

ATP6V1A1 / ATP6V1A Antibody (clone 4F5)
Mouse Monoclonal Antibody
Catalog # ALS14267**Specification****ATP6V1A1 / ATP6V1A Antibody (clone 4F5) - Product Information**

Application	WB, IHC-P, E
Primary Accession	P38606
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	68kDa KDa
Dilution	WB~~1:1000 IHC-P~~N/A E~~N/A

ATP6V1A1 / ATP6V1A Antibody (clone 4F5) - Additional Information**Gene ID** 523**Other Names**

V-type proton ATPase catalytic subunit A, V-ATPase subunit A, 3.6.3.14, V-ATPase 69 kDa subunit, Vacuolar ATPase isoform VA68, Vacuolar proton pump subunit alpha, ATP6V1A, ATP6A1, ATP6V1A1, VPP2

Target/Specificity

Human ATP6V1A

Reconstitution & Storage

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles.

Precautions

ATP6V1A1 / ATP6V1A Antibody (clone 4F5) is for research use only and not for use in diagnostic or therapeutic procedures.

ATP6V1A1 / ATP6V1A Antibody (clone 4F5) - Protein Information**Name** ATP6V1A**Synonyms** ATP6A1, ATP6V1A1, VPP2**Function**

Catalytic subunit of the V1 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:8463241). 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:32001091). 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 neurite development and synaptic connectivity (PubMed:29668857).

Cellular Location

Cytoplasm. Cytoplasm, cytosol {ECO:0000250|UniProtKB:P50516}. Cytoplasmic vesicle, secretory vesicle. Cytoplasmic vesicle, clathrin-coated vesicle membrane {ECO:0000250|UniProtKB:P31404}; Peripheral membrane protein. Lysosome {ECO:0000250|UniProtKB:P50516} Note=Co-localizes with WFS1 in the secretory granules in neuroblastoma cell lines.

Tissue Location

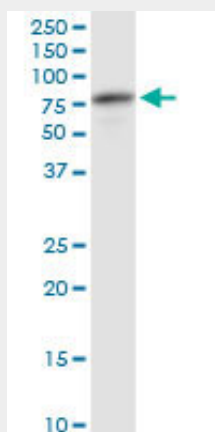
High expression in the skin.

ATP6V1A1 / ATP6V1A Antibody (clone 4F5) - Protocols

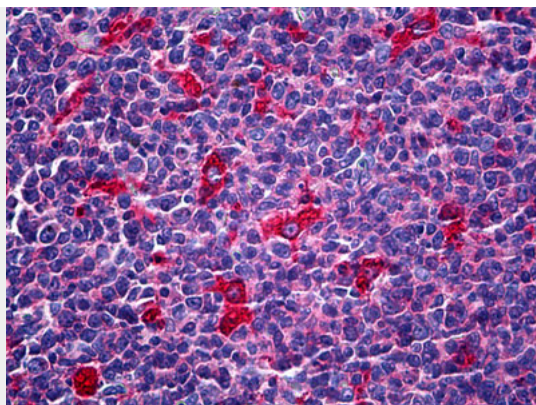
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

ATP6V1A1 / ATP6V1A Antibody (clone 4F5) - Images



ATP6V1A monoclonal antibody, clone 4F5. Western blot of ATP6V1A expression in human kidney.



Anti-ATP6V1A antibody IHC of human tonsil.

ATP6V1A1 / ATP6V1A Antibody (clone 4F5) - Background

Catalytic subunit of the peripheral V1 complex of vacuolar ATPase. V-ATPase vacuolar ATPase is responsible for acidifying a variety of intracellular compartments in eukaryotic cells.

ATP6V1A1 / ATP6V1A Antibody (clone 4F5) - References

- van Hille B.,et al.J. Biol. Chem. 268:7075-7080(1993).
Hu R.-M.,et al.Proc. Natl. Acad. Sci. U.S.A. 97:9543-9548(2000).
Kalnine N.,et al.Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases.
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Muzny D.M.,et al.Nature 440:1194-1198(2006).