

KD-Validated Anti-ATP6V1A Rabbit Monoclonal Antibody
Rabbit monoclonal antibody
Catalog # AGI1982**Specification****KD-Validated Anti-ATP6V1A Rabbit Monoclonal Antibody - Product Information**

Application	WB, FC, ICC
Primary Accession	P38606
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Calculated MW	Predicted, 68 kDa, observed, 68 kDa kDa
Gene Name	ATP6V1A
Aliases	ATP6V1A; ATPase H ⁺ Transporting V1 Subunit A; V-ATPase Subunit A; ATP6V1A1; ATP6A1; Vma1; VA68; VPP2; ATPase, H ⁺ Transporting, Lysosomal 70kDa, V1 Subunit A; V-Type Proton ATPase (V-ATPase) Catalytic Subunit A; V-Type Proton ATPase Catalytic Subunit A; Vacuolar Proton Pump Subunit Alpha; ATPase, H ⁺ Transporting, Lysosomal (Vacuolar Proton Pump), Alpha Polypeptide, 70kD, Isoform 1; H ⁺ -Transporting ATPase Chain A, Vacuolar (VA68 Type); ATPase, H ⁺ Transporting, Lysosomal, Subunit A1; H(+)-Transporting Two-Sector ATPase, Subunit A; Vacuolar Proton Pump Alpha Subunit 1; Vacuolar ATPase Isoform VA68; V-ATPase 69 kDa Subunit 1; Vacuolar-Type H(+)-ATPase; V-ATPase 69 kDa Subunit; V-ATPase A Subunit 1; EC 3.6.3.14; EC 7.1.2.2; EC 3.6.3; ARCL2D; IECEE3; DEE93; HO68
Immunogen	Recombinant protein of human ATP6V1A

KD-Validated Anti-ATP6V1A Rabbit Monoclonal Antibody - Additional Information

Gene ID	523
Other Names	
V-type proton ATPase catalytic subunit A, V-ATPase subunit A, 7.1.2.2, V-ATPase 69 kDa subunit, Vacuolar ATPase isoform VA68, Vacuolar proton pump subunit alpha, ATP6V1A, ATP6A1, ATP6V1A1, VPP2	

KD-Validated Anti-ATP6V1A Rabbit Monoclonal Antibody - 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

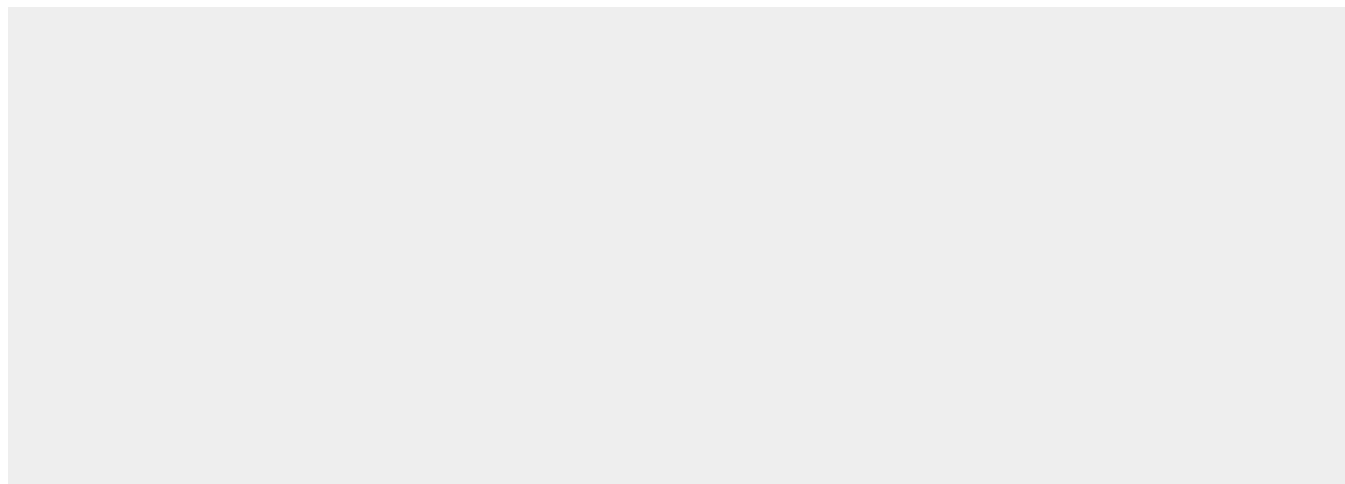
High expression in the skin.

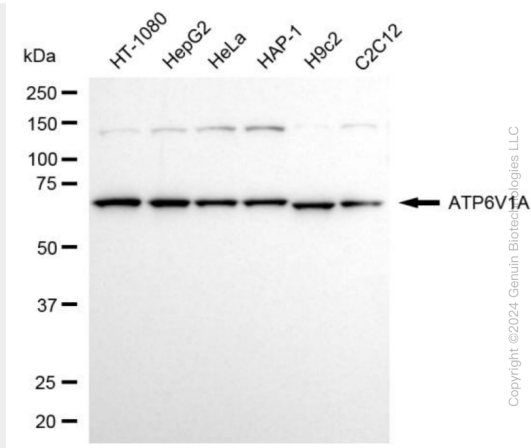
KD-Validated Anti-ATP6V1A Rabbit Monoclonal Antibody - Protocols

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

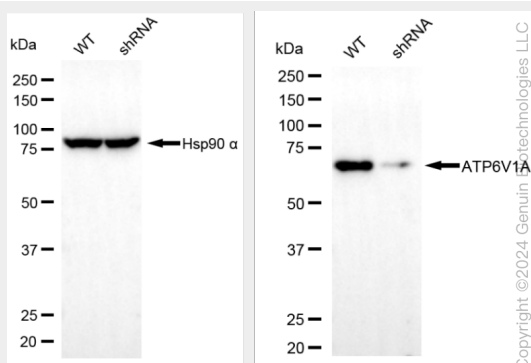
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

KD-Validated Anti-ATP6V1A Rabbit Monoclonal Antibody - Images

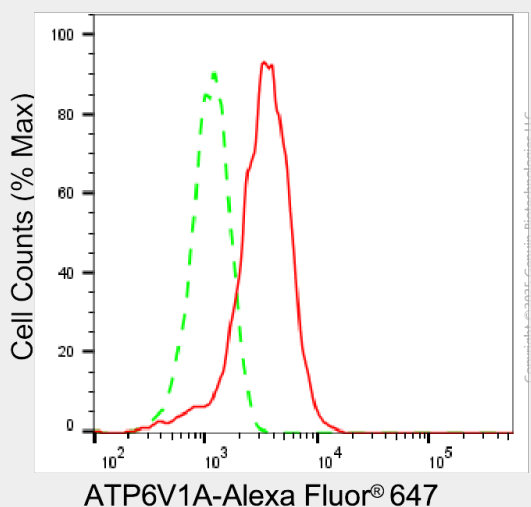




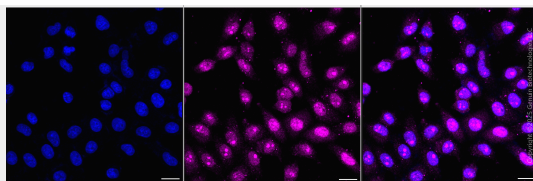
Western blotting analysis using anti-ATP6V1A antibody (Cat#AGI1982). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-ATP6V1A antibody (Cat#AGI1982, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-ATP6V1A antibody (Cat#AGI1982). ATP6V1A expression in wild-type (WT) and ATP6V1A shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-ATP6V1A antibody (Cat#AGI1982, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of ATP6V1A expression in HepG2 cells using anti-ATP6V1A antibody (Cat#AGI1982, 1:2,000). Green, isotype control; red, ATP6V1A.



Immunocytochemical staining of HepG2 cells with anti-ATP6V1A antibody (Cat#AGI1982, 1:1,000). Nuclei were stained blue with DAPI; ATP6V1A was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20 μ m.