

V-ATPase D1 Polyclonal Antibody

Catalog # AP73209

Product Information

Application WB Primary Accession P61421

Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Calculated MW 40329

Additional Information

Gene ID 9114

Other Names ATP6V0D1; ATP6D; VPATPD; V-type proton ATPase subunit d 1; V-ATPase

subunit d 1; 32 kDa accessory protein; V-ATPase 40 kDa accessory protein;

V-ATPase AC39 subunit; p39; Vacuolar proton pump subunit d 1

Dilution WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/20000. Not yet tested in other

applications.

Format Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium

azide.

Storage Conditions -20°C

Protein Information

Name ATP6V0D1 (HGNC:13724)

Synonyms ATP6D, VPATPD

Function Subunit of the V0 complex of vacuolar(H+)-ATPase (V-ATPase), a multisubunit

enzyme composed of a peripheral complex (V1) that hydrolyzes ATP and a

membrane integral complex (V0) that translocates protons

(PubMed: <u>28296633</u>, PubMed: <u>30374053</u>, PubMed: <u>33065002</u>). V-ATPase is

responsible for acidifying and maintaining the pH of intracellular

compartments and in some cell types, is targeted to the plasma membrane,

where it is responsible for acidifying the extracellular environment

(PubMed:30374053). May play a role in coupling of proton transport and ATP hydrolysis (By similarity). In aerobic conditions, involved in intracellular iron homeostasis, thus triggering the activity of Fe(2+) prolyl hydroxylase (PHD) enzymes, and leading to HIF1A hydroxylation and subsequent proteasomal degradation (PubMed:28296633). May play a role in cilium biogenesis through regulation of the transport and the localization of proteins to the cilium (By

similarity).

Cellular Location Membrane; Peripheral membrane protein; Cytoplasmic side. Lysosome

membrane; Peripheral membrane protein. Cytoplasmic vesicle,

clathrin-coated vesicle membrane {ECO:0000250|UniProtKB:P61420};

Peripheral membrane protein. Note=Localizes to centrosome and the base of

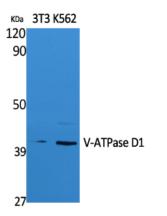
the cilium {ECO:0000250 | UniProtKB:Q6PGV1}

Tissue Location Ubiquitous.

Background

Subunit of the integral membrane V0 complex of vacuolar ATPase. Vacuolar ATPase is responsible for acidifying a variety of intracellular compartments in eukaryotic cells, thus providing most of the energy required for transport processes in the vacuolar system. May play a role in coupling of proton transport and ATP hydrolysis (By similarity). May play a role in cilium biogenesis through regulation of the transport and the localization of proteins to the cilium (By similarity). In aerobic conditions, involved in intracellular iron homeostasis, thus triggering the activity of Fe(2+) prolyl hydroxylase (PHD) enzymes, and leading to HIF1A hydroxylation and subsequent proteasomal degradation (PubMed: 28296633).

Images



Western Blot analysis of extracts from NIH-3T3, K562 cells, using V-ATPase D1 Polyclonal Antibody.. Secondary antibody was diluted at 1:20000

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