

## Product datasheet for **RC203149**

### ATP6V1C1 (NM\_001695) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ATP6V1C1 (NM_001695) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ATP6V1C1
Synonyms:	ATP6C; ATP6D; VATC; Vma5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC203149 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGACTGAGTTCTGGCTTATATCTGCTCCTGGGGAGAAAACCTGTCAGCAAACATGGGAGAAATTGCATG  
CGGCAACTTCAAAGAACAATAATCTTGCTGTCACCTTCCAAGTTCAATATTCCTGACTTAAAGTTGGCAC  
GTTGGATGCTTGGTTGGCTTGCAGATGAAGTAACTGGATGCATTTGTAGAAGGAGTGGTTAAG  
AAAGTAGCTCAATACATGGCTGATGATTGGAAGATAGCAAAGACAAAGTTCAAGAGAATCTGTTGGCTA  
ATGGAGTGGACTTGGTTACTTATAACAAGGTTCCAGTGGGACATGGCCAAATATCCAATCAAGCAGTC  
CCTGAAAAATATTCTGAAATAATTGCCAAGGGAGTAACCTCAGATTGATAATGACCTGAAATCTCGAGCA  
TCTGCATACAATAACCTGAAAGGAAATCTCAGAATTTGGAACGAAAGAATGCAGGAAGTTTGCTAACTA  
GAAGTCTAGCAGAAATTGTGAAGAAGGATGACTTTGTTCTTGATTGAGATATCTCGTCACATTACTGGT  
AGTAGTCCCAAGTTAAACCACAACGACTGGATTAAGCAGTATGAAACACTAGCCGAAATGGTAGTTCCA  
AGGTCTAGCAATGTTCTTTCAGAGGACCAAGACAGTTACCTGTGTAATGTCACCTTGTAGGAAGGCAG  
TTGATGACTTCAGACACAAGCCAGAGAAAACAATTCATTGTTCTGACTTCCAGTATAATGAAGAGGA  
GATGAAAGCAGATAAAGAAGAAATGAACAGGCTTTCTACTGATAAGAAAAACAATTTGGACCACCTTGTA  
CGGTGGCTGAAAGTGAATTTTAGTGAAGCATTTATTGCATGGATTCACGTGAAAGCATTACGGGTTTTCG  
TTGAGTCTGTTTTAAGGTATGGCTTGGCAGTGAAGTTCAGCAATGCTACTTCCAGCCCAATAAGAAAAAC  
TTTGAAGAACTGAGAGAAGTATTACATGAATTGTATAAACATCTAGACAGCAGTGCAGCAGCTATTATT  
GATGCTCCTATGGATATCCAGGTTAAACCTGAGTCAACAAGAATACTACCCTATGTGTACTACAAGA  
TTGATTGCAACTTGTGGAATCAAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAAACCTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC203149 protein sequence  
Red=Cloning site Green=Tags(s)

MTEFWLISAPGEKTCQQTWEKLHAATSKNNLAVTSKFNIPDLKVGTLVDLVGLSDELAKLDAFVEGVVK  
 KVAQYMADVLEDSKDKVQENLLANGVDLVTYITRFQWDMAYPIKQSLKNISEIIAKGVTQIDNDLKSRA  
 SAYNNLKGNLQNLERKNAGSLLTRSLAEIVKKDDFVLDSEYLVTLVVVPKLNHNDWIKQYETLAEMVVP  
 RSSNVLSEDDQDSYLCNVTLFRKAVDDFRHKARENKFIVRDFQYNEEEMKADKEEMNRLSTDKKKQFGLV  
 RWLKVNFSEAFIAWIHVKALRVFVESVLRVYGLPVNFMQAMLLQPNKKTLLKRLREVLHELKHLDSAAAII  
 DAPMDIPGLNLSQQEYYPVYKYIDCNLLEFK

TRTRPLEQKLISEEDLAANDILDYKDDDDKVK

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6569\\_a06.zip](https://cdn.origene.com/chromatograms/mk6569_a06.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_001695

**ORF Size:** 1146 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\\_001695.5](#)

**RefSeq Size:** 5704 bp

**RefSeq ORF:** 1149 bp

**Locus ID:** 528

**UniProt ID:** [P21283](#)

**Cytogenetics:** 8q22.3

**Domains:** V-ATPase\_C

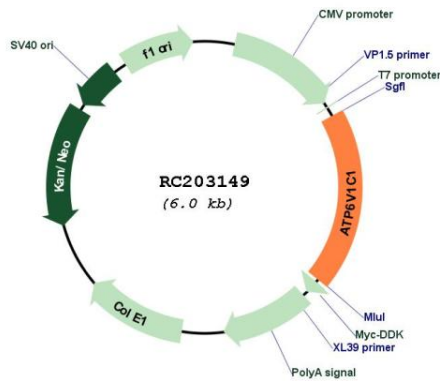
**Protein Families:** Druggable Genome

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

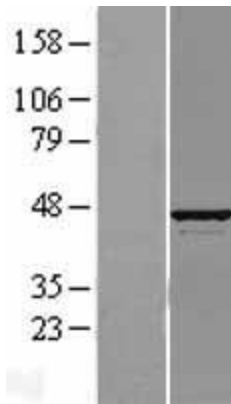
**MW:** 43.9 kDa

**Gene Summary:** This gene encodes a component of vacuolar ATPase (V-ATPase), a multisubunit enzyme that mediates acidification of 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 gene is one of two genes that encode the V1 domain C subunit proteins and is found ubiquitously. This C subunit is analogous but not homologous to gamma subunit of F-ATPases. Previously, this gene was designated ATP6D. [provided by RefSeq, Jul 2008]

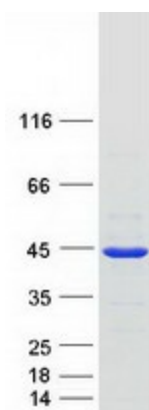
Product images:



Circular map for RC203149



Western blot validation of overexpression lysate (Cat# [LY419795]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203149 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ATP6V1C1 protein (Cat# [TP303149]). The protein was produced from HEK293T cells transfected with ATP6V1C1 cDNA clone (Cat# RC203149) using MegaTran 2.0 (Cat# [TT210002]).