

Product datasheet for **RG217650**

ATP6V1E1 (NM_001039366) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: ATP6V1E1 (NM_001039366) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: ATP6V1E1
Synonyms: ARCL2C; ATP6E; ATP6E2; ATP6V1E; P31; Vma4
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG217650 representing NM_001039366
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCTCTCAGCGATGCTGACGTGCAAAAGCAGGCAGAAGAAGAGTTCAACATAGAGAAAGGTCGGCTTG
 TGCAAACCCAAAGACTAAAGATTATGGAATATTATGAGAAGAAAGAGAAACAGATTGAGCAGCAGAAGAA
 AATTCAGATGTCCAATTTGATGAATCAAGCGAGACTCAAAGTCTCAGAGCAAGAGATGACCTTATCACA
 GACCTACTAAATGAAGCAAAACAGAGACTCAGCAAGGTGGTAAAAGATACAACCAGGTACCAAGTGCTGC
 TGGATGGACTGGTCTCCAGGGTTGTACCAGTTGCTGGAGCCCCGAATGATTGTTTCGTTGCAGGAAACA
 AGATTTCCCTCTGGTAAAGGCTGCAAGTGCAGAAGCAATTCCTATGTACAAAATTGCCACCAAAAACGAT
 GTTGATGTCCAAATTGACCAGGAGTCTACCTGCCTGAAGACATAGCTGGTGGAGTTGAGATCTATAATG
 GAGATCGTAAAATAAAGGTTTCCAACACCTGGAAAGCCGGCTGGATCTCATAGCCCAGCAGATGATGCC
 AGAAGTCCGGGGAGCCTGTTTGGTGCAAATGCCAACAGGAAGTTTTGGAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG217650 representing NM_001039366
 Red=Cloning site Green=Tags(s)

MALSDADVQKQAEFFNIEKGRVLVQTQRLKIMEYYEKKEKQIEQQKIQMSNLMNQARLKVLRARDDLIT
 DLLNEAKQRLSKVVKDTRYQVLLDGLVLQGLYQLLEPRMIVRCRKQDFPLVKAIVQKAIIPMYKIATKND
 VDVQIDQESYLPEDIAGGVEIYNGDRKIKVSNTLESRLDLIAQQMMPEVRGALFGANANRKFLLD

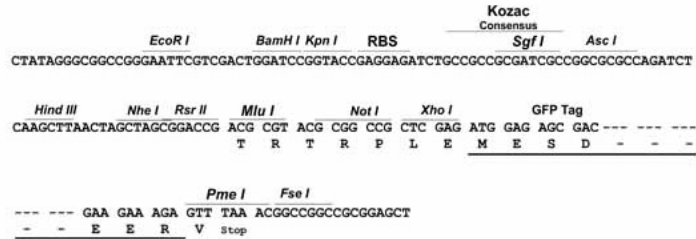
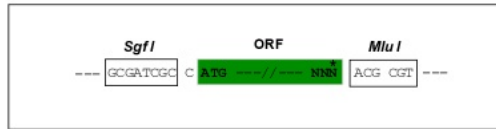
TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI

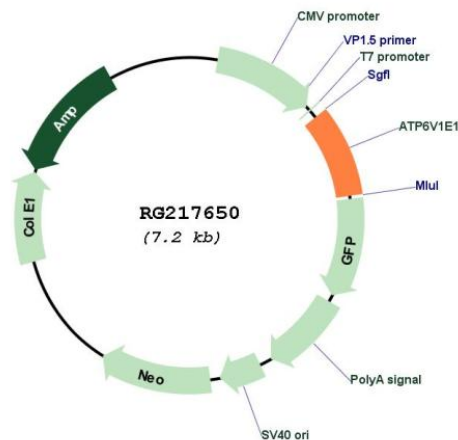


Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_001039366

ORF Size: 612 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:	<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:	<u>NM_001039366.1, NP_001034455.1</u>
RefSeq Size:	1340 bp
RefSeq ORF:	615 bp
Locus ID:	529
UniProt ID:	<u>P36543</u>
Cytogenetics:	22q11.21
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. This gene encodes alternate transcriptional splice variants, encoding different V1 domain E subunit isoforms. Pseudogenes for this gene have been found in the genome. [provided by RefSeq, Jul 2008]