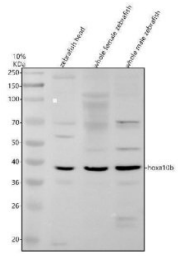
Zebrafish HOXA10 Antibody / Homeobox Protein Hox-A10b Antibody (RZ1465)

Catalog No.	Formulation	Size
RZ1465	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	Q8AWY2
Applications	Western Blot : 0.5-1ug/ml
Limitations	This Zebrafish HOXA10 Antibody / Homeobox Protein Hox-A10b Antibody is available for research use only.



Zebrafish HOXA10 Antibody WB. Western blot analysis of HOXA10 expression was performed using anti-HOXA10B antibody. Electrophoresis was carried out on a 10% SDS-PAGE gel under reducing conditions. Lane 1: zebrafish head tissue lysate. Lane 2: whole female zebrafish tissue lysate. Lane 3: whole male zebrafish tissue lysate. HOXA10B is a zebrafish ortholog of the mammalian HOXA10 homeobox transcription factor that regulates embryonic patterning, tissue specification, and anterior-posterior body axis development. A specific immunoreactive band is detected at approximately 37 kDa in all three samples, corresponding to the expected molecular weight of HOXA10B. The consistent expression across head and whole-body lysates supports the widespread developmental role of HOXA10B in regulating transcriptional programs required for vertebrate morphogenesis. These results demonstrate the utility of Zebrafish HOXA10 Antibody for studies of developmental biology, HOX gene function, embryonic patterning, and transcriptional regulation.

Description

Zebrafish HOXA10 Antibody / Homeobox Protein Hox-A10b Antibody recognizes HOXA10B, one of the zebrafish orthologs of the mammalian HOXA10 gene and a member of the highly conserved HOX family of homeobox transcription

factors. HOXA10 proteins regulate embryonic patterning by controlling the expression of genes that establish positional identity along the anterior-posterior body axis. Acting as sequence-specific DNA-binding transcription factors, HOX proteins coordinate tissue specification, morphogenesis, and organ development during vertebrate embryogenesis. Because these developmental pathways are highly conserved across species, zebrafish have become an important model for investigating HOX gene function and developmental gene regulation.

Zebrafish HOXA10 Antibody / Homeobox Protein Hox-A10b Antibody is valuable for studies of embryonic development, body patterning, and transcriptional regulation. HOXA10B is expressed in spatially restricted embryonic domains where it directs regional identity and coordinates differentiation of mesodermal, skeletal, and neural tissues. Like other HOX transcription factors, HOXA10B activates or represses downstream target genes to ensure proper tissue organization and developmental timing. Precise regulation of HOXA10B expression is essential for normal vertebrate morphogenesis, making it an important marker for developmental biology research.

Beyond embryogenesis, HOXA10 family members contribute to stem cell maintenance, hematopoiesis, reproductive tract development, and tissue remodeling. Altered HOXA10 expression has been associated with leukemia, endometrial disorders, ovarian cancer, and other malignancies, reflecting the importance of HOX transcription factors in controlling cellular differentiation and proliferation. Studies using zebrafish continue to provide valuable insight into the conserved genetic networks that regulate vertebrate development and disease. Because HOXA10B occupies a central position within these developmental pathways, it serves as an informative marker for investigating gene regulatory networks during embryogenesis and tissue differentiation.

Zebrafish HOXA10 Antibody / Homeobox Protein Hox-A10b Antibody supports investigations of developmental biology, transcriptional regulation, embryonic patterning, vertebrate morphogenesis, and HOX gene function. It is well suited for studies of tissue specification, developmental signaling, and mechanisms governing cell fate determination during embryonic development. The conserved biological function of HOXA10B makes Zebrafish HOXA10 Antibody / Homeobox Protein Hox-A10b Antibody an important research tool for developmental and translational studies.

Explore our HOXA10 Antibody / Developmental Transcription Factor Antibody page to learn more about this key regulator of embryonic development, tissue differentiation, and developmental gene expression.

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 HOXA10 Antibody / Homeobox Protein Hox-A10b Antibody should be determined empirically by the investigator.

Immunogen

An E.coli-derived Zebrafish HOXA10B recombinant protein (amino acids H27-E245) was used as the immunogen for the Zebrafish HOXA10 / HOXA10B Antibody.

Storage

After reconstitution, the Zebrafish HOXA10 / HOXA10B 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 HOXA10 antibody, Zebrafish HOXA10B antibody, Zebrafish Homeobox Protein Hox-A10b antibody, Zebrafish HoxA10b antibody, Zebrafish Homeobox Transcription Factor antibody, Zebrafish Developmental Patterning Protein antibody