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IFNGR1 Rabbit pAb

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Catalog # AP94130

Product Information

Application	WB
Primary Accession	P15261
Reactivity	Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	52343
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from mouse IFNGR1
Epitope Specificity	61-160/477
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Membrane; Single-pass type I membrane protein.
SIMILARITY	Belongs to the type II cytokine receptor family.Contains 2 fibronectin type-III domains.Contains 2 Ig-like C2-type (immunoglobulin-like)domains.
SUBUNIT	Monomer.
Post-translational modifications	Phosphorylated at Ser/Thr residues.
DISEASE	Mendelian susceptibility to mycobacterial disease (MSMD) [MIM:209950]: This rare condition confers predisposition to illness caused by moderately virulent mycobacterial species, such as Bacillus Calmette-Guerin (BCG) vaccine and environmental non-tuberculous mycobacteria, and by the more virulent Mycobacterium tuberculosis. Other microorganisms rarely cause severe clinical disease in individuals with susceptibility to mycobacterial infections, with the exception of Salmonella which infects less than 50% of these individuals. The pathogenic mechanism underlying MSMD is the impairment of interferon-gamma mediated immunity, whose severity determines the clinical outcome. Some patients die of overwhelming mycobacterial disease with lepromatous-like lesions in early childhood, whereas others develop, later in life, disseminated but curable infections with tuberculoid granulomas. MSMD is a genetically heterogeneous disease with autosomal recessive, autosomal dominant or X-linked inheritance. Note=The disease is caused by mutations affecting the gene represented in this entry.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene (IFNGR1) encodes the ligand-binding chain(alpha) of the gamma interferon receptor. Human interferon-gamma receptor is a heterodimer of IFNGR1 and IFNGR2. A genetic variation in IFNGR1 is associated with susceptibility to Helicobacter pylori infection. In addition, defects in IFNGR1 are a cause of mendelian susceptibility to mycobacterial disease, also known as familial disseminated atypical mycobacterial infection. [provided by RefSeq].

Additional Information

Gene ID	15979
Other Names	Interferon gamma receptor 1 {ECO:0000312|MGI:MGI:107655}, IFN-gamma receptor 1, IFN-gamma-R1, Interferon gamma receptor alpha-chain, CD119, Ifngr1 {ECO:0000312|MGI:MGI:107655}, Ifngr
Dilution	WB=1:500-2000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	Ifngr1 {ECO:0000312|MGI:MGI:107655}
Synonyms	Ifngr
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:20926559, PubMed:27286456). Associates with transmembrane accessory factor IFNGR2 to form a functional receptor (PubMed:2137461, PubMed:2530216, PubMed:2530582, PubMed:2531896, PubMed:2532365). 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 its dimerization, translocation to the nucleus, and stimulation of target gene transcription (PubMed:19889125). STAT3 can also be activated in a similar manner although activation seems weaker (PubMed:15284232). IFNGR1 intracellular domain phosphorylation also provides a docking site for SOCS1 that regulates the JAK-STAT pathway by competing with STAT1 binding to IFNGR1 (PubMed:15522878).
Cellular Location	Cell membrane; Single-pass type I membrane protein

Background

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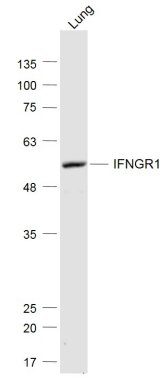
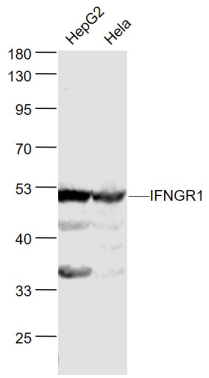
Images

Sample: Lung (Mouse) Lysate at 40 ug Primary: Anti-IFNGR1 (AP94130) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 54 kD Observed band size: 54 kD





Sample: HepG2 (Human) Cell Lysate at 30 ug Hela (Human) Cell Lysate at 30 ug Primary: Anti- IFNGR1 (AP94130) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 54 kD Observed band size: 50 kD