**OriGene Technologies, Inc.**
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

# Product datasheet for RG203198

## ATP1A3 (NM_152296) Human Tagged ORF Clone

### Product data:

| | |
|---|---|
| **Product Type:** | Expression Plasmids |
| **Product Name:** | ATP1A3 (NM_152296) Human Tagged ORF Clone |
| **Tag:** | TurboGFP |
| **Symbol:** | ATP1A3 |
| **Synonyms:** | AHC2; ATP1A1; CAPOS; DYT12; RDP |
| **Mammalian Cell Selection:** | Neomycin |
| **Vector:** | pCMV6-AC-GFP (PS100010) |
| **E. coli Selection:** | Ampicillin (100 ug/mL) |

**ORF Nucleotide Sequence:**

>RG203198 representing NM_152296
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGGGGACAAGAAAGATGACAAGGACTCACCCAAGAAGAACAAGGGCAAGGAGCGCCGGGACCTGGATG
ACCTCAAGAAGGAGGTGGCTATGACAGAGCACAAGATGTCAGTGGAAGAGGTCTGCCGGAAATACAACAC
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GGCTGAGATTCCCTTCAATTCCACCAACAAATACCAGCTCTCCATCCATGAGACCGAGGACCCCAACGAC



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AACCGATACCTGCTGGTGATGAAGGGTGCCCCCGAGCGCATCCTGGACCGCTGCTCCACCATCCTGCTAC
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GCCTTCCCCTACAGTTTCCTCATCTTCGTCTACGACGAAATCCGCAAACTCATCCTGCGCAGGAACCCAG
GGGGTTGGGTGGAGAAGGAAACCTACTAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>RG203198 representing NM_152296
Red=Cloning site Green=Tags(s)

MGDKKDDKDSPKKNKGKERRDLDDLKKEVAMTEHKMSVEEVCRKYNTDCVQGLTHSKAQEILARDGPNAL
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FIQLITGVAVFLGVSFFILSLILGYTWLEAVIFLIGIIVANVPEGLLATVTVCLTLTAKRMARKNCLVKN
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FDCDDVNFTTDNLCFVGLMSMIDPPRAAVPDAVGKCRSAGIKVIMVTGDHPITAKAIAKGVGIISEGNET
VEDIAARLNIPVSQVNPRDAKACVIHGTDLKDFTSEQIDEILQNHTEIVFARTSPQQKLIIVEGCQRQGA
IVAVTGDGVNDSPALKKADIGVAMGIAGSDVSKQAADMILLDDNFASIVTGVEEGRLIFDNLKKSIAYTL
TSNIPEITPFLLFIMANIPLPLGTITILCIDLGTDMVPAISLAYEAAESDIMKRQPRNPRTDKLVNERLI
SMAYGQIGMIQALGGFFSYFVILAENGFLPGNLVGIRLNWDDRTVNDLEDSYGQQWTYEQRKVVEFTCHT
AFFVSIVVVQWADLIICKTRRNSVFQQGMKNKILIFGLFEETALAAFLSYCPGMDVALRMYPLKPSWWFC
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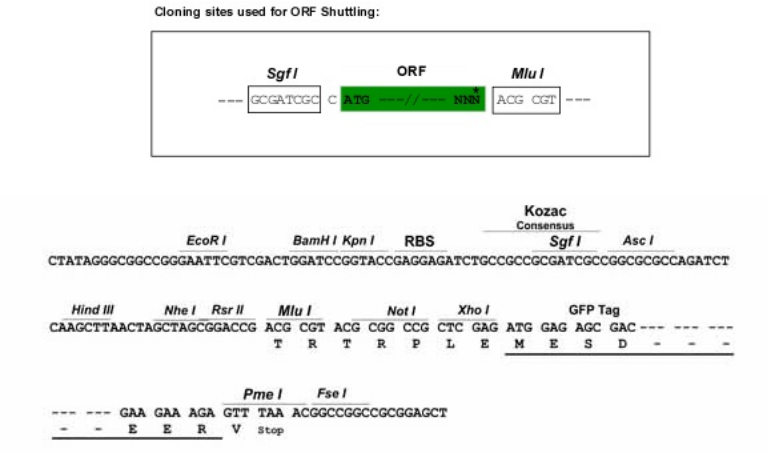
TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

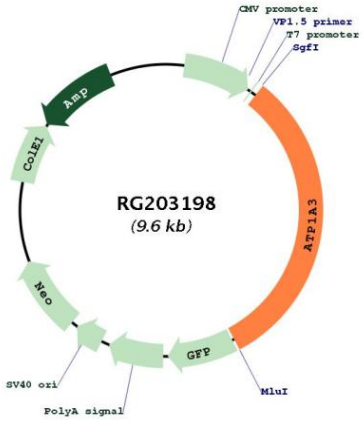
**Cloning Scheme:**




| | |
|---|---|
| **ACCN:** | NM_152296 |
| **ORF Size:** | 3039 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.<br>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.<br>3. Close the tube and incubate for 10 minutes at room temperature.<br>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.<br>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_152296.2 |
| **RefSeq Size:** | 3587 bp |

| | |
|---|---|
| **RefSeq ORF:** | 3042 bp |
| **Locus ID:** | 478 |
| **UniProt ID:** | P13637 |
| **Cytogenetics:** | 19q13.2 |
| **Domains:** | E1-E2_ATPase, Cation_ATPase_N, Hydrolase, Cation_ATPase_C |
| **Protein Families:** | Druggable Genome, Transmembrane |
| **Protein Pathways:** | Cardiac muscle contraction |
| **Gene Summary:** | The protein encoded by this gene belongs to the family of P-type cation transport ATPases, and to the subfamily of Na+/K+ -ATPases. Na+/K+ -ATPase is an integral membrane protein responsible for establishing and maintaining the electrochemical gradients of Na and K ions across the plasma membrane. These gradients are essential for osmoregulation, for sodium-coupled transport of a variety of organic and inorganic molecules, and for electrical excitability of nerve and muscle. This enzyme is composed of two subunits, a large catalytic subunit (alpha) and a smaller glycoprotein subunit (beta). The catalytic subunit of Na+/K+ -ATPase is encoded by multiple genes. This gene encodes an alpha 3 subunit. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jan 2012] |

## Product images:




Circular map for RG203198