10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-CD225 Antibody

Catalog # AP53303

Product Information

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

Additional Information

Gene ID	8519
Other Names	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
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human CD225. The exact sequence is proprietary.
Dilution	WB~~ 1:500
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
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.

References

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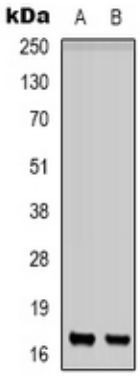
Deblandre G.A.,et al.J. Biol. Chem. 270:23860-23866(1995).
Kalnine N.,et al.Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases.
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Taylor T.D.,et al.Nature 440:497-500(2006).

Images



Western blot analysis of CD225 expression in K562 (A), PC12 (B) whole cell lysates. (Predicted band size: 13 kD; Observed band size: 17 kD)

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