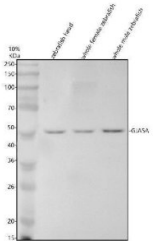
Zebrafish GJA5 Antibody / Gap Junction Alpha-5 Protein Antibody (RZ1439)

Catalog No.	Formulation	Size
RZ1439	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	F1QL21
Applications	Western Blot : 0.5-1ug/ml
Limitations	This Zebrafish GJA5 Antibody / Gap Junction Alpha-5 Protein Antibody is available for research use only.



Zebrafish GJA5 Antibody WB. Western blot analysis of GJA5A using anti-GJA5 antibody demonstrates a distinct immunoreactive band at approximately 45 kDa in zebrafish head, whole female, and whole male tissue lysates, consistent with the expected molecular weight of Connexin 40 (GJA5A). Connexin 40 is a gap junction protein that forms intercellular channels facilitating the direct exchange of ions, metabolites, and signaling molecules between neighboring cells. The observed expression across neural and whole-body tissue samples is consistent with the essential role of connexin proteins in cellular communication, tissue organization, and physiologic homeostasis. Western blot was performed using 0.5 ug/ml primary antibody. Predicted molecular weight: ~45 kDa.

Description

Zebrafish GJA5 Antibody / Gap Junction Alpha-5 Protein Antibody is designed for the detection and study of GJA5A, a member of the connexin family of gap junction proteins that mediate direct intercellular communication. GJA5A forms membrane-spanning channels that permit the exchange of ions, metabolites, and signaling molecules between neighboring cells. Through these activities, GJA5A contributes to the coordination of cellular responses required for tissue organization, development, and physiologic homeostasis.

GJA5A belongs to the connexin family of proteins that assemble into gap junction channels, specialized structures that facilitate communication between adjacent cells. Gap junctions play critical roles in synchronizing cellular activity and enabling tissues to function as integrated biologic units. Through the transfer of small signaling molecules and ions, GJA5A-containing channels help coordinate cellular behavior across diverse tissue types.

Zebrafish provide a valuable vertebrate model for investigating gap junction biology, tissue development, and intercellular signaling. Connexin-mediated communication pathways are highly conserved among vertebrates and are important for proper organogenesis, tissue patterning, and physiologic regulation. Studies utilizing zebrafish models have improved understanding of how gap junction proteins contribute to cellular coordination during development and throughout adult life.

Beyond developmental biology, connexin proteins have attracted significant interest in research involving cardiovascular biology, nervous system function, tissue homeostasis, and cellular communication networks. Because gap junctions serve as essential conduits for direct cell-to-cell signaling, GJA5A remains an important target for investigations examining how coordinated cellular activity influences tissue function and physiologic regulation. Zebrafish GJA5 Antibody supports these studies by enabling characterization of GJA5A expression in developmental and adult tissues.

Zebrafish GJA5 Antibody is useful for investigating gap junction biology, connexin signaling, intercellular communication, tissue development, and vertebrate physiology. Researchers utilize Zebrafish GJA5 Antibody to better understand molecular mechanisms governing cellular coordination, tissue organization, membrane channel function, and cell-to-cell communication pathways.

Learn more about Connexin 40 and its role in cell-to-cell communication, cardiovascular signaling, and gap junction biology on our Connexin 40 Antibody / GJA5 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 GJA5 Antibody / Gap Junction Alpha-5 Protein Antibody should be determined empirically by the investigator.

Immunogen

An E.coli-derived Zebrafish Gap Junction Alpha-5 Protein recombinant protein (amino acids H95-P353) was used as the immunogen for the Zebrafish GJA5 / GJA5A Antibody.

Storage

After reconstitution, the Zebrafish GJA5 / GJA5A 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 GJA5A Antibody, Zebrafish Gap Junction Alpha-5 Protein Antibody, Zebrafish Connexin 40.8 Antibody, Zebrafish Connexin Antibody, Zebrafish Gap Junction Protein Antibody, Zebrafish Intercellular Communication Protein Antibody, Zebrafish Cell Junction Protein Antibody