

Product datasheet for **RG204183**

ATP1B3 (NM_001679) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: ATP1B3 (NM_001679) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: ATP1B3
Synonyms: ATPB-3; CD298
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG204183 representing NM_001679
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGACGAAGAACGAGAAGAAGTCCCTCAACCAGAGCCTGGCCGAGTGAAGCTTTCATCTACAACCCGA
 CCACCGGAGAATTCCTGGGGCGCACCGCCAAGAGCTGGGGTTTGATCTTGCTCTTCTACCTAGTTTTTTA
 TGGGTTCTGCTGCACTCTTCTCATTACAGATGTGGTTATGCTTCAGACTCTCAACGATGAGGTTCCA
 AAATACCGTGACCAGATTCCTAGCCAGGACTCATGGTTTTTCCAAAACCAGTGACCGCATTGGAATATA
 CATTTCAGTAGGCTGATCCAACCTCGTATGCAGGGTACATTGAAGACCTTAAGAAGTTTCTAAAACCATA
 TACTTTAGAAGAACAGAAGAACCCTCACAGTCTGTCTGATGGAGCACTTTTTGAACAGAAGGTCAGTT
 TATGTTGCATGTCAAGTTTCTATTTCACTTCAAGCATGCAGTGGTATGAATGATCCTGATTTTGGCT
 ATTCTCAAGGAAACCTTGATTTCTGTGAAAATGAACAGAATAATTGGATTAAGCCTGAAGGAGTGCC
 AAGGATAGATTGTGTTTCAAAGAATGAAGATATACCAATGTAGCAGTTTATCCTCATAATGGAATGATA
 GACTTAAATATTTCCCATATTATGGGAAAAAAGTGCATGTTGGGTATCTACAGCCATTGGTTGCTGTT
 AGGTCAGCTTTGCTCCTAACAACACTGGGAAAGAAGTAAACAGTTGAGTGAAGATTGATGGATCAGCCAA
 CCTAAAAAGTCAGGATGATCGTGACAAGTTTTTGGGACGAGTTATGTTCAAAATCACAGCACGTGCA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG204183 representing NM_001679
 Red=Cloning site Green=Tags(s)

MTKNEKKSLSLQSLAEWKLFYINPTTGEFLGRTAKSWGLILLFYLVFYGFLLAALFSFTMWVMLQTLNDEVP
 KYRDQIPSPGLMVFPKPVTALEYTFSRSDPTSYAGYIEDLKKFLKPYTLEEQKNLTVCPDGALFEQKGPV
 YVACQFPISLLQACSGMNDPDFGYSQGNPCILVKMNRIIGLKEGVPRIDCVSKNEDIPNAVYPHNGMI
 DLKYFPYYGKKLHVGYLQPLVAVQVSFAPNNTGKEVTVECKIDGSANLKSQDDRDKFLGRVMFKITARA

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



ACCN: NM_001679

ORF Size: 837 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_001679.4](#)

RefSeq Size: 1853 bp

RefSeq ORF: 840 bp

Locus ID: 483

UniProt ID: [P54709](#)

Cytogenetics: 3q23

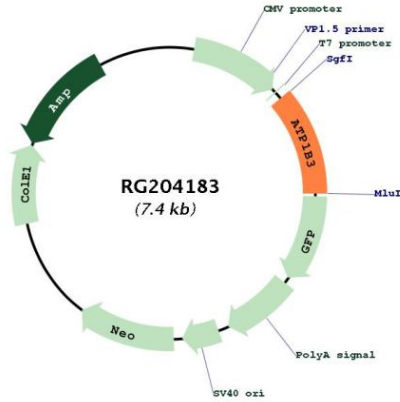
Domains: Na_K-ATPase

Protein Families: Transmembrane

Protein Pathways: Cardiac muscle contraction

Gene Summary: The protein encoded by this gene belongs to the family of Na⁺/K⁺ and H⁺/K⁺ ATPases beta chain proteins, 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 beta subunit regulates, through assembly of alpha/beta heterodimers, the number of sodium pumps transported to the plasma membrane. The glycoprotein subunit of Na⁺/K⁺ -ATPase is encoded by multiple genes. This gene encodes a beta 3 subunit. This gene encodes a beta 3 subunit. A pseudogene exists for this gene, and it is located on chromosome 2. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG204183