

Product datasheet for **RG220723**

ATP6V1G2 (NM_138282) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: ATP6V1G2 (NM_138282) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: ATP6V1G2
Synonyms: ATP6G; ATP6G2; NG38; VMA10
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG220723 representing NM_138282
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCAGTCAGTCCCAAGGTATCCAGCAGCTTCTGCAAGCTGAGAAGCGGGCAGCTGAGAAGGTGGCAG
ATGCCAGAAAGAGGAAGGCCCGGCGACTGAAGCAGGCAAAGGAGGAGGCACAGATGGAGGTGGAGCAATA
CCGCAGAGAGCGAGAGCACGAATTCAGAGCAAGCAGCAGGCCGATGGGCTCCAGGGGAACCTGTCT
GCTGAGGTGGAGCAGGCTACAAGGCGCCAGGTGCAGGGCATGCAGAGCTCCAGCAGAGAAACCGAGAGC
GTGTCCTGGCCAGCTTCTTGGCATGGTCTGCGACGTCAGGCCAGGTCCACCCAACTACCGGATTC
TGCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

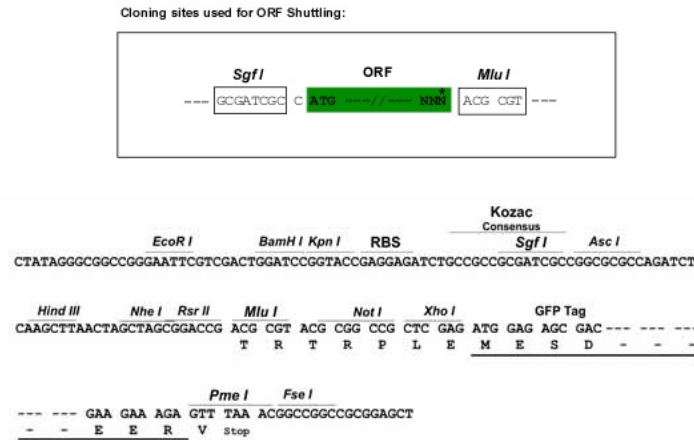
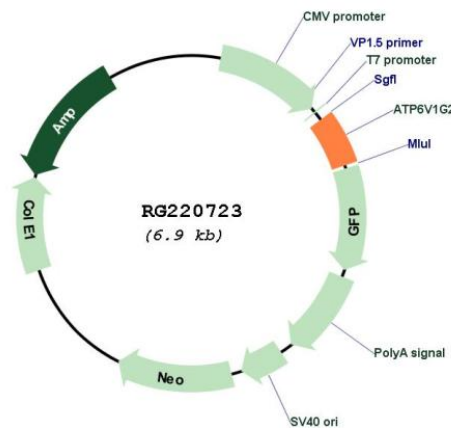
Protein Sequence: >RG220723 representing NM_138282
Red=Cloning site Green=Tags(s)
MASQSQGIQQLLQAEKRAAEKVADARKRKARRLKQAKEEAQMEVEQYRREREHEFQSKQQAAMGSQGNLS
AEVEQATRRQVQGMQSSQQRNRERVLAQLLGMVCDVRPQVHPNYRISA

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI



[View online »](#)

Cloning Scheme:

Plasmid Map:

ACCN:

NM_138282

ORF Size:

231 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:	NM_138282.1 , NP_612139.1
RefSeq Size:	1440 bp
RefSeq ORF:	234 bp
Locus ID:	534
UniProt ID:	O95670
Cytogenetics:	6p21.33
Domains:	V-ATPase_G
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 intracellular compartments of eukaryotic cells. V-ATPase dependent 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 encoded protein is one of three V1 domain G subunit proteins. This gene had previous gene symbols of ATP6G and ATP6G2. Alternatively spliced transcript variants encoding different isoforms have been described. Read-through transcription also exists between this gene and the downstream DEAD (Asp-Glu-Ala-Asp) box polypeptide 39B (DDX39B) gene. [provided by RefSeq, Feb 2011]