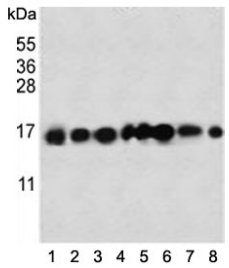
IFITM3 Antibody / Interferon-Induced Transmembrane Protein 3 Polyclonal Antibody (F54274)

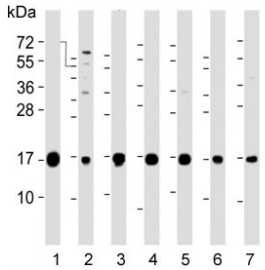
Catalog No.	Formulation	Size
F54274-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F54274-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

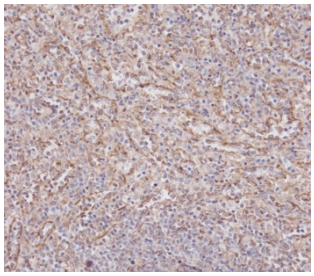
Availability	1-3 business days
Species Reactivity	Human, Mouse
Format	Purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity purified
UniProt	Q01628
RRID	AB_3756782
Localization	Cytoplasmic
Applications	Western blot: 1:500-1:2000 Immunohistochemistry (FFPE): 1:25 Immunofluorescence: 1:25
Limitations	This IFITM3 Antibody / Interferon-Induced Transmembrane Protein 3 Polyclonal Antibody is available for research use only.



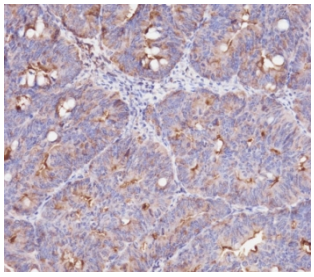
IFITM3 Antibody by WB in Human Cancer Cell Lines. Western blot testing of human HeLa (lane 1), 293 (lane 2), A549 (lane 3), NCI-H460 (lane 4), HepG2 (lane 5), SK-BR-3 (lane 6) and A375 (lane 7) cell lysates with IFITM3 Antibody. The Interferon-Induced Transmembrane Protein 3 Polyclonal Antibody detects a strong, sharply defined band at approximately 17 kDa across all seven cell lines, consistent with the expected migration of lipidated IFITM3. Signal intensity varies moderately among the samples, while little additional reactivity is visible.



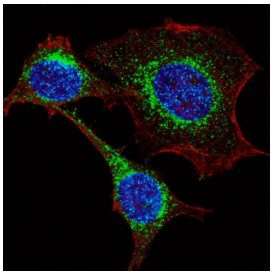
IFITM3 Antibody by WB in Human and Mouse Samples. Western blot testing of human HeLa (lane 1), 293 (lane 2), HepG2 (lane 3), NCI-H460 (lane 4), SK-BR-3 (lane 5), placenta (lane 6) and mouse colon (lane 7) lysates with IFITM3 Antibody. The Interferon-Induced Transmembrane Protein 3 Polyclonal Antibody detects prominent bands at approximately 17 kDa throughout the panel, consistent with the expected ~15/17 kDa migration of unmodified and lipidated IFITM3. The results demonstrate target-region detection in both human and mouse samples with minimal additional reactivity.



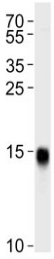
IFITM3 Antibody by IHC in Human Spleen. Immunohistochemistry of FFPE human spleen sections using IFITM3 Antibody. The Interferon-Induced Transmembrane Protein 3 Polyclonal Antibody produces widespread granular cytoplasmic and membrane-associated staining throughout the splenic tissue, with variation in staining intensity among individual cells. Nuclei are predominantly negative, producing clear contrast with the brown IFITM3 signal.



IFITM3 Antibody by IHC in Human Colon Carcinoma. Immunohistochemistry of FFPE human colon carcinoma sections using IFITM3 Antibody. The Interferon-Induced Transmembrane Protein 3 Polyclonal Antibody demonstrates heterogeneous staining within the tumor tissue, with prominent cytoplasmic and membrane-associated labeling in subsets of malignant epithelial cells. Areas of comparatively weak staining are also visible, emphasizing variation in IFITM3 expression across the section.



IFITM3 Antibody by IF in HeLa Cells. Immunofluorescence staining of fixed and permeabilized human HeLa cells using IFITM3 Antibody. IFITM3 staining is visualized in green, actin in red and nuclei in blue. The Interferon-Induced Transmembrane Protein 3 Polyclonal Antibody produces punctate cytoplasmic and perinuclear fluorescence, with additional signal extending through the cytoplasm around the DAPI-positive nuclei.



IFITM3 Antibody by WB in HT-1080 Cells. Western blot testing of human HT-1080 cell lysate with IFITM3 Antibody. The Interferon-Induced Transmembrane Protein 3 Polyclonal Antibody detects a strong, sharply defined band at approximately 15 kDa, consistent with the expected ~15/17 kDa molecular weight of unmodified and lipidated IFITM3. Little to no additional reactivity is visible across the displayed molecular weight range.

Description

IFITM3 Antibody recognizes interferon-induced transmembrane protein 3, a small membrane-associated protein encoded by the IFITM3 gene. IFITM3 belongs to the interferon-induced transmembrane protein family, whose members are rapidly induced as part of the cellular response to interferons and other immune stimuli. The protein is an important component of intrinsic antiviral immunity and functions as a restriction factor capable of limiting infection by a broad range of enveloped viruses.

IFITM3 is primarily associated with endosomal and lysosomal membranes, where it can alter membrane properties and interfere with the fusion events required for viral entry into the cytoplasm. Viruses that enter cells through endocytic

pathways may therefore encounter IFITM3-containing membranes before productive infection can occur. The precise mechanisms underlying restriction involve changes in membrane organization, curvature, fluidity and trafficking. An Interferon-Induced Transmembrane Protein 3 Polyclonal Antibody can support investigation of these processes and the regulation of intrinsic cellular antiviral defenses.

Expression of IFITM3 is regulated strongly by type I and type II interferon signaling, although basal expression can also occur in numerous cell types. Following immune stimulation, increased IFITM3 expression contributes to the establishment of an antiviral state. The protein has been studied extensively in relation to influenza viruses and has also been implicated in cellular responses to other enveloped RNA and DNA viruses. Genetic variation affecting IFITM3 expression or function has consequently attracted interest in studies of susceptibility to and severity of viral infection.

Beyond antiviral defense, IFITM3 has been investigated in immune cell biology, membrane trafficking, cellular differentiation and cancer. Altered expression has been reported in several tumor types, where IFITM3 may be associated with proliferation, migration, invasion and disease progression. These observations have expanded interest in IFITM3 from infectious disease research to broader studies of immune regulation and tumor biology. NSJ Bioreagents provides this Interferon-Induced Transmembrane Protein 3 Polyclonal Antibody for research into IFITM3 expression and function.

An IFITM3 Antibody can be used to investigate interferon responses, intrinsic antiviral immunity, membrane-associated viral restriction, immune signaling and the broader cellular functions associated with IFITM3.

Explore related antiviral and host-defense targets in our Innate Immunity Antibodies collection.

Application Notes

The stated application concentrations are suggested starting points. Titration of the IFITM3 Antibody / Interferon-Induced Transmembrane Protein 3 Polyclonal Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 1-30 from the human protein were used as the immunogen for the IFITM3 protein Antibody.

Storage

Aliquot the IFITM3 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

Interferon-Induced Transmembrane Protein 3 antibody, Interferon-Inducible Transmembrane Protein 3 antibody, Interferon-Inducible Protein 1-8U antibody, IFITM3 antibody, 1-8U antibody

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