

Product datasheet for **RG226206**

ATP6V0A1 (NM_001130020) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ATP6V0A1 (NM_001130020) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ATP6V0A1
Synonyms:	a1; ATP6N1; ATP6N1A; Stv1; Vph1; VPP1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide
Sequence:**

>RG226206 representing NM_001130020
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGGGAGCTTTTCCGGAGTGAAGAAATGACACTGGCCAGCTTTTCTACAGTCAGAGGCTGCTTATT
 GTTGTGTCAGTGAATTAGGAGAAGTTGAAAGGTTTCAGTTTCGTGACTTAAATCCAGATGTGAATGTTTT
 CCAACGGAAATTTGTGAATGAAGTTAGAAGATGTGAAGAAATGGATCGAAAGCTTCGATTTGTTGAGAAA
 GAGATAAGAAAAGCTAACATTCCGATTATGGACACCGGTGAAAACCCAGAGGTTCCCTTCCCGGGGACA
 TGATTGACTTAGAGGCCAATTTTGAAGAAGATTGAAAATGAACTGAAGGAAATCAACACAAACCAGGAAGC
 TCTGAAGAGAACTTCTGGAACGACCGAATTAATACTTTCGAAAACCTCAGCAATTTTTTGTAT
 GAGGCTGAATTGCATCATCAGCAGATGGCGGATCCAGACTTGTGGAAGAGTCTCATCCCTCTGGAGC
 CAAGTGAGATGGGAAGAGGCACTCCTTTAAGACTTGGCTTCGTGGCTGGTGTCTTAACCGGAGCGCAT
 CCCTACTTTTGGCGCATGCTTTGGCGGTATGCCGGGAAATGTGTTCTCGCAGAGGCTGAAATCGAG
 AACCCCTGGAGGATCCTGTGACTGGCGACTACGTGCACAAGTCTGTGTTTATCATTCTTCCAAGGCG
 ATCAGCTGAAAAACAGAGTCAAGAAAATCTGTGAAGGTTCCGAGCCTCACTCTATCCCTGTCTGAGAC
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 TGCGGAAGATGAAGGCCATCTATCACACCTGAACCTGTGCAACATAGATGTGACTCAGAAATGCTTGTAT
 TGCAGAGGCTGGTGGCCCTGTACCCGACCTTACTCCATCCAGTTTGCCTCAGAAAGGGGACCGGAACAC
 AGTGGTTCCACTGTACCTTCCATTTTGAACAGGATGCAGACAAACCAGACTCCCCAACCATAACAAAA
 CCAACAAGTTTACCTATGGCTTTTCAAGAATAGTAGATGCTTATGGAATGGAACCTACCGAGAGATAAA
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 CTGGAGTGTGGTGGACCATACCCTTTTGGCATTGATCCAATTTGGAACATTGTACCAATAAACTGAC
 GTTCTTGAACCTTTAAGATGAAGATGTCTGTTATCCTTGGTATCATCCATATGCTGTTTGGAGTCAGC
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 TACCTTGGATGCTGTGTTAAACCATGGTCTTCGCGTCAGTATTTGAGGAGAAAGCATTGGGGAAC
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 ACACCATCGAGTACTGCCTGGCTGCATCTCAACACTGCCTCTACTTGGGCTCTGGCCCTCAGCCT
 CGCTCATGCGCAGCTGTCTGAGGTGCTTTGGACCATGGTATCCACATCGGCTGAGCGTGAAGAGCTTG
 GCGGGAGGTTTGGTGTGTTCTTCTTCTCACTGCCTTTGCCACCCTGACCGTGGCCATCCTCTGATCA
 TGGAGGGCTCTCGCCCTTCTCCACGCACTGCGCTTACTGGGTTGAGTTCAGAAATAAATTCTACAG
 CGGACCGGTTTCAAGTCTTACCCTTCTCCTTCGAGCATATTCGGAAGGGAAGTTTGAAGAG

ACCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG226206 representing NM_001130020
Red=Cloning site Green=Tags(s)

MGELFRSEEMTLAQLFLQSEAAYCCVSELGELGKVQFRDLNPDVNVFQRKFNVEVRRCEEMDRKLRFVEK
EIRKANIPIMDTGENPEVPFPRDMIDLEANFEKIENELKEINTNQEALKRNFLTELKFI LRKTQQFFD
EAELHHQMQADPDLEEESLLEPSEMGRGTPLRLGFVAGVINRERIPTFERMLWRVCRGNVFLRQAEIE
NPLEDPVTGDYVHKSVEIIFQGDQLKNRVKKICEGFRASLYPCPETPQERKEMASGVNTRIDDLQMVLN
QTEDHRQVRLQAAAKNIRVWFIKVRKMKAIYHTLNL CNIDVTQKCLIAEVWCPVTDLDSIQFALRRGTEH
SGSTVPSILNRMQTNQTPPTYNKTNKFTYGFQNI VDAYGIGTYREINPAPYTIITFPFLFAVMFGDFGHG
ILMTLFAVWMLRESRILSQKNENEMFSTVFSGRYIILLMGVFSMYTGLIYND CFSKSLNIFGSSWSVRP
MFTYNWTEETLRGNPVLQLNPALPGVFGGYPYFGIDPIWNIATNKL TFLNSFKMKMSVILGIHMLFGVS
LSL FNHIYFKKPLNIYFGFIPEIIFMTSLFGYL VILIFYKWTAYDAHTSENAPSLLIHF INMFLFSYPES
GYSMLYSQKGIQCFLVVVALLCVPWMLL FKPLVLRQYLRRKHLGTLNFGGIRVGNPTEEDAEI IQHD
QLSTHSEDADEFDFGDTMVHQA IHTIEYCLGCISNTASYLR L WALSLAHAQLSEVLW TMVIHIGLSVKSL
AGGLV L FFFFTAFATLTVAILLIMEGLSAFLHALRLHWVEFQNKFYSGTGFKFLPFSFEHIREGKFEE

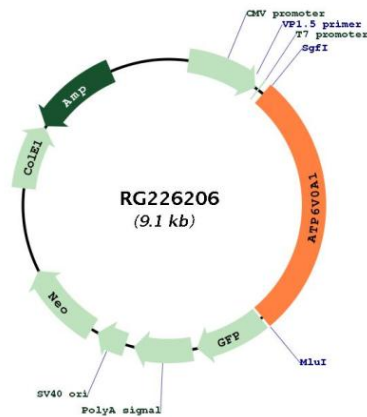
TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI

OTI Disclaimer:	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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</p>
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:	<ol style="list-style-type: none"> 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_001130020.3
RefSeq Size:	4208 bp
RefSeq ORF:	2517 bp
Locus ID:	535
UniProt ID:	Q93050
Cytogenetics:	17q21.2
Protein Families:	Transmembrane
Protein Pathways:	Epithelial cell signaling in Helicobacter pylori infection, Lysosome, Metabolic pathways, Oxidative phosphorylation, Vibrio cholerae infection

Gene Summary:

This gene encodes a component of vacuolar ATPase (V-ATPase), a multisubunit enzyme that mediates acidification of eukaryotic intracellular organelles. V-ATPase dependent organelle acidification is necessary for such intracellular processes as protein sorting, zymogen activation, receptor-mediated endocytosis, and synaptic vesicle proton gradient generation. V-ATPase is composed of a cytosolic V1 domain and a transmembrane V0 domain. The V1 domain consists of three A and three B subunits, two G subunits plus the C, D, E, F, and H subunits. The V1 domain contains the ATP catalytic site. The V0 domain consists of five different subunits: a, c, c', c", and d. Additional isoforms of many of the V1 and V0 subunit proteins are encoded by multiple genes or alternatively spliced transcript variants. This gene encodes one of three A subunit proteins and the encoded protein is associated with clathrin-coated vesicles. Three transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

Product images:


Circular map for RG226206