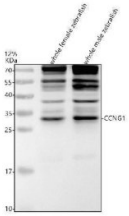
Zebrafish Cyclin G1 Antibody / CCNG1 Antibody (RZ1386)

Catalog No.	Formulation	Size
RZ1386	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	Q7ZTX1
Applications	Western blot: 0.5-1ug/ml
Limitations	This Zebrafish Cyclin G1 Antibody / CCNG1 Antibody is available for research use only.



Zebrafish Cyclin G1 Antibody WB. Western blot analysis of whole female zebrafish tissue lysate (lane 1) and whole male zebrafish tissue lysate (lane 2) using Zebrafish Cyclin G1 Antibody / CCNG1 Antibody demonstrates a prominent band at approximately 34 kDa, consistent with the reported molecular weight of full-length Cyclin G1 (CCNG1). Cyclin G1 is a member of the cyclin family that functions in cell cycle-associated signaling pathways, cellular growth control, and p53-responsive regulatory networks. CCNG1 contributes to mechanisms that coordinate cellular proliferation, checkpoint regulation, and adaptation to developmental and environmental stimuli. Additional higher molecular weight bands are also observed and may reflect Cyclin G1-associated protein complexes, modified protein species, or other factors that influence electrophoretic migration. Electrophoresis was performed on a 12% SDS-PAGE gel under reducing conditions with 30 Âµg of protein loaded per lane, followed by nitrocellulose transfer and HRP-ECL detection.

Description

Zebrafish Cyclin G1 Antibody / CCNG1 Antibody is useful for studying Cyclin G1 (CCNG1), a member of the cyclin family that functions in the regulation of cell cycle-associated signaling pathways, cellular growth control, and responses to cellular stress. Unlike classical cyclins that directly drive progression through specific stages of the cell cycle, Cyclin G1 primarily participates in regulatory networks that coordinate cellular adaptation to growth signals, DNA damage, and

environmental challenges. Through these activities, CCNG1 contributes to the maintenance of normal cellular homeostasis and developmental progression.

Cyclin G1 is widely recognized as a transcriptional target of the tumor suppressor protein p53 and participates in pathways that influence cell cycle regulation, checkpoint control, and cellular responses to stress. Expression of Cyclin G1 is frequently associated with mechanisms that monitor cellular integrity and coordinate appropriate biologic responses following DNA damage or other signaling events. These functions place CCNG1 within important regulatory pathways that influence cellular proliferation, survival, and adaptation.

In zebrafish, Cyclin G1 contributes to developmental processes that require tightly controlled cellular growth and differentiation. Proper regulation of cell cycle activity is essential during embryogenesis, tissue formation, and organ development, where balanced proliferation and developmental progression must be coordinated to support normal morphogenesis. Analysis of Cyclin G1 expression can therefore provide insight into the molecular mechanisms that govern developmental growth control and cellular regulation.

Zebrafish has become a valuable model for investigating cell cycle regulation because many pathways controlling proliferation, stress responses, and developmental signaling are highly conserved among vertebrates. The optical transparency of zebrafish embryos and accessibility of genetic manipulation allow researchers to examine cellular growth and developmental processes in vivo. Cyclin G1 is therefore frequently investigated in studies involving developmental biology, cell cycle regulation, DNA damage responses, and cellular signaling networks.

Beyond its developmental functions, Cyclin G1 participates in broader regulatory pathways that influence tissue homeostasis, cellular adaptation, and growth control. Because coordinated regulation of proliferation is required for normal tissue maintenance and organismal development, proteins involved in cell cycle-associated signaling remain important targets across multiple areas of biomedical research. CCNG1 is commonly studied in investigations of cellular stress responses, growth regulation, and mechanisms that govern cell fate decisions.

Zebrafish Cyclin G1 antibodies are commonly used in immunohistochemistry, immunofluorescence, western blotting, and related protein detection applications to evaluate Cyclin G1 expression and localization. These reagents support investigations of cell cycle regulation, developmental biology, cellular growth control, p53-associated signaling pathways, DNA damage responses, and vertebrate embryogenesis in zebrafish research models.

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 Cyclin G1 Antibody / CCNG1 Antibody should be determined empirically by the investigator.

Immunogen

An E.coli-derived Zebrafish CCNG1 recombinant protein (amino acids D22-K251) was used as the immunogen for the Zebrafish CCNG1 Antibody.

Storage

After reconstitution, the Zebrafish CCNG1 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 CCNG1 Antibody, Zebrafish Cell Cycle Regulatory Protein Antibody, Zebrafish p53 Response Protein Antibody, Zebrafish Cell Growth Regulatory Protein Antibody, Zebrafish Cyclin Family Protein Antibody, Zebrafish Cell Cycle Control Protein Antibody

Copyright © NSJ Bioreagents. All rights reserved.