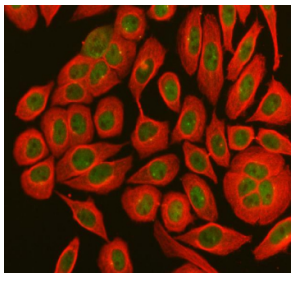
MX1 Antibody / Antiviral Response Protein Antibody (FY13028)

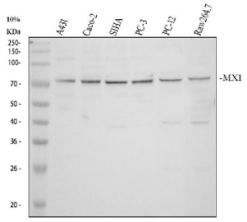
Catalog No.	Formulation	Size
FY13028	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml	100 ug

Bulk quote request

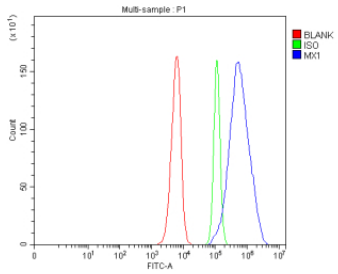
Availability	1-2 days
Species Reactivity	Human, Mouse, Rat
Format	Lyophilized
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Immunogen affinity purified
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	P20591
Localization	Cytoplasm, nucleus
Applications	Western Blot: 0.25-0.5ug/ml Immunocytochemistry/Immunofluorescence: 5ug/ml Flow cytometry: 1-3ug/million cells ELISA: 0.1-0.5ug/ml
Limitations	This MX1 Antibody / Antiviral Response Protein Antibody is available for research use only.



MX1 Antibody Nuclear Localization IF. Immunofluorescent staining of SiHa cells using MX1 Antibody / Antiviral Response Protein Antibody demonstrates strong green fluorescence predominantly localized within the nucleus and perinuclear compartment. Alpha Tubulin is visualized in red, highlighting the cytoskeletal network, while MX1 staining reveals expression of the interferon-inducible antiviral response protein. MX1 (Myxovirus Resistance Protein 1) is a dynamin-like GTPase that functions downstream of interferon signaling pathways and contributes to innate immune defense by restricting viral replication and supporting host antiviral responses. The observed staining pattern is consistent with the intracellular localization of MX1 and supports the utility of this antibody for immunofluorescent detection of antiviral response pathways and interferon-regulated proteins. Enzyme-mediated antigen retrieval was performed for 15 minutes prior to overnight primary antibody incubation and fluorescent secondary antibody detection.



MX1 Antibody Human Mouse Rat WB. Western blot analysis of human whole cell lysate (lane 1), human Caco-2 cells (lane 2), human SiHa cells (lane 3), human PC-3 cells (lane 4), rat PC-12 cells (lane 5), and mouse RAW264.7 cells (lane 6) using MX1 Antibody / Antiviral Response Protein Antibody demonstrates a prominent band at approximately 76 kDa, consistent with the expected molecular weight of MX1. Also known as Myxovirus Resistance Protein 1 (MxA), MX1 is an interferon-inducible dynamin-like GTPase that functions as a key mediator of innate antiviral immunity. MX1 is activated downstream of interferon signaling pathways and contributes to host defense by restricting viral replication and supporting antiviral response mechanisms. Detection of a consistent ~76 kDa band across human, rat, and mouse cell lysates supports the utility of this antibody for cross-species western blot analysis of MX1 expression. Electrophoresis was performed on a 10% SDS-PAGE gel followed by nitrocellulose transfer and HRP-ECL detection.



MX1 Antibody SiHa FACS. Flow cytometric analysis of fixed and permeabilized SiHa cells using MX1 Antibody / Antiviral Response Protein Antibody demonstrates a pronounced rightward shift of the MX1-positive population (blue) relative to both the isotype control (green) and unstained control (red), consistent with intracellular expression of MX1. Also known as Myxovirus Resistance Protein 1 (MxA), MX1 is an interferon-inducible dynamin-like GTPase that functions as a key mediator of innate antiviral immunity and host defense. MX1 is activated downstream of interferon signaling pathways and contributes to restriction of viral replication through multiple antiviral mechanisms. The distinct fluorescence shift supports the utility of this antibody for flow cytometric detection of MX1 expression and evaluation of interferon-responsive antiviral pathways. Cells were fixed, permeabilized, and stained using rabbit anti-MX1 antibody followed by DyLight 488-conjugated secondary antibody detection.

Description

MX1 antibody is useful for studying MX1 (Myxovirus Resistance Protein 1), an interferon-inducible dynamin-like GTPase that functions as a key mediator of innate antiviral immunity. MX1 is rapidly upregulated following activation of type I and type III interferon signaling pathways and contributes to cellular defense mechanisms that inhibit viral replication and dissemination. Through these activities, MX1 serves as an important component of host antiviral responses and innate immune system regulation.

MX1 belongs to the highly conserved Mx family of large GTP-binding proteins, which are expressed in response to interferon stimulation and function as intracellular antiviral effectors. Members of this protein family recognize and interfere with critical stages of viral replication cycles, helping establish an antiviral cellular state. Because MX1 expression is closely linked to interferon pathway activation, it is widely utilized as a marker of antiviral signaling and innate immune responsiveness.

Expression of MX1 has been reported in a variety of cell types and tissues following immune activation, viral infection, and interferon exposure. Analysis of MX1 expression can provide insight into mechanisms governing host-pathogen interactions, innate immune signaling, antiviral defense, and regulation of interferon-stimulated genes. As a result, MX1 has become an important target in studies of infectious disease biology, immunology, and immune response pathways.

Beyond its role in antiviral defense, MX1 participates in broader investigations of immune regulation and cellular stress responses. Interferon-regulated proteins occupy central positions within host defense networks and contribute to coordination of immune responses following pathogen challenge. Research involving MX1 therefore supports a greater understanding of innate immunity and mechanisms that protect cells against infection.

MX1 is frequently studied in investigations of viral pathogenesis, immune activation, cytokine signaling, and interferon-mediated defense pathways. Because many innate immune mechanisms are conserved among vertebrates, MX1

remains a valuable research target across multiple experimental systems and disease models.

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

Researchers studying interferon signaling, innate immunity, antiviral defense mechanisms, and host-pathogen interactions may also be interested in our broader Immunology Antibody collection.

Application Notes

Optimal dilution of the MX1 Antibody / Antiviral Response Protein Antibody should be determined by the researcher.

Immunogen

E.coli-derived human MX1 recombinant protein (Position: E315G-662) was used as the immunogen for the MX1 antibody.

Storage

After reconstitution, the MX1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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