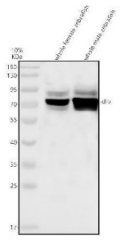
Zebrafish Delta-Like Protein B Antibody / DLB Antibody (RZ1359)

Catalog No.	Formulation	Size
RZ1359	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	O57409
Applications	Western blot: 0.5-1ug/ml
Limitations	This Zebrafish Delta-Like Protein B Antibody / DLB Antibody is available for research use only.



Zebrafish Delta-Like Protein B / DLB Antibody Notch Signaling WB. Western blot analysis of whole female and whole male zebrafish lysates using Zebrafish Delta-Like Protein B Antibody demonstrates a prominent immunoreactive band at approximately 67 kDa, consistent with the predicted molecular weight of Delta-Like Protein B (DLB). DLB is a membrane-associated ligand of the Notch signaling pathway that regulates cell fate determination, embryonic patterning, neurogenesis, and tissue development through cell-cell signaling interactions. The observed expression in both female and male zebrafish tissues is consistent with the established role of Delta family proteins in developmental signaling and maintenance of tissue homeostasis. The strong band detected at the expected molecular weight supports specific recognition of DLB in zebrafish tissue lysates. Electrophoresis was performed on a 10% SDS-PAGE gel under reducing conditions followed by transfer to a nitrocellulose membrane. Signal was detected using an HRP-conjugated secondary antibody and enhanced chemiluminescent substrate.

Description

Zebrafish Delta-Like Protein B Antibody / DLB Antibody recognizes Delta-Like Protein B (DLB), a membrane-associated ligand of the Notch signaling pathway that plays a critical role in embryonic development, cell fate determination, and tissue patterning. DLB belongs to the Delta family of Notch ligands and functions through direct cell-cell interactions that regulate Notch receptor activation. Through modulation of Notch signaling, DLB influences developmental processes

including neurogenesis, somitogenesis, cellular differentiation, and embryonic organization. The highly conserved nature of Notch signaling has established zebrafish as an important vertebrate model for investigating DLB function during development.

Notch signaling serves as one of the most important pathways governing communication between neighboring cells during embryogenesis. In zebrafish, DLB contributes to regulation of developmental patterning events that determine cell identity and tissue organization. Expression of DLB is frequently examined in studies investigating nervous system development, segmentation, stem cell regulation, and formation of specialized cell populations. Because precise control of Notch signaling is essential for normal development, DLB serves as an important marker of developmental signaling activity.

Activation of Notch receptors by Delta family ligands initiates transcriptional programs that regulate proliferation, differentiation, and maintenance of progenitor cell populations. Through these mechanisms, DLB helps coordinate developmental decisions that influence tissue architecture and organ formation. Researchers commonly evaluate DLB expression when studying embryonic patterning, neural development, regeneration, and developmental signaling networks. As a result, DLB remains an important target in developmental biology and cell fate determination research.

Zebrafish provide unique advantages for studying Notch signaling because developmental processes can be directly visualized throughout embryogenesis. Investigators frequently monitor DLB expression during studies of neurogenesis, somitogenesis, tissue regeneration, and developmental toxicology. Because Notch pathway components are highly conserved between zebrafish and mammals, findings generated using zebrafish models often provide valuable insight into vertebrate developmental regulation and signaling mechanisms.

At NSJ Bioreagents, we provide highly validated antibodies for developmental biology, stem cell biology, and zebrafish research. Zebrafish Delta-Like Protein B Antibody / DLB Antibody targets an important Notch pathway ligand involved in embryonic patterning and cell fate determination. DLB expression is widely studied in the context of developmental signaling, neurogenesis, tissue organization, progenitor cell regulation, and vertebrate development. Continued investigation of this important signaling molecule is expanding our understanding of the molecular mechanisms that govern tissue formation and developmental patterning.

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 Delta-Like Protein B Antibody / DLB Antibody should be determined empirically by the investigator.

Immunogen

An E.coli-derived Zebrafish DLB recombinant protein (amino acids Q16-E605) was used as the immunogen for the Zebrafish DLB Antibody.

Storage

After reconstitution, the Zebrafish DLB 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 DLB Antibody, Zebrafish Delta Like B Antibody, Zebrafish Notch Ligand DLB Antibody, Zebrafish Delta Family Protein Antibody, Zebrafish Developmental Signaling Ligand Antibody, Zebrafish Neurogenesis Signaling Protein Antibody

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