

Rabbit Fagilis (IFITM3) Polyclonal Antibody | anti-IFITM3 antibody

Fagilis (IFITM3) Antibody (Center)

CATALOG # AAA284291	HOST Rabbit	REACTIVITY Human (Predicted Reactivity: Mouse)	APPLICATIONS ELISA, Western Blot
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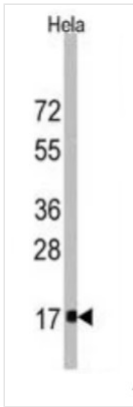
PRODUCT SYNONYMS

Fagilis (IFITM3); Polyclonal Antibody; Fagilis (IFITM3) Antibody (Center); Interferon-induced transmembrane protein 3; Dispanin subfamily A member 2b; DSPA2b; Interferon-inducible protein 1-8U; IFITM3; anti-IFITM3 antibody

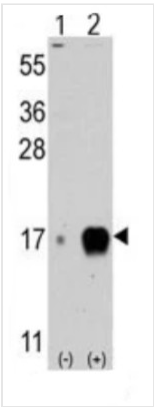
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human (Predicted Reactivity: Mouse)
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	This Fagilis (IFITM3) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 64-93 amino acids from the Central region of human Fagilis (IFITM3).
Purity/Purification	This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Form/Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.
Sequence Positions	64-93
Sequence Length	133
Applicable Applications for anti-IFITM3 antibody	ELISA, WB (Western Blot)
Function	IFN-induced antiviral protein which disrupts intracellular cholesterol homeostasis. Inhibits the entry of viruses to the host cell cytoplasm by preventing viral fusion with cholesterol depleted endosomes. May inactivate new enveloped viruses which buds out of the infected cell, by letting them go out with a cholesterol depleted membrane. Active against multiple viruses, including influenza A virus, SARS coronaviruses (SARS-CoV and SARS-CoV-2), Marburg virus (MARV), Ebola virus (EBOV), Dengue virus (DENV), West Nile virus (WNV), human immunodeficiency virus type 1 (HIV-1), hepatitis C virus (HCV) and vesicular stomatitis virus (VSV) (PubMed:26354436, PubMed:33239446, PubMed:33270927). Can inhibit: influenza virus hemagglutinin protein- mediated viral entry, MARV and EBOV GP1,2-mediated viral entry, SARS- CoV and SARS-CoV-2 S protein-mediated viral entry and VSV G protein-mediated viral entry (PubMed:33270927). Plays a critical role in the structural stability and function of vacuolar ATPase (v-ATPase). Establishes physical contact with the v-ATPase of endosomes which is critical for proper clathrin localization and is also required for the function of the v-ATPase to lower the pH in phagocytic endosomes thus establishing an antiviral state. In hepatocytes, IFITM proteins act in a coordinated manner to restrict HCV infection by targeting the endocytosed HCV virion for lysosomal degradation (PubMed:26354436). IFITM2 and IFITM3 display anti-HCV activity that may complement the anti-HCV activity of IFITM1 by inhibiting the late stages of HCV entry, possibly in a coordinated manner by trapping the virion in the endosomal pathway and targeting it for degradation at the lysosome (PubMed:26354436). Exerts opposing activities on SARS-CoV-2, including amphipathicity-dependent restriction of virus at endosomes and amphipathicity-independent enhancement of infection at the plasma membrane (PubMed:33270927).
Cellular Location	Cell membrane; Single-pass type II membrane protein. Late endosome membrane; Single-pass type II membrane protein. Early endosome membrane; Single-pass type II membrane protein Lysosome membrane; Single-pass type II membrane protein. Cytoplasm, perinuclear region. Note=Co-localizes with BRI3 isoform 1 at the perinuclear region.
Preparation and Storage	For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.

IMAGES



WB (Western Blot)
Western blot analysis of anti-IFITM3 Antibody (Center) in HeLa cell line lysates (35ug/lane). IFITM3 (arrow) was detected using the purified Pab.



WB (Western Blot)
Western blot analysis of IFITM3 (arrow) using rabbit polyclonal IFITM3 Antibody (C-term). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the IFITM3 gene (Lane 2) (Origene Technologies).

ADDITIONAL INFORMATION

Related Product Information for anti-IFITM3 antibody	The family of interferon-induced transmembrane protein (Ifitm/mil/fragilis) cell surface proteins may modulate cell adhesion and influence cell differentiation.
Product Categories/Family for anti-IFITM3 antibody	Developmental Biology ; Signal Transduction
References	Tanaka,S.S., Dev. Cell 9 (6), 745-756 (2005)

NCBI AND UNIPROT INFORMATION

NCBI GI #	148612842
NCBI GeneID	10410
NCBI Accession #	NP_066362.2
NCBI GenBank Nucleotide #	NM_021034.2
UniProt Accession #	Q01628; Q53Y76; Q96HK8; Q96J15
Molecular Weight	14632
NCBI Official Full Name	interferon-induced transmembrane protein 3
NCBI Official Synonym Full Names	interferon induced transmembrane protein 3
NCBI Official Symbol	IFITM3
NCBI Official Synonym Symbols	1-8U; IP15; DSPA2b
NCBI Protein Information	interferon-induced transmembrane protein 3
UniProt Protein Name	Interferon-induced transmembrane protein 3
UniProt Gene Name	IFITM3
UniProt Synonym Gene Names	DSPA2b
UniProt Entry Name	IFM3_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

