

Product datasheet for **RC210728**

ATP6V1F (NM_004231) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: ATP6V1F (NM_004231) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: ATP6V1F
Synonyms: ATP6S14; VATF; Vma7
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC210728 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGGGGAGGGTAAGCTCATCGAGTATCGGAGACGAGGACACGGTGACTGGTTTCCTGCTGGGCG
GCATAGGGGAGCTTAACAAGAACCGCCATCCCAATTTCTGGTGGTGGAGAAGGATACAACCATCAATGA
GATCGAAGACACTTCCGGCAATTTCTAAACCGGGATGACATTGGCATCATCCTCATCAACCAAGTACATC
GCAGAGATGGTGGCGCATGCCCTGGACGCCACCAGCAGTCCATCCCGCTGTCTGGAGATCCCCTCCA
AGGAGACCCCATATGACCCGCCAAGGACTCCATCCTGCGCAGGGCCAGGGGCATGTTCACTGCCGAAGA
CCTGCGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC210728 protein sequence
Red=Cloning site Green=Tags(s)
MAGRGKLIIVIGDEDVTGFLGGIGELNKNRHPNFLVVEKDTTINEIEDTFRQFLNRDDIGIILINQYI
AEMVRHALDAHQQSIPAVLEIPSKEHPYDAAKDSILRRRGMFTAEDLR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6377_d05.zip

Restriction Sites: Sgfl-Mlul



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Cloning Scheme:


ACCN: NM_004231

ORF Size: 357 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_004231.4](#)

RefSeq Size: 748 bp

RefSeq ORF: 360 bp

Locus ID: 9296

UniProt ID: [Q16864](#)

Cytogenetics: 7q32.1

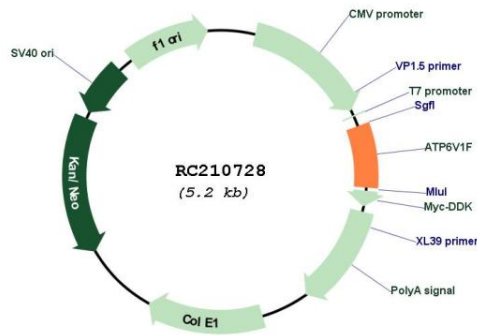
Domains: ATP-synt_F

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

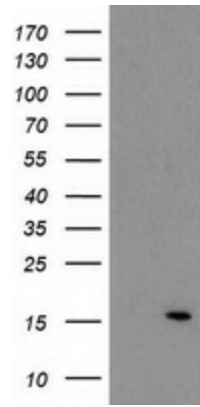
MW: 13.4 kDa

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 encoded protein is the V1 domain F subunit protein. [provided by RefSeq, Jul 2008]

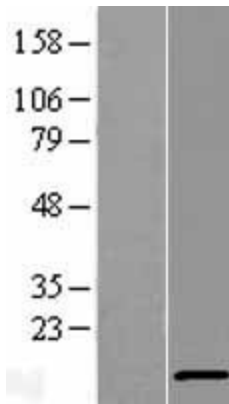
Product images:



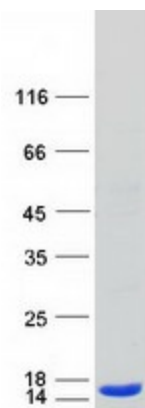
Circular map for RC210728



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY ATP6V1F (Cat# RC210728, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-ATP6V1F (Cat# [TA502279]). Positive lysates [LY418132] (100ug) and [LC418132] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY418132]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210728 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ATP6V1F protein (Cat# [TP310728]). The protein was produced from HEK293T cells transfected with ATP6V1F cDNA clone (Cat# RC210728) using MegaTran 2.0 (Cat# [TT210002]).