

IFITM1 Antibody(Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19541c

Specification

IFITM1 Antibody(Center) - Product Information

Application	WB,E
Primary Accession	P13164
Other Accession	Q01628 , Q01629 , C9JQL5 , NP_003632.3
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	13964
Antigen Region	37-66

IFITM1 Antibody(Center) - Additional Information

Gene ID 8519

Other Names

Interferon-induced transmembrane protein 1, Dispanin subfamily A member 2a, DSPA2a, Interferon-induced protein 17, Interferon-inducible protein 9-27, Leu-13 antigen, CD225, IFITM1, CD225, IFI17

Target/Specificity

This IFITM1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 37-66 amino acids from the Central region of human IFITM1.

Dilution

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

IFITM1 Antibody(Center) is for research use only and not for use in diagnostic or therapeutic procedures.

IFITM1 Antibody(Center) - Protein Information

Name IFITM1 ([HGNC:5412](#))

Synonyms CD225, IFI17

Function IFN-induced antiviral protein which inhibits the entry of viruses to the host cell cytoplasm, permitting endocytosis, but preventing subsequent viral fusion and release of viral contents into the cytosol. 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) and hepatitis C virus (HCV) (PubMed:[26354436](#), PubMed:[33270927](#)). Can inhibit: influenza virus hemagglutinin protein-mediated viral entry, MARV and EBOV GP1,2- mediated viral entry and SARS-CoV and SARS-CoV-2 S protein-mediated viral entry. Also implicated in cell adhesion and control of cell growth and migration (PubMed:[33270927](#)). Inhibits SARS-CoV-2 S protein- mediated syncytia formation (PubMed:[33051876](#)). Plays a key role in the antiproliferative action of IFN-gamma either by inhibiting the ERK activation or by arresting cell growth in G1 phase in a p53-dependent manner. Acts as a positive regulator of osteoblast differentiation. 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](#)).

Cellular Location

Cell membrane; Single-pass membrane protein. Lysosome membrane

Tissue Location

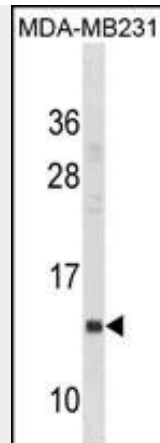
Bone (at protein level). Levels greatly elevated in colon cancer, cervical cancer, esophageal cancer and ovarian cancer Expressed in glioma cell lines.

IFITM1 Antibody(Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

IFITM1 Antibody(Center) - Images



IFITM1 Antibody (Center) (Cat. #AP19541c) western blot analysis in MDA-MB231 cell line lysates (35ug/lane). This demonstrates the IFITM1 antibody detected the IFITM1 protein (arrow).

IFITM1 Antibody(Center) - Background

IFN-induced antiviral protein that mediate cellular innate immunity to at least three major human pathogens, namely influenza A H1N1 virus, West Nile virus, and dengue virus by inhibiting the early step(s) of replication. Plays a key role in the antiproliferative action of IFN-gamma either by inhibiting the ERK activation or by arresting cell growth in G1 phase in a p53-dependent manner. Implicated in the control of cell growth. Component of a multimeric complex involved in the transduction of antiproliferative and homotypic adhesion signals.

IFITM1 Antibody(Center) - References

- Ma, Y., et al. *Oncol. Rep.* 23(6):1569-1576(2010)
- Mosbrugger, T.L., et al. *J. Infect. Dis.* 201(9):1371-1380(2010)
- Johnatty, S.E., et al. *PLoS Genet.* 6 (7), E1001016 (2010) :
- Pan, Z., et al. *Neoplasma* 57(2):123-128(2010)
- Brass, A.L., et al. *Cell* 139(7):1243-1254(2009)