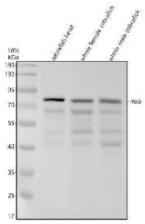
Zebrafish MX1 Antibody / MXA Antibody (RZ1393)

Catalog No.	Formulation	Size
RZ1393	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	Q8JH68
Applications	Western blot: 0.5-1ug/ml
Limitations	This Zebrafish MX1 Antibody / MXA Antibody is available for research use only.



Zebrafish MX1 Antibody Antiviral Response WB. Western blot analysis of zebrafish head tissue lysate (lane 1), whole female zebrafish tissue lysate (lane 2), and whole male zebrafish tissue lysate (lane 3) using Zebrafish MX1 Antibody / MXA Antibody demonstrates a prominent band at approximately 73 kDa, consistent with the expected molecular weight of MXA. MXA is an interferon-inducible dynamin-like GTPase and a functional zebrafish ortholog of mammalian MX1 that plays a central role in innate antiviral immunity. Members of the Mx protein family are induced by interferon signaling and contribute to host defense by restricting viral replication and supporting antiviral response pathways. Additional lower molecular weight bands are observed in some tissue lysates and may represent processed protein species, alternative forms, or other factors influencing electrophoretic migration. Detection of MXA across multiple zebrafish tissue preparations is consistent with its role in innate immune regulation and antiviral defense mechanisms. Electrophoresis was performed on a 10% SDS-PAGE gel under reducing conditions with 30 Âµg of protein loaded per lane, followed by nitrocellulose transfer and HRP-ECL detection.

Description

Zebrafish MX1 Antibody / MXA Antibody is useful for studying MXA, a member of the myxovirus resistance (Mx) family of interferon-induced dynamin-like GTPases that function as important mediators of innate antiviral immunity. MX proteins

are rapidly induced following activation of interferon signaling pathways and contribute to cellular defense mechanisms that restrict viral replication and dissemination. Through these activities, MXA plays a central role in host antiviral responses and innate immune system function.

MXA is considered a functional zebrafish ortholog of mammalian MX1 and belongs to a highly conserved family of large GTP-binding proteins involved in antiviral defense. Members of the Mx family recognize and interfere with critical stages of viral replication, helping to establish an intracellular environment that limits infection. Because these proteins act downstream of interferon signaling, they are widely utilized as markers of antiviral pathway activation and innate immune responsiveness.

In zebrafish, MXA expression is strongly associated with interferon-mediated immune responses and host defense pathways activated following viral challenge. Analysis of MXA expression can therefore provide valuable insight into innate immune signaling, antiviral defense mechanisms, pathogen-host interactions, and regulation of interferon-responsive genes. These characteristics have made MXA an important target in studies of infectious disease biology and vertebrate immunity.

Zebrafish has emerged as a valuable model for investigating innate immune responses because many components of interferon signaling and antiviral defense pathways are evolutionarily conserved among vertebrates. The accessibility of zebrafish embryos and the availability of genetic tools enable detailed analysis of immune regulation, pathogen responses, and mechanisms controlling host defense. As a result, MXA is frequently utilized as a marker of antiviral activity and innate immune pathway engagement.

Beyond its role in antiviral defense, MXA contributes to broader investigations of immune regulation and cellular stress responses. Because interferon-inducible genes occupy central positions within host defense networks, proteins such as MXA remain important subjects of research in immunology, infectious disease biology, and molecular mechanisms of innate immunity.

Zebrafish MX1 antibodies are commonly used in immunohistochemistry, immunofluorescence, western blotting, and related protein detection applications to evaluate MXA expression and localization. These reagents support investigations of antiviral defense, interferon signaling, innate immunity, host-pathogen interactions, immune activation, and vertebrate infectious disease biology.

Learn more about MX1 function in interferon signaling, antiviral defense mechanisms, innate immunity, and host-pathogen interactions on our MX1 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 MX1 Antibody / MXA Antibody should be determined empirically by the investigator.

Immunogen

An E.coli-derived Zebrafish MXA recombinant protein (amino acids Q351-Q646) was used as the immunogen for the Zebrafish MX1 / MXA Antibody.

Storage

After reconstitution, the Zebrafish MX1 / MXA 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 MXA Antibody, Zebrafish Myxovirus Resistance Protein Antibody, Zebrafish Interferon-Induced GTPase

Antibody, Zebrafish Antiviral Response Protein Antibody, Zebrafish Mx Protein Antibody, Zebrafish Innate Immune Response Protein Antibody

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