

# CD225 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP53303

#### **Product Information**

Application WB
Primary Accession P13164
Reactivity Human
Host Rabbit
Clonality Polyclonal
Calculated MW 13964

#### **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

**Dilution** WB~~ 1:500

Format Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.09% (W/V)

sodium azide and 50% glycerol

**Storage** Store at -20 °C.Stable for 12 months from date of receipt

#### **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.

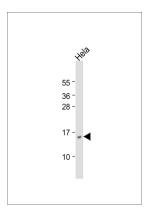
### **Background**

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.

#### References

Reid L.E., et al. Proc. Natl. Acad. Sci. U.S.A. 86:840-844(1989). Deblandre G.A., et al.J. Biol. Chem. 270:23860-23866(1995). Kalnine N., et al. Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases. Ota T., et al. Nat. Genet. 36:40-45(2004). Taylor T.D., et al. Nature 440:497-500(2006).

## **Images**



Anti-CD225 Antibody at 1:500 dilution + Hela whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L),Peroxidase conjugated at 1/10000 dilution. Predicted band size: 14 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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