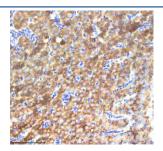


Zebrafish Nanos3 Antibody / Nanos homolog 3 (RZ1245)

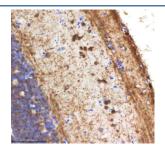
Catalog No.	Formulation	Size
RZ1245	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

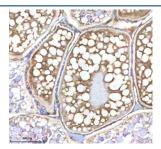
Availability	2-3 weeks
Species Reactivity	Zebrafish
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity chromatography
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q90WW1
Localization	Cytoplasm
Applications	Immunohistochemistry (FFPE) : 2-5ug/ml
Limitations	This Zebrafish Nanos3 antibody is available for research use only.



IHC staining of zebrafish Nanos3 protein using Zebrafish Nanos3 antibody, HRP-labeled secondary and DAB substrate. Nanos3 was detected in a paraffin-embedded section of zebrafish pancreas tissue. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of zebrafish Nanos3 protein using Zebrafish Nanos3 antibody, HRP-labeled secondary and DAB substrate. Nanos3 was detected in a paraffin-embedded section of zebrafish brain tissue. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of zebrafish Nanos3 protein using Zebrafish Nanos3 antibody, HRP-labeled secondary and DAB substrate. Nanos3 was detected in a paraffin-embedded section of zebrafish ovary tissue. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.

Description

Nanos3 is a highly conserved RNA binding protein that plays an essential role in the development and maintenance of germ cells. In zebrafish, Nanos3 is required for the proper specification, migration, and survival of primordial germ cells during early embryogenesis.

Zebrafish Nanos3 is an ortholog of the human NANOS3 gene. Both genes belong to the Nanos family of translational repressors and share conserved structural features, including zinc finger domains that enable binding to target messenger RNAs. Nanos3 acts primarily by interacting with other RNA binding proteins to repress the translation of specific transcripts involved in cell differentiation and apoptosis.

In zebrafish embryos, Nanos3 is expressed maternally and zygotically in germ cell precursors. It ensures the correct localization and survival of these cells as they migrate toward the developing gonads. Loss of Nanos3 function in zebrafish leads to the mislocalization and eventual loss of germ cells, resulting in infertility or defective gonadal development.

Because of its conserved role in germline development, zebrafish Nanos3 serves as a valuable marker for early germ cells and is widely used in studies of reproductive biology, stem cell maintenance, and gene regulation. It is also a useful model for understanding human infertility and germ cell tumors.

Application Notes

Optimal dilution of the Zebrafish Nanos3 antibody should be determined by the researcher.

Immunogen

E. coli-derived zebrafish Nanos3 recombinant protein (amino acids M1-W159) was used as the immunogen for the Zebrafish Nanos3 antibody.

Storage

After reconstitution, the Zebrafish Nanos3 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.