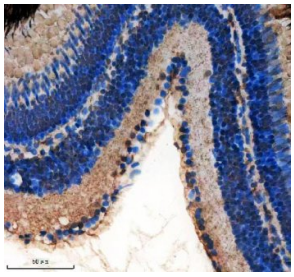
Zebrafish FOXE3 Antibody / Forkhead Box Protein E3 Antibody (RZ1434)

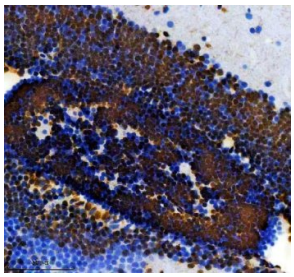
Catalog No.	Formulation	Size
RZ1434	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

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	B0UXI3
Applications	Immunohistochemistry (FFPE): 2-5ug/ml
Limitations	This Zebrafish FOXE3 Antibody / Forkhead Box Protein E3 Antibody is available for research use only.



Zebrafish FOXE3 Antibody Eye IHC. Immunohistochemistry staining of paraffin-embedded zebrafish eye tissue using FOXE3 antibody demonstrates prominent nuclear staining within ocular cell populations, consistent with expression of Forkhead Box Protein E3 (FOXE3). FOXE3 is a developmental transcription factor that regulates gene expression programs involved in ocular development, tissue differentiation, and maintenance of specialized cellular identities within the developing eye. The observed nuclear localization is consistent with the role of FOXE3 as a DNA-binding transcriptional regulator and supports its established involvement in vertebrate eye formation and developmental patterning. 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 FOXE3 Antibody Brain IHC. Immunohistochemistry staining of paraffin-embedded zebrafish brain tissue using FOXE3 antibody demonstrates strong nuclear staining throughout densely packed neural cell populations, consistent with expression of Forkhead Box Protein E3 (FOXE3). FOXE3 is a developmental transcription factor that regulates gene expression programs involved in cellular differentiation, tissue specification, and maintenance of developmental regulatory networks. The observed nuclear localization is consistent with the role of FOXE3 as a DNA-binding transcriptional regulator and supports its involvement in developmental processes governing vertebrate nervous system organization and cellular identity. 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 FOXE3 Antibody / Forkhead Box Protein E3 Antibody is designed for the detection and study of FOXE3 (Forkhead Box Protein E3), a member of the forkhead family of transcription factors that regulates gene expression during vertebrate development. FOXE3 functions as a DNA-binding regulatory protein that controls developmental pathways involved in tissue differentiation, cellular specification, and organ formation. Through these activities, FOXE3 contributes to the coordinated genetic programs required for normal embryonic growth and tissue organization.

Forkhead Box Protein E3 belongs to the FOX family of transcription factors, a group of proteins characterized by a conserved forkhead DNA-binding domain. Members of this family regulate diverse biologic processes including embryogenesis, cellular proliferation, differentiation, and maintenance of tissue identity. FOXE3 serves as an important component of developmental gene regulatory networks that coordinate tissue-specific patterns of gene expression during vertebrate development.

Zebrafish provide a valuable vertebrate model for investigating developmental regulation and organogenesis. FOXE3 expression has been associated with pathways involved in ocular development, tissue patterning, and establishment of specialized cellular identities. Studies utilizing zebrafish models continue to improve understanding of how transcription factors coordinate developmental signaling pathways and regulate formation of complex tissues during embryogenesis.

Beyond developmental biology, FOXE3 has attracted interest in research involving cellular differentiation, tissue maintenance, regenerative biology, and disease-associated alterations in gene expression. Because transcription factors occupy central positions within developmental regulatory networks, FOXE3 remains an important target for investigations examining how gene expression programs influence tissue formation and cellular function.

Zebrafish FOXE3 Antibody is useful for investigating developmental biology, transcriptional regulation, tissue differentiation, organogenesis, and vertebrate developmental pathways. Researchers utilize FOXE3 expression studies to better understand molecular mechanisms governing embryonic development, cellular specification, and maintenance of developmental gene regulatory networks.

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 FOXE3 Antibody / Forkhead Box Protein E3 Antibody should be determined empirically by the investigator.

Immunogen

An E.coli-derived Zebrafish FOXE3 recombinant protein (amino acids M1-T349) was used as the immunogen for the Zebrafish FOXE3 Antibody.

Storage

After reconstitution, the Zebrafish FOXE3 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 FOXE3 Antibody, Zebrafish Forkhead Box Protein E3 Antibody, Zebrafish Forkhead Transcription Factor Antibody, Zebrafish Ocular Development Protein Antibody, Zebrafish Lens Development Protein Antibody, Zebrafish Developmental Regulatory Protein Antibody, Zebrafish FOX Family Protein Antibody

Copyright © NSJ Bioreagents. All rights reserved.