

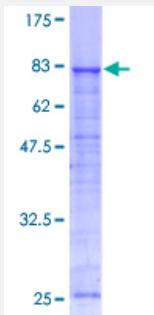
## Full-Length

# ATP6V1A (Human) Recombinant Protein (P01)

Catalog # H00000523-P01

Size 25 ug, 10 ug

## Applications



## Specification

<b>Product Description</b>	Human ATP6V1A full-length ORF (AAH13138, 1 a.a. - 617 a.a.) recombinant protein with GST-tag at N-terminal.
<b>Sequence</b>	MDFSKLPKILDEDKESTFGYVHGSGPVVTACDMAGAAMYELVRVGHSELVGEIIRLEGDMATIQVYEETSGVSVDGPVLRTGKPLSVELGPGIMGAIFDGIQRPLSDISSQTQSIMPGRGVNVSALSRDIKWDFTPCKNLRVGSHITGGDIYGIVSENSLIKHKIMLPPRNRGTVTYIAPPGNYDTSDVVLELEFEGVKEKFTMVQVWPVRQVRPVTEKLPANHPLLTGQRVLDALFPCVQGGTTAIPGAFGCGKTVISQSLSKYSNSDVIYVGCGERGNEMSEVLRDFPELTMEVDGKVESIMKRTALVANTSNMPVAAREASIYTGITLSEYFRDMGYHVSMMA DSTSRWAEALREISGRLAEMPADSGYPAYLGARLASFYERAGRVKCLGNPEREGSVSIVGAVSPPGGDFSDPVTSATLGIVQVFGLDKKLAQRKHFPSVNWLISYSKYMRALDEYYDKHFTEFVPLRTKAKEILQEEEDLAEIVQLVGKASLAETDKITLEVAKLIKDDFLQQNGYTPDRFCPFYKTVGMLSNMIAFYDMARRAVETTAQSDNKITWSIIREHMGDILYKLSSMFKDPLKDGEAKIKSDYAQLLEDMQNAFRSLED
<b>Host</b>	Wheat Germ (in vitro)
<b>Theoretical MW (kDa)</b>	93.5
<b>Interspecies Antigen Sequence</b>	Mouse (98); Rat (98)
<b>Preparation Method</b>	<a href="#">in vitro wheat germ expression system</a>
<b>Purification</b>	Glutathione Sepharose 4 Fast Flow

<b>Quality Control Testing</b>	12.5% SDS-PAGE Stained with Coomassie Blue.
<b>Storage Buffer</b>	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
<b>Storage Instruction</b>	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
<b>Note</b>	Best use within three months from the date of receipt of this protein.

## Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

## Gene Info — ATP6V1A

<b>Entrez GenelD</b>	<a href="#">523</a>
<b>GeneBank Accession#</b>	<a href="#">BC013138.1</a>
<b>Protein Accession#</b>	<a href="#">AAH13138</a>
<b>Gene Name</b>	ATP6V1A
<b>Gene Alias</b>	ATP6A1, ATP6V1A1, HO68, VA68, VPP2, Vma1
<b>Gene Description</b>	ATPase, H <sup>+</sup> transporting, lysosomal 70kDa, V1 subunit A
<b>Omim ID</b>	<a href="#">607027</a>
<b>Gene Ontology</b>	<a href="#">Hyperlink</a>

**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 one of two V1 domain A subunit isoforms and is found in all tissues. Transcript variants derived from alternative polyadenylation exist. [provided by RefSeq]

**Other Designations**

ATPase, H<sup>+</sup> transporting, lysosomal 70kD, V1 subunit A, isoform 1|ATPase, H<sup>+</sup> transporting, lysosomal, alpha polypeptide, 70kD, isoform 1|ATPase, H<sup>+</sup> transporting, lysosomal, subunit A1|H(+)-transporting two-sector ATPase, subunit A|H+-transporting ATPase ch

**Pathway**

- [Epithelial cell signaling in Helicobacter pylori infection](#)
- [Metabolic pathways](#)
- [Oxidative phosphorylation](#)
- [Vibrio cholerae infection](#)