAAATTCTGCAACAACCACGTCAGTACTGCAAAATACAACGTGATCACATTCCTCCGAGGTTCCCTCTAT
TCTCAGTTCGGAAGCGGCTAATTCTGTTCTTTCTTTATTGCCCTGCTCCAGCAAATTCCTGATGTGT
CGCCGACCGGTCGTTACACAACACTGGTTCCTCTCTTATTTATTTAGCTGTGGTGCTATTAAGAGAT
AATAGAAGATATTAACGACACAAGGCTGATAATGCTGTGAACAAGAAACAGACACAAGTTTTGAGAAAT
GGTGATGGGAAATTGTTCACTGGGAAAAGGTAATGTTGGAGATATAGTTATAATAAAGGCAAGAGT
ATATACCTGTGACACTGTCTTCTCTCGTCAAGTGAAGCCAGGCCATGTGCTACATCGAGACATCCAA
CTTAGATGGTGAACAACTTGAATTTAGACAAGGCTTACCGCAACATCGGATATCAAAGACATTGAC
AGTTTGATGAGAATTTCTGGCAGAATCGAGTGTGAAAGTCAAACCGACATCTCTACGATTTTGTGGGA
ACATAAGGCTTGATGGCCATGGCACCGTCCCTGGGGGACAGACCAGATCCTTCCGAGGAGCTCAGT
AAGAAATACCCAGTGGTTCATGGGATAGTTGTCTACACTGGCCACGACCAAGCTGATGCAGAATTCC
ACAAGCCACCCTTAACTCTCAATGTGGAACGGATTACAAATGTACAAATTCTGATTTTATTTGCA
TCTTAATTGCCATGTCTTGTGTGTTCTGTGGGCTCAGCCATTTGGAACCGAAGGCATTCGGGAAAGA
CTGGTACCTCCATCTACACTATGGTGGCCTAGTAACTTTGGACTGAACTTCTGACTTTTCATTATCCTT
TTCAACAACCTCATTCCCATCAGCTTGTGCTCACATTAGAAGTGGTGAAGTTTACTCAGGCATACTTCA
TAAATTTGGATCTTGACATGCATTATGAGCCACAGACACCGCAGCAATGGCTCGGACATCTAATCTGAA
TGAGGAACCTGGCCAGGTTAAATACATATTTCTGACAAAACCTGGACCCTGACATGCAATGTGATGCAG
TTCAAGAAGTGCACCATCGCGGGCTGGCCTATGGGCAGAGCTCACAGTTTGGAGATGAAAAACCTTTA
ATGACCCGTCGTTGCTGGACAATCTCCAGAATAACCACCAACCGCACCTATCATCTGTGAATTTCTCAC
AATGATGGCCGTCTGCCACAGCTGTACCGGAGAGAGAAGGGGCAAGATCATTATCAGGCTGCATCG
CCAGATGAGGGTGCCTGGTCCAGAGCCCAAGCAGTTGAATTTGTCTTCACTGGAAGAACTCCTGACT



CTGTCATCATAGATTCACCTGGGGCAGGAAGAAAGATATGAATTGCTCAATGTCCTAGAGTTCACCAAGTGC
 TAGGAAGAGGATGTCGGTGGTGGTTGCGACTCCATCCGGGAAGTTACGGCTCTACTGCAAAGGAGCTGAC
 ACAGTAATTTATGAACGACTTGCAGAGACCTCAAAGTACAAAGAAATCACCCATAAACACTTGGAAACAGT
 TTGCTACAGAAGGGCTGAGGACTTTGTGTTTTGCTGTGGCTGAGATTTCTGAGAGCGACTTCGAGGAGTG
 GCGGGCCGTCTACCACCGCGCATCCACGTCGGTACAGAACAGGCTGCTGAAGCTGGAGGAGAGCTACGAA
 CTAATTGAAAAGAATCTTCAGCTACTTGGAGCTACAGCCATTGAGGATAAATTGCAGGACCAAGTGCCTG
 AAACCATAGAAACGCTAATGAAGGCTGACATCAAATATGGATCCTTACTGGGGACAAGCAAGAAACTGC
 CATTAAATTGGACACTCCTGTAGACTCCTCAAGAGGAACATGGGAATGATCGTGATAAACGAGGGCTCT
 CTTGACGCGCACGAGGAAACTCTCAGCCGCCACTGCACCACCCTGGGAGATGCTCTTCGGAAGGAAAATG
 ATTTTGTCTTATAATTGATGGGAAGACCTCAAATATGCCTAACCTTTGGCGTCCGGCAGTATTTCTT
 GGACTTAGCTCTGCTGCAAAGCTGTCATTTGCTGCAGGGTTTCTCCTCTTCAGAAGTCCGAGGTTGTC
 GAGATGGTTAAGAAACAAGTCAAAGTCATCACACTTGCCATCGGGGATGGAGCAAATGACGTGAGCATGA
 TCCAGACGGCCCATGTGGGTGTTGGGATAAGCGGCAATGAAGTTTGCAGGCAGCCAACCTTTCAGATTA
 CTCATCGCTCAGTTCAAATATTTGAAGAATTTGTTGATGGTTCACGGTGCCTGGAATTACAATAGAGTC
 TCCAAGTGTATCCTGTACTGCTTCTACAAGAACATCGTGTCTACATCATCGAGATCTGGTTTGCCTTTG
 TCAACGGCTTTTCTGGACAGATCCTCTTTGAAAGATGGTGTATAGGGCTTTATAATGTGATGTTACAGC
 GATGCCTCCCTTGACACTTGAATATTTGAGAGATCGTGCAGAAAGGAGAACATGTTGAAGTATCCTGAG
 TTGTACAAAACATCCCAGAATGCTCTGGACTTCAATACCAAGGTTTTCTGGGTTCAATGTTTGAATGGCC
 TCTTCCACTCCGTTATTCTGTTTTGGTTCCCACTGAAAGCCCTGCAGTATGGCACGGTATTTGAAATGG
 GAAAACCTCAGATTACCTGCTTCTGGGAAACTTTGTTTATACTTTTGTAGTGATAACTGTGTGCTTGAAA
 GCTGGACTGGAACCTCCTATTGGACATGGTTCAGCCACATCGCCATCTGGGGCAGCATCGCGCTCTGGG
 TGGTGTCTTCGGGATCTACTCATCTCTGTGGCTGCCGTGCCATGGCCCTGACATGTCCGGAGAGGC
 AGCCATGCTCTTCAGCTCTGGAGTCTTCTGGTGGGCTTGCTCTCCATCCCTGTGGCGTCTTGTCTTG
 GATGTGCTGTACAAAGTCAAGAGGACGGCCTTTAAAACCTTAGTGGATGAAGTTCAGGAGCTTGAGG
 CGAAATCTCAAGACCCGGGCGCAGTCGACTTGGAAAGAGCCTCACGGAGAGAGCGCAGCTGCTCAAGAA
 CGTCTTTAAGAAGAACCAGTGAATCTGTACCGCTCCGAGTCCCTGCAGCAGAACCCTGCTTACGGCTAT
 GCTTTCTCTCAAGATGAAAACGGCATCGTCTCACAGTCTGAAGTCATCAGAGCCTATGACACCACGAAAC
 AGAGGCCCGATGAGTGGTGA

ACGGCTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** SgfI-MluI
- ACCN:** NM_009727
- Insert Size:** 3450 bp
- OTI Disclaimer:** 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.

RefSeq: [NM_009727.3](#), [NP_033857.1](#)

RefSeq Size: 8131 bp

RefSeq ORF: 3450 bp

Locus ID: 11980

UniProt ID: [P70704](#)

Cytogenetics: 5 C3.1

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. In vitro, its ATPase activity is selectively and stereospecifically stimulated by phosphatidylserine (PS). 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 plasma membrane. Acts as aminophospholipid translocase at the plasma membrane in neuronal cells; the activity is associated with hippocampus-dependent learning.[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (2) contains an alternate exon and lacks two other alternate exons in the 5' coding region, compared to variant 1. It encodes isoform b, which is shorter than isoform a. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.