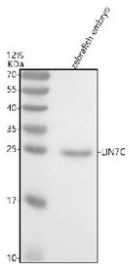
Zebrafish Lin7c Antibody / Protein lin-7 homolog C (RZ1153)

Catalog No.	Formulation	Size
RZ1153	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
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity chromatography
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q66IB0
Applications	Western Blot : 0.5-1 ug/ml
Limitations	This Zebrafish Lin7c antibody is available for research use only.



Zebrafish Lin7c Antibody Embryo Tissue WB. Western blot analysis of Lin7c protein using Zebrafish Lin7c antibody and zebrafish embryo tissue lysate. The predicted molecular weight of LIN7C is ~22 kDa.

Description

Zebrafish (Danio rerio) Lin7c antibody detects Lin7c, a member of the Lin7 family of scaffold proteins involved in establishing cell polarity, directing membrane protein localization, and stabilizing synaptic and epithelial junctions. In zebrafish, lin7c encodes Protein lin-7 homolog C, a PDZ-domain containing adaptor that organizes multiprotein complexes at the plasma membrane. Lin7 proteins are essential for targeting and anchoring channels, receptors, and transporters, making them important regulators of synaptic signaling, epithelial polarity, and neuronal connectivity. Because membrane compartmentalization is critical for developmental patterning and circuit maturation, Zebrafish Lin7c antibody reagents support research in neurodevelopment, epithelial biology, and polarity signaling.

Lin7c participates in protein trafficking and retention by binding transmembrane proteins through its PDZ domain and associating with larger polarity complexes such as Crumbs, CASK, and MPP family members. These interactions enable Lin7c to direct the apical-basal distribution of membrane components and maintain structural organization in epithelial tissues. In zebrafish embryos, lin7c is expressed in developing epithelia, sensory structures, and neural circuits where polarized trafficking ensures proper morphogenesis, lumen formation, and synaptic organization.

Within the nervous system, Lin7c contributes to synaptic targeting and stability. Lin7 proteins are known to interact with NMDA receptors, AMPA receptors, potassium channels, and additional synaptic components, helping define postsynaptic architecture and regulate synaptic transmission. In zebrafish neuronal development, Lin7c likely participates in localizing ion channels and neurotransmitter receptors to specific synaptic domains, supporting the refinement of neural circuits and sensory processing pathways.

Protein lin-7 homolog C also influences vesicle trafficking and cell junction formation. Lin7 family members are integral to the assembly of tight junctions and adherens junctions, working with polarity regulators to establish correct epithelial alignment and barrier function. In zebrafish, disruptions in lin7c expression may impair epithelial organization, alter tissue morphogenesis, or interfere with the formation of functional neural and sensory structures. Because polarity proteins coordinate signaling pathways such as Wnt, Notch, and Hippo, Lin7c contributes indirectly to developmental decisions controlled by these pathways.

At the molecular level, Lin7c contains a single PDZ domain followed by regions that mediate interactions with CASK and other polarity scaffolds. These domains help assemble multiprotein platforms that integrate signaling inputs, structural organization, and protein trafficking. Subcellular localization is predominantly at the basolateral membrane in epithelial cells and at synaptic regions in neurons. In zebrafish embryos, Lin7c distribution highlights tissues undergoing polarization or synaptic development, providing a useful marker for studying membrane organization and polarity cue integration.

Lin7 family proteins are highly conserved across vertebrates, and dysfunction has been linked to neurological disorders, sensory deficits, and defects in epithelial architecture. Zebrafish provide an excellent model for visualizing polarity establishment and synaptic maturation in vivo, making Lin7c an informative target for developmental research.

A Zebrafish Lin7c antibody is suitable for research applications such as western blotting, immunohistochemistry, and assays examining cell polarity, synaptic organization, membrane trafficking, and epithelial development. This antibody targets Lin7c for studies involving polarity complexes, neuronal connectivity, and vertebrate tissue patterning. NSJ Bioreagents provides the Zebrafish Lin7c antibody to support research in cellular organization and developmental biology.

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

Application Notes

Optimal dilution of the Zebrafish Lin7c antibody should be determined by the researcher.

Immunogen

An E.coli-derived zebrafish Lin7c recombinant protein (amino acids M1-A73) was used as the immunogen for the Zebrafish Lin7c antibody.

Storage

After reconstitution, the Zebrafish Lin7c antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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