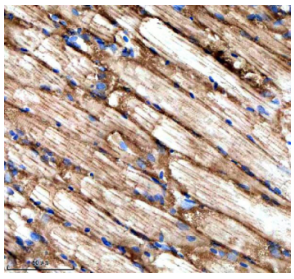
Zebrafish Stip1 Antibody / Stress induced phosphoprotein 1 (RZ1110)

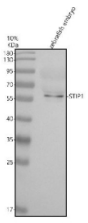
Catalog No.	Formulation	Size
RZ1110	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

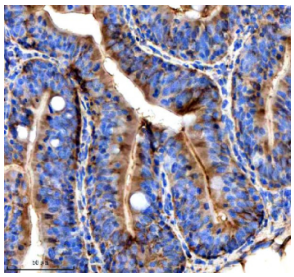
Availability	2-3 weeks
Species Reactivity	Zebrafish
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity chromatography
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q5RKM3
Applications	Western blot: 0.5-1 ug/ml Immunohistochemistry (FFPE): 2-5 ug/ml
Limitations	This Zebrafish Stip1 antibody is available for research use only.



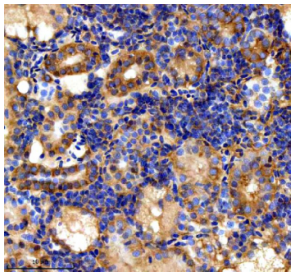
Zebrafish Stip1 Antibody Skeletal Muscle IHC. Immunohistochemical analysis of Stip1 protein using Zebrafish Stip1 antibody and paraffin-embedded zebrafish skeletal muscle tissue. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



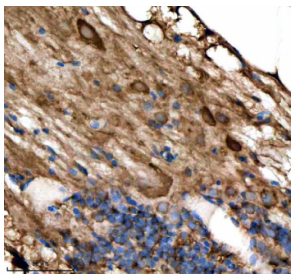
Zebrafish Stip1 Antibody WB. Western blot analysis of Stip1 protein using Zebrafish Stip1 antibody and zebrafish embryo tissue lysate. The predicted molecular weight of Stip1 is 63 kDa.



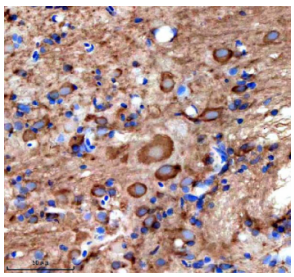
Zebrafish Stip1 Antibody Colon IHC. Immunohistochemical analysis of Stip1 protein using Zebrafish Stip1 antibody and paraffin-embedded zebrafish colon tissue. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Zebrafish Stip1 Antibody Kidney IHC. Immunohistochemical analysis of Stip1 protein using Zebrafish Stip1 antibody and paraffin-embedded zebrafish kidney tissue. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Zebrafish Stip1 Antibody Spinal Cord IHC. Immunohistochemical analysis of Stip1 protein using Zebrafish Stip1 antibody and paraffin-embedded zebrafish spinal cord tissue. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Zebrafish Stip1 Antibody Brain IHC. Immunohistochemical analysis of Stip1 protein using Zebrafish Stip1 antibody and paraffin-embedded zebrafish brain tissue. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.

Description

Zebrafish (Danio rerio) Stip1 antibody detects Stress induced phosphoprotein 1, a conserved co-chaperone that coordinates protein folding by linking Hsp70 and Hsp90 into functional chaperone complexes. In zebrafish, the stip1 gene encodes a modular protein containing tetratricopeptide repeat domains and acidic regions that facilitate interactions with client proteins and molecular chaperones. Stress induced phosphoprotein 1 acts as a scaffold that accelerates substrate transfer between Hsp70 and Hsp90, promoting efficient maturation of signaling molecules, kinases, transcription factors, and structural proteins. Because chaperone networks are central to proteostasis, developmental stability, and stress responses, Zebrafish Stip1 antibody reagents are widely used in studies of cell biology and vertebrate development.

Stip1, also known as HOP (Hsp70-Hsp90 organizing protein), participates in numerous processes that require stabilization of nascent or stress-damaged proteins. In zebrafish embryos, stip1 is broadly expressed, with elevated levels in neural tissue, somites, the heart, and proliferative zones where protein synthesis and turnover are high. Its activity helps maintain protein quality during rapid growth and differentiation, preventing aggregation and supporting proper folding of chaperone-dependent clients. Loss or reduction of Stip1 function disrupts signaling pathways such as MAPK, steroid receptor activation, and cytoskeletal organization, highlighting its role in integrating proteostasis with developmental signaling.

At the molecular level, Stip1 uses its tetratricopeptide repeat domains to bind Hsp70 and Hsp90 simultaneously, forming a platform that coordinates ATP-driven conformational transitions in both chaperones. This coordination ensures efficient transfer of client proteins between folding states. In zebrafish, this function is particularly important for maturation of receptors and kinases that govern tissue patterning, neuronal specification, and organogenesis. Stip1 also influences the folding and stability of proteins involved in stress protection, metabolism, and signal transduction.

Beyond chaperone interactions, Stip1 participates in RNA processing, cytoskeletal dynamics, and cell survival pathways. It associates with ribonucleoprotein complexes, intermediate filaments, and proteins involved in apoptotic regulation. These diverse roles reflect its ability to stabilize proteins across functional categories, affecting processes such as axon outgrowth, muscle integrity, and metabolic resilience. In zebrafish, Stip1 supported pathways contribute to coordinated morphogenesis, neural network formation, and embryonic stress responses.

Subcellular localization of Stip1 includes the cytoplasm, perinuclear region, and sites of active protein synthesis. It interacts with Hsp90, Hsp70, steroid receptors, transcriptional regulators, cytoskeletal elements, and additional co-chaperones involved in protein quality control. Zebrafish models are particularly useful for visualizing Stip1-associated developmental phenotypes, including disruptions in muscle patterning, heart development, or neural differentiation when chaperone function is perturbed.

A Zebrafish Stip1 antibody is suitable for research applications such as western blotting, immunohistochemistry, and assays examining chaperone networks, protein Folding, and developmental stress responses. This antibody targets Stip1 for studies involving proteostasis regulation, chaperone-cofactor interactions, and embryonic development. NSJ Bioreagents provides the Zebrafish Stip1 antibody to support investigations into molecular chaperoning and vertebrate developmental biology.

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

Application Notes

Optimal dilution of the Zebrafish Stip1 antibody should be determined by the researcher.

Immunogen

An E.coli-derived zebrafish Stip1 recombinant protein (amino acids R504-R542) was used as the immunogen for the Zebrafish Stip1 antibody.

Storage

After reconstitution, the Zebrafish Stip1 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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