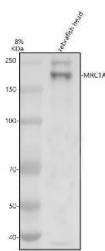


Zebrafish MRC1 Antibody / Mannose Receptor Antibody (RZ1412)

Catalog No.	Formulation	Size
RZ1412	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	A0A0R4INM0
Applications	Western Blot : 0.5-1ug/ml
Limitations	This Zebrafish MRC1 Antibody / Mannose Receptor Antibody is available for research use only.



Zebrafish MRC1 Antibody Head WB. Western blot analysis of zebrafish head tissue lysate using Zebrafish MRC1 Antibody / Mannose Receptor Antibody. A distinct immunoreactive band is detected at approximately 165 kDa, consistent with the expected molecular weight of MRC1A (Mannose Receptor 1A). MRC1A is a C-type lectin receptor involved in carbohydrate recognition, receptor-mediated endocytosis, pathogen sensing, and innate immune regulation. The observed high molecular weight band is characteristic of the heavily glycosylated mannose receptor protein and supports detection of endogenous MRC1A expression in zebrafish tissue. Electrophoresis was performed on an 8% SDS-PAGE gel under reducing conditions using zebrafish head lysate. Membranes were blocked with 5% non-fat milk/TBS and incubated with rabbit anti-MRC1A antibody at 0.5 ug/ml overnight at 4°C, followed by goat anti-rabbit IgG-HRP secondary antibody and ECL detection using the Tanon 5200 imaging system. Predicted molecular weight: ~163 kDa. Observed molecular weight: ~165 kDa.

Description

Zebrafish MRC1 Antibody / Mannose Receptor Antibody recognizes MRC1A, a member of the C-type lectin receptor family that functions as a pattern-recognition and endocytic receptor. Mannose receptors bind carbohydrate structures containing mannose, fucose, and N-acetylglucosamine residues that are commonly present on microorganisms, glycoproteins, and cellular debris. Through these interactions, MRC1 contributes to ligand uptake, cellular trafficking, and

recognition of extracellular molecules involved in immune surveillance and tissue homeostasis.

Zebrafish MRC1 Antibody is valuable for studying innate immune pathways and receptor-mediated endocytosis in zebrafish. Mannose receptors participate in the internalization and processing of glycosylated molecules and are important components of host defense mechanisms. By recognizing carbohydrate patterns associated with pathogens and endogenous ligands, MRC1 helps coordinate cellular responses involved in antigen processing, clearance of extracellular material, and maintenance of tissue integrity.

Zebrafish MRC1 Antibody is also useful for investigations of macrophage biology and cellular scavenging pathways. Mannose receptors are frequently associated with specialized phagocytic and antigen-presenting cell populations where they contribute to uptake of extracellular proteins, glycoproteins, and microbial products. In zebrafish, studies of MRC1 expression can provide insights into the development and function of innate immune cell populations as well as the molecular mechanisms that regulate host-pathogen interactions and inflammatory responses.

Zebrafish MRC1 Antibody supports research involving lectin receptor biology, carbohydrate recognition pathways, endocytosis, and immune system development. Because C-type lectin receptors are evolutionarily conserved across vertebrate species, zebrafish provide a valuable model for investigating receptor-mediated signaling and innate immune mechanisms. Expression analysis of MRC1 can therefore contribute to a better understanding of immune regulation, pathogen recognition, and tissue-specific cellular responses during development and disease.

Zebrafish MRC1 Antibody is additionally relevant for studies examining the interaction between immune cells and the extracellular environment. By mediating the uptake and processing of glycosylated ligands, MRC1 influences cellular communication, clearance pathways, and maintenance of tissue homeostasis. Consequently, Mannose Receptor remains an important target for investigations of innate immunity, receptor trafficking, inflammatory regulation, and vertebrate developmental biology.

Researchers studying macrophage biology, antigen uptake, and innate immune regulation may also be interested in our [CD206 Antibody / Macrophage Mannose Receptor Antibody](#).

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 MRC1 Antibody / Mannose Receptor Antibody should be determined empirically by the investigator.

Immunogen

An E.coli-derived Zebrafish MRC1A recombinant protein (amino acids N790-A1440) was used as the immunogen for the Zebrafish MRC1A Antibody.

Storage

After reconstitution, the Zebrafish MRC1A 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 MRC1 Antibody, Zebrafish Mannose Receptor Antibody, Zebrafish MRC1A Antibody, Zebrafish Macrophage Mannose Receptor Antibody, Zebrafish C-Type Lectin Receptor Antibody, Zebrafish Endocytic Receptor Antibody

