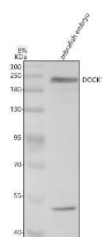


Zebrafish DOCK1 Antibody / Dedicator of Cytokinesis 1 Antibody (RZ1432)

Catalog No.	Formulation	Size
RZ1432	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	A8E1V6
Applications	Western Blot : 0.5-1ug/ml
Limitations	This Zebrafish DOCK1 Antibody / Dedicator of Cytokinesis 1 Antibody is available for research use only.



Zebrafish DOCK1 Antibody WB. Western blot analysis of DOCK1 using anti-DOCK1 antibody demonstrates a prominent immunoreactive band at approximately 215-230 kDa in zebrafish embryo lysate, consistent with the expected molecular weight of Dedicator of Cytokinesis 1 (DOCK1). DOCK1, also known as DOCK180, is a Rac guanine nucleotide exchange factor that regulates cytoskeletal organization, cellular adhesion, and signal transduction pathways involved in tissue morphogenesis and developmental processes. The observed embryonic expression is consistent with the established role of DOCK1 in coordinating cellular dynamics, migration-associated signaling, and vertebrate development. Western blot was performed using 0.5 ug/ml primary antibody. Predicted molecular weight: ~215 kDa.

Description

Zebrafish DOCK1 Antibody / Dedicator of Cytokinesis 1 Antibody is designed for the detection and study of DOCK1 (Dedicator of Cytokinesis 1), a member of the DOCK family of guanine nucleotide exchange factors that regulate signaling through Rac-family small GTPases. DOCK1, also known as DOCK180, functions as an important mediator of intracellular signaling pathways that coordinate cytoskeletal organization, cellular morphology, and dynamic responses to extracellular cues. Through these activities, DOCK1 contributes to developmental processes requiring coordinated cellular movement and tissue organization.

Dedicator of Cytokinesis 1 functions by promoting activation of Rac GTPases, which regulate actin cytoskeletal remodeling and numerous downstream signaling pathways. These signaling networks influence cellular shape, polarity, adhesion, and migratory behavior, allowing cells to adapt to changing developmental and environmental conditions. As a result, DOCK1 serves as an important regulator of communication between extracellular signals and intracellular structural responses.

Zebrafish provide a valuable vertebrate model for investigating cytoskeletal regulation, developmental signaling, and tissue morphogenesis. DOCK1 expression has been associated with biologic pathways involved in embryonic development, cellular organization, tissue remodeling, and coordinated cell behavior. Studies of DOCK family proteins have demonstrated their importance in controlling cellular dynamics required for normal tissue formation and maintenance.

Beyond developmental biology, DOCK1 has attracted interest in research involving cell migration, neuronal development, wound repair, immune cell function, and disease-associated signaling pathways. Because Rac-mediated signaling influences numerous aspects of cellular physiology, DOCK1 remains an important target for investigations examining how cytoskeletal regulation contributes to tissue development and cellular communication. Its central role in Rac activation has established DOCK1 as a widely studied component of signaling networks that govern cellular behavior.

Zebrafish DOCK1 Antibody is useful for investigating Rac signaling, cytoskeletal regulation, developmental biology, and vertebrate morphogenesis pathways. Researchers utilize DOCK1 expression studies to better understand molecular mechanisms governing cellular organization, tissue development, intracellular signaling, and regulation of dynamic cellular processes.

Learn more about DOCK1 and its role in cell migration, cytoskeletal remodeling, and cellular adhesion on our [DOCK1 Antibody / Cell Migration 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 DOCK1 Antibody / Dedicator of Cytokinesis 1 Antibody should be determined empirically by the investigator.

Immunogen

An E.coli-derived Zebrafish DOCK1 recombinant protein (amino acids S264-E1722) was used as the immunogen for the Zebrafish DOCK1 Antibody.

Storage

After reconstitution, the Zebrafish DOCK1 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 DOCK1 Antibody, Zebrafish Dedicator of Cytokinesis 1 Antibody, Zebrafish DOCK180 Antibody, Zebrafish Rac Activator Antibody, Zebrafish Rho GEF Family Protein Antibody, Zebrafish Cytoskeletal Signaling Protein Antibody, Zebrafish Cell Motility Protein Antibody

