

IFITM2 Antibody

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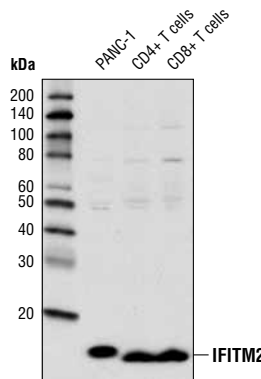
For Research Use Only. Not For Use In Diagnostic Procedures.

Applications W, IP Endogenous	Species Cross-Reactivity* H	Molecular Wt. 15 kDa	Source Rabbit**
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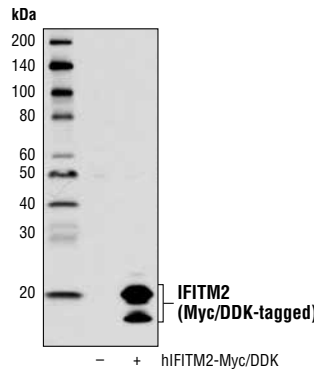
Background: Interferon-induced transmembrane protein (IFITM) family members are composed of short amino- and carboxy-termini, two transmembrane domains, and a cytoplasmic domain (1). There are four family members in humans: IFITM1, IFITM2, IFITM3, and IFITM5 (2,3). Mice have two additional family members, IFITM6 and IFITM7 (2,3). Basal expression of IFITM proteins is observed in some cells and expression can also be induced by type I and type II interferons (4-6). The primary function of IFITM family proteins appears to be viral restriction, as IFITM proteins inhibit cytosolic entry of viruses by preventing fusion of viral and host membranes (7,8). The mechanism by which IFITM proteins inhibit fusion is unclear. Although IFITM proteins are present on both the plasma membrane and intracellular membranes, they most effectively restrict viral fusion in late endosomes and lysosomes (8,9). In addition, different family members exhibit specific viral preferences (9). For example, IFITM3 is most effective at restricting influenza A infection, while IFITM1 is more successful in controlling filoviruses and SARS (9,10).

Specificity/Sensitivity: IFITM2 Antibody recognizes endogenous levels of total IFITM2 protein. This antibody does not cross-react with IFITM1 or IFITM3 proteins.

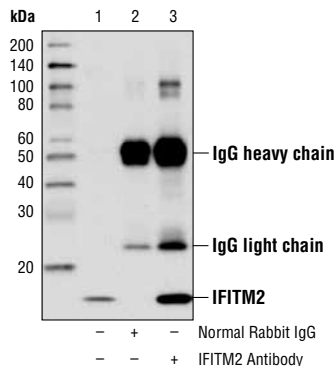
Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Pro40 of human IFITM2 protein. Antibodies are purified by protein A and peptide affinity chromatography.



Western blot analysis of extracts from PANC-1 cells, human CD4+ T cells, and human CD8+ T cells using IFITM2 Antibody.



Western blot analysis of extracts from 293T cells, mock transfected (-) or transfected with a construct expressing Myc/DDK-tagged full-length human IFITM2 protein (hIFITM2-Myc/DDK; +), using IFITM2 Antibody.



◀ Immunoprecipitation of IFITM2 from HeLa cell extracts, using Normal Rabbit IgG #2729 (lane 2) or IFITM2 Antibody (lane 3). Lane 1 is 10% input. Western blot analysis was performed using IFITM2 Antibody.

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Entrez Gene ID #10581
UniProt ID #Q01629

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

*Species cross-reactivity is determined by western blot.

**Anti-rabbit secondary antibodies must be used to detect this antibody.

Recommended Antibody Dilutions:

Western blotting 1:1000
Immunoprecipitation 1:50

For product specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

Background References:

- (1) Diamond, M.S. and Farzan, M. (2013) *Nat Rev Immunol* 13, 46-57.
- (2) Lange, U.C. et al. (2003) *BMC Dev Biol* 3, 1.
- (3) Hickford, D. et al. (2012) *BMC Genomics* 13, 155.
- (4) Reid, L.E. et al. (1989) *Proc Natl Acad Sci USA* 86, 840-4.
- (5) Lewin, A.R. et al. (1991) *Eur J Biochem* 199, 417-23.
- (6) Friedman, R.L. et al. (1984) *Cell* 38, 745-55.
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