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Product datasheet for MC223737

Atp8a2 (NM_015803) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Atp8a2 (NM_015803) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Atp8a2
Synonyms:	agil; AI415030; Atpc1b; wl
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin

Fully Sequenced ORF:

>MC223737 representing NM_015803
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTCCCGGGCCACGTCTGTTGGAGACCAGCTAGAGGCACCGGCCCGCATAATTTACCTCAACCAATCTC
ATCTCAACAAATTCTGCGACAACCGGATCAGTACGGCCAAGTACAGCGTGTTGACATTTCTACCTCGATT
CCTGTATGAGCAGATTAGGAGAGCTGCTAACGCCTTCTTCCTCTTCATTGCCTTATTACAGCAAATCCCA
GACGTCTCACCAACAGGACGGTACACCACCCTGGTGCCCTTGGTCATCATTCTAACGATTGCAGGCATCA
AAGAGATCATAGAAGATTTTAAACGACATAAGGCAGACAATGCAGTTAACAAGAAGAAAACAATAGTGTT
AAGAAATGGCATGTGGCACACTATCATGTGGAAAGAGGTGGCAGTGGGAGACATCGTGAAGGTCCTCAAT
GGGCAGTATCTTCCAGCAGACATGGTCCTGTTCTCCTCCAGTGAGCCCCAGGGGATGTGCTATGTTGAAA
CTGCTAACCTGGATGGCGAGACGAACCTTAAAATACGACAGGGCTTGAGCCACACAACCGACATGCAGAC
GAGGGACGTGCTCATGAAGCTGTCGGGAAGGATAGAGTGTGAAGGGCCCAACCGCCACCTCTACGACTTC
ACCGGCAACCTGCACTTGGATGGGAAGAGCTCCGTTGCCCTTGGACCTGACCAGATCCTTCTGAGAGGCA
CCCAGCTCAGGAACACACAGTGGGTCTTCGGCGTCGTTGTGTACACTGGACATGACAGCAAGCTCATGCA
GAATTCAACAAAAGCACCTCTCAAGAGATCAAATGTTGAGAAGGTAACCAACGTGCAGATCCTGGTGCTG
TTTGGTATCCTCCTGGTCATGGCGCTGGTGAGCTCTGTGGGGGCCCTGTTCTGGAATGGGTCTCATGGCG
GAAAGAGTTGGTACATCAAGAAGATGGACACGAACTCAGATAATTTTGGCTACAACTTGCTAACGTTTAT
CATCTTGTACAACAATCTGATTCCTATCAGCCTGCTGGTGACACTTGAGGTTGTGAAATACACGCAAGCC
CTCTTCATAAACTGGGACATGGATATGTATTATATTGAAAATGACACTCCTGCAATGGCCAGGACATCAA
ACCTCAACGAAGAGCTGGGGCAGGTAAAATACCTGTTTTCAGACAAGACTGGAACTCTTACATGTAATAT
CATGAACTTCAAGAAGTGTAGCATTGCTGGTGTGACCTATGGCCACTTCCCGGAACTAGCCAGAGAGCAG
TCCTCAGATGACTTCTGCCGGATGACTTCTTGTACCAATGACTCATGTGACTTCAATGATCCCAGGCTGT
TAAAGAACATCGAGGATCAGCACCCTACAGCCCCTTGCATACAAGAGTTCCTTACCCTGCTGGCTGTGTG
TCACACCGTCGTCCCCGAGAAGGATGGAGATGAAATTATCTACCAAGCCTCGTCCCCAGATGAAGCTGCT
TTGGTCAAAGGAGCTAAGAAGCTTGGCTTTGTGTTTACCGGGAGGACGCCGTACTCGGTCATCATCGAAG

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CGATGGGACAAGAACAGACATTCGGGATCCTCAATGTTCTAGAATTTTCTAGTGACAGGAAAAGAATGTC
TGTCATTGTCCGACTGCCATCAGGACAACTTCGACTCTACTGCAAGGGAGCCGATAACGTCATCTTTGAA
AGACTCTCAAAGGACTCAAAGTACATGGAGGAGACGCTATGCCATCTGGAATATTTTGCCACAGAAGGCC
TGCGGACTCTGTGCGTGGCCTACGCAGACCTTTCTGAGAATGAGTATGAGGAGTGGCTGAAAGTCTATCA
AGAGGCCAGCATCATTCTGAAGGACAGAGCCCAGAGGCTGGAAGAGTGTTACGAGATCATTGAGAAGAAT
TTACTGTTACTTGGAGCTACAGCCATCGAAGACCGTCTTCAAGCCGGCGTTCCAGAAACCATAGCCACTC
TGCTGAAGGCAGAAATCAAAATCTGGGTGTTGACAGGAGACAAACAAGAAACTGCAATTAATATCGGGTA
TTCCTGTCGGTTGGTGTCGCAGAACATGGCCCTTATCCTATTGAAGGAGGACTCTTTAGATGCAACAAGG
GCGGCCATCACTCAGCACTGCACAGATCTTGGAAATTTGCTGGGCAAAGAGAACGATGTGGCCCTCATCA
TCGATGGCCATACCCTGAAGTATGCACTCTCCTTTGAAGTCCGCAGAAGTTTCCTGGACCTGGCGCTCTC
ATGCAAAGCTGTCATCTGCTGCAGAGTGTCCCCTCTGCAGAAGTCTGAGATCGTGGATGTTGTGAAGAAG
CGAGTGAAAGCCATCACCCTGGCCATCGGAGACGGTGCCAATGACGTGGGGATGATCCAGACAGCCCACG
TAGGGGTCGGGATCAGCGGGAACGAGGGAATGCAGGCTACCAACAACTCAGATTATGCCATCGCACAGTT
TTCCTACCTGGAGAAGCTGCTTTTGGTCCACGGAGCCTGGAGCTACAACCGGGTGACCAAGTGTATCCTG
TACTGTTTCTACAAGAATGTGGTCCTCTACATCATCGAGCTATGGTTCGCCTTTGTGAATGGATTTTCTG
GGCAGATTTTATTCGAGCGCTGGTGCATCGGCTTGTACAATGTGATCTTCACGGCATTGCCGCCCTTCAC
TCTGGGGATCTTCGAGAGGTCTTGTACTCAGGAGAGCATGCTCAGGTTCCCACAGCTTTACAGAATCACT
CAGAACGCTGAAGGTTTCAACACTAAGGTTTTCTGGGGTCACTGCATCAATGCCTTGGTTCATTCCCTCA
TCCTCTTCTGGGTTCCCATGAAAGCGCTGGAGCATGATACTCCAGTAACCAGCGGTCATGCCACAGACTA
TTTGTTTGTTGGAAATATTGTTTACACGTACGTTGTGGTTACAGTTTGTTTGAAAGCTGGTTTGGAGACG
ACAGCTTGGACGAAATTCAGTCACCTGGCGGTGTGGGGAAGCATGCTGATCTGGTTGGTGTTCTTCGGTG
TCTATTCAACCATCTGGCCGACCATCCCCATTGCTCCTGACATGAAAGGGCAGGCAACTATGGTCCTGAG
CTCTGCGTACTTCTGGTTGGGATTGTTCCTGGTTCCGACTGCGTGTTTGATTGAAGACGTGGCGTGGAGA
GCGGCCAAGCACACCTGCAAAAAGACTCTGCTGGAGGAGGTGCAGGAGCTGGAGACCAAGTCCCGAGTGA
TGGGCAAGGCGATGCTTCGAGACAGTAACGGAAAGAGGATGAACGAGCGTGACCGTCTGATCAAGAGGCT
CAGCAGGAAGACACCTCCAACCCTCTTCCGAACAGGCTCCATCCAGCAGTGTGTCAGCCATGGGTATGCC
TTTTCTCAAGAAGAGCATGGAGCTGTTACACAGGAGGAAATAGTCCGCGCTTATGATACCACCAAAGAGA
ATTCAAGGAAGAAATAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI

ACCN: NM_015803

Insert Size: 3447 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.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info

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_015803.2, NP_056618.1
RefSeq Size:	3685 bp
RefSeq ORF:	3447 bp
Locus ID:	50769
UniProt ID:	P98200
Cytogenetics:	14 C3-D1
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. Reconstituted to liposomes, the ATP8A2:TMEM30A flippase complex predominantly transports phosphatidylserine (PS) and to a lesser extent phosphatidylethanolamine (PE). ATP8A2:TMEM30A may be involved in regulation of neurite outgrowth. Proposed to function in the generation and maintenance of phospholipid asymmetry in photoreceptor disk membranes and neuronal axon membranes. May be involved in vesicle trafficking in neuronal cells. Required for normal visual and auditory function; involved in photoreceptor and inner ear spiral ganglion cell survival. [UniProtKB/Swiss-Prot Function]