

Product datasheet for SC305936

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com

OriGene Technologies, Inc.

EU: info-de@origene.com CN: techsupport@origene.cn

ATP6V1G3 (NM_133262) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: ATP6V1G3 (NM_133262) Human Untagged Clone

Tag: Tag Free
Symbol: ATP6V1G3

Synonyms: ATP6G3; Vma10

Mammalian Cell

Selection:

Neomycin

Vector: pCMV6-Entry (PS100001) **E. coli Selection:** Kanamycin (25 ug/mL)

Fully Sequenced ORF: >SC305936 representing NM_133262.

Blue=Insert sequence Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAATTTTGTAATACGACTCACTATAGGGCCGCCGGGAATTCGTCGACTG

GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGACAAGCCAGTCTCAGGGGATCCACCAGCTTCTTCAGGCAGAAAAACGGGCCAAGGACAAGCTAGAG GAAGCCAAGAAGAGAAAAGGGAAAGCGATTGAAGCAAGCCAAGGAGAAGCAATGGTAGAAATTGACCAG TACAGAATGCAGAGAGATAAAGAGTTTCGACTAAAACAATCTAAGATAATGGGCTCTCAGAATAATCTC TCAGATGAAATAGAAGAACAAACACTAGGGAAGATACAAGAACTTAATGGACACTACAATAAGTATATG GAAAGTGTGATGAACCAGCTCTTGAGCATGGTCTGTGACATGAAACCAGAAATCCATGTGAACTACAGA GCCACCAACTAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT

TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites: Sgfl-Mlul ACCN: NM 133262

Insert Size: 357 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.



ATP6V1G3 (NM_133262) Human Untagged Clone - SC305936

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: <u>NM 133262.2</u>

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]

Transcript Variant: This variant (1) lacks an alternate in-frame exon in the 5' coding region, compared to variant 3. It encodes isoform a, which lacks an internal segment and is shorter,

compared to isoform c.