

Anti-ATP6V0A4 (ATPase, H⁺ transporting, lysosomal V0 subunit isoform 4) Polyclonal Antibody

Cat. #: 60B345

Description:

ATP6V0A4(ATPase, H⁺ transporting, lysosomal V0 subunit isoform 4) is 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, and receptor-mediated endocytosis. V-ATPase is comprised of a cytosolic V1 domain and a transmembrane V0 domain. The V1 domain consists of a hexamer of three A and three B subunits plus the C, D, and E subunits. It contains the ATP catalytic site. The ATP6V0A4 protein is one of three 116 kD subunits family. This family consists of the 116kDa V-type ATPase (vacuolar H⁺)-ATPases) subunits, as well as V-type ATP synthase subunit i. The V-type ATPases family are proton pumps that acidify intracellular compartments in eukaryotic cells for example yeast central vacuoles, clathrin-coated and synaptic vesicles. They have important roles in membrane trafficking processes. The 116kDa subunit (subunit a) in the V-type ATPase is part of the V0 functional domain responsible for proton transport. The a subunit is a transmembrane glycoprotein with multiple putative transmembrane helices it has a hydrophilic amino terminal and a hydrophobic carboxy terminal. It has roles in proton transport and assembly of the V-type ATPase complex. This subunit is encoded by two homologous gene in yeast VPH1 and STV1

Immunogen/Specificity:

Polyclonal antibody produced in rabbits immunizing with a synthetic peptide corresponding to C-terminal residues of Human ATP6V0A4(ATPase, H⁺ transporting, lysosomal V0 subunit isoform 4)

References

Smith, et al, Nat. Genet. 26 (1), 71-75 (2000)
Karet,F.E., et al, Am. J. Hum. Genet. 65 (6), 1656-1665 (1999)
Wieczorek,H., et al, Bioessays 21 (8), 637-648 (1999)
Forgac,M., J. Biol. Chem. 274 (19), 12951-12954 (1999)
Nelson,N. and Harvey,W.R., Physiol. Rev. 79 (2), 361-385 (1999)

Clone Number:

Isotype:

Species: Human

Storage and Stability: at -20oC

Storage buffer:

This antibody is stored in PBS, 0.01% sodium azide and 50% glycerol.

Preparation:

Purified by antigen-specific affinity chromatography.

Applications :

ELISA

Western Blotting (1µg/ml for 2hrs)