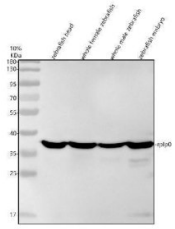
Zebrafish RPLP0 Antibody / 60S Acidic Ribosomal Protein P0 Antibody (RZ1408)

Catalog No.	Formulation	Size
RZ1408	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Species Reactivity	Zebrafish
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Buffer	Lyophilized from a buffered saline solution containing 2% trehalose. Reconstitute with 0.2 mL distilled water to yield a final antibody concentration of 500 ug/mL.
UniProt	Q9PV90
Applications	Western Blot : 0.5-1ug/ml
Limitations	This Zebrafish RPLP0 Antibody / 60S Acidic Ribosomal Protein P0 Antibody is available for research use only.



Zebrafish RPLP0 Antibody Multi-Tissue WB. Western blot analysis of zebrafish head (lane 1), whole female (lane 2), whole male (lane 3), and embryo (lane 4) tissue lysates using Zebrafish RPLP0 Antibody / 60S Acidic Ribosomal Protein P0 Antibody demonstrates strong immunoreactive bands at approximately 37 kDa. RPLP0 is a highly conserved structural component of the 60S ribosomal subunit and serves as the central protein of the ribosomal stalk complex, where it facilitates interactions with translation factors required for efficient protein synthesis. The broad expression observed across multiple zebrafish tissues is consistent with the ubiquitous requirement for ribosomal function and cellular protein production. Although the predicted molecular weight of RPLP0 is approximately 27 kDa, the protein is commonly observed at higher apparent molecular weights depending on species, electrophoretic conditions, and post-translational modifications. Primary antibody was used at 0.5 ug/ml. Predicted molecular weight: approximately 27 kDa. Observed molecular weight: approximately 37 kDa.

Description

Zebrafish RPLP0 Antibody / 60S Acidic Ribosomal Protein P0 Antibody detects RPLP0, a highly conserved structural component of the large ribosomal subunit that plays an essential role in protein synthesis. RPLP0 serves as the central

component of the ribosomal stalk complex and participates in recruitment and interaction of translation factors required for efficient mRNA translation. Because of its ubiquitous expression and fundamental role in cellular protein production, RPLP0 is widely utilized as a marker of translational machinery and cellular metabolic activity. Zebrafish RPLP0 Antibody is valuable for studies of ribosome biology, gene expression, developmental growth, and cellular homeostasis.

RPLP0 functions within the 60S ribosomal subunit where it forms the core of the ribosomal stalk structure together with associated acidic phosphoproteins. This complex facilitates interactions between the ribosome and elongation factors that drive protein synthesis. Through its role in translation, RPLP0 contributes to production of proteins required for cellular growth, differentiation, metabolism, and maintenance of normal physiological function.

In zebrafish, RPLP0 is broadly expressed in developing and adult tissues, reflecting the universal requirement for protein synthesis during growth and tissue maintenance. The protein is commonly used as a constitutively expressed reference marker in molecular and developmental studies because of its stable expression across diverse tissue types and physiological conditions. Zebrafish models provide an effective system for examining how ribosomal function contributes to vertebrate development and cellular regulation.

Protein synthesis is essential for embryogenesis, tissue formation, regeneration, and maintenance of cellular homeostasis. As a core ribosomal protein, RPLP0 supports these processes by ensuring efficient translation of mRNAs into functional proteins. Researchers frequently utilize Zebrafish RPLP0 Antibody to investigate ribosome biology, translational regulation, developmental growth, and cellular responses to physiological stress.

Beyond developmental biology, RPLP0 is studied in metabolism, cell growth, regenerative biology, and mechanisms that regulate gene expression at the translational level. The remarkable evolutionary conservation of RPLP0 across vertebrate species underscores its importance in fundamental cellular processes. Analysis of RPLP0 expression provides insight into protein synthesis capacity and the molecular machinery required for cellular function.

Zebrafish RPLP0 Antibody / 60S Acidic Ribosomal Protein P0 Antibody is useful for researchers studying ribosome biology, protein synthesis, translational regulation, developmental biology, cellular metabolism, gene expression, tissue growth, and vertebrate development. Applications may include immunohistochemistry, immunofluorescence, western blotting, and other protein expression analyses when supported by validation data.

Learn more about RPLP0 expression, ribosome biology, protein synthesis, and translational regulation on our RPLP0 Antibody / Ribosomal Protein P0 Antibody page.

This Zebrafish antibody is part of a broader Zebrafish / Danio rerio antibody panel offered by NSJ Bioreagents.

Application Notes

The optimal working dilution of the Zebrafish RPLP0 Antibody / 60S Acidic Ribosomal Protein P0 Antibody should be determined empirically by the investigator.

Immunogen

An E.coli-derived Zebrafish RPLP0 recombinant protein (amino acids D33-D319) was used as the immunogen for the Zebrafish RPLP0 Antibody.

Storage

After reconstitution, the Zebrafish RPLP0 Antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

Zebrafish RPLP0 Antibody, Zebrafish 60S Acidic Ribosomal Protein P0 Antibody, Zebrafish Ribosomal Protein Lateral Stalk Subunit P0 Antibody, Zebrafish Large Ribosomal Protein P0 Antibody, Zebrafish Ribosomal Protein Antibody,

Zebrafish Translation Factor Antibody