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V-ATPase D1 Polyclonal Antibody

Catalog # AP73209

Product Information

Application	WB, E
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. E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

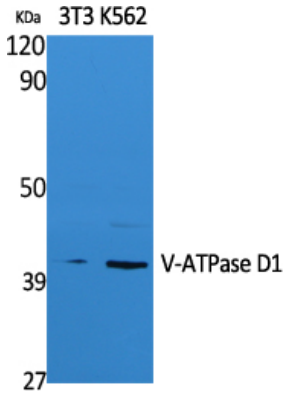
Name	ATP6V0D1 (HGNC:13724)
Synonyms	ATP6D, VPATPD
Function	Subunit of the V0 complex of vacuolar(H+)-ATPase (V-ATPase), a multisubunit enzyme composed of a peripheral complex (V1) that hydrolyzes ATP and a membrane integral complex (V0) that translocates protons (PubMed:28296633, PubMed:30374053, PubMed:33065002). 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 promotes acidification of the extracellular environment (PubMed:30374053). The V-ATPase complex also acts as an activator for mTORC1 on lysosomal membrane by promoting the guanine nucleotide exchange factor (GEF) of the Ragulator complex, thereby enabling mTORC1 recruitment (PubMed:22053050). 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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.