

Product datasheet for **RG213903**

ATP1A4 (NM_144699) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ATP1A4 (NM_144699) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ATP1A4
Synonyms:	ATP1A1; ATP1AL2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG213903 representing NM_144699 Red=Cloning site Blue=ORF Green=Tags(s)

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GCC**CGATCGCC**

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TCTTCGCTATGATGAAATCAGAAAACCTCATCCGTCAGCACCCGGATGGCTGGGTGGAAAGGGAGAC
GTACTAC
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ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG213903 representing NM_144699
 Red=Cloning site Green=Tags(s)

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LRLISAQCKVDNSSLTGESEPSRSPDFTHENPLETRNICFFSTNCVEGTARGIVIAATGDSTVMGRIAS
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CLTLTAKRMARKNCLVKNLEAVETLGSTSTICSDKTGTLTQNRMTVAHMWFDMTVYEADTTEEQTGKFTT
KSSDTWFMRLARIAGLCNRADFKANQEILPIAKRATTGDASESALLKFIQSYSSVAEMREKNPKVAEIPF
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LPRNPKTDNLVNHRLIGMAYGQIGMIQALAGFFTYFVILAENGFPRVDLLGIRLHWEDKYLNDLEDYSGQ
QWTYEQRKVVEFTCQTAFFVTIVVVQWADLIISKTRRNSLFQQGMRNKVLIFGILEETLLAAFLSYTPGM
DVALRMYPLKITWWLCAIPYSILIFVYDEIRKLLIRQHPDGWVERETY
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TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_144699

ORF Size: 3087 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.

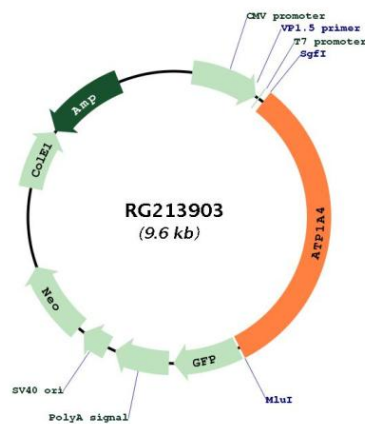
RefSeq: [NM_144699.4](#)

RefSeq Size: 3912 bp

RefSeq ORF: 3090 bp

Locus ID: 480
UniProt ID: [Q13733](#)
Cytogenetics: 1q23.2
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 4 subunit. Alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG213903