

Anti-IFITM1 Antibody
Catalog # ABO10570

Specification

Anti-IFITM1 Antibody - Product Information

Application	WB, IHC
Primary Accession	P13164
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Interferon-induced transmembrane protein 1(IFITM1) detection. Tested with WB, IHC-P, IHC-F in Human.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-IFITM1 Antibody - 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

Calculated MW

13964 MW KDa

Application Details

Immunohistochemistry(Frozen Section), 0.5-1 µg/ml, Human,
-
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By
Heat
Western blot, 0.1-0.5 µg/ml, Human

Subcellular Localization

Cell membrane ; Single-pass membrane protein .

Tissue Specificity

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

Protein Name

Interferon-induced transmembrane protein 1

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence at the N-terminus of human IFITM1(1-17aa MHKEEHEVAVLGPPST).

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Anti-IFITM1 Antibody - 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

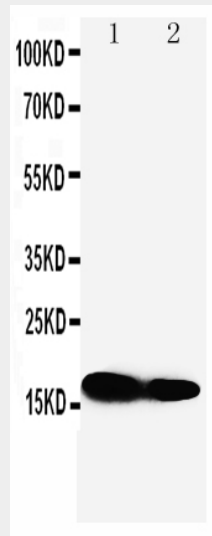
Bone (at protein level). Levels greatly elevated in colon cancer, cervical cancer, esophageal cancer and ovarian cancer Expressed in glioma cell lines.

Anti-IFITM1 Antibody - Protocols

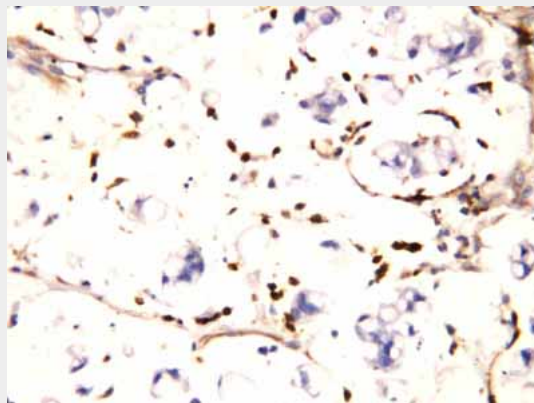
Provided below are standard protocols that you may find useful for product applications.

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

Anti-IFITM1 Antibody - Images



Anti-IFITM1 antibody, ABO10570, Western blotting Lane 1: SW620 Cell Lysate Lane 2: CEM Cell Lysate



Anti-IFITM1 antibody, ABO10570, IHC(P) IHC(P): Human Intestinal Cancer Tissue

Anti-IFITM1 Antibody - Background

Interferon-induced Transmembrane Protein 1 (IFITM1), also called Interferon-induced Protein 17 (IFI17). IFITM1 activity is required for primordial germ cells (PGCs) transit from the mesoderm into the endoderm, and that it appears to act via a repulsive mechanism, such that PGCs avoid Ifitm1-expressing tissues. It is mapped to Chr.11 and belongs to the family of interferon-induced transmembrane proteins (Ifitm/mil/fragilis), which encodes cell surface proteins that may modulate cell adhesion and influence cell differentiation. Interferon-inducible membrane proteins of

approximately 17 kDa have been suggested to play a role in the antiproliferative activity of interferons based on their pattern of induction in interferon-sensitive and -resistant cell lines and the ability of a membrane fraction enriched in 17-kDa proteins to inhibit cell growth.