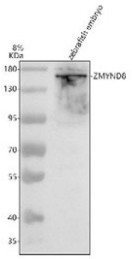
Zebrafish Zmynd8 Antibody / Zinc finger MYND domain-containing protein 8 (RZ1073)

Catalog No.	Formulation	Size
RZ1073	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	2-3 weeks
Species Reactivity	Zebrafish
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity chromatography
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	A0A0R4ISB9
Applications	Western Blot : 0.5-1 ug/ml
Limitations	This Zebrafish Zmynd8 antibody is available for research use only.



Western blot analysis of Zmynd8 protein using Zebrafish Zmynd8 antibody and zebrafish embryo tissue lysate. Predicted molecular weight ~132 kDa, commonly observed at 132-180 kDa.

Description

Zebrafish (Danio rerio) Zmynd8 antibody recognizes Zinc finger MYND domain-containing protein 8, encoded by the zebrafish zmynd8 gene. Zmynd8 is a conserved chromatin-associated regulatory protein that integrates transcriptional control, epigenetic modulation, and signaling pathway regulation across diverse tissues. It contains a MYND-type zinc finger domain that mediates protein-protein interactions, enabling Zmynd8 to serve as a scaffold for chromatin regulators, transcription factors, and signaling intermediates. In Danio rerio embryos, zmynd8 is expressed broadly from early developmental stages with enrichment in developing brain, neural tube, somites, heart, vasculature, and endoderm-derived organs including liver and pancreas. Subcellular localization is predominantly nuclear, consistent with its functions

in chromatin remodeling and regulation of gene expression.

Zinc finger MYND domain-containing protein 8 participates in transcriptional control by interacting with histone-modifying enzymes, chromatin-remodeling proteins, and sequence-specific transcription factors. Through these interactions, Zmynd8 influences promoter and enhancer activity, chromatin accessibility, and lineage-specific transcriptional programs. In zebrafish embryos, which undergo rapid and extensive changes in gene expression as tissues proliferate and differentiate, Zmynd8 helps establish and maintain transcriptional states that guide organogenesis and developmental timing.

Neural development is particularly dependent on Zmynd8 activity. Neural progenitors rely on chromatin-mediated regulation to balance proliferation and differentiation while maintaining regional patterning. Zmynd8 contributes to transcriptional programs that determine neural identity, neuroepithelial organization, and early neuronal maturation. In differentiating neurons, Zmynd8 supports expression of genes associated with axon guidance, synaptic development, and metabolic adaptation. Dysregulation of chromatin-associated proteins such as Zmynd8 can impair neurogenesis or disrupt neural circuit assembly.

Somite and skeletal muscle development also require Zmynd8-mediated transcriptional control. Myogenic progenitors depend on chromatin remodeling to activate muscle-specific gene expression programs. Zmynd8 influences regulatory pathways that shape somite segmentation, myotome formation, and early muscle fiber organization. Because muscle differentiation involves rapid transitions between proliferative and specialized states, Zmynd8 helps ensure precise epigenetic regulation during these developmental changes.

Cardiac and vascular development involve significant chromatin reprogramming in which Zmynd8 plays a supporting role. Cardiomyocytes require coordinated transcriptional and epigenetic regulation to guide contractile protein expression, chamber morphogenesis, and metabolic maturation. Endothelial tissues rely on chromatin-mediated control of genes involved in angiogenic sprouting, cell polarity, and vessel stabilization. Zmynd8 activity contributes to proper transcriptional responses to mechanical forces and biochemical gradients that shape cardiovascular development.

Endoderm-derived organs depend on Zmynd8 to regulate gene expression programs underlying metabolic specialization and organ expansion. In liver and pancreas, chromatin-associated regulatory factors influence lineage decisions, stress-response pathways, and metabolic programming. Zmynd8 participates in these processes by modulating transcriptional networks that guide hepatocyte maturation and endocrine differentiation.

This Zebrafish Zmynd8 antibody is suitable for detecting Zinc finger MYND domain-containing protein 8 in research focused on chromatin regulation, neural development, muscle formation, cardiac and vascular morphogenesis, and transcriptional control in zebrafish. NSJ Bioreagents provides this reagent within its zebrafish and chromatin-regulation antibody portfolio.

Application Notes

Optimal dilution of the Zebrafish Zmynd8 antibody should be determined by the researcher.

Immunogen

An E.coli-derived zebrafish Zmynd8 recombinant protein (amino acids M20-P1167) was used as the immunogen for the Zebrafish Zmynd8 antibody.

Storage

After reconstitution, the Zebrafish Zmynd8 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.