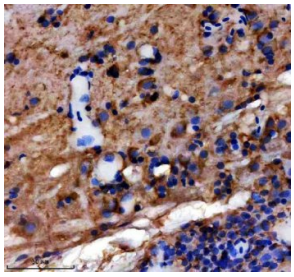
Zebrafish Vimentin Antibody / VIM Antibody (RZ1478)

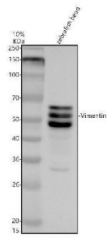
Catalog No.	Formulation	Size
RZ1478	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

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	Q9YHX5
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 2-5ug/ml
Limitations	This Zebrafish Vimentin Antibody / VIM Antibody is available for research use only.



Zebrafish Vimentin Antibody / VIM Antibody Zebrafish Brain IHC. Immunohistochemical staining of paraffin-embedded zebrafish brain tissue using Zebrafish Vimentin Antibody / VIM Antibody. Vimentin expression is detected predominantly within the cytoplasm of neural support and mesenchymal-associated cells, consistent with its role as a type III intermediate filament protein involved in cytoskeletal organization, tissue development, and cellular remodeling. Heat-induced epitope retrieval was performed in EDTA buffer prior to staining. Tissue sections were blocked with 10% goat serum and incubated with the primary antibody (2 ug/ml) overnight at 4Â°C, followed by an HRP-conjugated goat anti-rabbit secondary antibody and DAB chromogen for visualization.



Zebrafish Vimentin Antibody / VIM Antibody Zebrafish Head WB. Western blot analysis of zebrafish head tissue lysate using Zebrafish Vimentin Antibody / VIM Antibody. Two prominent immunoreactive bands are detected at approximately 54 kDa, consistent with the expected molecular weight of vimentin. The closely migrating bands likely represent different post-translationally modified forms or isoforms of the endogenous protein. Proteins were separated under reducing conditions, transferred to a nitrocellulose membrane, and detected following incubation with the primary antibody (0.5 ug/ml) and an HRP-conjugated goat anti-rabbit secondary antibody using ECL detection.

Description

Zebrafish Vimentin Antibody / VIM Antibody recognizes zebrafish VIM, the ortholog of human vimentin, a type III intermediate filament protein that forms an essential component of the cytoskeleton in mesenchymal cells. Vimentin provides structural support while regulating cell shape, mechanical stability, migration, and intracellular organization. During zebrafish embryogenesis, vimentin contributes to tissue morphogenesis, organ development, wound healing, and cellular remodeling, making Zebrafish Vimentin Antibody / VIM Antibody an excellent tool for studies of developmental biology, cytoskeletal organization, and regenerative processes.

Vimentin intermediate filaments interact dynamically with microtubules and actin filaments to maintain cellular architecture and coordinate responses to mechanical stress. In zebrafish, vimentin expression is associated with developing mesenchymal tissues, connective tissues, endothelial cells, and additional cell populations undergoing migration and differentiation. The protein plays important roles in epithelial-to-mesenchymal transition, tissue repair, angiogenesis, and regenerative responses, all of which are highly conserved among vertebrates.

Because zebrafish possess remarkable regenerative capacity, vimentin has become an important marker for investigating fin regeneration, cardiac repair, nervous system injury, inflammation, and wound healing. Altered vimentin expression is also associated with epithelial-to-mesenchymal transition, fibrosis, tumor progression, and metastatic behavior in mammalian systems, making zebrafish an informative model for studying cytoskeletal remodeling and disease mechanisms relevant to human biology.

Zebrafish Vimentin Antibody / VIM Antibody is suitable for immunohistochemistry, immunofluorescence, western blotting, and related immunodetection applications requiring reliable detection of endogenous vimentin. Researchers commonly use this antibody to investigate mesenchymal differentiation, cytoskeletal dynamics, tissue regeneration, developmental biology, angiogenesis, and epithelial-to-mesenchymal transition. By supporting studies of one of the principal intermediate filament proteins, Zebrafish Vimentin Antibody / VIM Antibody provides a dependable reagent for developmental, regenerative, and cell biology research.

Explore our Protein Microarray Validated Vimentin Antibody page to learn more about vimentin biology, mesenchymal cell markers, and additional validated products.

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 Vimentin Antibody / VIM Antibody should be determined empirically by the investigator.

Immunogen

An E.coli-derived Zebrafish Vimentin/VIM recombinant protein (amino acids S63-N362) was used as the immunogen for the Zebrafish Vimentin Antibody.

Storage

After reconstitution, the Zebrafish Vimentin 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 Vimentin antibody, Zebrafish VIM antibody, Zebrafish Intermediate Filament Protein antibody, Zebrafish Type III Intermediate Filament antibody, Zebrafish Mesenchymal Marker antibody, Zebrafish Vim antibody

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