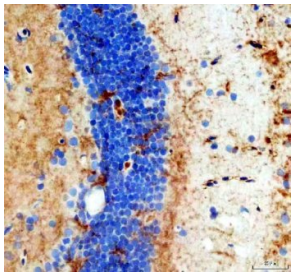
# Zebrafish VEGF Antibody / VEGFAB Antibody (RZ1332)

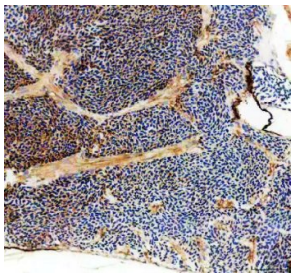
| Catalog No. | Formulation | Size |
|---|---|---|
| RZ1332 | 0.5mg/ml if reconstituted with 0.2ml sterile DI water | 100 ug |

**Bulk quote request**

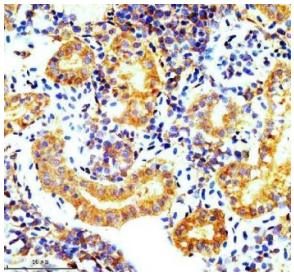
| | |
|---|---|
| **Species Reactivity** | Zebrafish |
| **Format** | Antigen affinity purified |
| **Host** | Rabbit |
| **Clonality** | Polyclonal (rabbit origin) |
| **Isotype** | Rabbit Ig |
| **Buffer** | Lyophilized from a buffered saline solution containing 2% trehalose. Reconstitute with 0.2 mL distilled water to yield a final antibody concentration of 500 ug/ml. |
| **UniProt** | A0A8M1P9F8 |
| **Applications** | Western blot: 0.5-1ug/ml<br>Immunohistochemistry (FFPE): 2-5ug/ml |
| **Limitations** | This Zebrafish VEGF Antibody / VEGFAB Antibody is available for research use only. |



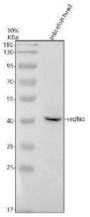
Zebrafish VEGF / VEGFAB Antibody Brain IHC. Immunohistochemistry staining of FFPE zebrafish brain tissue using Zebrafish VEGF Antibody demonstrates cytoplasmic and extracellular HRP-DAB brown staining within neural tissue compartments adjacent to densely cellular brain regions. The staining pattern is consistent with expression of Vascular Endothelial Growth Factor AB (VEGFAB), a secreted angiogenic growth factor that regulates endothelial cell signaling, blood vessel formation, vascular permeability, and tissue vascularization. Signal is observed within brain-associated tissue structures, reflecting the established role of VEGF family proteins in neurovascular development and maintenance of the vertebrate vascular system. Heat mediated antigen retrieval was performed in EDTA buffer. Primary antibody was incubated overnight at 4Â°C followed by detection using a peroxidase-conjugated goat anti-rabbit secondary antibody and DAB chromogen.



Zebrafish VEGF / VEGFAB Antibody Heart IHC. Immunohistochemistry staining of FFPE zebrafish heart tissue using Zebrafish VEGF Antibody demonstrates cytoplasmic and extracellular HRP-DAB brown staining within myocardial and vascular-associated tissue compartments. The staining pattern is consistent with expression of Vascular Endothelial Growth Factor AB (VEGFAB), a secreted angiogenic growth factor that regulates endothelial cell signaling, blood vessel formation, vascular permeability, and cardiovascular development. Signal is observed in regions associated with cardiac tissue architecture and vascular support structures, reflecting the essential role of VEGF signaling in maintenance and development of the vertebrate circulatory system. Heat mediated antigen retrieval was performed in EDTA buffer. Primary antibody was incubated overnight at 4Â°C followed by detection using a peroxidase-conjugated goat anti-rabbit secondary antibody and DAB chromogen.



Zebrafish VEGF / VEGFAB Antibody Kidney IHC. Immunohistochemistry staining of FFPE zebrafish kidney tissue using Zebrafish VEGF Antibody demonstrates strong cytoplasmic HRP-DAB brown staining within renal tubular epithelial structures and associated glandular compartments. The staining pattern is consistent with expression of Vascular Endothelial Growth Factor AB (VEGFAB), a secreted angiogenic growth factor that regulates endothelial cell signaling, vascular permeability, blood vessel formation, and tissue vascularization. Prominent staining within renal epithelial populations is consistent with the importance of VEGF signaling in maintenance of vascular networks, tissue perfusion, and organ homeostasis. Heat mediated antigen retrieval was performed in EDTA buffer. Primary antibody was incubated overnight at 4Â°C followed by detection using a peroxidase-conjugated goat anti-rabbit secondary antibody and DAB chromogen.



Zebrafish VEGF / VEGFAB Antibody Angiogenesis WB. Western blot analysis of zebrafish head tissue lysate using Zebrafish VEGF Antibody demonstrates a distinct immunoreactive band at approximately 40 kDa corresponding to Vascular Endothelial Growth Factor AB (VEGFAB). VEGFAB is a secreted angiogenic growth factor that regulates endothelial cell signaling, blood vessel formation, vascular permeability, and cardiovascular development. The observed band migrates at a higher apparent molecular weight than the predicted size of VEGFAB (~26 kDa), which may reflect post-translational modification or alternative protein forms present in zebrafish tissue. Electrophoresis was performed on a 10% SDS-PAGE gel under reducing conditions followed by transfer to a nitrocellulose membrane. Signal was detected using an HRP-conjugated secondary antibody and enhanced chemiluminescent substrate. Predicted molecular weight: ~26 kDa; observed molecular weight: ~40 kDa.

## Description

Zebrafish VEGF Antibody / VEGFAB Antibody recognizes Vascular Endothelial Growth Factor AB (VEGFAB), a secreted signaling protein that plays a central role in angiogenesis, vascular development, and endothelial cell biology. VEGFAB belongs to the vascular endothelial growth factor family, a group of cytokines that regulate blood vessel formation, vascular permeability, endothelial cell proliferation, migration, and survival. Through activation of VEGF receptor signaling pathways, VEGFAB contributes to the establishment and maintenance of the vascular network required for normal embryonic development and physiological homeostasis. The zebrafish model has become particularly valuable for studying VEGF signaling because of its optical transparency and the ability to directly visualize blood vessel formation in living embryos.

Angiogenesis is a tightly regulated biological process that coordinates the growth and remodeling of blood vessels throughout development and tissue repair. VEGFAB functions as an important regulator of endothelial cell behavior, helping direct the formation of vascular structures during embryogenesis. In zebrafish, VEGFAB contributes to cardiovascular development, vascular patterning, circulation establishment, and tissue perfusion. Disruption of VEGF

signaling pathways can result in abnormal vessel formation, impaired blood flow, and developmental defects, highlighting the essential role of VEGFAB in vascular biology.

Members of the VEGF family are also involved in numerous physiological and pathological processes beyond embryonic development. These growth factors regulate wound healing, tissue regeneration, inflammatory responses, and adaptation to hypoxic conditions. Because zebrafish possess extensive regenerative capabilities and highly conserved vascular signaling pathways, VEGFAB has become an important target in studies investigating regenerative biology, vascular remodeling, and tissue repair mechanisms. Researchers frequently examine VEGFAB expression when evaluating factors that influence angiogenesis and endothelial cell function.

VEGF signaling pathways are widely studied because of their importance in controlling vessel growth, endothelial cell communication, and tissue vascularization. Experimental modulation of VEGF activity is commonly used to investigate the molecular mechanisms governing blood vessel formation and maintenance. Zebrafish models provide a powerful platform for analyzing these pathways in vivo, allowing researchers to observe dynamic vascular responses and assess the effects of genetic or environmental perturbations on angiogenesis. Consequently, VEGFAB remains a valuable target in developmental biology, cardiovascular research, regenerative medicine, and vascular signaling studies.

At NSJ Bioreagents, we provide highly validated antibodies for angiogenesis, cardiovascular biology, developmental biology, and zebrafish research. Zebrafish VEGF Antibody / VEGFAB Antibody targets a key regulator of endothelial cell signaling and blood vessel formation. VEGFAB expression is widely studied in the context of angiogenesis, vascular development, cardiovascular function, tissue regeneration, and hypoxia-responsive signaling pathways. Continued investigation of VEGFAB is expanding our understanding of the molecular mechanisms that govern vascular growth, tissue perfusion, and vertebrate development.

For additional information about VEGF biology, validated applications, and related products, learn more about our VEGF Antibody, an Angiogenesis Growth Factor Antibody for investigating endothelial signaling, tumor angiogenesis, vascular remodeling, and VEGF-mediated growth factor 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 VEGF Antibody / VEGFAB Antibody should be determined empirically by the investigator.

## Immunogen

An E.coli-derived Zebrafish VEGFAB recombinant protein (amino acids A24-R252) was used as the immunogen for the Zebrafish VEGF Antibody.

## Storage

After reconstitution, the Zebrafish VEGF 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 VEGFAB Antibody, Zebrafish Vascular Endothelial Growth Factor AB Antibody, Zebrafish Angiogenic Growth Factor Antibody, Zebrafish Vascular Growth Factor Antibody, Zebrafish Endothelial Growth Factor Antibody, Zebrafish Blood Vessel Development Antibody

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