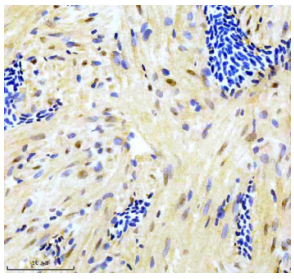
Zebrafish Gata6 Antibody / GATA-binding factor 6 (RZ1191)

Catalog No.	Formulation	Size
RZ1191	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
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity chromatography
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q6NW63
Applications	Immunohistochemistry (FFPE): 2-5ug/ml
Limitations	This Zebrafish Gata6 antibody is available for research use only.



Zebrafish Gata6 Antibody Heart Tissue IHC. Immunohistochemistry staining of zebrafish Gata6 protein using Zebrafish Gata6 antibody, HRP-labeled secondary and DAB substrate. Gata6 was detected in a paraffin-embedded section of zebrafish heart tissue. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.

Description

Zebrafish Gata6 antibody detects Gata6, a zinc finger transcription factor essential for endoderm specification, cardiac development, and organogenesis. In zebrafish (Danio rerio), Gata6 functions alongside other GATA family members to regulate transcriptional programs that establish endodermal identity and guide morphogenesis of organs such as the pancreas, liver, gut, and heart. Also known as GATA-binding factor 6, this regulator plays a conserved and pivotal role in early lineage decisions, epithelial organization, and mesendodermal patterning. Because these developmental processes are shared across vertebrates, Zebrafish Gata6 antibody reagents support research in transcriptional control, organ formation, and embryonic signaling pathways.

During early zebrafish development, gata6 is expressed in mesendodermal progenitors and later becomes enriched in endoderm-derived tissues. Gata6 acts upstream of key transcription factors and signaling components that specify endodermal fate, including sox17, foxa1, foxa2, and hnf family regulators. Loss or reduction of Gata6 function leads to defects in gut tube formation, pancreatic and hepatic specification, and proper arrangement of the endodermal epithelium. In the heart, Gata6 cooperates with Gata4 and Gata5 to promote myocardial differentiation, chamber formation, and proper looping morphogenesis.

GATA-binding factor 6 integrates developmental cues from pathways such as BMP, FGF, Nodal, and Wnt. Its transcriptional activity shapes gene networks that drive organ bud initiation, epithelial rearrangement, and lineage restriction. In scientific literature, zebrafish proteins like Gata6 are also commonly referred to using Danio rerio nomenclature, and researchers frequently use terms such as Danio Gata6 or Danio rerio Gata6 interchangeably with zebrafish naming.

Beyond its early patterning roles, Gata6 influences differentiation of endodermal organs. In the developing pancreas, Gata6 contributes to endocrine and exocrine lineage allocation, working with transcriptional partners to activate genes required for cell identity and organ expansion. In liver development, Gata6 participates in hepatoblast specification and supports growth of the hepatic diverticulum. Gata6 also plays roles in intestinal epithelial differentiation, ensuring proper regional identity along the digestive tract.

At the molecular level, Gata6 binds WGATAR motifs through its conserved zinc finger domains and recruits chromatin modifiers, co-activators, and repressors to regulate enhancer and promoter activity. These interactions enable Gata6 to function as both an activator and pioneer factor capable of opening chromatin to establish cell-type-specific regulatory landscapes. Subcellular localization is nuclear, with dynamic regulation influenced by developmental timing, signaling inputs, and interacting proteins.

As zebrafish embryos mature, Gata6 remains involved in maintaining tissue homeostasis and coordinating epithelial morphogenesis. It contributes to cardiac outflow tract formation, gut looping, and endodermal remodeling. Because zebrafish possess strong regenerative potential, Gata6 may also play roles in injury-induced reactivation of developmental gene programs, particularly in cardiac and hepatic tissues.

A Zebrafish Gata6 antibody is suitable for research applications such as western blotting, immunohistochemistry, and assays examining endoderm development, cardiac formation, organogenesis, and transcriptional regulation. This antibody targets GATA-binding factor 6 for studies involving vertebrate developmental biology and gene regulatory networks. NSJ Bioreagents provides the Zebrafish Gata6 antibody to support research in early lineage specification and organ development.

This Zebrafish antibody is part of a broader Zebrafish / Danio rerio antibody panel offered by NSJ Bioreagents.

Application Notes

Optimal dilution of the Zebrafish Gata6 antibody should be determined by the researcher.

Immunogen

E. coli-derived zebrafish Gata6 recombinant protein (amino acids E26-E296) was used as the immunogen for the Zebrafish Gata6 antibody.

Storage

After reconstitution, the Zebrafish Gata6 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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