



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

Gene Name	ATP6V0A1 ATPase, H+ transporting, lysosomal V0 subunit a1 [Homo sapiens]
Official Symbol	ATP6V0A1
Synonyms	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;
Entrez Gene ID	535
Protein Refseq	NP_001123492
UniProt ID	Q53ET5
Chromosome Location	17q21
Pathway	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.
Function	ATPase binding; hydrogen ion transmembrane transporter activity; protein binding;