

Product datasheet for RC204218

ATP6V1C2 (NM_144583) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: ATP6V1C2 (NM_144583) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: ATP6V1C2
Synonyms: ATP6C2; VMA5
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC204218 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGTCGGAGTTTTGGTTAATTTCTGCCCTGGCGATAAGGAAAATTTGCAAGCTCTGGAGAGGATGAATA
 CTGTAACCTCCAAGTCCAACCTGTCTTATAATACCAAATTCGCTATTCTGACTTCAAGGTGGGACCTT
 GGATTCCTGGTTGGCCTCTCTGATGAGTTGGGAAACTCGACACCTTTGCTGAAAGCCTCATAAGGAGA
 ATGGCTCAGAGCGTGGTGAAGTCATGGAGGACTCAAAGGGAAGGTCCAGGAGCACCTCCTGGCAAACG
 GAGTTGACTTAACATCCTTTGTGACCCACTTTGAATGGGACATGGCCAAATATCCTGTCAAGCAGCCGCT
 CGTGAGTGTGGTGACACAATAGCCAAGCAACTGGCGCAGATCGAGATGGACCTGAAGTCCCGAACGGCC
 GCCTACGACACTCTGAAGACAAACCTGGAGAACCTGGAAGAAATCCATGGGGAACCTTCTCACCCGGA
 CACTGAGTGATATTGTGAGCAAAGAGGACTTCGTGCTGGATTCTGAATATCTCGTCACACTTCTGGTCAT
 CGTCCCCAAACCAAACTACTCACAATGGCAAAAACCTACGAATCTCTCAGACATGGTGGTCCCTCGA
 TCAACCAAACTCATTACTGAGGACAAGGAAGGGGGCCTTTTCACTGTGACTCTGTTTCGAAAAGTGATTG
 AAGATTTCAAACCAAGGCCAAAGAAAACAAGTTCAGTGTTCGTGAATTTACTATGATGAGAAGGAAAT
 TGAAGGGAAAGGAGGAGATGGCCAGATTGCTGTCTGATAAGAAGCAACAGTATGGCCCCCTGCTGCCG
 TGGCTCAAGGTGAACCTCAGTGAAGCCTTCATTGCCTGGATCCACATCAAGGCCCTGAGAGTGTGTTG
 AGTCCGTGCTCAGGTATGGACTACCAGTGAACCTCCAGGCAGTGTCTCTGAGCCGCATAAGAAGTCATC
 CACCAAGCGTTTAAAGAGAGGTTCTAAACTCTGTCTTCCGACATCTGGATGAAGTAGCCGCTACAAGTATA
 CTGGATGCATCTGTGGAGATCCCGGACTGCAACTCAATAACCAAGACTATTTTCCTTATGTCTACTTCC
 ATATTGACCTTAGTCTTCTTGAC

ACGCGTACGCGGCCGCTCGAGCAGAAAACCTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC204218 protein sequence
Red=Cloning site Green=Tags(s)

MSEFWLISAPGDKENLQALERMNTVTSKSNLSYNTKFAIPDFKVGTLDSLVLGSDDELGKLDTFAESLIRR
 MAQSVVEVMEDSKGKVQEHLLANGVDLTSFVTHFEWDMAKYPVKQPLVSVVDTIAKQLAQIEMDLKSRTA
 AYDTLKTNLNLEKKSMDGLFRTLSDIVSKEDFVLDSEYLVTLVIVPKPNYSQWQKTYESLSDMVVPR
 STKLITDEKEGGLFTVTLFRKVIEDFKTKAKENKFTVREFYDEKEIEREREEMARLLSDKKQYGPLLR
 WLKVNFEAFIAWIHIKALRVFVESVLRVGLPVNFQAVLLQPHKKSSTKRLREVLNSVFRHLDEVAATSI
 LDASVEIPGLQLNNQDYFPYVYFHIDL SLLD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6430_b01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_144583

ORF Size: 1143 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_144583.1](#)

RefSeq Size: 3112 bp

RefSeq ORF: 1146 bp

Locus ID: 245973

UniProt ID: [Q8NEY4](#)

Cytogenetics: 2p25.1

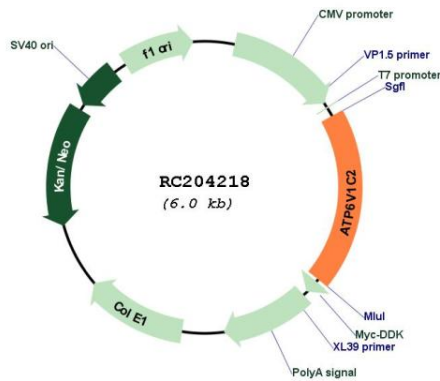
Domains: V-ATPase_C

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

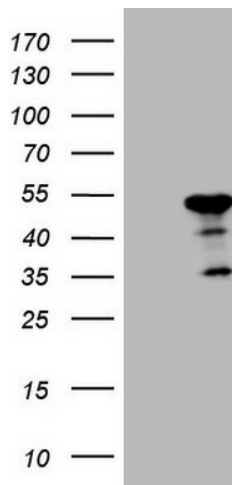
MW: 43.9 kDa

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, 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 C subunit isoforms. [provided by RefSeq, Jul 2008]

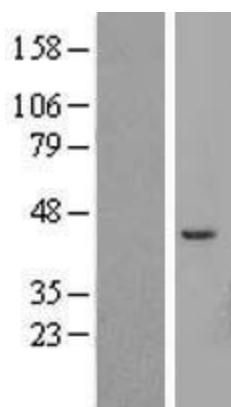
Product images:



Circular map for RC204218



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY ATP6V1C2 (Cat# RC204218, 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-ATP6V1C2 (Cat# [TA808278])(1:2000). Positive lysates [LY408291] (100ug) and [LC408291] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY408291]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204218 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).