

Product datasheet for **MR227364**

Atp11c (NM_001001798) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Atp11c (NM_001001798) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Atp11c
Synonyms: A330005H02Rik; AI315324; Ig
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >MR227364 representing NM_001001798
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGTTCCGCCGGACCCTCAACCGTTTGTGTGCTGGAGAAGAGAAACGAGTTGGTACACGCACAGTGTGTTG
 TTGGCAATCATCCCATTCTGGAACAGAACCTTATATTGCGCAAAGATTTTGTGATAATAGAATAGTCTC
 ATCTAAGTATACACTTTGGAATTTCTCCCTAAGAATTTGTTGAACAGTTTGAAGAATTGCGAATTTT
 TATTTCTCATCATTTTCTTGTACAGGTCACAGTAGACACACCAACCAGCCAGTTACCACTGGACTTC
 CACTTTTTTTTCGTTATACTGTTACAGCAATCAAGCAGGGGTATGAAGATTGGCTTAGACACAGAGCTGA
 TAATGAAGTTAACAAAAGTGCTGTTTATATTGAAAATGCAAAGCGAGTGAGGAAAGAAAGTGAAAAA
 ATCAAGTTGGTGATGTAGTAGAAGTACAGGCAATGAAACCTTTCCCTGTGATCTTATACTTCTGTTCAT
 CCTGCACAACCTGATGGAACCTGTATGTCACTACAGCCAGTCTTGATGGTGAATCTAATTGCAAGACACA
 TTATGCAGTACGAGATACCATTGCACTGTGTACAGCCGAATCCATTGATAATCTCCGAGCAACAATTGAA
 TGTGAGCAGCCTCAACCTGATCTCTACAGGTTTGTGGGCGAATCAGTATCTATAGTAATAGTATTGAGG
 CTGTTGCCAGGCTTTGGGACCTGAAAACTTTTGTGCTGAAAGGAGCCACACTTAAAAATACCAAGAAGAT
 ATATGGAGTTGCTGTTTACACTGGGATGGAACCAAAAATGGCTTTGAACTACCAAGGAAATCTCAGAAA
 TGTTCTGCTGTGAAAAATCTATTAATGCCTTCTTGATTGTTTATTTATTTACTGACCAAAAGCTG
 CAGTATGCACAACCTTAAAGTATGTTGGCAAAGTTCCCATACAATGATGAACCATGGTATAACCAAAA
 GACTCAAAGGAACGGGAAACTTTTCAGGTTTTGAAAATGTTCACTGACTTTTTATCATTATGTTCTT
 TTCAACTTCATTATACCTGTCTCCATGTATGTCACAGTAGAAATGCAGAAATTTTTAGGGTCATTCTTTA
 TTTTCATGGGATAAAGACTTTTTTGTGAAAGAAATTAATGAAGGAGCCTTGGTTAATACATCAGACCTTAA
 TGAAGAAGTTGGTCAGGTGGACTATGTATTTACAGATAAGACTGGGACACTCACTGAAAAATAGCATGGAA
 TTCATTGAATGCTGCATAGATGGGCACAAATATAAAGGCACAACCTCAGGAAGTTGATGGATTATCTCAGA
 CTGATGGGCCCTTAGCCTATTTTGATAAAGCAGATAAAGACCGAGAGGCACTCTTCTCCGTGCCCTATG
 CTTATGTCACACTGTAGAAATGAAAACAAATGATGATGTTGATGGACCTGTAGAAGGAGCCGGATTACAA



[View online »](#)

TATATCTCCTCCTCACCAGATGAAATAGCTTTGGTGAAGGAGCTAAAAGGTTTGGGTTACATTTTTGG
 GAAATCAGAATGGATATATCAGAGTAGAGAACCAAGAAAAGAAATAGAAGAGTATGAACCTCTCCACAC
 CTTAAATTTTGTCTGTCCGCCGACGTATGAGTGAATTGTAAGGACCCAAAAGGAGATATTCTACTT
 TTCTGTAAGGAGCAGATTATCAATTTTTCCAGGGTACATAGCCATCAAAATGAGTTAACCAAAGACC
 ATGTGGAACGTAATGCAATGGATGGGTATCGGACTCTTTGTGTAGCCTTCAAAGAAATCCTCCAGATGA
 TTTTGAAGAATCAATGCACAAC TAGTAGAGGCAAAAATGGCCCTACAAGATAGAGAAGAAAACTGGAA
 AAGGTTTTGTAGATTGAGACTAACATGAATTTAATTGGAGCCACTGCTGTGGAAGACAAGCTGCAAG
 ATCAGGCTGCAGAGACCATTGAAGCTCTCCATGCAGCTGGCTTAAAAGTCTGGGTGCTTACTGGGGACAA
 GATGGAACAGCCAAATCTACTTGTATGCCTGCCGCTTTTCCAAACCAATACTGAGCTCTTGGAACTG
 ACCACAAAACCATTGAAGAGAGTGAAGGAAAGAAGTCGATTACATGAACTGCTAATAGAATATCGTA
 AGAAGTTGCTGCATGAATTTCTAAAAGCACTAGAAGCCTTAAAAAGCATGGACAGAACATCAGGAATA
 TGGATTAATCATTGATGGCTCCACATTGCACTCATACTAAATCTAGTCAAGATTGTAGTTCAAACAAC
 TATAAAGTATTTTTCTACAACTGTATGAAATGCACGTCAGTCTGCTGCCGGATGCCACCATTAC
 AAAAGCCAGATTGTCAGAATGGTGAAGAACTGAAAGGCAGCCCCATAACACTGTCAATAGGTGATGG
 TGCCAATGATGTCAGTATGATTTTGAATCCCATGTGGGAATAGGTATTAAGGAAAAGAAGGCCGTC
 GCAGCCAGGAATAGTGATTATTCTGTTCCAAAGTTAAGCATTTAAAGAACTGCTATTGGTTCATGGAC
 ATCTATACTATGTGAGAATAGCACATCTTGACAATATTTCTTCTACAAGAACCTTTGTTTCATTTTGC
 ACAATTTTGTACCAGTCTTCTGTGGATTCTCACAACAGCCACTCTATGATGCTGCTTATCTTACAATG
 TACAATATCTGTTTACATCCCTGCCATCCTGGCTTATAGTCTACTGGAACAGCACATCAACATTGATA
 CTCTGACCGCAGACCCTCGATTGTATGAAAATTACCGTAATGCTATGTTACAGTTGGGGCCCTTCTT
 ACATTGGACATTTCTGGCTGCATTTGAAGGACAGTATTCTTCTTTGGGACTTATTTCTTTTTCAGACT
 TCATCCTTAGAAGACAATGGAAAGATTTATGAAATGGACATTTGGAACCATTGTTTTACAGTCTTAG
 TATTCACCGTAACTCTGAAGCTCGCCTGGATACCCGGTCTGGACATGGATAAATCATTTTGTGATTTG
 GGGTTCTTAGCCTTTTATGTTTTTTTTCTATTCTTCTGGGAGGAATTATTTGGCCTTTTTCTGAAACAA
 CAGAGAATGTATTTGTGTTTGTCAAATGCTCTGTTCTGTATCCACATGGTTGGCTATAATCCTTTTAA
 TATTTATCAGCCTTTTCCCTGAGATTCTCCTAATAGTTGTAAAGAATGTTGGAAGAAGTCCAGGAA
 TCCGAATCTTGAAGTGCCTATGTTATTGCTTACAAGCATATTGACCGTGGTTGCAGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR227364 representing NM_001001798
 Red=Cloning site Green=Tags(s)

MFRRTLNRLCAGEEKRVGTRTVFVGNHPISGTEPYIAQRFCNRIVSSKYTLWNFLPKNLFEQFRIANF
 YFLIIFLVQVTVDPTSPVTSGLPLFFVITVTAIKQGYEDWLRHRADNEVNKSAVYIIENAKRVRKESEK
 IKVGDVVEVQANETFPDDLILLSSCTTDGTCYVTTASLDGESNCKTHYAVRDTIALCTAESIDNLRATIE
 CEQPQPDLYRFVGRISIYSNSIEAVARSLGPENLLLKGATLKNKKIYGVAVYTGMEKMLNYQGSQK
 CSAVEKSINAFILVYLFILLTKAAVCTTLKYVWQSSPYNDEPWYQKTKKERETFQVLKMFDFLSFVVL
 FNFIIIPVSMYVTVEMQKFLGSFFISWDKDFDEEINEGALVNTSDLNEELGQVDYVFTDKGTLTENSME
 FIECCIDGHKYKGTQEVDSLQTDGPLAYFDKADKNREALFLRALCLCHTVEMKTNDDVDGPVEGAGFT
 YISSSPDEIALVKGAKRFGFTFLGNQNGYIRVENQRKEIEEYELLHLNFDVRRRMSVIVRTQKGDILL
 FCKGADSSIFPRVHSHQIELTKDHVERNAMDGYRTL CVAFKEIPPDDFERINAQLVEAKMALQDREEKLE
 KVFDEIETNMNLIGATAVEDKLQDQAAETIEALHAAGLKVVWL TGDKMETAKSTCYACRLFQNTLELLEL
 TTKTIEESERKEDRLHELLIEYRKKLLHEFPKSTRSLKKAWTEHQEYGLIDGSTLSLILNSSQDCSSNN
 YKSIIFLQICMKCTAVLCCRMPLQKAQIVRMVKNLKGSPITLSIGDGDANDVSMILESHVIGIKGKEGRQ
 AARNSDYSVPKFKHLKLLLVHGLYYVRI AHLVQYFFYKNLCLFPQLPFLYQFFCGFSQQPLYDAAYLTM
 YNICFTSLPILAYSLLEQHINIDTLTADPRLYMKITGNAMLQLGPFLHWTFLAAFEGTVFFFGTYFLFQT
 SSLEDNGKIYGNWTFGTIVFTVLVFTVLKALDTRFWTWINHFVIWGS LAFYVFFSFFWGGIWPFLKQ
 QRMVFVFAQMLCSVSTWLAIIILLIFISLFEIILLIVVKNVRRRSARNPNLELPMLLSYKHIDRGCS

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9002_b07.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001001798

ORF Size: 3348 bp

OTI Disclaimer: 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](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_001001798.3](#)

RefSeq Size: 5965 bp

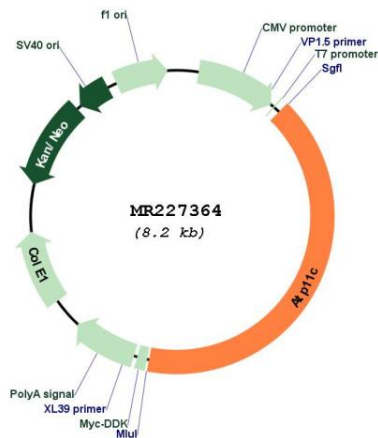
RefSeq ORF: 3351 bp

Locus ID: 320940

Cytogenetics: X A6
MW: 128.3 kDa

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. In the cell membrane of erythrocytes, it is required to maintain phosphatidylserine (PS) in the inner leaflet preventing its exposure on the surface. This asymmetric distribution is critical for the survival of erythrocytes in circulation since externalized PS is a phagocytic signal for splenic macrophages (By similarity). Phospholipid translocation seems also to be implicated in vesicle formation and in uptake of lipid signaling molecules. Required for B cell differentiation past the pro-B cell stage (PubMed:21423173). Seems to mediate phosphatidylserine (PS) flipping in pro-B cells (PubMed:21423172). May be involved in the transport of cholestatic bile acids (PubMed:21518881).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR227364