

## Product datasheet for **MR211546**

### Atp1a3 (NM\_144921) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Atp1a3 (NM_144921) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Atp1a3
Synonyms:	Atpa-2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR211546 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGGGGACAAAAAGATGACAAGAGCTCGCCCAAGAAGAGCAAGGCCAAAGAGCGCCGGGACCTGGATG  
ACCTCAAGAAGGAAGTGGCTATGACAGAGCACAAGATGTCAGTAGAAGAGGTCTGCCGAAATACAATAC  
TGACTGCGTGCAGGGTCTGACACACAGTAAAGCCAGGAGATCCTAGCCCGGGATGGGCCTAACGCCCTC  
ACACCACCGCCACCACCCAGAATGGGTCAAGTCTGCCGCGAGCTGTTTGGTGGCTTCTCTATCTCTGC  
TGTGGATCGGGCAATCCTTTGCTTCTGGCCTATGGCATCCAGGCAGGGACGGAGGATGACCCTCCGG  
TGACAATCTGTACCTGGGCATAGTGTGGCCGAGTCTGATCATCACCGGCTGCTTCTCCTACTACCAA  
GAAGCCAAGAGTTCTAAGATCATGGAGTCTTCAAGAACATGGTCCCCAGCAAGCCCTGTGATCCGGG  
AAGGTGAAAAGATGCAGGTGAATGCGGAGGAGGTGGTGGTCCGGGACCTGGTGGAGATCAAGGTGGTGA  
CCGGGTGCCAGCTGACCTGCGCATCATCTCGGCCATGGCTGCAAGGTGGACAACCTCCTCCCTGACTGGC  
GAATCTGAGCCTCAGACCCGCTCCCCGGACTGCACACAGACAACCCCTGGAGACTCGGAACATCACCT  
TCTTTCCACCAACTGCGTGAAGGCACCGCTCGGGTGTGGTGGTAGCCACAGGTGACCGCACCCTCAT  
GGCCCGCATTGCCACCTGGCCTCGGGCTTGGAGTGGCAAGACGCCATCGCCATTGAGATTGAGCAT  
TTCATCCAGCTCATTACGGGCGTGGCCGTGTTCTTGGGCGTGTCTTCTCATCCTCTCTCATTCTGG  
GTTACACCTGGCTCGAGGCAGTCATCTTCTCATCGGCATCATTGTGGCCAATGTCCAGAGGGGCTGCT  
GGCTACTGTACGGTGTGTCTGACGCTGACCGCAAGCGCATGGCTCGAAGAATGCCTGGTGAAGAAC  
CTGGAGGCGGTGGAGACGCTGGGCTCCACGTCCACCATCTGCTCGGACAAGACCGGCACTCTCACCCAGA  
ACCGCATGACCGTCCGCCACATGTGGTTTGACAACAGATCCACGAGGCAGACACCACAGAGGATCAGTC  
AGGGACCTCTTTCGACAAGAGCTCACACACCTGGGTGGCCCTGTCCACATCGCCGGGCTCTGCAACCGG  
GCCGTCTTCAAGGGCGGGCAGGACAACATCCCAGTACTCAAGAGGGACGTGGCCGGTGTGCTCCGAGT  
CTGCCCTGCTTAAGTGCATTGAGCTGTCTCGGGTCCGTAAGTCTGATGCGGAAACGGAACAAGAAAGT  
GGCTGAGATTCGGTTCAACTCGACCAACAATACCAGCTATCCATCCATGAGACTGAGGATCCCAATGAC



AACCGGTACCTGCTAGTGATGAAGGGCGCCCCGAACGCATTCTGGACCGCTGTGCCACCATCCTCCTGC  
 AGGGCAAGGAGCAGCCTCTGGATGAGGAGATGAAGGAGGCCTCCAGAATGCCTACCTGGAGCTTGGTGG  
 CCTGGGCGAGCGTGTGCTGGGTTTCTGCCATTACTACCTGCCTGAGGAACAGTTCCTCCAAAGGGCTTTGCC  
 TTTGACTGTGATGACGTGAACCTCACCACAGACAACTTTGCTTTGTGGGTCTCATGTCCATGATTGACC  
 CTCCCCGGGCAGCCGTCCTGACGCTGTGGGCAAATGCCGAAGCGCAGGCATCAAGGTATCATGGTCAC  
 CGGCGATCACCCATCACTGCCAAGGCCATTGCCAAGGGTGTGGGTATCATCTCTGAGGGTAACGAGACT  
 GTCGAAGACATCGTGCCTGCTCAACATCCCTGTCAGCCAGGTGAACCCAGGGATGCCAAAGCCTGTG  
 TGATTCACGGCACCGACCTCAAGGACTTACCTCGGAGCAGATTGACGAGATTCTGCAGAACCACCCGA  
 GATCGTCTTTGCCGAACCTCCCCTCAGCAGAAGCTCATCATCGTGGAGGGCTGTGAGAGACAGGGAGCA  
 ATTGTGGCTGTGACTGGCGATGGTGTGAATGACTCCCCTGCTCTGAAGAAGGCTGACATCGGGGTGGCCA  
 TGGGCATTGCTGGCTCTGATGTCTTAAGCAGGCTGCCGACATGATTCTGCTGGATGACAACTTTGCTTC  
 CATTGTCACTGGTGTGGAGGAAGCCGCTGATCTTTGACAACCTGAAGAAATCCATCGCTACACTCTG  
 ACTAGCAACATCCCTGAGATCACACCCTCCTGCTTTCATCATGGCTAACATCCCCTGCTCTTGCCA  
 CCATCACCATCCTCTGCATTGACCTGGGTACCGACATGGTCCCTGCAATCTCCCTGGCCTACGAGGCTGC  
 CGAGAGCGACATCATGAAGAGGCAGCCAGGAACCCACGCACAGACAACTGGTCAACGAAAGGCTCATC  
 AGCATGGCCTACGGGCAGATTGGGATGATCCAGGCCCTCGGTGGTTTCTTCTCCTACTTTGTCATCCTGG  
 CAGAAAATGGCTTCTTGCCCGAAACCTGGTGGGCATCCGGCTCAACTGGGATGATCGCACTGTCAATGA  
 CCTAGAAGACAGTTATGGGCAGCAGTGGACTTATGAGCAGAGGAAGGTGGTAGAGTTCACATGCCACACA  
 GCCTTCTTTGTGAGTATCGTGGTGGTCCAGTGGGCTGACCTGATCATCTGCAAGACCAGGAGGAACCTCCG  
 TCTTCCAGCAGGGCATGAAGAATAAGATCTTGATCTTCGGCTTGTGGAGGACGGCCCTCGCTGCCTT  
 CCTGTCTACTGCCAGGCATGGATGTGGCCCTTCGCATGTACCCTCTCAAGCCAGCTGGTGGTTCTGT  
 GCCTTCCCCTACAGTTTCTCATCTTCGTCTATGATGAGATTGCAAACTCATCTGCGCAGGAACCCCG  
 GGGGTGAGGGCCGCATGGCCAGGGGTAAGGCTGGGAGGGGAAGCAGAGGGTGAAGCACTCCCTGTGCCTC  
 TCAGATGTGTCGTTCTTCTTCTTCCCTCTCTCCCCGCTTGCTTTCACTCTTTTCAAGTCCGA  
 CTGTGTGTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR211546 protein sequence  
 Red=Cloning site Green=Tags(s)

MGDKKDDKSSPKKSKAKERRDLDDLKKEVAMTEHKMSVEEVCRKYNTDCVQGLTHSKAQEILARDGPNAL  
 TPPPTTPEWVKFCRQLFGGFSILLWIGAILCFLAYGIQAGTEDDPSGDNLVYLGIVLAAVVIITGCFSYQQ  
 EAKSSKIMESFKNMVPPQALVIREGEKMQVNAEEVVVGDLEIKGGDRVPADLRIISAHGCKVDNSSLTG  
 ESEPTQTRSPDCTHDNPLETRNITFFSTNCVEGTARGVVVATGDRVMGRIATLASGLEVGKTPIAIEIEH  
 FIQLITGVAVFLGVSFFILSLILGYTWLEAVIFLIGIIVANVPEGLLATVTVCLTLTAKRMARKNCLVKN  
 LEAVETLSTSTICSDKTGTLTQNRMTVAHMWFDNQIHEADTTEDQSGTSFDKSSHTWVALSHIAGLCNR  
 AVFKGGQDNIPVLKRDVAGDASESALLKCIELSSGSVKLMRERNKVAEIPFNSTNKYQLSIHETEDPND  
 NRYLLVMKGAPERILDRCATILLQKEQPLDEEMKEAFQNAYLELGGGGERVLFCHYYLPEEQFPKGF  
 FDCDDVNFTTDNLCFVGLMSMIDPPRAAVPDAVKGCRSAGIKVIMVTGDHPITAKAIAKGVGIISEGNET  
 VEDIAARLNIPVSQVNPRAKACVIHGTDLKDFTEQIDEILQNHTEIVFARTSPQKLIIVEGCQRQGA  
 IVAVTGDGVNDSPALKKADIGVAMGIAGSDVSKQAADMILLDDNFASIVTGVVEGRLIFDNLKKSIAATL  
 TSNIPETPFLIFIMANIPLPLGTITILCIDLGTDMVPAISLAYEAAESDIMKRQPRNPRDKLVNERLI  
 SMAYGQIGMIQALGGFFSYFVILAENGLPGLVGIIRLNWDDRTVNDLEDSYQQWYEQYRQVVEFTCHT  
 AFFVSI VVVQWADLIICKTRRNSVVFQQGMKNKILIFGLFEETALAAFLSYCPGMDVALRMYPLKPSWWFC  
 AFPYSFLIFVYDEIRKILIRRNPGGEGRMARGKGWEGKQYRSTPCASQMCFFFLFPLSPPCLSLSFQVRL  
 CV

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

**Restriction Sites:**

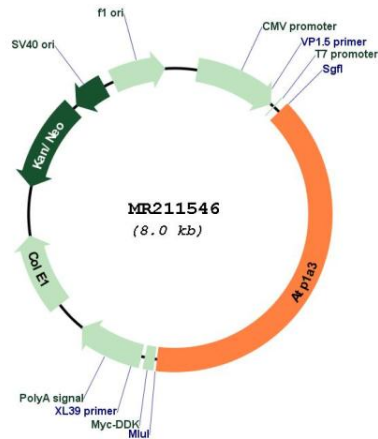
SgfI-MluI



**RefSeq:** NM\_144921.1, NP\_659170.1  
**RefSeq Size:** 4043 bp  
**RefSeq ORF:** 3162 bp  
**Locus ID:** 232975  
**Cytogenetics:** 7 13.73 cM  
**MW:** 116 kDa

**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]

**Product images:**



Circular map for MR211546