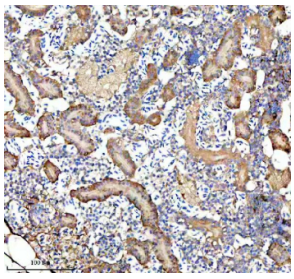
Zebrafish Gipc1 Antibody / GAIP c-terminus interacting protein 1 (RZ1098)

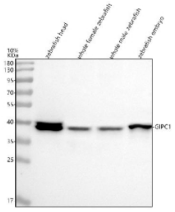
Catalog No.	Formulation	Size
RZ1098	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

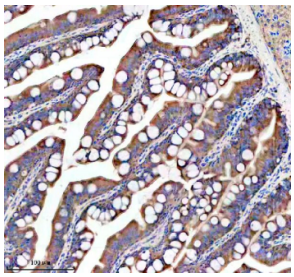
Availability	2-3 weeks
Species Reactivity	Zebrafish
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity chromatography
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q6B337
Applications	Western blot: 0.5-1 ug/ml Immunohistochemistry (FFPE): 2-5 ug/ml
Limitations	This Zebrafish Gipc1 antibody is available for research use only.



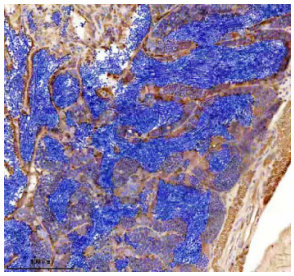
Zebrafish Gipc1 Antibody Kidney IHC. Immunohistochemistry staining of FFPE zebrafish kidney tissue with Zebrafish Gipc1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



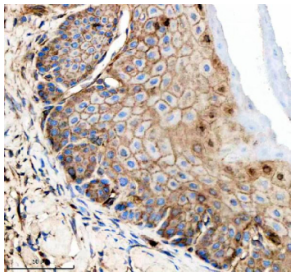
Zebrafish Gipc1 Antibody WB. Western blot analysis of Gipc1 protein using Gipc1 antibody and 1) zebrafish head, 2) whole female zebrafish, 3) whole male zebrafish and 4) zebrafish embryo tissue lysate. Predicted molecular weight ~36 kDa.



Zebrafish Gipc1 Antibody Colon IHC. Immunohistochemistry staining of FFPE zebrafish colon tissue with Zebrafish Gipc1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Zebrafish Gipc1 Antibody Testis IHC. Immunohistochemistry staining of FFPE zebrafish testis tissue with Zebrafish Gipc1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Zebrafish Gipc1 Antibody Esophagus IHC. Immunohistochemistry staining of FFPE zebrafish esophagus tissue with Zebrafish Gipc1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.

Description

Zebrafish (Danio rerio) Gipc1 antibody detects GAIP c-terminus interacting protein 1, a multifunctional PDZ domain containing adaptor protein involved in receptor trafficking, cytoskeletal organization, and intracellular signaling. In zebrafish, the gipc1 gene encodes a highly conserved scaffold protein that binds a diverse set of membrane receptors and signaling components through its central PDZ domain. These interactions enable Gipc1 to coordinate vesicle transport, endocytic recycling, and polarized cell behaviors. Because of its broad roles in membrane dynamics and developmental signaling, GAIP c-terminus interacting protein 1 antibody reagents are widely used in studies of receptor localization, neuronal maturation, and epithelial patterning.

Gipc1 participates in endocytic and recycling pathways by linking membrane proteins to motor complexes that guide intracellular trafficking. It interacts with GAIP (RGS19), GLUT receptors, integrins, and growth factor receptors, influencing their stability, cellular distribution, and signaling outputs. In zebrafish embryos, gipc1 is expressed in neural tissues, somites, cardiovascular structures, and developing epithelia, reflecting its essential function in organizing membrane domains and supporting tissue morphogenesis.

One of Gipc1's hallmark roles is in regulating polarized cell behavior. By binding receptors and motor proteins such as myosin VI, Gipc1 helps position key signaling complexes at the correct cellular locations. This spatial organization is important for axon guidance, epithelial junction formation, and left-right patterning. Zebrafish studies have shown that altered gipc1 function can disrupt neuronal connectivity, craniofacial development, and vascular patterning, emphasizing the protein's role in guiding morphogenetic processes.

Beyond receptor transport, Gipc1 contributes to signaling cascades associated with cell proliferation, differentiation, and survival. It interacts with growth factor pathways, including TGF-beta and Wnt regulators, influencing transcriptional responses that guide embryonic development. The protein also supports cytoskeletal organization by binding actin related partners, helping coordinate force generation, adhesion, and migratory behavior. These roles make zebrafish an effective model for dissecting the integrative signaling functions of PDZ domain adaptor proteins.

Subcellular localization of Gipc1 includes endosomes, the plasma membrane, the perinuclear region, and actin rich structures where receptor trafficking is particularly active. Its PDZ mediated binding versatility allows it to assemble multi-protein complexes that serve as hubs for directional transport and membrane remodeling. Known interaction partners encompass GAIP, myosin VI, GLUT transporters, integrins, and numerous receptors whose proper localization is essential for cell communication and tissue formation.

Because receptor trafficking and cytoskeletal coordination are fundamental to vertebrate development, Gipc1 influences early axis formation, neural circuit establishment, vascular remodeling, and sensory system differentiation. Zebrafish offer ideal visualization advantages for studying these dynamic processes, enabling detailed analysis of Gipc1's contribution to vesicle flow and receptor positioning across developmental stages.

A Zebrafish Gipc1 antibody is suitable for research applications such as western blotting, immunohistochemistry, and assays examining receptor trafficking, membrane organization, and cytoskeletal coordination. This reagent detects endogenous Gipc1 without implying epitope mapping or literature validated specificity. NSJ Bioreagents provides the Zebrafish Gipc1 antibody to support studies in developmental signaling, neuronal patterning, epithelial polarity, and intracellular transport.

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

Application Notes

Optimal dilution of the Zebrafish Gipc1 antibody should be determined by the researcher.

Immunogen

An E.coli-derived zebrafish Gipc1 recombinant protein (amino acids H70-V335) was used as the immunogen for the Zebrafish Gipc1 antibody.

Storage

After reconstitution, the Zebrafish Gipc1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Copyright © NSJ Bioreagents. All rights reserved.