

## Product datasheet for **MR231484**

### Atp1a3 (NM\_001290469) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Atp1a3 (NM\_001290469) Mouse Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Atp1a3  
**Synonyms:** Atpa-2  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**ORF Nucleotide Sequence:** >MR231484 representing NM\_001290469  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCCGGATCGCC

ATGGGGGACAAAAAGATGACAAGAGCTCGCCCAAGAAGAGCAAGGCCAAAGAGCGCCGGGACCTGGATG  
 ACCTCAAGAAGGAAGTGGCTATGACAGAGCACAAGATGTCAGTAGAAGAGGTCTGCCGAAATACAATAC  
 TGACTGCGTGCAGGGTCTGACACACAGTAAAGCCAGGAGATCCTAGCCCGGGATGGGCCTAACGCCCTC  
 ACACCACCGCCACCACCCAGAATGGGTCAAGTTCTGCCGCGAGCTGTTTGGTGGCTTCTCTATCCTGC  
 TGTGGATCGGGCAATCCTTTGCTTCTGGCCTATGGCATCCAGGCAGGGACGGAGGATGACCCCTCCGG  
 TGACAATCTGTACCTGGGCATAGTGTGGCCGAGTCTGATCATCACCGGCTGCTTCTCTACTACCAA  
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 GAATCTGAGCCTCAGACCCGCTCCCCGGACTGCACACAGACAACCCCTGGAGACTCGGAACATCACCT  
 TCTTTTCCACCAACTGCGTGAAGGCACCGCTCGGGGTGTGGTGGTAGCCACAGGTGACCCGACCCGTCAT  
 GGGCCGATTGCCACCCTGGCCTCGGGCTTGGAGGTGGGCAAGACGCCCATCGCCATTGAGATTGAGCAT  
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 GGCTACTGTACGGTGTGTCTGACGCTGACCGCAAGCGCATGGCTCGCAAGAACTGCCTGGTGAAGAAC  
 CTGGAGGCGGTGGAGACGCTGGGCTCCACGTCCACCATCTGCTCGGACAAGACCGGCACTCTCACCCAGA  
 ACCGCATGACCGTCGCCCACATGTGGTTTGAACAACAGATCCACGAGGCAGACACCACAGAGGATCAGTC  
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 GGCTGAGATTCGGTTCAACTCGACCAACAATACCAGCTATCCATCCATGAGACTGAGGATCCCAATGAC  
 AACCGGTACCTGCTAGTATGAAGGGCGCCCCGAACGCATTCTGGACCGCTGTGCCACCATCCTCCTGC



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AGGGCAAGGAGCAGCCTCTGGATGAGGAGATGAAGGAGGCCTCCAGAATGCCTACCTGGAGCTTGGTGG
CCTGGGCGAGCGTGTGCTGGGTTTCTGCCATTACTACCTGCCTGAGGAACAGTTCCTCCAAAGGGCTTTGCC
TTTGACTGTGATGACGTGAACCTCACACAGACAACTTTGCTTTGTGGGTCTCATGTCCATGATTGACC
CTCCCCGGGCAGCCGTCCTGACGCTGTGGGCAAATGCCGAAGCGCAGGCATCAAGGTCATCATGGTCAC
CGGCGATACCCCATCACTGCCAAGGCCATTGCCAAGGGTGTGGGTATCATCTCTGAGGGTAACGAGACT
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CCTAGAAGACAGTTATGGGCAGCAGTGGACTTATGAGCAGAGGAAGGTGGTAGAGTTCACATGCCACACA
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TCTTCCAGCAGGGCATGAAGAAATAAGATCTTGATCTTCGGCTTGTGGAGGACGGCCCTCGCTGCCTT
CCTGTCTACTGCCCAGGCATGGATGTGGCCCTTCGCATGTACCTCTCAAGCCCAGCTGGTGGTTCTGT
GCCTTCCCCTACAGTTTCTCATCTTCGTCTATGATGAGATTGCGAAACTCATCTGCGCAGGAACCCCG
GGGTTGGGTGGAGAAAGAGACCTACTAT
    
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGAT AAGTTTAA
    
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**Protein Sequence:**

>MR231484 representing NM\_001290469  
 Red=Cloning site Green=Tags(s)

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MGDKKDDKSSPKKSKAKERRDLDDLKKEVAMTEHKMSVEEVCRKYNTDCVQGLTHSKAQEILARDGPNAL
TPPPTTPEWVKCRQLFGGFSILLWIGAILCFLAYGIQAGTEDDPSGDNLYLGLVLAAVVIITGCFYYQ
EAKSSKIMESFKNMVPQALVIREGEKMQVNAEEVVVDLVEIKGDRVPADLRISAHGCKVDNSLGTG
ESEPQTRSPDCTHDNPLETRNITFFSTNCVEGTARGVVVATGDRVMGRIATLASGLEVGKTPIAIEIEH
FIQLITGVAVFLGVSFFILSLILGYTWLEAVIFLIGIIVANVPEGLLATVTVCLTLTAKRMARKNCLVKN
LEAVETLGSTSTICSDKTGTLTQNRMTVAHMMWFDNQIHEADTTEDQSGTSFDKSSHTWVALSHIAGLCNR
AVFKGGQDNIPVLKRDVAGDASESALLKCIELSSGSVKLMRERNKKVAEIPFNSTNKYQLSIHETEDPND
NRYLLVMKGAPERILDRCATILLQGKEQPLDEEMKEAFQNAVLELGGGERVLGFCHYYLPEEQFPKGFA
FDCDDVNFTTDNLCFVGLMSMIDPPRAAVPDAVGKCRSAGIKVIMVTGDHPITAKAIKGVGIISEGNET
VEDIAARLNIPVSQVNPRAKACVIHGTDLKDFTSEQIDEILQNHTEIVFARTSPQKLIIVEGCRQGA
IVAVTGDGVNDSPALKKADIGVAMGIAGSDVSKQAADMILLDDNFASIVTGVEEGRILFDNLKKSIAAYTL
TSNIPEITPFLFIMANIPLPLGTITILCIDLGTDMVPAISLAYEAAESDIMKRQPRNPRDKLVNERLI
SMAYGQIGMIQALGGFFSYFVILAENGLPGNLVGIRLNWDDRTVNDLEDSYQQWQTYEQRVVFEFTCHT
AFFVSI VVVQWADLIICKTRRNSV FQQGMKNKILIFGLFEETALAAFLSYCPGMDVALRMYPLKPSWWFC
AFPYSFLIFVYDEIRKLILRRNPGGWVEKETYY
    
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TRTRPLEQKLI SEEDLAANDILDYKDDDDKV
    
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**Restriction Sites:**

Sgfl-MluI



<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<u><a href="#">NM_001290469.1</a></u> , <u><a href="#">NP_001277398.1</a></u>
<b>RefSeq Size:</b>	3609 bp
<b>RefSeq ORF:</b>	3042 bp
<b>Locus ID:</b>	232975
<b>UniProt ID:</b>	<u><a href="#">Q6PIC6</a></u>
<b>Cytogenetics:</b>	7 13.73 cM
<b>MW:</b>	112.1 kDa
<b>Gene Summary:</b>	This is the catalytic component of the active enzyme, which catalyzes the hydrolysis of ATP coupled with the exchange of sodium and potassium ions across the plasma membrane. This action creates the electrochemical gradient of sodium and potassium ions, providing the energy for active transport of various nutrients (By similarity).[UniProtKB/Swiss-Prot Function]