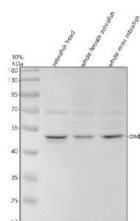


Zebrafish DND Antibody / Dead End Protein Antibody (RZ1383)

Catalog No.	Formulation	Size
RZ1383	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	Q7T1H5
Applications	Western Blot : 0.5-1ug/ml
Limitations	This Zebrafish DND Antibody / Dead End Protein Antibody is available for research use only.



Zebrafish DND Antibody WB. Western blot analysis of zebrafish head tissue lysate (lane 1), whole female zebrafish tissue lysate (lane 2), and whole male zebrafish tissue lysate (lane 3) using Zebrafish DND Antibody / Dead End Protein Homolog 1 Antibody demonstrates a prominent immunoreactive band at approximately 46-50 kDa, consistent with the predicted molecular weight of DND. DND (Dead End) is an RNA-binding protein that plays a critical role in primordial germ cell development, migration, survival, and maintenance. As an essential regulator of germline specification and reproductive development, DND is widely studied in zebrafish developmental biology and germ cell research. Thirty micrograms of protein lysate were resolved under reducing conditions on a 10% SDS-PAGE gel and transferred to nitrocellulose prior to immunodetection. The observed bands support detection of zebrafish DND by western blot analysis.

Description

Zebrafish DND Antibody / Dead End Protein Antibody is useful for studying Dead End (DND), an RNA-binding protein that plays a critical role in germ cell development, germline maintenance, and primordial germ cell survival. DND is one of the most extensively studied germline-associated proteins in zebrafish and is required for the specification, migration, and maintenance of primordial germ cells during early embryogenesis. Through its regulation of RNA stability and post-transcriptional gene expression, DND helps preserve germ cell identity throughout development.

DND functions by interacting with specific messenger RNAs and regulatory molecules that control gene expression in developing germ cells. By protecting target transcripts from inappropriate repression or degradation, DND promotes the expression of proteins required for germline specification and cellular survival. These activities make DND an essential regulator of germ cell fate determination and reproductive development.

In zebrafish, DND expression is closely associated with primordial germ cells, making it a valuable marker for studies of germline formation and reproductive biology. Loss of DND function can disrupt germ cell development, impair germ cell migration, and reduce germline survival. As a result, DND has become an important target for investigations examining the molecular mechanisms that establish and maintain germline identity during vertebrate development.

Zebrafish is widely used as a model for studying germ cell biology because embryos develop externally, remain optically transparent during early development, and permit direct visualization of primordial germ cell migration. Many of the pathways controlling germline specification and maintenance are highly conserved among vertebrates, making zebrafish DND studies relevant to broader investigations of developmental and reproductive biology.

As an RNA-binding protein, DND also contributes to post-transcriptional regulation of gene expression. The ability of DND to influence RNA stability and translation places it within regulatory networks that coordinate cellular differentiation and developmental progression. Consequently, DND is frequently studied in developmental biology, reproductive biology, stem cell research, germline specification, and RNA regulatory pathway investigations.

Zebrafish DND antibodies are commonly used in immunohistochemistry, immunofluorescence, western blotting, and related protein detection applications to evaluate Dead End expression and localization. These reagents support investigations of primordial germ cells, germline development, reproductive biology, RNA regulation, and embryonic development in zebrafish research models.

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 DND Antibody / Dead End Protein Antibody should be determined empirically by the investigator.

Immunogen

An E.coli-derived Zebrafish DND recombinant protein (amino acids M1-F411) was used as the immunogen for the Zebrafish DND Antibody.

Storage

After reconstitution, the Zebrafish DND 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 Dead End Protein Antibody, Zebrafish Dead End Homolog 1 Antibody, Zebrafish Germ Cell Development Protein Antibody, Zebrafish Primordial Germ Cell Marker Antibody, Zebrafish Germline Maintenance Protein Antibody, Zebrafish RNA Binding Protein Antibody

