

Rabbit Anti-IFITM1 antibody

SL1031R

Product Name IFITM1

Chinese Name Interferon 诱导 Transmembrane protein1 抗体

Alias CD225; CD225 antigen; CD 225; CD-225; IFI17; Interferon induced protein 17; Interferon induced transmembrane protein 1; Interferon inducible protein 9-27; Interferon-induced protein 17; Interferon-induced transmembrane protein 1; Interferon-inducible protein 9-27; Leu 13 antigen; Leu-13 antigen; LEU13; IFM1_HUMAN; Dispanin subfamily A member 2a; DSPA2a.

Research Area Tumour immunology

Immunogen Species Rabbit

Clonality Polyclonal

React Species Human, (predicted: Mouse, Rat,)

Applications ELISA=1:5000-10000 (Paraffin sections need antigen repair)
not yet tested in other applications.
optimal dilutions/concentrations should be determined by the end user.

Theoretical molecular weight 11.7kDa

Cellular localization The cell membrane

Form Liquid

Concentration 1mg/ml

immunogen KLH conjugated synthetic peptide derived from human IFITM1: 58-86/125 <Cytoplasmic>

Lsotype IgG

Purification affinity purified by Protein A

Buffer Solution 1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.

Storage Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

Attention This product as supplied is intended for research use only, not for use in human,

therapeutic or diagnostic applications.

PubMed

[PubMed](#)

IFITM1 expression is induced by interferons alpha and gamma and it is thought to play a role in control of cell growth. It is upregulated in several tumor types and may be useful as a tumor biomarker.

Function:

IFN-induced antiviral protein that mediate cellular innate immunity to at least three major human pathogens, namely influenza A H1N1 virus, West Nile virus, and dengue virus by inhibiting the early step(s) of replication. 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. Implicated in the control of cell growth. Component of a multimeric complex involved in the transduction of antiproliferative and homotypic adhesion signals.

Subunit:

Interacts with CAV1; this interaction enhances the ability of CAV1 in inhibiting ERK activation.

Subcellular Location:

Cell membrane; Multi-pass membrane protein.

**Product
Detail**

Post-translational modifications:

Palmitoylation on membrane-proximal cysteines controls clustering in membrane compartments and antiviral activity against influenza virus.

Similarity:

Belongs to the CD225 family.

SWISS:

P13164

Gene ID:

8519

Database links:

[Entrez Gene: 8519](#) Human

[Entrez Gene: 68713](#) Mouse

[Entrez Gene: 293618](#) Rat

[Omim: 604456](#) Human

[SwissProt: P13164](#) Human

[SwissProt: Q9D103](#) Mouse

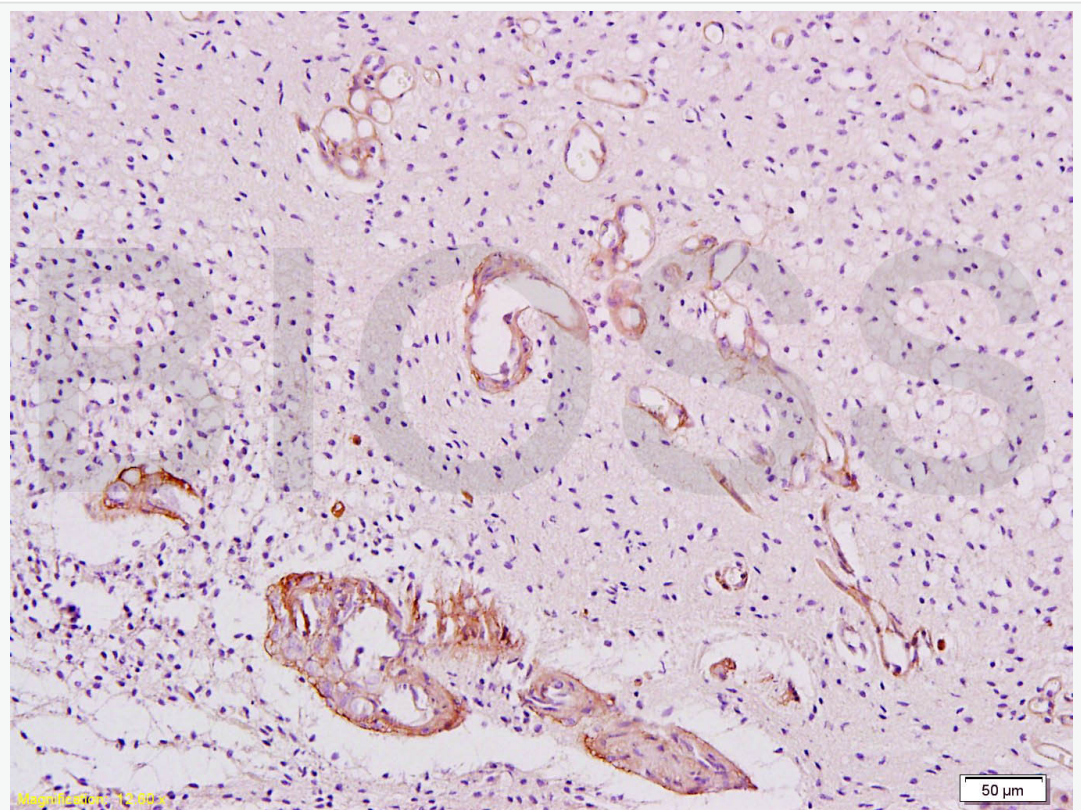
[Unigene: 458414](#) Human

[Unigene: 175661](#) Mouse

[Unigene: 22087](#) Rat

IFITM1 蛋白是蛋白复合物的组分之一,主要功能是参与同型粘附和抗增殖信号的转导,与细胞增殖、Tumour 分化、抗病毒、免疫监视等有关。IFITM-1 主要用于消化系统 Tumour 方面的研究,有学者认为: Interferon 诱导 Transmembrane protein1 与 Interferon 结合,可以抑制 Tumour 细胞的分化和增值。

**Product
Picture**

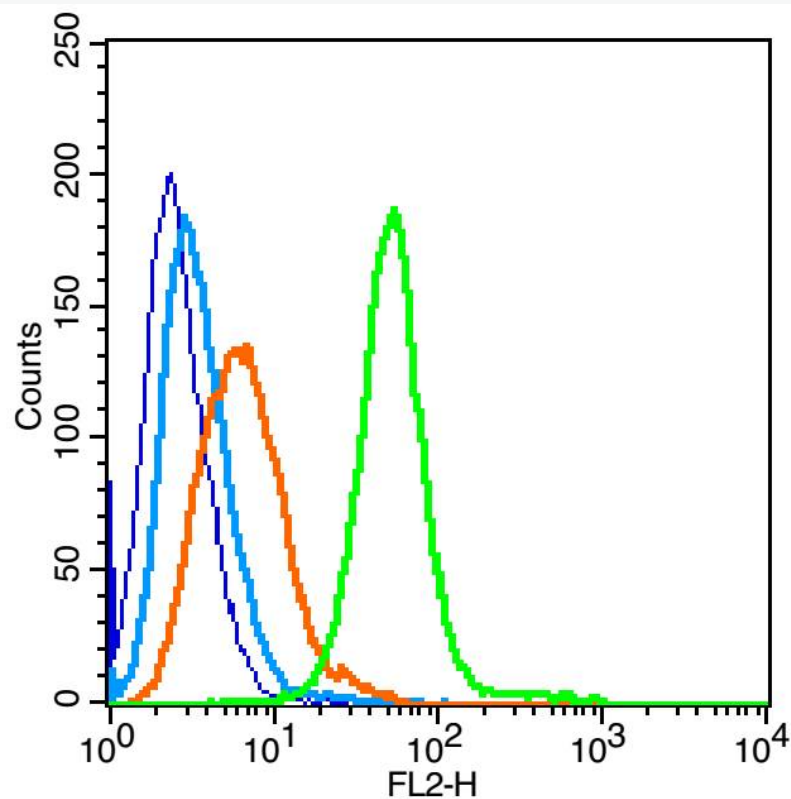


Tissue/cell: human glioma tissue; 4% Paraformaldehyde-fixed and

paraffin-embedded;

Antigen retrieval: citrate buffer (1M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-IFITM1/CD225 Polyclonal Antibody, Unconjugated(SL1031R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Blank control: Raji (blue).

Primary Antibody: Rabbit Anti-IFITM1 antibody(SL1031R), Dilution: 1µg in 100

μ L 1X PBS containing 0.5% BSA;

Isotype Control Antibody: Rabbit IgG(orange),used under the same conditions);

Secondary Antibody: Goat anti-rabbit IgG-PE(white blue), Dilution: 1:200 in 1 X PBS containing 0.5% BSA.

Protocol

The cells were fixed with 2% paraformaldehyde (10 min) . Primary antibody (SL1031R, $1\mu\text{g} / 1 \times 10^6$ cells) were incubated for 30 min on the ice, followed by 1 X PBS containing 0.5% BSA + 1 0% goat serum (15 min) to block non-specific protein-protein interactions. Then the Goat Anti-rabbit IgG/PE antibody was added into the blocking buffer mentioned above to react with the primary antibody at 1/200 dilution for 30 min on ice. Acquisition of 20,000 events was performed.