

Product datasheet for **MC223227**

Atp1a2 (NM_178405) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Atp1a2 (NM_178405) Mouse Untagged Clone
Tag: Tag Free
Symbol: Atp1a2
Synonyms: Atpa-3; AW060654; mKIAA0778
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC223227 representing NM_178405
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGGGTCGTGGGGCAGGGCGTGAGTACTCGCTGCTGCCACCACTGCGGAAAATGGGGTGGCAAGAAGA
AACAGAAAAGAGAAGGAGCTCGATGAGCTGAAGAAGGAGGTTGCCATGGATGACCACAAGCTGTCTTGG
TGAGCTGGGCCGAAAATACCAAGTGGATCTGTCTAAGGGCCTACCAATCAGCGAGCTCAGGACATTCTG
GCTAGAGATGGACCAACGCCCTTACTCCGCCCCCACTCCTGAGTGGGTCAAGTCTGTCTGTCAGC
TTTTTGGGGGCTTCTCTATCCTGCTGTGGATTGGGGCACTCCTCTGCTTCTTAGCCTATGGTATCCTGGC
CGCTATGGAGGACGAACCATCCAACGATAATTTATATCTAGGTATCGTGTAGCGGCTGTAGTTATCGTC
ACCGGCTGCTTCTCTACTACCAGGAAGCCAAGAGCTCCAAGTCAATGGACTCCTTCAAGAACATGGTGC
CTCAGCAAGCTCTGGTCATCCGAGAGGGAGAAAAGATGCAGATCAATGCAGAGGAGGTGGTGGTGGGAGA
CCTGGTGGAGGTGAAGGGTGGAGACCGTGTCCCTGCTGACCTCCGGATCATCTCTCCACGGTTGCAAG
GTGGATAACTCATCCCTAACAGGGGAGTCGGAGCCCCAGACCCGTTCTCCTGAGTTCACCCACGAGAACC
CCTTGGAGACGCGCAATATCTGTTTCTTCTCTACCAACTGCGTGAAGGCACTGCCAGGGCATTGTGAT
TGCCACAGGTGACCGACAGTGTGGGCCGATAGCCACTCTTGCTCTGGCCTAGAGGTGGGACAGACA
CCCATAGCCATGGAGATCGAGCATTTTATCCAGCTGATCACAGGGGTGGCTGTGTTCTGGGGTCTCCT
TCTTCGTTCTGTCCCTCATCCTGGGCTACAGCTGGCTGGAGGCAGTCATCTTCTCATCGGCATCATCGT
AGCCAATGTGCCGAAGGGCTGTTGGCCACCGTACTGTGTGCCTGACGCTGACAGCCAAGCGCATGGCT
CGCAAAAAGTGCCTGGTGAAGAACCTGGAGGCCGTGGAGACGCTGGGCTCCACGTCACCATCTGCTCAG
ACAAGACGGGCACCCCTACCCAGAACCGCATGACAGTGGCTCACATGTGGTTTGACAACAGATCCATGA
GGCTGACACCACAGAGGACAGTCTGGGCCACTTTTGACAAACGGTCCCCACATGGACAGCCCTGTCT
CGGATCGCTGGTCTCTGCAATCGTGTCTTCAAGGCTGGACAAGAGAACATCTCCGTGTCTAAGCGGG
ACACAGCTGGAGATGCTTCTGAGTCAGCTCTGCTCAAGTGCATTGAGCTGTCTGTGGCTCAGTGAGGAA
GATGAGGGACAGGAACCCCTAAGGTGGCAGAAAATCCCTTCAACTCCACCAACAAATATCAGCTCTCCATC
CACGAGAGGGAAGACAGTCCCCAGAGCCATGTGCTGGTGTGAAAGGCGCCCCAGAGCGCATCCTGGACC



GATGCTCCACCATCCTGGTACAGGGCAAGGAGATCCCTCTTGACAAGGAGATGCAAGATGCTTTTCAAAA
 CGCCTACATGGAGCTGGGAGGACTTGGGAACGAGTGTGGGCTTCTGTGAGCTGAACCTGCCTTCTGGA
 AAGTTTCTCGGGGCTTCAAATTTGATACAGATGAGCTGAACTTTCCACAGAGAAGCTCTGTTTTGTGG
 GGCTCATGTCTATGATTGATCCCCCAGAGCAGCCGTGCCGGATGCCGTGGGCAAGTGCCGAAGCGCGGG
 CATCAAGTGATCATGGTACCAGGGGATCACCCATCACAGCTAAGGCCATTGCCAAAGGTGTGGGCATC
 ATATCAGAGGGTAACGAGACTGTGGAAGACATTGCAGCCAGGCTCAACATTCTGTGAGTCAAGTCAATC
 CCAGAGAAGCCAAGCGTGTGTAGTGCACGGCTCAGACCTGAAGGACATGACGTGAGAGCAGCTGGATGA
 GATCCTCAGGGACCACACGGAGATTGTCTTTGCCGGACCTCCCTCAGCAGAAGCTTATCATTGTGGAA
 GGGTGTGACAGGGCAGGGAGCCATTGTGGCAGTACTGGTACGGGGTGAACGACTCCCCCGCTGAAGA
 AGGCTGACATTGGCATTGCCATGGGCATCTCCGGCTCCGATGTCTCTAAGCAGGGCGGCTGACATGATCCT
 TCTCGACGACAACCTTGCCTCCATTGTGACAGGCGTGGAGGAGGGCCGCTGATCTTTGACAACCTGAAG
 AAGTCCATCGCATACACCCTGACCAGCAACATCCCTGAGATCACCCCTTCTGCTGTTCATCATTGCCA
 ACATCCCCCTTCCACTGGGCACTGTGACCATCCTCTGCATCGACCTGGGACAGATATGGTTCCTGCTAT
 CTCATTAGCATACGAAGCAGCTGAGAGTGACATCATGAAGAGGCAGCCACGAACTCCAGACAGACAAG
 CTGGTGAACGAGAGGCTTATCAGCATGGCTTACGGACAGATTGGCATGATCCAGGCTCTGGTGGCTTCT
 TTACCTACTTTGTGATACTGGCAGAGAATGGGTTTCTACCATCGCGGCTGCTAGGGATCCGCTGGACTG
 GGATGATCGGACTACCAACGACCTGGAGGACAGCTATGGACAAGAGTGGACCTACGAGCAGCGGAAGGTG
 GTGGAGTTCACATGCCACACGGCCTTCTTCGCTAGCATCGTGGTGTGACAGTGGGCTGACCTCATCATCT
 GCAAGACCCGTCGCAACTCAGTGTTCAGCAGGGCATGAAGAACAAGATCCTGATTTTTGGGCTGCTAGA
 AGAGACGGCTTTGGCTGCCTTTCTGTCTTACTGCCCGGCATGGGGTTGCCCTCCGGATGTACCCACTC
 AAGGTCACGTGGTGGTCTGTGCCTTCCCTACAGTCTCCTCATCTTATGATGAAGTTCGGAAGC
 TCATCTACGGCGGTACCCTGGGGCTGGGTGGAGAAGGAGACGTACTACTGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** SgfI-MluI
- ACCN:** NM_178405
- Insert Size:** 3063 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_178405.3](#), [NP_848492.1](#)
- RefSeq Size:** 6227 bp
- RefSeq ORF:** 3063 bp

Locus ID: 98660

UniProt ID: [Q6PIE5](#)

Cytogenetics: 1 79.6 cM

Gene Summary: 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]