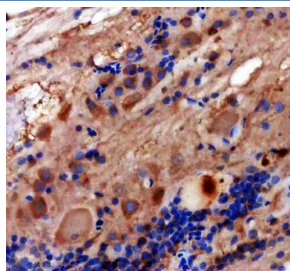


Zebrafish NKX2.1 Antibody / Thyroid Transcription Factor 1 Antibody (RZ1473)

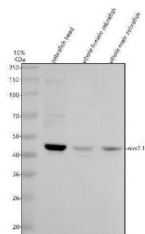
Catalog No.	Formulation	Size
RZ1473	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

[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	Q98TX4
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml
Limitations	This Zebrafish NKX2.1 Antibody / Thyroid Transcription Factor 1 Antibody is available for research use only.



Zebrafish NKX2.1 Antibody / Thyroid Transcription Factor 1 Antibody Zebrafish Spinal Cord IHC. Immunohistochemical staining of paraffin-embedded zebrafish spinal cord tissue using Zebrafish NKX2.1 Antibody / Thyroid Transcription Factor 1 Antibody. NKX2.1 expression is detected predominantly within the nuclei of spinal cord cells, consistent with its function as a homeobox transcription factor regulating neuronal specification, central nervous system development, and transcriptional control during vertebrate embryogenesis. Heat-induced epitope retrieval was performed using EDTA buffer prior to immunostaining with DAB chromogenic detection.



Zebrafish NKX2.1 Antibody / Thyroid Transcription Factor 1 Antibody Zebrafish Head, Female and Male WB. Western blot analysis of zebrafish head, whole female, and whole male tissue lysates using Zebrafish NKX2.1 Antibody / Thyroid Transcription Factor 1 Antibody. A distinct immunoreactive band is detected at approximately 42 kDa in all three samples, consistent with expression of NKX2.1. The observed molecular weight is close to the predicted size of approximately 38 kDa, supporting specific detection of the target protein. 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 NKX2.1 Antibody / Thyroid Transcription Factor 1 Antibody recognizes NKX2.1, a homeobox-containing transcription factor that functions as a master regulator of thyroid, lung, and forebrain development. Also known as thyroid transcription factor 1 (TTF-1), NKX2.1 controls the expression of numerous genes involved in organ specification, cellular differentiation, and tissue maturation. As a DNA-binding transcription factor, NKX2.1 coordinates developmental programs that establish organ identity and maintain specialized cellular functions throughout vertebrate development. Zebrafish NKX2.1 Antibody / Thyroid Transcription Factor 1 Antibody is therefore well suited for studies of embryogenesis, developmental biology, and transcriptional regulation.

During zebrafish embryonic development, NKX2.1 is expressed within the developing forebrain and thyroid primordium, where it regulates tissue specification, neuronal differentiation, and endocrine organ formation. Proper NKX2.1 activity is required for normal development of the hypothalamus, ventral forebrain, and thyroid gland while contributing to patterning events that establish regional identity within the central nervous system. Loss or disruption of NKX2.1 expression can impair thyroid differentiation and alter neural development, highlighting its essential role during early vertebrate embryogenesis.

Beyond embryonic patterning, NKX2.1 continues to regulate transcriptional networks that maintain tissue identity and specialized cellular function. The protein controls genes involved in thyroid hormone synthesis, pulmonary epithelial differentiation, and neuronal maturation while interacting with additional developmental transcription factors to coordinate lineage-specific gene expression. Because many NKX2.1-regulated pathways are highly conserved, zebrafish provides an excellent model for investigating congenital developmental disorders, endocrine biology, neurodevelopment, and the molecular mechanisms controlling organogenesis.

Zebrafish NKX2.1 Antibody / Thyroid Transcription Factor 1 Antibody is a valuable research tool for immunohistochemistry, immunofluorescence, western blotting, and other applications requiring reliable detection of NKX2.1 expression and localization. Researchers commonly use this antibody to study thyroid gland development, forebrain specification, transcriptional regulation, and endocrine signaling throughout zebrafish development. By supporting investigations into one of the principal transcription factors governing vertebrate organogenesis, Zebrafish NKX2.1 Antibody / Thyroid Transcription Factor 1 Antibody provides a dependable reagent for developmental, endocrine, and translational research.

Learn more about TTF-1 / NKX2.1 biology, diagnostic applications, and additional validated products on our [TTF-1 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 NKX2.1 Antibody / Thyroid Transcription Factor 1 Antibody should be determined empirically by the investigator.

Immunogen

An E.coli-derived Zebrafish NKX2.1 recombinant protein (amino acids S23-S326) was used as the immunogen for the Zebrafish NKX2.1 Antibody.

Storage

After reconstitution, the Zebrafish NKX2.1 Antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.

Alternate Names

Zebrafish NKX2.1 antibody, Zebrafish Thyroid Transcription Factor 1 antibody, Zebrafish TTF-1 antibody, Zebrafish NK2 Homeobox 1 antibody, Zebrafish Homeobox Protein NKX2.1 antibody, Zebrafish TITF1 antibody