

## Recombinant Human ATP6V1G2, GST-tagged

Cat. No. ATP6V1G2-10050H Lot. No. (See product label)

### SPECIFICATION

**Product Overview** Recombinant Human ATP6V1G2 protein, fused to GST-tag, was expressed in E.coli and purified by GSH-sepharose.

**Species** Human

**Source** E.coli

**ProteinLength** C-term-79a.a.

**Description** 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 encoded protein is one of three V1 domain G subunit proteins. This gene had previous gene symbols of ATP6G and ATP6G2. Alternatively spliced transcript variants encoding different isoforms have been described. Read-through transcription also exists between this gene and the downstream DEAD (Asp-Glu-Ala-Asp) box polypeptide 39B (DDX39B) gene.

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<b>Storage</b>	The protein is stored in PBS buffer at -20°C. Avoid repeated freezing and thawing cycles.
<b>Storage Buffer</b>	1M PBS (58mM Na <sub>2</sub> HPO <sub>4</sub> , 17mM NaH <sub>2</sub> PO <sub>4</sub> , 68mM NaCl, pH8. ) added with 100mM GSH and 1% Triton X-100, 15% glycerol.
<b>GENE INFORMATION</b>	
<b>Gene Name</b>	ATP6V1G2 ATPase, H <sup>+</sup> transporting, lysosomal 13kDa, V1 subunit G2 [ Homo sapiens ]
<b>Official Symbol</b>	ATP6V1G2
<b>Synonyms</b>	ATP6V1G2; ATPase, H <sup>+</sup> transporting, lysosomal 13kDa, V1 subunit G2; ATP6G, ATP6G2, ATPase, H <sup>+</sup> transporting, lysosomal (vacuolar proton pump) , ATPase, H <sup>+</sup> transporting, lysosomal 13kDa, V1 subunit G isoform 2; V-type proton ATPase subunit G 2; Em:AC004181.3; NG38; Vma10; V-ATPase 13 kDa subunit 2; vacuolar proton pump G subunit 2; vacuolar ATP synthase subunit G 2; H(+)-transporting two-sector ATPase, subunit G2; ATPase, H <sup>+</sup> transporting, lysosomal (vacuolar proton pump); ATP6G; VMA10; ATP6G2;
<b>Gene ID</b>	534
<b>mRNA Refseq</b>	NM_001204078
<b>Protein Refseq</b>	NP_001191007
<b>MIM</b>	606853
<b>UniProt ID</b>	O95670

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<b>Chromosome Location</b>	6p21.3
<b>Pathway</b>	Collecting duct acid secretion, organism-specific biosystem; Collecting duct acid secretion, conserved biosystem; Epithelial cell signaling in Helicobacter pylori infection, organism-specific biosystem; Epithelial cell signaling in Helicobacter pylori infection, conserved biosystem; Insulin receptor recycling, organism-specific biosystem; Iron uptake and transport, organism-specific biosystem; Metabolic pathways, organism-specific biosystem;
<b>Function</b>	hydrolase activity, acting on acid anhydrides, catalyzing transmembrane movement of substances;

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