

## Product datasheet for RC235125

### ATP1A3 (NM\_001256213) Human Tagged ORF Clone

#### Product data:

|                          |  |
|--------------------------|--|
| Product Type:            | Expression Plasmids  |
| Product Name:            | ATP1A3 (NM_001256213) Human Tagged ORF Clone                                   |
| Tag:                     | Myc-DDK  |
| Symbol:                  | ATP1A3   |
| Synonyms:                | AHC2; ATP1A1; CAPOS; DYT12; RDP  |
| Vector:                  | pCMV6-Entry (PS100001)   |
| E. coli Selection:       | Kanamycin (25 ug/mL)   |
| Cell Selection:          | Neomycin   |
| ORF Nucleotide Sequence: | >RC235125 representing NM_001256213<br>Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGGAGGCTGGGAGGAGGAGGAACAGGAGAGCCACGGACAAGAAAGATGACAAGGACTCACCAAGA  
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CATCATCGTGGCCAATGTCCCAGAGGTCTGCTGGCCACTGTCACTGTGTGTCTGACGCTGACCGCAAG  
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TCAAGAGGGATGTGGCTGGGGATGCGTCTGAGTCTGCCCTGCTCAAGTGCATCGAGCTGTCTCTGGCTC  
CGTGAAGCTGATGCGTGAACGCAACAAGAAAGTGGCTGAGATTCCCTTCAATTCCACCAACAAATACCAG  
CTCTCCATCCATGAGACCGAGGCCCAACGACAACCGATACCTGCTGGTGTGAAAGGTGCCCCGAGC



GCATCCTGGACCGCTGCTCCACCATCTGCTACAGGGCAAGGAGCAGCCTCTGGACGAGGAAATGAAGGA  
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 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC235125 representing NM\_001256213  
 Red=Cloning site Green=Tags(s)

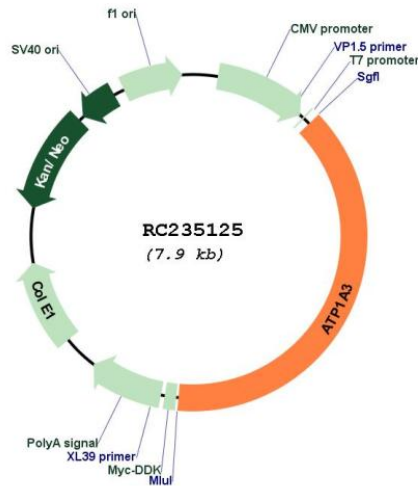
MGWEEERNRRATDKKDDKSPKKNKGKERRDLDDLKKEVAMTEHKMSVEEVCRKYNTDCVQGLTHSKAQ  
 EILARDGNALTPPPTTPEWVKFCRQLFGGFSILLWIGAILCFLAYGIQAGTEDDPSGDNLYLGIVLAAY  
 VIITGCFSYQAEAKSSKIMESFKNMVQQALVIREGEMQVNAEEVVVDLVEIKGGDRVPADLRIISAH  
 GCKVDNSSLTGESEPQTRSPDCTHDNPLETRNITFFSTNCVEGTARGVVVATGDRTVMGRIATLASGLEV  
 GKTPIAIEIEHF IQLITGVAVFLGVSFFILSLILGYTWLEAVIFLIGIIVANVPEGLLATVTVCLTLTAK  
 RMARKNCLVKNLEAVETLGSTSTICSDKTGTLTQNRMTVAHMWFDNQIHEADTTEDQSGTSFDKSSHTWV  
 ALSHIAGLCNRAVFKGGQDNIPVLKRDVAGDASESALLKCIELSSGSVKLMRERNKVAEIPFNSTNKYQ  
 LSIHETEDPNDNRYLLVMKGAPERILDRCTILLQGKEQPLDEEMKEAFQNYLELGGGERVLFCHYY  
 LPEEQFPKGFADFCDVNF TTDNLCFVGLMSMIDPPRAAVPDAVGKCRSAGIKVIMVTGDHPITAKAIK  
 GVGIISEGNETVEDIAARLNIPVSQVNPDAKACVIHGTDLKDF TSEQIDEILQNHTEIVFARTSPQQKL  
 IIVEGCRQGAIVAVTGDGVNDSPALKKADIGVAMGIAGSDVSKQAADMILLDDNFASIVTGVEEGRLIF  
 DNLLKKSIAAYLTLSNIPEITPFLFFIMANIPLPLGTITILCIDLGTDMVPAISLAYEAAESDIMKRQPRNP  
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 QRKVVEFTCHTAFFVSI VVVQWADLIICKTRRNSVFQGMKNKILIFGLFEETALAAFLSYCPGMDVALR  
 MYPLKPSWWFCAPYSFLIFVYDEIRKILRRNPGGWVEKETY

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**

**Plasmid Map:**


**ACCN:** NM\_001256213

**ORF Size:** 3072 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](#)

|                               |  |
|-------------------------------|--|
| <b>OTI Annotation:</b>        | This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.   |
| <b>Components:</b>            | 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).   |
| <b>Reconstitution Method:</b> | <ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>  |
| <b>RefSeq:</b>                | <a href="#">NM_001256213.1</a> , <a href="#">NP_001243142.1</a>  |
| <b>RefSeq Size:</b>           | 3504 bp  |
| <b>RefSeq ORF:</b>            | 3075 bp  |
| <b>Locus ID:</b>              | 478  |
| <b>UniProt ID:</b>            | <a href="#">P13637</a>   |
| <b>Cytogenetics:</b>          | 19q13.2  |
| <b>Protein Families:</b>      | Druggable Genome, Transmembrane  |
| <b>Protein Pathways:</b>      | Cardiac muscle contraction   |
| <b>MW:</b>                    | 113.6 kDa  |
| <b>Gene Summary:</b>          | <p>The protein encoded by this gene belongs to the family of P-type cation transport ATPases, and to the subfamily of Na<sup>+</sup>/K<sup>+</sup> -ATPases. Na<sup>+</sup>/K<sup>+</sup> -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<sup>+</sup>/K<sup>+</sup> -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]</p> |