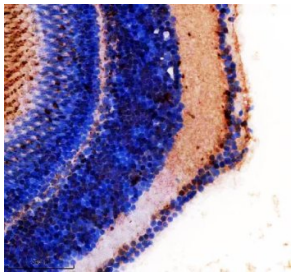
Zebrafish FOXD1 Antibody / Forkhead Box Protein D1 Antibody (RZ1429)

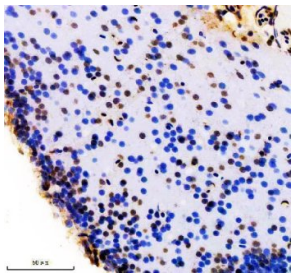
Catalog No.	Formulation	Size
RZ1429	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

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	A2CE80
Applications	Immunohistochemistry (FFPE): 2-5ug/ml
Limitations	This Zebrafish FOXD1 Antibody / Forkhead Box Protein D1 Antibody is available for research use only.



Zebrafish FOXD1 Antibody Eye IHC. Immunohistochemistry staining of paraffin-embedded zebrafish eye tissue using FOXD1 antibody demonstrates distinct staining within retinal-associated cellular layers and adjacent ocular structures, consistent with expression of Forkhead Box Protein D1 (FOXD1). FOXD1 is a developmental transcription factor that regulates gene expression programs involved in tissue patterning, cellular differentiation, and organogenesis. The observed staining pattern within the developing eye is consistent with the established role of FOXD1 in regional specification and developmental regulation of vertebrate sensory tissues. Heat-mediated antigen retrieval was performed in EDTA buffer. Tissue sections were stained with 2 ug/ml primary antibody and visualized using DAB chromogen.



Zebrafish FOXD1 Antibody Brain IHC. Immunohistochemistry staining of paraffin-embedded zebrafish brain tissue using FOXD1 antibody demonstrates prominent nuclear staining within neural cell populations, consistent with expression of Forkhead Box Protein D1 (FOXD1). FOXD1 is a developmental transcription factor that regulates gene expression programs involved in tissue patterning, cellular differentiation, and regional specification during vertebrate development. The observed nuclear localization is consistent with the role of FOXD1 as a DNA-binding transcriptional regulator and supports its involvement in developmental processes governing nervous system organization and maturation. 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 FOXD1 Antibody / Forkhead Box Protein D1 Antibody is designed for the detection and study of FOXD1 (Forkhead Box Protein D1), a member of the forkhead family of transcription factors that regulate gene expression during embryonic development and tissue differentiation. FOXD1 functions as a DNA-binding regulatory protein that controls developmental programs involved in tissue patterning, cellular specification, and organ formation. Through these activities, FOXD1 contributes to the coordinated genetic networks required for normal vertebrate development.

Forkhead Box Protein D1 belongs to the large FOX family of transcription factors, which are characterized by a conserved forkhead DNA-binding domain. Members of this family regulate diverse biologic processes including embryogenesis, cell fate determination, proliferation, differentiation, and tissue homeostasis. FOXD1 specifically participates in developmental pathways that influence formation and organization of multiple tissue types during embryonic growth.

Zebrafish provide a valuable vertebrate model for investigating developmental gene regulation and tissue patterning mechanisms. FOXD1 expression has been associated with developmental signaling pathways involved in organogenesis, regional tissue specification, and establishment of normal embryonic architecture. Studies in zebrafish have helped define how transcriptional regulatory networks coordinate cellular behavior during vertebrate development and morphogenesis.

Beyond developmental biology, FOXD1 has attracted interest in research involving stem cell regulation, tissue regeneration, cellular differentiation, and disease-associated changes in gene expression. Because transcription factors occupy central positions within developmental regulatory networks, FOXD1 remains an important target for investigations examining how genetic programs control tissue formation and cellular identity.

Zebrafish FOXD1 Antibody is useful for investigating developmental regulation, organogenesis, tissue patterning, and vertebrate developmental biology pathways. Researchers utilize FOXD1 expression studies to better understand molecular mechanisms governing embryonic development, cellular differentiation, and transcriptional control of tissue formation.

Learn more about FOXD1 and its role in developmental transcriptional regulation, cellular differentiation, and organogenesis on our FOXD1 Antibody / Developmental Transcription Factor 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 FOXD1 Antibody / Forkhead Box Protein D1 Antibody should be determined empirically by the investigator.

Immunogen

An E.coli-derived Zebrafish FOXD1 recombinant protein (amino acids D29-C343) was used as the immunogen for the Zebrafish FOXD1 Antibody.

Storage

After reconstitution, the Zebrafish FOXD1 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 FOXD1 Antibody, Zebrafish Forkhead Box Protein D1 Antibody, Zebrafish Forkhead Transcription Factor Antibody, Zebrafish Developmental Regulatory Protein Antibody, Zebrafish Mesenchymal Development Protein Antibody, Zebrafish Organogenesis Protein Antibody, Zebrafish FOX Family Protein Antibody

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