

## Product datasheet for **RG217790**

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

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	ATP6V1H (NM_213620) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ATP6V1H
Synonyms:	CGI-11; MSTP042; NBP1; SFD; SFDalpha; SFDbeta; VMA13
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG217790 representing NM\_213620  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGACCAAAATGGATATCCGAGGTGCTGTGGATGCTGCTGTCCCAACCAATATTATTGCTGCCAAGGCTG  
 CAGAAGTTCGTGCAAACAAGTCAACTGGCAATCCTATCTTCAGGGACAGATGATTTCTGCTGAAGATTG  
 TGAGTTTATTCAGAGTTTAAAATGAAACGAAGCCCTGAAGAGAAGCAAGAGATGCTTCAAACCTGAAGGC  
 AGCCAGTGTGCTAAAACATTTATAAATCTGATGACTCATATCTGCAAAGAACAGACCGTTTCAGTATATAC  
 TAACTATGGTGGATGATATGCTGCAGGAAAATCATCAGCGTGTAGCATTCTTTGACTATGCAAGATG  
 TAGCAAGAACACTGCGTGGCCCTACTTTCTGCCAATGTTGAATCGCCAGGATCCCTTCAGTTCATATG  
 GCAGCAAGAATTATTGCCAAGTTAGCAGCTTGGGAAAAGAAGTATGGAAGGCAGTGACTTAAATTACT  
 ATTTCAATTGGATAAAAACCTCAGCTGAGTTCACAGAACTGCGTGGTAGCGGTGTTGCTGTTGAAACAGG  
 AACAGTCTCTCAAGTGATAGTTCGAGTATGTGCAGTGGTGGCCGGTGTTCGAGCTGATGCTCCGG  
 GTCATAGTACCGCTTTGCTTGGTGGAGCAGATGGGGTAAATTCATAATGGGAGTGTGAGTAAACA  
 AGTGTGGCTTTCAGCTCCAGTATCAAATGATTTTTTCAATATGGCTCCTGGCATTTCAGTCCCAAATGTG  
 TGAACACCTGCGGCGCTATAATATCATTCCAGTCTGTCTGATATCCTTCAGGAGTCTGTCAAAGAGAAA  
 GTAACAAGAATCATTCTTGACGATTTTCGTAACTTTTAGAAAAATCAACTGAAAGAGAACTCGCCAAG  
 AATATGCCCTGGCTATGATTTCAGTGCAAAGTCTGAAACAGTTGGAGAAGTTGGAACAGCAGAAGTACGA  
 TGATGAAGATACAGCGAAGATACAAATTTCTTTGGAAAACTGGAGAGAGTGTCCAGGACCTAGT  
 TCATTTGATGAATACAGTTCAGAACTTAAATCTGGAAGTTGGAATGGAGTCTGTGCACAAATCTGAGA  
 AATTTTGGAGAGAGAATGCTGTGAGGTTAAATGAGAAGAATTATGAACTTTGAAAATCTTGACAAAAC  
 TTTGGAAGTGTGAGATGATCCCAAGTCTTAGCTGTTGCTGCTCACGATGTTGGAGAATATGTGCGGCAT  
 TATCCACGAGGCAACCGGTCATCGAGCAGCTCGGTGGGAAGCAGCTGGTTCATGAACCACATGCATCATG  
 AAGACCAGCAGTCCGCTATAATGCTCTGCTGGCCGTGCAGAAGCTCATGGTGCACAACTGGGAATACCT  
 TGGCAAGCAGCTCCAGTCCGAGCAGCCCCAGCCGCTGCCGCCGAAGC

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:**

>RG217790 representing NM\_213620  
 Red=Cloning site Green=Tags(s)

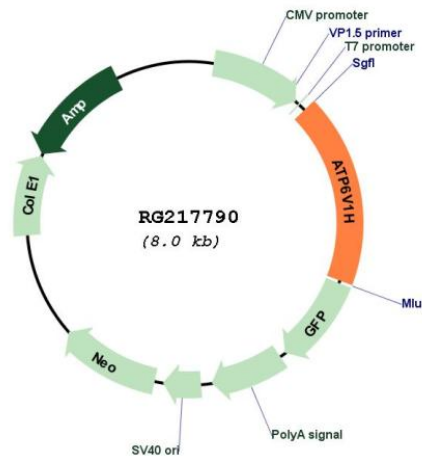
MTKMDIRGAVDAAVPTNIIAAKAAEVRANKVNWQSYLQGMISAEDCEFIQRFEMKRSPEEKQEMLQTEG  
 SQCAKTFINLMTHICKEQTVQYILTMVDDMLQENHQRVSIFFDYARCSKNTAWPYFLPMLNRQDPFTVHM  
 AARI IAKLAAWGKELMEGSDLNYYFNWIKTQLSSQKLRGSGVAVETGTVSSDSSQYVQCVAGCLQLMLR  
 VNEYRFAWVEADGVNCGVLSNKGFLQYQMI FSIWLLAFSPQMCEHLRRYNIIPVLSDILQESVKEK  
 VTRIILAAFRNFLEKSTERETRQYALAMIQCKVLKQLENLEQQKYDDEDISEDIKFLLEKLGESVQDLS  
 SFDEYSSELKSGRLEWSPVHKSEKFWRENARVRLNEKNYELLKILTKLLEVSDDPQVLAVAAHDVGEYVRH  
 YPRGKRVI EQLGKQLVMNHMHEDQQVRYNALLAVQKLMVHNWEYL GKQLQSEQPQTAAARS

**TRTRPLE** - GFP Tag - V

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**

**Plasmid Map:**


**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).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_213620.2</a> , <a href="#">NP_998785.1</a>
<b>RefSeq Size:</b>	2025 bp
<b>RefSeq ORF:</b>	1452 bp
<b>Locus ID:</b>	51606
<b>UniProt ID:</b>	<a href="#">Q9UI12</a>
<b>Cytogenetics:</b>	8q11.23
<b>Protein Pathways:</b>	Epithelial cell signaling in Helicobacter pylori infection, Lysosome, Metabolic pathways, Oxidative phosphorylation, Vibrio cholerae infection
<b>Gene Summary:</b>	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]