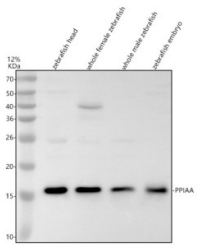
Zebrafish PPIA Antibody / Cyclophilin A Antibody (RZ1418)

Catalog No.	Formulation	Size
RZ1418	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	A0A8M1PHT1
Applications	Western blot: 0.5-1ug/ml
Limitations	This Zebrafish PPIA Antibody / Cyclophilin A Antibody is available for research use only.



Zebrafish PPIA Antibody WB. Western blot analysis of PPIAA / Cyclophilin A using anti-PPIAA antibody demonstrates a distinct immunoreactive band at approximately 17 kDa in zebrafish head, whole female, whole male, and embryo tissue lysates, consistent with the expected molecular weight of PPIA, the zebrafish ortholog of human Peptidylprolyl Isomerase A. PPIA, also known as Cyclophilin A, is a ubiquitously expressed protein that functions in protein folding, intracellular trafficking, and cellular stress responses through its peptidyl-prolyl cis-trans isomerase activity. The observed expression across adult and embryonic samples is consistent with the broad physiologic role of PPIA in maintaining protein homeostasis and supporting normal cellular function. Western blot was performed using 0.5 ug/ml primary antibody. Predicted molecular weight: ~17 kDa.

Description

Zebrafish PPIA Antibody / Cyclophilin A Antibody recognizes PPIAA, a member of the cyclophilin family of peptidyl-prolyl cis-trans isomerases that catalyze protein folding through the isomerization of proline peptide bonds. Cyclophilin A is one of the most abundant intracellular immunophilins and functions as a molecular chaperone that promotes proper protein folding, trafficking, and maintenance of protein homeostasis. Through these activities, PPIA contributes to a wide range of cellular processes including signal transduction, stress responses, and regulation of protein stability.

Zebrafish PPIA Antibody is widely used for studying protein folding and cellular stress pathways. Cyclophilin A

participates in the maturation of newly synthesized proteins and assists cells in adapting to physiological and environmental stress. Expression of PPIA is often associated with highly active metabolic tissues and cells undergoing increased protein synthesis or stress-related remodeling. Because zebrafish provide an excellent model for studying vertebrate development and cellular homeostasis, analysis of PPIA expression can provide valuable insights into the regulation of protein quality control mechanisms.

Zebrafish PPIA Antibody is also useful for investigations of development, cell signaling, and immune responses. In addition to its intracellular chaperone functions, Cyclophilin A can influence inflammatory signaling pathways and cellular communication processes. PPIA has been implicated in regulation of cell growth, differentiation, apoptosis, and adaptation to oxidative stress, making it an important target for studies of normal physiology and disease-associated cellular responses.

Zebrafish PPIA Antibody supports research involving molecular chaperones, protein folding, cellular stress responses, developmental biology, and signal transduction. The strong evolutionary conservation of Cyclophilin A across vertebrate species has established zebrafish as a useful model for investigating the biological functions of PPIA in vivo. Expression analysis can provide important information regarding protein homeostasis, cellular adaptation, and tissue-specific regulation of stress response pathways.

Zebrafish PPIA Antibody is additionally relevant for studies of inflammation, metabolism, and disease mechanisms involving protein quality control. Because Cyclophilin A serves as both a molecular chaperone and signaling regulator, it remains an important biomarker for investigations of cellular homeostasis, stress adaptation, and vertebrate physiology.

Researchers studying protein folding, molecular chaperones, cellular stress responses, and Cyclophilin A signaling pathways may also be interested in our Cyclophilin A Antibody / Protein Folding Chaperone Antibody.

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 PPIA Antibody / Cyclophilin A Antibody should be determined empirically by the investigator.

Immunogen

An E.coli-derived Zebrafish PPIAA recombinant protein (amino acids M1-L164) was used as the immunogen for the Zebrafish PPIAA Antibody.

Storage

After reconstitution, the Zebrafish PPIAA 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 PPIA Antibody, Zebrafish Cyclophilin A Antibody, Zebrafish PPIAA Antibody, Zebrafish Peptidylprolyl Isomerase A Antibody, Zebrafish Rotamase A Antibody, Zebrafish Protein Folding Chaperone Antibody

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