

## Product datasheet for **MG217941**

### Atp13a3 (NM\_001128096) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Atp13a3 (NM_001128096) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Atp13a3
Synonyms:	AU022875; Gm541; Gm542; Gm1745
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG217941 representing NM_001128096 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGACAAAGAAGAAAGGAAGACTATCAACAAGGGTCAAGAAGATGAAATGGAGATACATGGCTATAACT  
TATGCCGCTGGAAGCTTGCCATGGTTTTGTAGGAGTGATTTGTACTGGTGGTTTTCTCCTCCTCCTCT  
CTACTGGCTGCCTGAGTGGCGAGTGAAGCCACATGTGTTAGAGCTGCAGTTAAAGACTGTGAAGTGGTG  
CTTCTCAGGACAAGTGAATTTAGAGTATGGTTTTGTGCAAAAATTCACTTTCTCCTGTGGAGAATC  
AACCAAAATTTGAATGCAAAATGTTTAGTTAATGAGTTTTCTAATGGCCATGCTGTTTCATCTGACTGAAGA  
AAATAGATGCGAGATGAATAAACTCACAGAGTCAGTCAACAACAGATGGGTTATTTTACCACCATAGC  
ATAAGATATTTCTGGAATGATGCCATTCACAATTTTGATTTCTTAAAGGGACTGGATGAAGGTGATCCT  
GTGCATCACTTTATGAAAAGCATAGTGCAGGACTGACACAGGGGATGCATGCCTACAGAAAAGTTGATTTA  
TGGAGTAAATGAAATGCTGTGAAAAGTGCCTTCTGTTTTAAGCTTCTAATTAAGAGGTTCTCAACCCA  
TTTTACATTTTCCAGCTCTTCAGTGTTATCCTGTGGAGCGTTGATGAGTACTATTACTATGCTCTAGCCA  
TTGTGATCATGTCGAGTATCCATTATAAGTTCACTATATTCCATTAGAAAAGCAATATGTTATGTTACA  
TGACATGGTGGCAACTCACAGTACCGTGAGAGTTTCAGTCTGTAGAGAAAATGAAGAAAATAGAAGAGATC  
TTTTCTACAGACCTTGTCCGGGAGACGTCATGATCATTCCATTAATGGGACAGTCATGCCTTGTGATG  
CAGTACTTATTAATGGTACTTGCAATGTAATGAAAGCATGTTAACAGGAGAAAAGTGTTCAGTGACAAA  
GACTAATTTGCCAAATCCTTCAGTGGATGTGAAAAGGAATGGGGGAGGAGCAGTACAGCCCAGAGACACAC  
AAGCGGCACACTTTGTTTTGTGGGACGACTGTTATTCAGACCCGTTTCTACACTGGAGAACTTGTGAAAAG  
CCATAGTAGTTAGAACAGGATTTAGTACTTCCAAGGACAGCTTGTTCGTTCTATACTGTATCCCAAGCC  
AACTGACTTTAACTCTATAGAGATGCCTACTTGTCTGCTGTCTTGTGGTGGTGGCTGGAATTGGA  
TTTATCTACACAATCATCAATAGCATCCTAAATGAGAAAAGTCAAGAAATAATTATTAAGTCTCTTG  
ATATCATTACAATTAAGTGTGCCACCTGCTTCTCCTGCTGCAATGACTGCTGGGATTGTGTATGCTCAGAG  
AAGACTGAAAAAAGTTGGGATTTCTGTATTAGTCCCCAGAGGATAAACATCTGTGGACAGCTGAACCTT



GTTTGCTTTGACAAGACTGGAACCTTACCGAAGATGGTTTAGATCTGTGGGAATTCAGCGAGTGGAAA  
ATACCCGATTTCTTTTACCAGAAGACAATGTTGCAGTGAGATGTTGGTAAAATCTCAATTTGTTGCTTG  
TATGGCTACTTGTCACTTCACTTACAAAAATCGAAGGTGTACTTTCTGGTGACCCACTTGATTTGAAAATG  
TTTGAAGCCATTGGATGGATTCTGGAAGAAGCAACTGAAGAAGAAACAGCACTTCATAACCGGATCATGC  
CTACTGTGGTTCGTCCTTCCAAACAACCTGCTTCTGAACCTACAACCTGCAGGAAACCAAGAAATGGAGCT  
GTTTGAACCTCCAGCTATTTATGAGATAGGAATGTTTCGCCAGTTCCATTTTCTCTGCCTTGAACCG  
ATGAGTGTGGTTGCAAGGACACTAGGTGAGAAGAGGATGGATGCCTACATGAAGGGGGCCCTGAGGTTG  
TCGCCAGTCTCTGCAAACCGGAAACAGTTCAGTTGATTTTGAAGAAAGTTAGAAGATTATACCAAACA  
AGGTTTCCGTGTAATTGCTCTTGACACAGAAAATTGGAGTCAAAGCTGACCTGGCATAAAGTACAGCAT  
ATTAGCAGAGATGCCATTGAAAACAACATGGATTTTATGGGATTGATTATAATGCAGAACAAATTGAAGC  
AGGAAACCCCTGCAGTACTTGAAGATTTGCATAAAGCCAACATTCGAACTGTCATGGTCACAGGAGACAA  
CATGTTGACGGCTGTCTCTGTGGCCAGAGACTGTGGGATGATTCTACCTCAGGATAAAGTTATTATTGCT  
GAAGCATTACCTCAAAGGATGGAAAAGTTGCCAAGATCAATTGGCATTATACAGACTCCCTGTCACAGT  
GTAGTGAATCATCAGCCATTGACTCAGAGGCTATTCCAATCAAACCTGCCATGATAGTTTLAGGGATCT  
TGAGGTGACTCGCTATCATTTCGCGATGAATGGAAAGTCATTTTCGGTGATACTGGAACATTTTCAAGAT  
CTTGTTCCTAAGTTGATGTTGCATGGTACTGTGTTTGGCTCGAATGACACCGGATCAGAAGACACAATTGG  
TGGAGGCATTGCAGAACGTAGACTACTTTGTTGGGATGTGCGGTGATGGTGCAAAATGATTGTGGTCTTT  
GAAGAGGGCACATGGTGGCATTTCCTTATCTGAGCTTGAAGCTTCCGTGGCATCTCCTTTTACTTCTAAG  
ACACCCAGTATCTCTGTGTGCCAAACCTTATCAGGGAAGGTCGTGCTTAAATGACGTCCTTCTGTG  
TGTTTAAATTTATGGCGTTATACAGCATCATCCAGTACTTCAGTGTACTCTCCTGTATTCTATCTTGAG  
TAACTGGGAGACTTTCAGTTTCTTTCATTGATCTGGCAATCATTTTGGTAGTAGTATTTACAATGAGT  
TTAAATCCTGCCTGGAAGAGCTTGTGGCACAGAGACCACCTCAGGCCTTATATCTGGGGCGCTCCTCT  
TCTCCGCTTGTCTCAGATTGTGATCTCCGTTGGATTTTCAGTCGCTGGGTTTTTCTGGTCAAGCAGTA  
TAAAGTGTGCGATCCAAATTCAGATGTTTGTAAATACAACAAGAAGCGCATGTTGGAACCTCGTCACACTTA  
TACAATGGGACTGAACTCGATTCTGTGAAAATACAAAATTATGAAAATACCACAGTATTTTTTATCTCCA  
GTTTCCAGTACCTCACAGTGGCGGTTGCCTTTTCAAAGGAAAACCATTAGGCAGCCTTGTACAAGAA  
TTATTTTTTTGTTATATCTGTGATTATTTTGTATGTTTTCATATTATTCATCATGTTGCATCCAGTTGCC  
TCTGTTGACCAGGTTCTTGAGATTATGTGTGTACCATACCAGTGGCGCATATATGCTTATCATTGTTT  
TTATCAATGCCTTCGTGTCTATCAGGTGGAGAGCTTCTCCTTGACACGGTCTTTGGAAAGTTGTATT  
CAATCGAGACAAACAAGGAGAGTGTGTTTCAGCACCACACAGCCACCACAGGAGTCAGTGGATCGGTGG  
GGAAAATGCTGTTTGCCTGGGCCCTGAGCTGTAGAAAGAAAACCTCAAAGCAAAGTACATGTACTTAG  
CACAGGAGCTCCGCTTTGATCCTGAGTGGCCGCTAAACCTCAGACAACGACGGAAGCCAAAGCTGTAGT  
AAAGGAGAATGGATCATGTCAGATTATCACCATAGCA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >MG217941 representing NM\_001128096  
 Red=Cloning site Green=Tags(s)

```

MDKEERKTINKGQEDEMEIHGYNLCRWKLAMVFGVICTGGFLLLLLWLPWVRVKATCVRAAVKDCEVV
LLRTTDEFVWFCAKIHFLPVENQPNLNAKCLVNEVSNHGHAVHLTEENRCCEMNKYSQSQSQQMRYFTHHS
IRYFWNDAIHNFDFLKGLDEGVSCASLYEKHSAGLTQGMHAYRKLIVGVNEIAVKVPSVFKLLIKEVLNP
FYIFQLFSVILWSVDEYYYYALIVIMSVVSIISLYSIRKQYVMLHDMVATHSTVRSVCRENEEIEEI
FSTDLPVGDVMIIPLNQVMPGDAVLINGTCIVNESMLTGESVPTKTNLPNPSVDVKMGEEQYSPETH
KRHTLFCGTTVIQTRFYTGELVKAIVVRTGFSTSKGQLVRSILYPKPTDFKLYRDAYLFLCLLVVAGIG
FIYTIINSILNEKEVQEIIKSLDIITITVPPALPAAMTAGIVYAQRRLKKGIFCISPQRINICGQLNL
VCFDKTGTLTEDGLDWIQRVENTRFLLPEDNVCSEMLVKSQFVACMATCHSLTKIEGVLSGDPLDLKM
FEAIGWILEEATEEETALHNRIMPTVVRPSKQLLPEPTTAGNQEMELFELPAIYEIGIVRQFPFSSALQR
MSVVARTLGEKRMDAYMKGAPVVASLCKPETVPVDFEKVLEDYTKQGFVIALAHRKLESKLTWHKVQH
ISRDAIENMDFMGLIIMQNKLQETPAVLEDLHKANIRTVMTGDNMLTAVSVARDCGMILPQDKVIAA
EALPPKDGKVAKINWHYTDSLQCSSESAIDSEAPIKLAHDSLEDLEVTRYHFAMNGKSFVILEHFQD
LVPKLMLHGTVFARMAPDQKTQLVEALQNVDFVGMCGDGANDCGALKRAHGGISLSELEASVASPFTSK
TPSISCVPNLIREGRAALMTSFCVFKFMALYSIIQYFSVTLTLLYSILSNLGDQFLFIDLAILVVVFTMS
LNPAAKELVAQRPPSGLISGALLFVLSQIVISVGFQSLGFFWVKYKVCDPNSDVCNTRSACWNSSHL
YNGTELDCKIQNYENTTVFFISSFQYLVAVAFSKGKPFQPCYKNYFFVISVILVYVILFIMLHPVA
SVDQVLEIMCVPYQWRIYMLIIVLINAFVSITVESFFLDTVLWKVVFNDRDKQGEGRFSTTQPPQESVDRW
GKCLSWALSCRKTPKAKYMYLAQELRFDPEWPPKPQTTEAKAVVKENGSCQIITIA
  
```

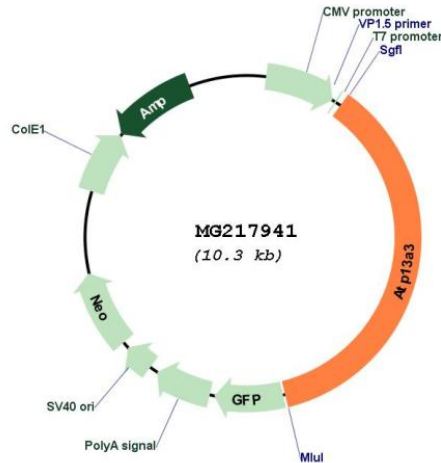
TRTRPLE - GFP Tag - V

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**



**Plasmid Map:**


**ACCN:** NM\_001128096

**ORF Size:** 3747 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\\_001128096.1](#), [NP\\_001121568.1](#)

**RefSeq Size:** 7310 bp

**RefSeq ORF:** 3750 bp

**Locus ID:** 224088

**UniProt ID:** [Q5XF89](#)

**Cytogenetics:** 16 B2

**Gene Summary:** ATP-driven pump involved in endocytosis-dependent polyamine transport. Uses ATP as an energy source to transfer polyamine precursor putrescine from the endosomal compartment to the cytosol.[UniProtKB/Swiss-Prot Function]