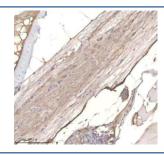


Zebrafish Phyhipl Antibody / Phyhiplb / Phytanoyl-CoA hydroxylase-interacting protein-like (RZ1269)

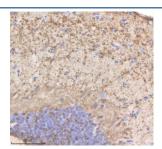
Catalog No.	Formulation	Size
RZ1269	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

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	A4QNW7, A0A8M2B4A8
Localization	Cytoplasm
Applications	Immunohistochemistry (FFPE) : 2-5ug/ml
Limitations	This Zebrafish Phyhipl antibody is available for research use only.



IHC staining of zebrafish Phyhipl/b protein using Zebrafish Phyhipl antibody, HRP-labeled secondary and DAB substrate. Phyhipl was detected in a paraffin-embedded section of zebrafish spinal tissue. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of zebrafish Phyhipl/b protein using Zebrafish Phyhipl antibody, HRP-labeled secondary and DAB substrate. Phyhipl was detected in a paraffin-embedded section of zebrafish brain tissue. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.

Description

Phyhipl (PH domain and IF2-like domain containing protein) is a protein involved in cellular processes such as signal transduction, cellular stress response, and regulation of transcription. It is characterized by the presence of the PH domain, which is involved in binding to phosphoinositides and other lipid signals, and the IF2-like domain, which may play a role in protein-protein interactions and cellular signaling pathways. Phyhipl is involved in regulating key processes such as cell cycle progression, cell growth, and cell differentiation.

In zebrafish, Phyhipl is an ortholog of the human PHYHIPL gene. Both zebrafish and human Phyhipl share high sequence similarity, particularly in the PH domain and IF2-like domain, suggesting conservation of function across species. This conservation makes zebrafish an excellent model for studying the molecular functions of Phyhipl and its involvement in cellular signaling and developmental processes.

Phyhipl is thought to play a role in the regulation of cellular stress responses, especially under conditions of oxidative stress or hypoxia, by modulating cellular signaling networks. It may also interact with cellular scaffolding proteins and signal transduction pathways, helping to coordinate responses to environmental and internal cellular stresses. This protein is likely involved in neural development, embryonic development, and organogenesis, particularly in the brain, heart, and muscle, where regulation of cell growth and differentiation is crucial.

Zebrafish PhyhipI has isoforms, which may vary in their domain structure, tissue-specific expression, and functional capacity. The isoforms could be differentially expressed in various tissues, reflecting the need for fine-tuned regulation in response to changing environmental and metabolic conditions. Isoform variation is likely important for tissue-specific functions during development and tissue regeneration.

Given its essential role in signal transduction, cell stress responses, and developmental regulation, zebrafish Phyhipl is an important model for investigating the molecular mechanisms underlying cellular stress responses, neurodevelopmental diseases, and cancer. Its functional conservation with the human protein makes it a valuable tool for studying human diseases that involve cellular signaling and developmental defects.

Application Notes

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

Immunogen

E. coli-derived zebrafish Phyhipl recombinant protein (amino acids M1-D337) was used as the immunogen for the Zebrafish Phyhipl antibody. This antibody will detect Phyhipl protein as well as the Phyhiplb isoform.

Storage

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