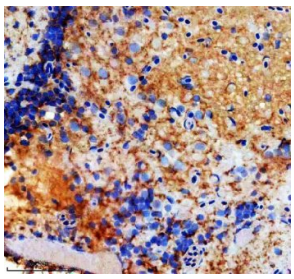
Zebrafish GNRHR4 Antibody / Gonadotropin-Releasing Hormone Receptor 4 Antibody (RZ1431)

Catalog No.	Formulation	Size
RZ1431	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	A3QJZ0
Applications	Immunohistochemistry (FFPE): 2-5ug/ml
Limitations	This Zebrafish GNRHR4 Antibody / Gonadotropin-Releasing Hormone Receptor 4 Antibody is available for research use only.



Zebrafish GNRHR4 Antibody Brain IHC. Immunohistochemistry staining of paraffin-embedded zebrafish brain tissue using GNRHR4 antibody demonstrates widespread cytoplasmic and membranous staining within neural cell populations, consistent with expression of Gonadotropin-Releasing Hormone Receptor 4 (GNRHR4). GNRHR4 is a G protein-coupled receptor that mediates neuroendocrine signaling pathways involved in hormonal communication, reproductive regulation, and endocrine system function. The observed staining pattern within brain tissue is consistent with the established role of GnRH receptor family members in coordinating neuronal and endocrine signaling networks that regulate physiologic homeostasis and vertebrate development. Heat-mediated antigen retrieval was performed in EDTA buffer. Tissue sections were stained with 2 ug/ml primary antibody and visualized using DAB chromogen.

Description

Zebrafish GNRHR4 Antibody / Gonadotropin-Releasing Hormone Receptor 4 Antibody is designed for the detection and study of GNRHR4, a member of the gonadotropin-releasing hormone receptor family that participates in neuroendocrine signaling pathways. GNRHR4 belongs to the G protein-coupled receptor (GPCR) superfamily and functions as a membrane-associated receptor that mediates cellular responses to gonadotropin-releasing hormone-related ligands.

Through these activities, GNRHR4 contributes to communication between endocrine, reproductive, and nervous system pathways that regulate physiologic homeostasis and vertebrate development.

Gonadotropin-Releasing Hormone Receptor 4 functions by converting extracellular hormonal signals into intracellular signaling events that influence gene expression, cellular activity, and endocrine regulation. Members of the GnRH receptor family are important components of neuroendocrine communication networks that coordinate reproductive function, developmental timing, and hormonal responsiveness. As a GPCR, GNRHR4 participates in signaling cascades that allow cells to respond dynamically to changing physiologic conditions and environmental cues.

Zebrafish have become a valuable vertebrate model for studying endocrine biology, reproductive signaling, and developmental regulation. The GnRH signaling system is highly conserved across vertebrate species and plays important roles in coordinating hormonal communication between the brain, pituitary, and peripheral tissues. Investigation of zebrafish GNRHR4 expression provides insight into the molecular mechanisms that govern neuroendocrine signaling and receptor-mediated control of physiologic processes during development and adulthood.

In addition to reproductive biology, GnRH receptor signaling has been implicated in broader pathways involving cellular communication, neuronal regulation, hormone-responsive gene expression, and developmental physiology. Because GPCR-mediated signaling networks influence numerous biologic functions, GNRHR4 remains an important target for studies examining how extracellular hormonal signals regulate cellular behavior. Research involving GNRHR family receptors continues to improve understanding of endocrine system organization and neuroendocrine control mechanisms in vertebrates.

Zebrafish GNRHR4 Antibody is useful for investigating neuroendocrine signaling, reproductive biology, endocrine regulation, GPCR-mediated pathways, and vertebrate developmental processes. Researchers utilize GNRHR4 expression studies to better understand molecular mechanisms governing hormonal communication, receptor-mediated signaling, reproductive physiology, and endocrine system function.

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 GNRHR4 Antibody / Gonadotropin-Releasing Hormone Receptor 4 Antibody should be determined empirically by the investigator.

Immunogen

An E.coli-derived Zebrafish GNRHR4 recombinant protein (amino acids T7-E406) was used as the immunogen for the Zebrafish GNRHR4 Antibody.

Storage

After reconstitution, the Zebrafish GNRHR4 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 GNRHR4 Antibody, Zebrafish Gonadotropin-Releasing Hormone Receptor 4 Antibody, Zebrafish GnRH Receptor 4 Antibody, Zebrafish Neuroendocrine Receptor Antibody, Zebrafish Reproductive Signaling Receptor Antibody, Zebrafish GPCR Antibody, Zebrafish Hormone Receptor Antibody

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