

CD225 Polyclonal Antibody

Catalog # AP73661

Product Information

Application	WB, IHC-P
Primary Accession	<u>P13164</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	13964

Additional Information

Gene ID	8519
Other Names	IFITM1; CD225; IFI17; Interferon-induced transmembrane protein 1; Dispanin subfamily A member 2a; DSPA2a; Interferon-induced protein 17; Interferon-inducible protein 9-27; Leu-13 antigen; CD225
Dilution	WB~~Western Blot: 1/500 - 1/2000. IHC-p: 1/100-1/300. ELISA: 1/20000. Not yet tested in other applications. IHC-P~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

Protein Information

Name	IFITM1 (<u>HGNC:5412</u>)
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: <u>26354436</u> , PubMed: <u>33270927</u>). 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: <u>33270927</u>). Inhibits SARS-CoV-2 S protein- mediated syncytia formation (PubMed: <u>33051876</u>). 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: <u>26354436</u>). 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: <u>26354436</u>).
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

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 coronavirus (SARS-CoV), 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). Can inhibit: influenza virus hemagglutinin protein- mediated viral entry, MARV and EBOV GP1,2-mediated viral entry and SARS-CoV S protein-mediated viral entry. Also implicated in cell adhesion and control of cell growth and migration. 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.

Images



Western Blot analysis of MCF7, PC12 cells using CD225 Polyclonal Antibody.. Secondary antibody was diluted at 1:20000



Immunohistochemical analysis of paraffin-embedded human-liver, antibody was diluted at 1:100

Immunohistochemical analysis of paraffin-embedded human-brain, antibody was diluted at 1:100



Immunohistochemical analysis of paraffin-embedded human-brain, antibody was diluted at 1:100

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