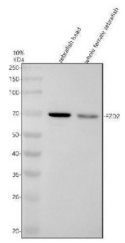
Zebrafish FZD2 Antibody / Frizzled 2 Antibody (RZ1471)

Catalog No.	Formulation	Size
RZ1471	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	Q90YL7
Applications	Western blot: 0.5-1ug/ml
Limitations	This Zebrafish FZD2 Antibody / Frizzled 2 Antibody is available for research use only.



Zebrafish FZD2 Antibody / Frizzled 2 Antibody Zebrafish Head and Female WB. Western blot analysis of zebrafish head and whole female tissue lysates using Zebrafish FZD2 Antibody / Frizzled 2 Antibody. A distinct immunoreactive band is detected at approximately 70 kDa in both samples, consistent with expression of FZD2. Although the predicted molecular weight is approximately 63 kDa, the higher apparent molecular weight is consistent with the extensive glycosylation commonly observed for Frizzled family transmembrane receptors. Proteins were separated under reducing conditions, transferred to a nitrocellulose membrane, and detected following incubation with the primary antibody (0.5 ug/ml) and an HRP-conjugated goat anti-rabbit secondary antibody using ECL detection.

Description

Zebrafish FZD2 Antibody / Frizzled 2 Antibody recognizes Frizzled 2 (FZD2), a seven-transmembrane receptor that functions as a key component of the Wnt signaling pathway. FZD2 binds Wnt ligands and transduces signals through both canonical beta-catenin-dependent and non-canonical pathways to regulate embryonic patterning, cell polarity, migration, proliferation, and differentiation. Because Wnt signaling is highly conserved among vertebrates, zebrafish serves as an important model for investigating the molecular mechanisms that control tissue development and organ formation. Zebrafish FZD2 Antibody is therefore well suited for studies of developmental biology and cell signaling.

During zebrafish embryogenesis, FZD2 contributes to numerous morphogenetic processes including gastrulation, neural development, craniofacial formation, and establishment of body axis polarity. Through regulation of planar cell polarity signaling, FZD2 helps coordinate the directed movement and orientation of cells required for normal tissue organization. Appropriate FZD2 signaling is also essential for the development of multiple organs, including the nervous system, heart, liver, and skeletal structures. Disruption of FZD2 activity can lead to defects in convergent extension movements and abnormal embryonic morphogenesis, highlighting its importance throughout early vertebrate development.

Beyond embryogenesis, FZD2 participates in maintaining tissue homeostasis by regulating stem cell activity, epithelial organization, and regenerative responses. Activation of FZD2 influences cellular proliferation, differentiation, migration, and survival through interactions with multiple intracellular signaling proteins. Aberrant FZD2 expression or dysregulated Wnt signaling has been associated with cancer progression, fibrosis, and developmental disorders in mammals, making zebrafish an attractive experimental system for studying conserved disease mechanisms and evaluating therapeutic targets that modulate Wnt pathway activity.

Zebrafish FZD2 Antibody is a valuable research tool for immunohistochemistry, immunofluorescence, western blotting, and other applications requiring reliable detection of FZD2 expression and localization. Investigators commonly use this antibody to examine Wnt receptor distribution during embryonic development, characterize signaling networks controlling tissue morphogenesis, and study the molecular basis of regeneration and disease. By supporting investigations into one of the central signaling pathways governing vertebrate development, Zebrafish FZD2 Antibody provides an effective reagent for developmental, regenerative, and translational research.

Learn more about FZD2 biology, Wnt signaling, and additional validated products on our Frizzled 2 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 FZD2 Antibody / Frizzled 2 Antibody should be determined empirically by the investigator.

Immunogen

An E.coli-derived Zebrafish FZD2 recombinant protein (amino acids E134-V550) was used as the immunogen for the Zebrafish FZD2 Antibody.

Storage

After reconstitution, the Zebrafish FZD2 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 FZD2 antibody, Zebrafish Frizzled 2 antibody, Zebrafish Frizzled-2 antibody, Zebrafish Wnt Receptor FZD2 antibody, Zebrafish Frizzled Family Receptor 2 antibody

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