

Product datasheet for **RC221453**

ATP6V1G3 (NM_133262) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: ATP6V1G3 (NM_133262) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: ATP6V1G3
Synonyms: ATP6G3; Vma10
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC221453 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGACAAGCCAGTCTCAGGGGATCCACCAGCTTCTTCAGGCAGAAAAACGGGCCAAGGACAAGCTAGAGG
AAGCCAAGAAGAGAAAAGGAAAGCGATTGAAGCAAGCCAAGGAGGAAGCAATGGTAGAAATTGACCAGTA
CAGAATGCAGAGAGATAAAGAGTTTCGACTAAAACAATCTAAGATAATGGGCTCTCAGAATAATCTCTCA
GATGAAATAGAAGAACAACACTAGGGAAGATACAAGAACTTAATGGACTACAATAAGTATATGGAAA
GTGTGATGAACCAGCTTTGAGCATGGTCTGTGACATGAAACCAGAAATCCATGTGAACTACAGAGCCAC
CAAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC221453 protein sequence
Red=Cloning site Green=Tags(s)

MTSQSQGIHQLLQAEKRAKDKLEEAKKRKGRKQAKKEEAMVEIDQYRMQRDKEFRLKQSKIMGSQNNLS
DEIEEQTLGKIQELNGHYNKYMESVMNQLLSMVCMDKPEIHNVYRATN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6457_a01.zip

Restriction Sites: SgfI-MluI



[View online »](#)

Cloning Scheme:


ACCN: NM_133262

ORF Size: 354 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_133262.2](#), [NP_573569.1](#)

RefSeq Size: 645 bp

RefSeq ORF: 357 bp

Locus ID: 127124

UniProt ID: [Q96LB4](#)

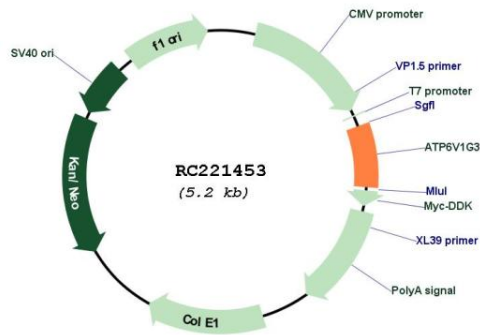
Cytogenetics: 1q31.3

Protein Pathways: Epithelial cell signaling in Helicobacter pylori infection, Metabolic pathways, Oxidative phosphorylation, Vibrio cholerae infection

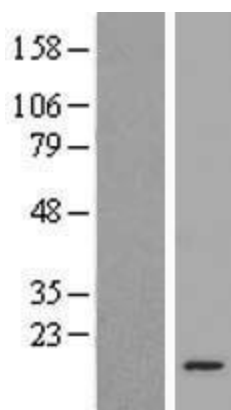
MW: 13.9 kDa

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 G subunit proteins. Transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

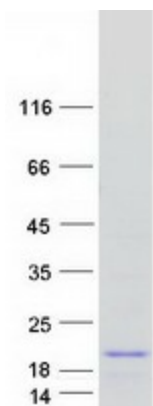
Product images:



Circular map for RC221453



Western blot validation of overexpression lysate (Cat# [LY408852]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221453 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ATP6V1G3 protein (Cat# [TP321453]). The protein was produced from HEK293T cells transfected with ATP6V1G3 cDNA clone (Cat# RC221453) using MegaTran 2.0 (Cat# [TT210002]).