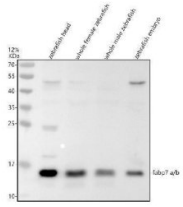
Zebrafish FABP7 Antibody / Brain Lipid Binding Protein Antibody (RZ1406)

Catalog No.	Formulation	Size
RZ1406	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	Q9I8N9
Applications	Western blot: 0.5-1ug/ml
Limitations	This Zebrafish FABP7 Antibody / Brain Lipid Binding Protein Antibody is available for research use only.



Zebrafish FABP7 Antibody WB. Western blot analysis of zebrafish head, whole female, whole male, and embryo tissue lysates using Zebrafish FABP7 Antibody / Brain Lipid Binding Protein Antibody demonstrates a distinct immunoreactive band at approximately 14-15 kDa, consistent with expression of FABP7A/B (Brain Lipid Binding Protein). FABP7 is a member of the fatty acid-binding protein family that functions in intracellular lipid transport, fatty acid metabolism, and regulation of neural developmental pathways. The protein is widely studied as a marker of neural progenitor populations and developing nervous system tissues. The observed banding pattern across multiple zebrafish tissues supports endogenous expression of FABP7-related proteins and is consistent with the expected molecular weight of the target. Primary antibody was used at 0.5 ug/ml. Predicted and observed molecular weight: approximately 14-15 kDa.

Description

Zebrafish FABP7 Antibody / Brain Lipid Binding Protein Antibody detects FABP7, a member of the intracellular fatty acid-binding protein family involved in lipid transport, fatty acid metabolism, and regulation of cellular signaling pathways. FABP7, also known as Brain Lipid Binding Protein (BLBP), binds long-chain fatty acids and other hydrophobic ligands, facilitating their intracellular trafficking and utilization. As an important regulator of neural development and lipid homeostasis, FABP7 contributes to cellular processes that influence growth, differentiation, and tissue organization.

Zebrafish FABP7 Antibody is widely used for studies of nervous system development, lipid metabolism, and vertebrate embryogenesis.

FABP7 functions as a cytoplasmic lipid chaperone that transports fatty acids between cellular compartments and helps coordinate lipid-dependent signaling pathways. Through interactions with bioactive lipids, FABP7 influences gene expression, cellular energy utilization, membrane biogenesis, and regulation of developmental programs. These activities are particularly important in tissues undergoing rapid growth and differentiation where lipid metabolism plays a critical role in cellular function.

In zebrafish, FABP7-related proteins are associated with neural progenitor populations, developing nervous system structures, and tissues requiring active lipid transport and metabolic regulation. Expression of FABP7 has been linked to developmental processes involving neurogenesis, cellular differentiation, and organization of the central nervous system. Because zebrafish embryos permit direct visualization of vertebrate development, FABP7 serves as a valuable marker for studying neural development and lipid-mediated biological processes.

Brain Lipid Binding Protein is frequently investigated as a marker of neural precursor cells and developing neuroepithelial tissues. Researchers utilize Zebrafish FABP7 Antibody to examine mechanisms governing nervous system formation, cellular migration, differentiation, and maintenance of neural cell populations. The protein also provides insight into how intracellular lipid transport influences developmental signaling pathways and tissue morphogenesis.

Beyond developmental biology, FABP7 is studied in stem cell regulation, neural regeneration, metabolic adaptation, and cellular responses to changing physiological conditions. The evolutionary conservation of fatty acid-binding proteins across vertebrates makes zebrafish an important model for understanding lipid metabolism and the molecular mechanisms that regulate neural tissue development. Analysis of FABP7 expression contributes to a broader understanding of how lipid-binding proteins coordinate cellular function and tissue homeostasis.

Zebrafish FABP7 Antibody / Brain Lipid Binding Protein Antibody is useful for researchers studying neural development, lipid metabolism, neurogenesis, stem cell biology, cellular differentiation, nervous system formation, fatty acid transport, and vertebrate developmental biology. Applications may include immunohistochemistry, immunofluorescence, western blotting, and other protein expression analyses when supported by validation data.

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 FABP7 Antibody / Brain Lipid Binding Protein Antibody should be determined empirically by the investigator.

Immunogen

An E.coli-derived Zebrafish FABP7A/B recombinant protein (amino acids M1-A132) was used as the immunogen for the Zebrafish FABP7 / Fatty Acid Binding Protein 7A/B Antibody.

Storage

After reconstitution, the Zebrafish FABP7 / Fatty Acid Binding Protein 7A/B 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 FABP7 Antibody, Zebrafish FABP7A Antibody, Zebrafish FABP7B Antibody, Zebrafish Brain Lipid Binding Protein Antibody, Zebrafish Fatty Acid Binding Protein 7 Antibody, Zebrafish BLBP Antibody

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