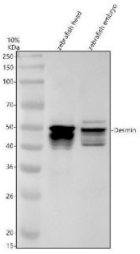
Zebrafish Desmin Antibody / DES Antibody (RZ1441)

Catalog No.	Formulation	Size
RZ1441	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	F1R8W4
Applications	Western Blot : 0.5-1ug/ml
Limitations	This Zebrafish Desmin Antibody / DES Antibody is available for research use only.



Zebrafish Desmin Antibody WB. Western blot analysis of DESMA using anti-Desmin antibody demonstrates prominent immunoreactive bands at approximately 50 kDa in zebrafish head and embryo tissue lysates, consistent with the expected molecular weight of Desmin, the zebrafish ortholog of human DES. Desmin is a type III intermediate filament protein that forms an essential component of the muscle cytoskeleton, providing structural support and mechanical integrity within skeletal, cardiac, and smooth muscle cells. The observed expression in both developmental and adult-associated tissues is consistent with the established role of Desmin in muscle formation, cytoskeletal organization, and maintenance of tissue architecture. Western blot was performed using 0.5 ug/ml primary antibody. Predicted molecular weight: ~54 kDa.

Description

Zebrafish Desmin Antibody / DES Antibody is designed for the detection and study of DESMA, the zebrafish ortholog of human Desmin (DES), a type III intermediate filament protein that serves as a major structural component of muscle cells. Zebrafish Desmin Antibody enables investigation of cytoskeletal networks that maintain cellular architecture and mechanical stability within skeletal, cardiac, and smooth muscle tissues. Through these functions, Desmin contributes to muscle organization, tissue integrity, and normal vertebrate development.

Desmin belongs to the intermediate filament family of cytoskeletal proteins and forms supportive intracellular networks

that help preserve cell shape and structural cohesion. These filament systems connect contractile elements, anchor organelles, and provide mechanical resilience within muscle cells. Zebrafish Desmin Antibody is useful for studying the molecular architecture of muscle tissue and the mechanisms that coordinate muscle assembly and maintenance throughout development and adulthood.

Zebrafish Desmin Antibody supports research into muscle development and vertebrate physiology using one of the most widely utilized animal models in developmental biology. Desmin expression is highly conserved among vertebrates and plays important roles during myogenesis, muscle maturation, and organization of contractile tissues. Studies utilizing Zebrafish Desmin Antibody can help characterize expression patterns associated with muscle formation, growth, and structural specialization.

Beyond developmental biology, Desmin has attracted significant interest in cardiovascular biology, skeletal muscle physiology, tissue remodeling, and cytoskeletal organization. Because intermediate filaments provide essential structural support within muscle cells and contribute to intracellular connectivity, Desmin remains an important target for investigations examining how cytoskeletal networks maintain tissue function and respond to physiologic stress. Zebrafish Desmin Antibody supports these studies by enabling characterization of Desmin expression in developmental and adult tissues.

Zebrafish Desmin Antibody is useful for investigating muscle biology, intermediate filament organization, cytoskeletal regulation, tissue development, and vertebrate physiology. Researchers utilize Zebrafish Desmin Antibody to better understand molecular mechanisms governing muscle structure, cellular architecture, tissue integrity, and cytoskeleton-dependent regulatory pathways.

This antibody can be compared with our Desmin Antibody (clone DES/2960R) for detection of desmin as a muscle marker with validation supported by gene knockdown.

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 Desmin Antibody / DES Antibody should be determined empirically by the investigator.

Immunogen

An E.coli-derived Zebrafish DESMA recombinant protein (amino acids S71-K370) was used as the immunogen for the Zebrafish DESMA / Desmin Antibody.

Storage

After reconstitution, the Zebrafish DESMA / Desmin 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 Desmin Antibody, Zebrafish DES Antibody, Zebrafish DESMA Antibody, Zebrafish Intermediate Filament Protein Antibody, Zebrafish Muscle Cytoskeleton Protein Antibody, Zebrafish Muscle Structural Protein Antibody, Zebrafish Myocyte Intermediate Filament Antibody

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