

Anti-IFITM1 Antibody

Catalog # ABO10570

Product Information

Application	WB, IHC-P, IHC-F
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.

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
Application Details	Immunohistochemistry(Frozen Section), 0.5-1 μ g/ml, Human, - Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μ g/ml, Human, By Heat Western blot, 0.1-0.5 μ g/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. .
Source	Eukaryota
Protein Name	Interferon-induced transmembrane protein 1
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Thimerosal, 0.05mg NaN ₃ .
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human IFITM1(1-17aa MHKEEHEVAVLGPPPST).
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.

Protein Information

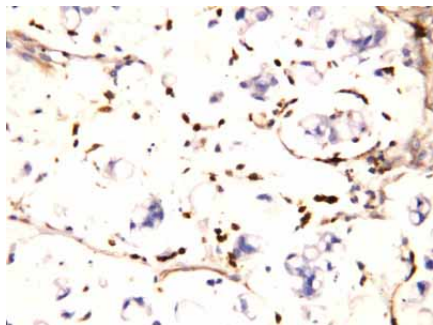
Name	IFITM1 (HGNC:5412)
Synonyms	CD225, IFI17
Function	IFN-induced antiviral protein which inhibits the entry of viruses to the host cell cytoplasm, permitting endocytosis, but preventing subsequent viral fusion and release of viral contents into the cytosol. Active against multiple viruses, including influenza A virus, SARS coronaviruses (SARS-CoV and SARS-CoV-2), Marburg virus (MARV), Ebola virus (EBOV), Dengue virus (DNV), 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.

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.

Images

Anti-IFITM1 antibody, ABO10570, Western blottingLane 1: SW620 Cell LysateLane 2: CEM Cell Lysate



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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.