

Product datasheet for **RG205447**

ATP6V1B2 (NM_001693) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ATP6V1B2 (NM_001693) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ATP6V1B2
Synonyms:	ATP6B1B2; ATP6B2; DOOD; HO57; VATB; Vma2; VPP3; ZLS2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG205447 representing NM_001693
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCGCTGCGGGCGATGCGGGGGATTGTCAACGGGGCCGACCCGAGCTACCCGTGCCACCGGTGGG
 CGCGGTTGGGAGCTCAGGAGCAGGCGCTGGCAGTCAGTCGGAACCTCTCCAGCCTCGCTCACATA
 CAAGACAGTATCTGGAGTCAATGGTCCACTAGTGATCTTAGATCATGTTAAGTTTCCAGGTATGCTGAA
 ATTGTCCATTTGACCTTACCGGATGGCACAAGAGAAGTGGCAAGTTCTGGAAGTTAGTGGTTCCAAGG
 CAGTAGTTCAGGTATTTGAAGGGACTTCAGGTATAGATGCTAAGAAAACGTCCTGTGAGTTTACTGGGA
 TATTCTCCGAACACCGGTGTCTGAGGATATGCTTGGTGGGTATTCAATGGATCGGGAACCCATTGAC
 AGAGGTCCTGTTGACTGGCCGAAGACTTCCTTGATATCATGGGTGAGCAATCAACCTCAATGTCGAA
 TCTACCCAGAGGAATGATTCGGACTGGCATTTCGGCCATCGATGGGATGAACAGTATTGCTAGGGGGCA
 GAAAATTCCTATCTTCTGCTGCTGGGCTACCACACAATGAGATTGCAGCTCAGATCTGTGCCAGGCT
 GGTGGTAAAGAAATCCAAAGATGTAGTAGACTACAGTGAGGAAAATTTTGAATTTGATTTGCTGCTA
 TGGGTGTAACATGGAACTGCCCGTTCTTCAATCTGACTTTGAAGAAAATGGCTCAATGGACAATGT
 CTGCTCTTTTTGAACCTGGCTAATGACCAACCATTTAGCGCAATTATCACTCCTCGCCTGGCTCTAAC
 ACAGCTGAATTTCTGGCTACCAATGTGAGAAACATGTATTGGTTATTCTAACAGACATGAGTTCTTATG
 CTGAAGCACTTCGAGAGGTTTCAGCAGCCAGGGAAGAGGTACCTGGTTCGACGAGGTTTTCCAGGTTACAT
 GTATACAGATTTAGCCACGATATATGAACGCGCTGGGCGAGTGGGAGGGAGAAACGGCTCGATTACTCAA
 ATCCCTATTCTAACCATGCCTAATGATGATATCACTCACCCATCCCAGACTTACTGGCTACATTACAG
 AGGGGCGAGATCTATGTGGACAGACAGTGCACAACAGACAGATTTATCCACCTATCAATGTGCTCCCTC
 ACTATCAGGTTAATGAAGTCTGCTATTGGAGAAGGGATGACCAGGAAGGATCATGCCGATGTATCTAAC
 CAGCTATATGCGTGTATGCTATTGGAAAGGATGTGCAAGCCATGAAAGCTGTCGTTGGAGAAGAAGCCC
 TTACCTCAGATGATCTTCTACTTGGAAATTTCTGCAGAAGTTTGGAGGAACTTCATTGCTCAGGGTCC
 TTACGAAAATCGCACTGTCTTTGAGACTTTGGACATTGGCTGGCAGCTACTCCGAATCTTCCCAAAGAA
 ATGCTGAAGAGAATCCCTCAGAGCACCTCAGCGAATTTTACCCTCGAGACTCTGCAAAGCAT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG205447 representing NM_001693
 Red=Cloning site Green=Tags(s)

MALRAMRGIVNGAAPPELVPVPTGGPAVGAQEALAVSRNYLSQPRLTYKTVSGVNGPLVILDHVKFPRYAE
 IVHLTLPDGTKRSGQVLEVSGSKAVVQVFEGTSGIDAKKTSCEFTGDILRTPVSEDMLGRVFNNGSGKPID
 RGPVVLAEFDLIMGQPINPQCRIYPEEMIRTGISAIDGMNSIARGQKIPFSAAGLPHNEIAAQICRQA
 GLVKKSKDVVDYSEENFAIVFAAMGVNMETARFFKSDFEENGSMNVCLFLNLANOPTIERIITPRLALT
 TAEFLAYQCEKHVLVILDMSSYAEALREVSAREEVPGRRGFPGYMYTDLATYERAGRVGGRNGSITQ
 IPILTMPNDIITHPIPDLTGYITEGQIYVDRQLHNRQIYPPINVLPSSLRMLKSAIGEGMTRKDHADVSN
 QLYACYAIGKDVQAMKAVVGEEALTSDDLLEYLFLQKFERNFIAQGPYENRTVFETLDIGWQLLRIFPKE
 MLKRIPQSTLSEFYPRDSAKH

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_001693

ORF Size: 1533 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_001693.3](#), [NP_001684.2](#)

RefSeq Size: 3054 bp

RefSeq ORF: 1536 bp

Locus ID: 526

UniProt ID: [P21281](#)

Cytogenetics: 8p21.3

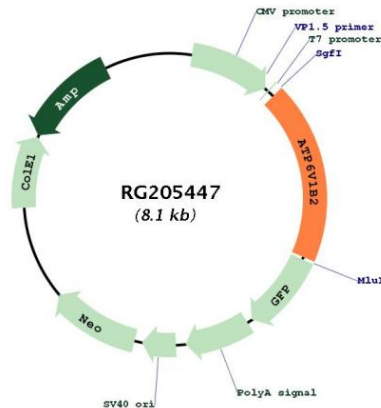
Domains: ATP-synt_ab, ATP-synt_ab_C, ATP-synt_ab_N

Protein Families: Druggable Genome

Protein Pathways: Epithelial cell signaling in Helicobacter pylori infection, 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, three B, and two G subunits, as well as a C, D, E, F, and H subunit. The V1 domain contains the ATP catalytic site. The protein encoded by this gene is one of two V1 domain B subunit isoforms and is the only B isoform highly expressed in osteoclasts. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG205447