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Recombinant Anti-IFNGR1 Rabbit mAb

Catalog # AP95291

Product Information

Application	WB, IHC, FC, IF/IC
Primary Accession	P15260
Reactivity	Human
Host	Rabbit
Clonality	Monoclonal
Calculated MW	54405

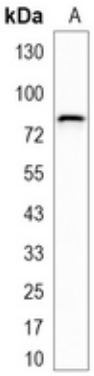
Additional Information

Gene ID	3459
Other Names	Interferon gamma receptor 1; IFN-gamma receptor 1; IFN-gamma-R1; CDw119; CD119
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within human IFNGR1 protein. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500 FC~~1:10~50 IF/IC~~N/A
Format	Liquid in PBS, pH 7.3, 50% glycerol, 0.05% BSA, and 0.05% Proclin300.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

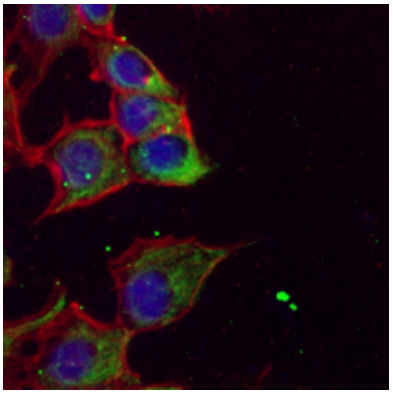
Protein Information

Name	IFNGR1 (HGNC:5439)
Function	Receptor subunit for interferon gamma/INFG that plays crucial roles in antimicrobial, antiviral, and antitumor responses by activating effector immune cells and enhancing antigen presentation (PubMed:20015550). Associates with transmembrane accessory factor IFNGR2 to form a functional receptor (PubMed:10986460, PubMed:2971451, PubMed:7615558, PubMed:7617032, PubMed:7673114). Upon ligand binding, the intracellular domain of IFNGR1 opens out to allow association of downstream signaling components JAK1 and JAK2. In turn, activated JAK1 phosphorylates IFNGR1 to form a docking site for STAT1. Subsequent phosphorylation of STAT1 leads to dimerization, translocation to the nucleus, and stimulation of target gene transcription (PubMed:28883123). STAT3 can also be activated in a similar manner although activation seems weaker. IFNGR1 intracellular domain phosphorylation also provides a docking site for SOCS1 that regulates the JAK-STAT pathway by competing with STAT1 binding to IFNGR1 (By similarity).
Cellular Location	Cell membrane; Single-pass type I membrane protein

Images



Western blot analysis of IFNGR1 expression in MCF7 (A) whole cell lysates. (Predicted band size: 54 kD; Observed band size: 45-100 kD)



Immunofluorescent analysis of IFNGR1 staining in MCF7 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with an AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).