ARG54856
anti-IFITM3 / Fragilis antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes IFITM3 / Fragilis
Tested Reactivity	Hu
Tested Application	ICC/IF, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	IFITM3 / Fragilis
Species	Human
Immunogen	KLH-conjugated synthetic peptide corresponding to aa. 1-30 (N-terminus) of Human Interferon-inducible protein (IFITM3).
Conjugation	Un-conjugated
Alternate Names	IP15; DSPA2b; 1-8U; Interferon-induced transmembrane protein 3; Dispanin subfamily A member 2b; Interferon-inducible protein 1-8U

Application Instructions

Application table

Application	Dilution
ICC/IF	1:100 - 1:500
WB	1:1000

Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.
Positive Control	HT1080

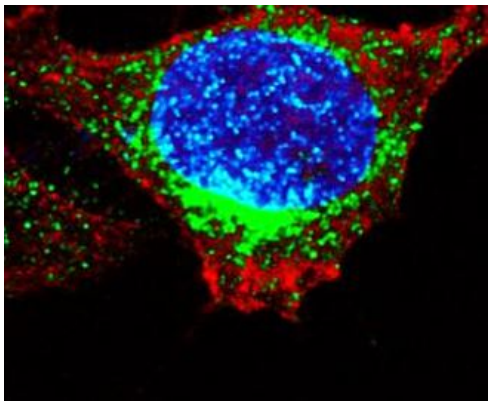
Properties

Form	Liquid
Purification	This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Buffer	PBS and 0.09% (W/V) Sodium azide
Preservative	0.09% (W/V) Sodium azide
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

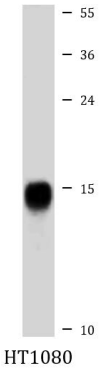
Database links	GeneID: 10410 Human Swiss-port # Q01628 Human
Gene Symbol	IFITM3
Gene Full Name	interferon induced transmembrane protein 3
Background	The protein encoded by this gene is an interferon-induced membrane protein that helps confer immunity to influenza A H1N1 virus, West Nile virus, and dengue virus. Two transcript variants, only one of them protein-coding, have been found for this gene. Another variant encoding an N-terminally truncated isoform has been reported, but the full-length nature of this variant has not been determined. [provided by RefSeq, May 2012]
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 coronavirus (SARS-CoV), Marburg virus (MARV) and Ebola virus (EBOV), Dengue virus (DNV), West Nile virus (WNV), human immunodeficiency virus type 1 (HIV-1) and vesicular stomatitis virus (VSV). Can inhibit: influenza virus hemagglutinin protein-mediated viral entry, MARV and EBOV GP1,2-mediated viral entry, SARS-CoV S protein-mediated viral entry and VSV G protein-mediated viral entry. 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. [UniProt]
Research Area	Developmental Biology antibody
Calculated Mw	15 kDa
PTM	Palmitoylation on membrane-proximal cysteines controls clustering in membrane compartments and antiviral activity against influenza virus. Not glycosylated. Polyubiquitinated with both 'Lys-48' and 'Lys-63' linkages. Ubiquitination negatively regulates antiviral activity. Lys-24 is the most prevalent ubiquitination site.
Cellular Localization	Cell membrane; Single-pass type II membrane protein. Late endosome membrane; Single-pass type II membrane protein. Lysosome membrane; Single-pass type II membrane protein

Images



ARG54856 anti-IFITM3 / Fragilis antibody ICC/IF image

Immunofluorescence: HeLa cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.2%, 30 min), then stained with ARG54856 anti-IFITM3 / Fragilis antibody (green) at 1:200 dilution, 2 h at room temperature. Cytoplasmic actin was counterstained with Alexa Fluor® 555 (red) conjugated Phalloidin (5.25 µM, 25 min). Nuclei were counterstained with Hoechst 33342 (blue) (10 µg/ml, 3 min). Note the highly specific localization of the IFITM3 immunoreactivity to the Golgi.



ARG54856 anti-IFITM3 / Fragilis antibody WB image

Western blot: 35 µg of HT1080 cell lysate stained with ARG54856 anti-IFITM3 / Fragilis antibody at 1:1000 dilution.