

Product datasheet for **MG211743**

Atp13a2 (BC042661) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Atp13a2 (BC042661) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Atp13a2
Synonyms: 1110012E06Rik; AA589443
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG211743 representing BC042661
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGAGCGCAGACAGCAGCCTGCTCATGGGCAGCACGCCCCCAGCTATGGGACCTGACGACAGGGACGT
 CAATCGATCCCCTCAGCTCCTCAGTTCATCCGTGAGGCTCAGCGGCTACTGTGGCAGTCCATGGAGGGC
 CATCGGCTATCACGCCGGTCTGGATGCTGGCCGGATCCCTTGGCTGCTATCCGCTGGAAGCCCTTG
 TGGGGCGTGCCCTGCGCTGAAGCCATGCAGCCTGGCCACGCCGAAACTCGTTATAGAAATAAAG
 ACAAGAGGGTAGCTCCAGACAGCTCTCACGGTTCAGGTGCAGACTGAGGCTCTGTCCAGGGCAGCCT
 GGAGCTGCCCCACAGGCCAGGCAGAGGATGGCCGGAGCCAGGCAGCCGTGGGAGTGACACCAGAGGGC
 ACATGGCAGGACACCTCCGAATCCACAGGCAGGAAGAGGCAAAGCAGGTACTGCCCTATTATGTCTCC
 AAGGTCAACGCTACGTCTGGATGGAAACCCAGCAAGCCTTCTGCCAAGTCAGCCTGCTGGACCACAGTCG
 TACCTGTGATGACGTCCACTGCTCCAGCTCCGGCCTCAGCCTCCAAGACCAAGCTACGAGGAAGACCATT
 TACGGCCCAATGTGATCAGTATTCCTGTCAAGTCTACCTGCAGCTGCTGGCGGATGAGGCCCTGAATC
 CCTACTATGGGTCCAAGCCTTCAGCATCGCACTGTGGCTGGCCGACCACTACTACTGGTATGCTCTCTG
 CATCTTCTCATCTCAGCCATCTCCATCTGCCTGGCTCTGTACAAGACCAGAAAGCAAAGCTTGACCCTG
 AGGGACATGGTCAAGCTGTCCGTGCGGGTGCAGGTGTGCCACCCGAGGAGAGGAAGAGTGGTGGAT
 CCAGTGAGCTGGTGCCCGAGACTGCCTGGTGTGCCACAGGAGGGCGGGGTGATGCCATGCGACGCGGC
 TCTGGTGGCCGGGAGTGTGTGGTCAACAGAGACTCCCTGACAGGGGAGAGCACCCCTGTGCTGAAGACG
 GCCCTGCCAGAGGGGCCAAGCCCTACTGCCAGAGACCCACCGCGGCACACCCTTTCTGTGGCACCC
 TCATTCTGAGGCCGAGCCTACGTGGGACCCGTGTGCTAGCAGTGGTACTCGGACAGGGTTCTGCAC
 AGCCAAAGGGGGCTGGTGAAGCTCCATCTACACCAAGGCCATCAGCTTCAAGTTCTACAAACACAGC
 ATGAAGTTTGGCTGCGCTCTCCGTCTGGCTCTGCTCGGCACCGTCTACAGCATCGTCATCCTTACC
 GAAACCGGTACCTGTGAGGGAGATTGTGATCCGAGCTCTGGACCTGGTACGGTGGTGGTCCGCCCGC
 CCTGCCTGCCCCATGACGGTGTGCACACTCTATGCCAGAGTCGGCTGCGGCACAGGGCATCTTCTG



[View online >](#)

ATCCACCCACTGCGCATCAACTTGGGGGCAAGCTGCGGCTCGTGTGCTTTGACAAGACAGGCACCCTCA
CAGAGGACGGCTTGGACGTAATGGGCGTAGTGCCCTAAAGGGGCAGGTGTTGCTGCCACTGGTCCCAGA
GCCCCGCCACCTGCCCTGGGGCCCTCCTGCGAGCACTGGCCACCTGTCATGCCCTCAGCCAGCTACAT
GACACCCCGTGGGGCAGCCCATGGATCTGAAGATGGTGGAGTCTACAGGCTGGGTCTTAGAGGAGGGTC
CAGCTGCAGGCTCAGCACCTGGGAGCCAGGTCTTGGTGGTAATGAGACCCCAACCCGGGGCCCTCGGCA
GCAGGAAGAGCCACCAGTGCCAGTCAGCGTCTCTGCCGTTCCCTTCTCCTCTGCCCTGCAGCGGATG
GATGTGGTAGTGACATGGCCAGGGGCCACCCAGCCTGAGGCCTACGTCAAAGGCTCCCAGAGCTTGTGG
CCAGCCTCTGCAGCCCCGAGACAGTACCCAGCGACTTTTCTCAGGTGCTGCAGAGCTACACAGCTGCTGG
CTACCGAGTTGTGGCCCTGGCTGGCAAGCCACTGCCATTGCGCCAGCCTTGGAGCCGCTCAGCAGCTG
ACAAGGGACACTGTGGAGAGGGAAGTGGAGCCTCTGGGGCTGCTGGTTCATGCGGAACCTACTGAAGCCAC
AGACGGCCCCAGTTATCCAGACTCTGAGGAAGACGGGCATCCGCACCGTTATGGTGACAGGGGACAACCT
GCAGACAGCAGTCACCGTGGCCAGAGCTTGTGGCATGGTGGGCGCCAGGAGCACCTGGCTGTCATCCAT
GCCACCCACCCGAGCAGGGCCAGCCTGCTGCCCTTGTGTTCTTCCCAACGGAGTCTCTGCAGTCATGA
ATGGGGCAAGGGCCACAGGCTATCCACGGTCCCGGAACCCAGTTCTGTCACTGGCCCTCAGCGGGTC
CAGTTTTGCAGTCTTCCGAAGCACTTCCCAAGCTGCTGCCAAGGTCCTGGTGCAGGCTACCGTCTTT
GCCCGCATGGCCCCGGAGCAGAAGACAGAGCTAGTGTGCGAACTGCAGAGGCTTCACTACTGTGTGGGCA
TGTGCGGGGATGGAGCCAACGACTGTGGGGCCCTGAAGGCGGCTGATGTGGGCATATCGCTGTCCCAGGC
GGAGGCGTCAGTGGTCTCTCCGTTACCTCCAGCATGGCCAGTATTGAATGTGTGCCACTGTATCAGG
GAAGGCCGCTGCTCCCTGGATACTTCATTCAGCGTCTTCAAGTACATGGCCCTTACAGCCTGACTCAGT
TCATCTCTGTGCTCATTCTACACAATCAACACCAACCTGGGAGACCTACAGTTCTTGGCCATTGACCT
GGTCATCACCACCAGGTTGCGGTGCTCATGAGCCGCACAGGCCCTGCACTGACCTTGGTGGGAGCGCGG
CCACCAGGGGCGCTGCTGAGTGTGCCTGTGCTTGGCAGTCTGCTGCTGCAGGTGGCCTTGGTGGCCGGCA
TCCAGCTGGGGGCTACTTTTTGGTTCATAGCTCAGCCCTGGTTTGTGCCTCTGAACAGAAGTGTGCCCGC
TCCGGACAACCTGCCCAACTACGAGAATACGGTGGTCTTCTCTGTCTGGCTTCCAGTACCTCATCCTG
GCCGCAGCGGTGTCTAAGGGGGCACCTTCCGCCAGCCACTCTACACCAACGTGCCCTTCTGGTGGCCC
TGGCGCTCTTGGGCTCTGTCTGGTGGGCTCATCCTGGTCCCCGGCCTCCTGCAGGGGCCCTAGGACT
GAGGAACATTGTGGACAGCTCCTCAAGCTACTGCTGCTGGGTCTGGTCGCCTTCAACTCGTCGGCGCC
TTTATGCTGGAGAGCGTCTGGACCAGTGTCTCCAGCCTGCCTGCGGTGGCTGCGGCCTAAACGGGCT
CCAAGAAGCAATTCAAGCGGCTGCAACAGGAGCTTGCAGAACATCCATGGCCACTCTGCCCGTTGGCTC
CGTGAGG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >MG211743 representing BC042661
 Red=Cloning site Green=Tags(s)

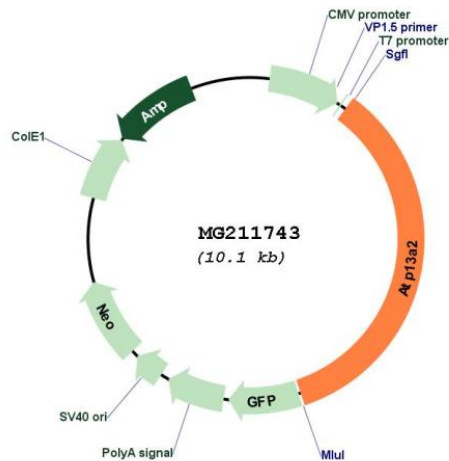
```
MSADSSLLMGSTPPSYGTLTTGTSIDPLSSSASSVRLSGYCGSPWRAIGYHAAVWMLAGIPWLLFRWKPL
WGVRLRLKPCSLAHAETLVIEIKDKEGSSRQLFTVQVQTEALVQGSLELPPQAQAEDGRSQAAVGVTPG
TWQDTSELHRQEEAKQVLRYYVLQGQRYVWMETQQAFQCQVSLLDHSRTCDDVHCSSSGLSLDQATRKT
YGPNVISIPVKSYLQLLDAEALNPYYGFQAFSIALWLDHYWYALCIFLISAISICLALYKTRKQSLTL
RDMVKLSVRVQVCRPGGEEWVDSSELVPGDCLVLPQEGGVMPDAALVAGECVVNESSLTGESTPVLKT
ALPEGPKPYCPETHRRHTLFCGTLILQARAYVGRVLAVVTRTGFCTAKGGLVSSILHPRPISFKFYKHS
MKFVAALSVLALLGTVYSIVILYRNRVREIVIRALDLVTVVPPALPAAMTVCTLYAQSLRAQGIFC
IHPLRINLGGKLRVCFDKTGTLTEDGLDVMGVVPLKGGVLLPLVPEPRHLPLGPLLALRATCHALSQHL
DTPVGDPMDLKMEVSTGWVLEEGPAAGSAPGSQVLVVMRPPGGPRQEEPPVPSVLCRFPFSSALQRM
DVVVTWPQATQPEAYVKGSPELVASLCPETVPSDFSQVLQSYTAAGYRVVALAGKPLPIAPSLEAAQQL
TRDIVERELSLGLLVMRNLKPKQTAPVIQTLRKTGIRTVMTGDNLQAVTVARACGMVGAQEHLAVIH
ATHPEQGPAALEFLPTESSAVMNGAKATGYPTVPEPQFCHLALSGSTFAVLRKHFPKLLPKVLVQATVF
ARMAPEQKTELVCCELQRLQYCVGMCGDGANDCGALKAADVGISLSQAEASVVSPFTSSMASIECVPTVIR
EGRCSLDTFSVFKYMALYSLTQFISVLIYINTNLGDLQFLAIDLITTTTAVLMSRTPALTLVRAR
PPGALLSVPVLGSLLLQVALVAGIQGGYFLVIAQPWFVPLNRTVPAPDNLPNYENTVVFSLSGFQYLIL
AAAVSKGAPFRQPLYTNVPFLVALALLGSVLVGLILVPGLLQGPLGLRNIVDSSFKLLLLGLVAFNFVGA
FMLESVLDQCLPACLRWRPKRASKKQFKRLQQELAEHPWPTLPVGSVR
```

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI
Cloning Scheme:



Plasmid Map:



ACCN: BC042661

ORF Size: 3509 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: [BC042661](#), [AAH42661](#)

RefSeq Size: 3953 bp

RefSeq ORF: 3509 bp

Locus ID: 74772

Cytogenetics: 4 D3

Gene Summary:

ATPase that plays a role in intracellular cation homeostasis and the maintenance of neuronal integrity. Required for a proper lysosomal and mitochondrial maintenance.[UniProtKB/Swiss-Prot Function]