



# Anti-ATP6V0A1 monoclonal antibody (DCABH-10674)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

**Antigen Description** 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', 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 encodes one of three A subunit proteins and the encoded protein is associated with clathrin-coated vesicles. Three transcript variants encoding different isoforms have been found for this gene.

**Immunogen** A synthetic peptide of human ATP6V0A1 is used for rabbit immunization.

**Isotype** IgG

**Source/Host** Rabbit

**Species Reactivity** Human

**Purification** Protein A

**Conjugate** Unconjugated

**Applications** Western Blot (Transfected lysate); ELISA

**Buffer** In 1x PBS, pH 7.4

**Preservative** None

**Storage**

Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

## GENE INFORMATION

<b>Gene Name</b>	<a href="#">ATP6V0A1 ATPase, H+ transporting, lysosomal V0 subunit a1 [ Homo sapiens ]</a>
<b>Official Symbol</b>	ATP6V0A1
<b>Synonyms</b>	ATP6V0A1; ATPase, H+ transporting, lysosomal V0 subunit a1; ATP6N1, ATP6N1A, ATPase, H+ transporting, lysosomal (vacuolar proton pump) non catalytic accessory protein 1A (110/116kD) , ATPase, H+ transporting, lysosomal V0 subunit a isoform 1 , ATPase, H+ transporting, lysosomal V0 subunit A1 , VPP1; V-type proton ATPase 116 kDa subunit a isoform 1; a1; Stv1; Vph1; V-ATPase 116 kDa; vacuolar proton pump subunit 1; vacuolar proton pump, subunit 1; V-type proton ATPase 116 kDa subunit a; vacuolar-type H(+)-ATPase 115 kDa subunit; vacuolar adenosine triphosphatase subunit Ac116; vacuolar proton translocating ATPase 116 kDa subunit A; H(+)-transporting two-sector ATPase, 116 kDa accessory protein A1; clathrin-coated vesicle/synaptic vesicle proton pump 116 kDa subunit; ATPase, H+ transporting, lysosomal non-catalytic accessory protein 1 (110/116kD); ATPase, H+ transporting, lysosomal (vacuolar proton pump) non-catalytic accessory protein 1A (110/116kD); VPP1; ATP6N1; ATP6N1A; DKFZp781J1951;
<b>Entrez Gene ID</b>	<a href="#">535</a>
<b>Protein Refseq</b>	<a href="#">NP_001123492</a>
<b>UniProt ID</b>	<a href="#">Q53ET5</a>
<b>Chromosome Location</b>	17q21
<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; Lysosome, organism-specific biosystem.
<b>Function</b>	ATPase binding; hydrogen ion transmembrane transporter activity; protein binding;