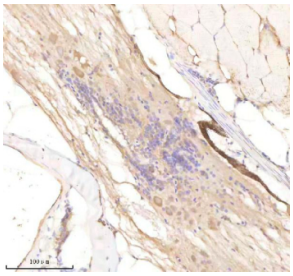
Zebrafish Rcc2 Antibody / Protein RCC2 homolog (RZ1303)

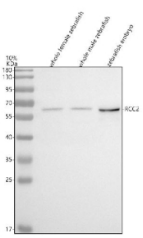
Catalog No.	Formulation	Size
RZ1303	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

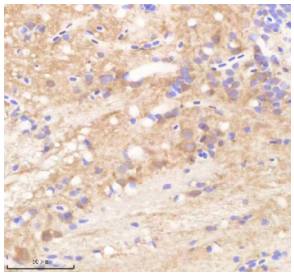
Availability	2-3 weeks
Species Reactivity	Zebrafish
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity chromatography
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q6NYE2
Localization	Cytoplasm, cell membrane, nuclear
Applications	Western Blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 2-5ug/ml
Limitations	This Zebrafish Rcc2 antibody is available for research use only.



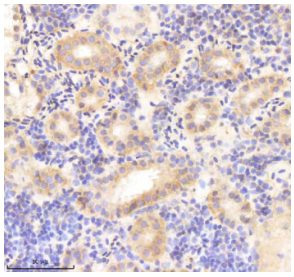
Zebrafish Rcc2 Antibody Spinal Tissue IHC. Immunohistochemistry staining of FFPE zebrafish spinal cord tissue with Rcc2 antibody, HRP-labeled secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



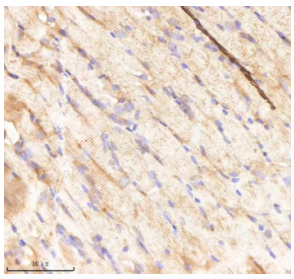
Zebrafish Rcc2 Antibody Tissue WB. Western blot analysis of Rcc2 protein using Zebrafish Rcc2 antibody and 1) zebrafish head, 2) whole female zebrafish, 3) whole male zebrafish and 4) zebrafish embryo tissue lysate. Predicted molecular weight ~54 kDa.



Zebrafish Rcc2 Antibody Brain Tissue IHC. Immunohistochemistry staining of FFPE zebrafish brain tissue with Rcc2 antibody, HRP-labeled secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Zebrafish Rcc2 Antibody Kidney Tissue IHC. Immunohistochemistry staining of FFPE zebrafish kidney tissue with Rcc2 antibody, HRP-labeled secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Zebrafish Rcc2 Antibody Muscle Tissue IHC. Immunohistochemistry staining of FFPE zebrafish muscle tissue with Rcc2 antibody, HRP-labeled secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.

Description

The Zebrafish Rcc2 antibody targets Rcc2, also known as Protein RCC2 homolog, a conserved regulator of cell cycle progression, cytoskeletal organization, and mitotic spindle dynamics in Danio rerio. Zebrafish, also known as Danio rerio, express rcc2 broadly during embryogenesis, with enriched expression in proliferative tissues such as the developing brain, somites, notochord, and early organ primordia. Rcc2 localizes primarily to the cytoplasm and mitotic apparatus, with additional association to centrosomes and spindle microtubules, reflecting its role in coordinating cell division and cytoskeletal remodeling during rapid developmental growth.

Rcc2 belongs to a family of proteins originally identified through their interaction with chromatin and cell cycle regulators, and it is functionally linked to control of mitotic progression rather than nucleotide exchange activity. In vertebrate systems, RCC2 is known to interact with small GTPase signaling pathways, particularly those involving Rac1, influencing cytoskeletal stability and cell shape. In zebrafish embryos, Rcc2 expression is prominent in regions undergoing active proliferation and morphogenetic movement, making it a useful marker for studying coordination between cell division and tissue patterning. A Zebrafish Rcc2 antibody is suitable for detecting Rcc2 in cytoplasmic and mitotic structures where cell cycle regulation intersects with cytoskeletal control.

Functionally, Rcc2 plays an important role in mitotic spindle assembly, chromosome alignment, and faithful segregation of genetic material. By modulating cytoskeletal dynamics and signaling pathways that govern microtubule behavior, Rcc2 helps ensure proper progression through mitosis. In zebrafish, these functions are critical during early embryonic cleavage stages, somitogenesis, neural tube formation, and organogenesis, when errors in cell division can have widespread developmental consequences. Disruption of rcc2 expression can lead to mitotic defects, abnormal spindle orientation, altered cell migration, and impaired tissue architecture due to uncoupling of proliferation and morphogenetic processes.

Structurally, zebrafish Rcc2 contains conserved domains that mediate interactions with cytoskeletal regulators and cell

cycle-associated proteins. These interaction surfaces allow Rcc2 to act as a scaffold coordinating signaling inputs that regulate microtubule stability and cell division timing. The zebrafish rcc2 gene maps to chromosome 10 and is regulated by transcriptional programs linked to proliferation, growth control, and developmental timing. Co-localization studies detect Rcc2 in dividing cells, particularly at spindle poles and along mitotic microtubules, as well as in cytoplasmic regions associated with dynamic actin and microtubule remodeling.

A Zebrafish Rcc2 antibody is suitable for detecting Rcc2 in studies focused on cell cycle regulation, mitosis, cytoskeletal dynamics, tissue morphogenesis, and developmental growth control in Danio rerio. Its localization pattern provides insight into how proliferative signals are integrated with structural organization during embryogenesis. Researchers use Rcc2 expression to examine mitotic defects in genetic or chemical models, analyze coordination between cell division and tissue patterning, and study pathways that couple cytoskeletal regulation to developmental progression. This antibody is supplied for research use by NSJ Bioreagents.

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

Application Notes

Optimal dilution of the Zebrafish Rcc2 antibody should be determined by the researcher.

Immunogen

E. coli-derived zebrafish Rcc2 recombinant protein (amino acids K266-L495) was used as the immunogen for the Zebrafish Rcc2 antibody.

Storage

After reconstitution, the Zebrafish Rcc2 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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