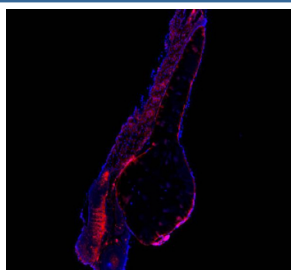


Zebrafish Atp6v1a Antibody (RZ1134)

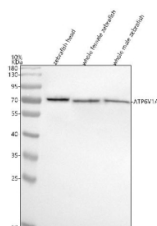
Catalog No.	Formulation	Size
RZ1134	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	2-3 weeks
Species Reactivity	Zebrafish
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity chromatography
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q7SY46
Applications	Western Blot : 0.5-1 ug/ml Immunofluorescence : 5 ug/ml
Limitations	This Zebrafish Atp6v1a antibody is available for research use only.



Immunofluorescent staining of FFPE zebrafish embryo tissue with Zebrafish Atp6v1a antibody (red) and DAPI nuclear stain (blue). HIER: steam section in pH8 EDTA buffer for 20 min.



Western blot analysis of Atp6v1a protein using Atp6v1a antibody and 1) zebrafish head, 2) whole female zebrafish and 3) whole male zebrafish tissue lysate. Predicted molecular weight ~68 kDa.

Description

ATP6V1A encodes the catalytic A subunit of the V1 domain of the vacuolar-type H⁺-ATPase (V-ATPase), a multi-subunit enzyme complex responsible for acidifying intracellular compartments in eukaryotic cells. The V-ATPase plays a crucial role in diverse cellular processes, including protein degradation, receptor-mediated endocytosis, and neurotransmitter loading into synaptic vesicles.

The Atp6v1a protein forms the core of the V1 domain, where it contributes to ATP hydrolysis, driving proton translocation across membranes via the V0 domain. This acidification is essential for maintaining cellular homeostasis, lysosomal function, and pH-dependent signaling pathways.

In zebrafish (*Danio rerio*), Atp6v1a is highly conserved and broadly expressed during development, particularly in neural, renal, and gastrointestinal tissues. It serves as a model for studying V-ATPase function in vertebrate development, organogenesis, and disease models such as neurodegeneration and cancer.

Application Notes

Optimal dilution of the Zebrafish Atp6v1a antibody should be determined by the researcher.

Immunogen

An E.coli-derived zebrafish Atp6v1a recombinant protein (amino acids A37-D617) was used as the immunogen for the Zebrafish Atp6v1a antibody.

Storage

After reconstitution, the Zebrafish Atp6v1a antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.