

## Product datasheet for **RC217790**

### ATP6V1H (NM\_213620) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ATP6V1H (NM_213620) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ATP6V1H
Synonyms:	CGI-11; MSTP042; NBP1; SFD; SFDalpha; SFDbeta; VMA13
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC217790 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGACCAAAATGGATATCCGAGGTGCTGTGGATGCTGCTGCCACCAATATTATTGCTGCCAAGGCTG  
 CAGAAGTTCGTGCAAACAAGTCAACTGGCAATCCTATCTTCAGGGACAGATGATTTCTGCTGAAGATTG  
 TGAGTTTATTCAGAGTTTGAATGAAACGAAGCCCTGAAGAGAAGCAAGAGATGCTTCAAACCTGAAGGC  
 AGCCAGTGTGCTAAAACATTTATAAATCTGATGACTCATATCTGCAAAGAACAGACCGTTTCAGTATATAC  
 TAACTATGGTGGATGATATGCTGCAGGAAAATCATCAGCGTGTTAGCATTTTCTTTGACTATGCAAGATG  
 TAGCAAGAACACTGCGTGGCCCTACTTTCTGCCAATGTTGAATCGCCAGGATCCCTTCACTGTTCATATG  
 GCAGCAAGAATTATTGCCAAGTTAGCAGCTTGGGAAAAGAAGTATGGAAGGCAGTGACTTAAATTACT  
 ATTTCAATTGGATAAAAACCTCAGCTGAGTTCACAGAACTGCGTGGTAGCGGTGTTGCTGTTGAAACAGG  
 AACAGTCTCTTCAAGTGATAGTTCGAGTATGTGCAGTGGTGGCCGGTGGTGGAGCTGATGCTCCGG  
 GTC AATAGTACCGCTTTGCTTGGGTGGAAGCAGATGGGGTAAATTCATAATGGGAGTGTGAGTAAAC  
 AGTGTGGCTTTCAGCTCCAGTATCAAATGATTTTTTCAATATGGCTCCTGGCATTTCAGTCCCAAATGTG  
 TGAACACCTGCGGCGCTATAATATCATTCCAGTCTGTCTGATATCCTTCAGGAGTCTGTCAAAGAGAAA  
 GTAACAAGAATCATTCTTGCAGCATTTCGTAACTTTTAGAAAAATCAACTGAAAGAGAACTCGCCAAG  
 AATATGCCCTGGCTATGATTCAGTGCAAAGTCTGAAACAGTTGGAGAAGTTGGAACAGCAGAAGTACGA  
 TGATGAAGATACAGCGAAGATACAAATTTCTTTGGAAAACTGGAGAGAGTGTCCAGGACCTTAGT  
 TCATTTGATGAATACAGTTCAGAACTTAAATCTGGAAGTTGGAATGGAGTCTGTGCACAAATCTGAGA  
 AATTTTGGAGAGAGAATGCTGTGAGGTTAAATGAGAAGAATTGAACTTTGAAAACTTGACAAAACT  
 TTTGGAAGTGTGAGATGATCCCCAAGTCTTAGCTGTTGCTGCTCAGATGTTGGAGAATATGTGCGGCAT  
 TATCCACGAGGCAACCGGTATCGAGCAGCTCGGTGGGAAGCAGCTGGTTCATGAACCACATGCATCATG  
 AAGACCAGCAGTCCGCTATAATGCTCTGCTGGCCGTGCAGAAGCTCATGGTGCACAACTGGGAATACCT  
 TGGCAAGCAGCTCCAGTCCGAGCAGCCCCAGCCGCTGCCGCCGAAGC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC217790 protein sequence  
 Red=Cloning site Green=Tags(s)

MTKMDIRGAVDAAVPTNIIAAKAAEVRANKVNWQSYLQGQMI SAEDCEF IQRFEMKRSPEEKQEMLQTEG  
 SQCAKTFINLMTHICKEQTVQYILTMVDDMLQENHQRVSIFFDYARCSKNTAWPYFLPMLNRQDPFTVHM  
 AARIIAKLAAWGKELMEGSDLNYYFNWIKTQLSSQKLRGSGVAVETGTVSSDSSQYVQCVAGCLQLMLR  
 VNEYRFAWVEADGVNCGVLSNKGFLQYQMI FSIWLLAFSPQMCEHLRRYNIIPVLSIDILQESVKEK  
 VTRIIILAAFRNFLEKSTERETRQYALAMIQCKVLKQLENLEQQKYDDEDI SEDIKFLLEKLGESVQDLS  
 SFDEYSSELKSGRLEWSPVHKSEKFWRENAVRLNEKNYELLKILTKLLEVSDDPQVLAVAHDVGEYVRH  
 YPRGKRVI EQLGKQLVMNHMHEDQQVRYNALLAVQKLMVHNWEYL GKQLQSEQPQTAAARS

**TR**TRPLEQKLI SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6564\\_h04.zip](https://cdn.origene.com/chromatograms/mk6564_h04.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**

Cloning sites used for ORF Shutting:



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

**ACCN:** NM\_213620

**ORF Size:** 1449 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\\_213620.2](#), [NP\\_998785.1](#)
**RefSeq Size:** 2080 bp

**RefSeq ORF:** 1452 bp

**Locus ID:** 51606

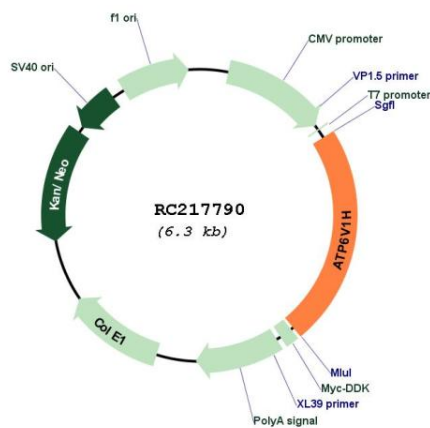
**UniProt ID:** [Q9UI12](#)
**Cytogenetics:** 8q11.23

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

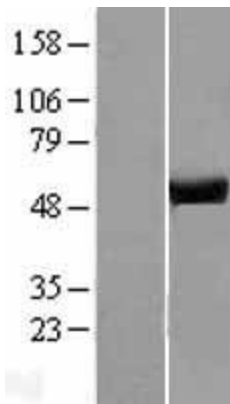
**MW:** 55.9 kDa

**Gene Summary:** This gene encodes a component of vacuolar ATPase (V-ATPase), a multisubunit enzyme that mediates acidification of intracellular organelles. V-ATPase-dependent organelle acidification is necessary for multiple processes including protein sorting, zymogen activation, receptor-mediated endocytosis, and synaptic vesicle proton gradient generation. The encoded protein is the regulatory H subunit of the V1 domain of V-ATPase, which is required for catalysis of ATP but not the assembly of V-ATPase. Decreased expression of this gene may play a role in the development of type 2 diabetes. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, May 2012]

**Product images:**



Circular map for RC217790



Western blot validation of overexpression lysate (Cat# [LY403892]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC217790 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).