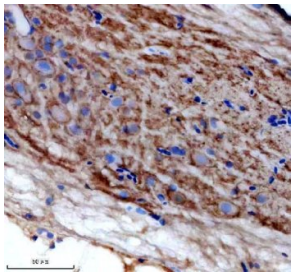
Zebrafish BCL2L1 Antibody / Bcl-XL Antibody (RZ1401)

Catalog No.	Formulation	Size
RZ1401	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	Q90Z98
Applications	Immunohistochemistry (FFPE): 2-5ug/ml
Limitations	This Zebrafish BCL2L1 Antibody / Bcl-XL Antibody is available for research use only.



Zebrafish BCL2L1 Antibody Spinal Cord IHC. Immunohistochemistry staining of paraffin-embedded zebrafish spinal cord tissue using Zebrafish BCL2L1 Antibody / Bcl-XL Antibody demonstrates diffuse cytoplasmic HRP-DAB brown staining within spinal cord-associated neural cells. The staining pattern is consistent with expression of BCL2L1 (Bcl-XL), an anti-apoptotic member of the BCL2 protein family that promotes cell survival by inhibiting mitochondrial apoptosis pathways. BCL2L1 plays important roles in neuronal survival, embryonic development, tissue homeostasis, and regulation of programmed cell death. HIER was performed using EDTA buffer prior to staining. Tissue sections were blocked with 10% goat serum and incubated with primary antibody at 2 ug/ml overnight at 4C before detection with peroxidase-conjugated goat anti-rabbit IgG and DAB chromogen.

Description

Zebrafish BCL2L1 Antibody / Bcl-XL Antibody detects BCL2L1, the zebrafish ortholog of human BCL2L1 and the gene that encodes the anti-apoptotic protein Bcl-XL. BCL2L1 is a key member of the BCL2 family of apoptosis regulators and functions to promote cell survival by inhibiting programmed cell death pathways. Through its ability to preserve mitochondrial integrity and suppress activation of pro-apoptotic signaling cascades, BCL2L1 plays an essential role in embryonic development, tissue maintenance, and cellular homeostasis. Zebrafish BCL2L1 Antibody is valuable for studies of apoptosis, developmental biology, and cell survival signaling.

BCL2L1 functions primarily at the outer mitochondrial membrane, where it antagonizes pro-apoptotic BCL2 family proteins and prevents release of cytochrome c and other apoptogenic factors. This activity helps regulate the balance between survival and death signals within cells and allows developing tissues to maintain appropriate cell populations during growth and differentiation. Tight regulation of apoptosis is essential for normal vertebrate development, making BCL2L1 an important target for developmental and cellular studies.

In zebrafish, BCL2L1 contributes to the survival of diverse cell populations during embryogenesis and organ formation. The protein is involved in developmental processes affecting the nervous system, cardiovascular tissues, and other rapidly growing embryonic structures. Because zebrafish embryos are highly amenable to visualization and genetic manipulation, BCL2L1 is frequently investigated in models examining programmed cell death, tissue morphogenesis, and developmental regulation.

Beyond its developmental functions, BCL2L1 participates in cellular responses to stress, injury, and environmental challenges. Regulation of apoptosis is critical for maintaining tissue integrity and supporting regenerative processes, and zebrafish provide a useful model for studying these mechanisms. Researchers frequently utilize Zebrafish BCL2L1 Antibody to examine pathways that influence cellular survival, mitochondrial function, and tissue regeneration.

BCL2 family proteins are central regulators of intrinsic apoptosis and have been extensively studied in cancer biology, neurobiology, and regenerative medicine. The evolutionary conservation of BCL2L1 function across vertebrates makes zebrafish an important model for investigating mechanisms that control cell survival and programmed cell death. Studies of BCL2L1 expression provide valuable insight into how tissues maintain homeostasis during development and in response to physiological stress.

Zebrafish BCL2L1 Antibody / Bcl-XL Antibody is useful for researchers studying apoptosis, cell survival, mitochondrial biology, embryonic development, tissue regeneration, stress responses, and vertebrate developmental signaling. Applications may include immunohistochemistry, immunofluorescence, western blotting, and other protein expression analyses when supported by validation data.

Learn more about Bcl-XL function, apoptosis regulation, mitochondrial survival signaling, and BCL2L1 biology on our Bcl-XL Antibody / Anti-Apoptotic Protein Antibody page.

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 BCL2L1 Antibody / Bcl-XL Antibody should be determined empirically by the investigator.

Immunogen

An E.coli-derived Zebrafish Bcl-XL/BCL2L1 recombinant protein (amino acids Q19-K215) was used as the immunogen for the Zebrafish BCL2L1 / Bcl-XL Antibody.

Storage

After reconstitution, the Zebrafish BCL2L1 / Bcl-XL 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 BCL2L1 Antibody, Zebrafish Bcl-XL Antibody, Zebrafish BCL-XL Antibody, Zebrafish BCL-X Antibody, Zebrafish Apoptosis Regulator Antibody, Zebrafish Anti-Apoptotic Protein Antibody

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