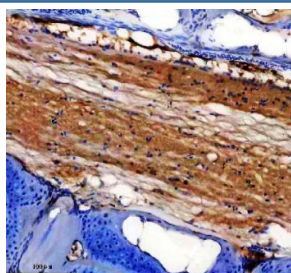


Zebrafish DTNB Antibody / Dystrobrevin Alpha Antibody (RZ1411)

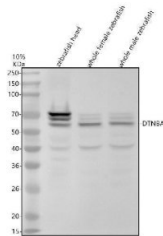
Catalog No.	Formulation	Size
RZ1411	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

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	A0A0R4IAV8
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml
Limitations	This Zebrafish DTNB Antibody / Dystrobrevin Alpha Antibody is available for research use only.



Zebrafish DTNB Antibody Spinal Cord IHC. Immunohistochemical analysis of paraffin-embedded zebrafish spinal cord tissue using Zebrafish DTNB Antibody / Dystrobrevin Alpha Antibody demonstrates strong cytoplasmic and fiber-associated HRP-DAB brown staining within elongated neural and supporting tissue structures. The staining pattern is consistent with expression of Dystrobrevin Alpha (DTNBA), a component of the dystrophin-associated protein complex involved in cytoskeletal organization, membrane stability, and neuromuscular signaling. Positive immunoreactivity highlights structures associated with spinal cord architecture and neuronal connectivity, supporting the role of DTNBA in nervous system development and maintenance. Heat-induced antigen retrieval was performed in EDTA buffer. Tissue sections were blocked with 10% goat serum and incubated with DTNBA antibody (2 ug/ml) overnight at 4°C, followed by Peroxidase Conjugated Goat Anti-rabbit IgG and DAB chromogen detection.



Zebrafish DTNB Antibody Zebrafish Tissue WB. Western blot analysis of 1) zebrafish head tissue lysate, 2) whole female zebrafish tissue lysate, and 3) whole male zebrafish tissue lysate using Zebrafish DTNB Antibody / Dystrobrevin Alpha Antibody. A prominent band is detected at approximately 66 kDa, consistent with the expected molecular weight of DTNBA / Dystrobrevin Alpha. Additional lower-intensity bands are observed and may represent DTNBA isoforms, post-translationally modified species, partial degradation products, or background reactivity commonly seen in complex whole-tissue lysates. Electrophoresis was performed on a 10% SDS-PAGE gel under reducing conditions with 30 ug sample per lane. Membranes were blocked with 5% non-fat milk/TBS and incubated with rabbit anti-DTNBA antibody at 0.5 ug/ml overnight at 4°C, followed by goat anti-rabbit IgG-HRP secondary antibody and ECL detection.

Description

Zebrafish DTNB Antibody / Dystrobrevin Alpha Antibody recognizes Dystrobrevin Alpha, a cytoplasmic scaffold protein that functions as an important component of the dystrophin-associated protein complex. Dystrobrevin family proteins interact with dystrophin, syntrophins, and other membrane-associated signaling molecules to help maintain the structural stability and functional organization of muscle and nervous system tissues. Through these interactions, DTNB contributes to communication between the intracellular cytoskeleton and the plasma membrane, supporting cellular integrity, membrane specialization, and signaling pathways required for normal tissue function.

Zebrafish DTNB Antibody is valuable for studying skeletal muscle development, neuromuscular junction organization, and muscle maintenance in zebrafish. Dystrobrevin Alpha participates in the assembly and stabilization of the dystrophin glycoprotein complex, a multi-protein structure that protects muscle cell membranes from mechanical stress generated during contraction and movement. Proper organization of this complex is essential for maintaining muscle architecture, coordinating signaling events, and preserving membrane integrity throughout vertebrate development.

Zebrafish DTNB Antibody is also useful for investigations of cytoskeletal architecture and membrane-associated signaling networks. Dystrobrevin Alpha functions as a molecular scaffold that recruits signaling proteins to specialized membrane domains, helping regulate pathways involved in cellular differentiation, tissue organization, and maintenance of highly structured cell types. Because zebrafish embryos allow direct visualization of developing muscle fibers and associated tissues, DTNB expression studies can provide valuable insights into the molecular mechanisms that govern vertebrate tissue formation and maturation.

Zebrafish DTNB Antibody is additionally useful for studying nervous system development and synaptic organization. Dystrobrevin Alpha is expressed in neuronal tissues where it contributes to the localization of signaling proteins and maintenance of specialized membrane structures. Interactions between dystrobrevin family members and other components of the dystrophin-associated protein complex are believed to support synaptic stability, neuronal communication, and cellular responses to mechanical and biochemical stimuli. These functions make DTNB an important marker for investigations of neurodevelopment, neuronal connectivity, and nervous system maintenance in zebrafish models.

Zebrafish DTNB Antibody supports research involving muscle biology, neuromuscular development, cytoskeletal regulation, and dystrophin-associated signaling pathways. The evolutionary conservation of dystrophin complex components between zebrafish and mammals has established zebrafish as a valuable model for studying mechanisms relevant to muscular dystrophy, neuromuscular disorders, and membrane stability. Consequently, Dystrobrevin Alpha remains an important target for investigations of muscle structure, neuronal connectivity, vertebrate development, and disease-associated signaling pathways.

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 DTNB Antibody / Dystrobrevin Alpha Antibody should be determined empirically by the investigator.

Immunogen

An E.coli-derived Zebrafish DTNBA recombinant protein (amino acids A13-Q544) was used as the immunogen for the Zebrafish DTNBA Antibody.

Storage

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

Alternate Names

Zebrafish DTNB Antibody, Zebrafish Dystrobrevin Alpha Antibody, Zebrafish Alpha Dystrobrevin Antibody, Zebrafish DTNBA Antibody, Zebrafish Dystrophin Associated Protein Antibody, Zebrafish Dystrophin Complex Protein Antibody