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IFNGR2 Rabbit pAb

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Catalog # AP50884

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	P38484
Reactivity	Human
Predicted	Mouse, Rat, Dog, Rabbit
Host	Rabbit
Clonality	Polyclonal
Calculated MW	37806
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human IFNGR2
Epitope Specificity	241-337/337
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.
DISEASE	Defects in IFNGR2 are a cause of mendelian susceptibility to mycobacterial disease (MSMD) [MIM:209950]; also known as familial disseminated atypical mycobacterial infection. 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.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	IFN gamma receptor beta is part of the receptor for interferon gamma. This class II cytokine receptor pairs with CDw119 to form the IFN gamma receptor and is an integral part of the IFN gamma signal transduction pathway. CDw119 serves as the IFN gamma binding chain and associates with the IFN gamma beta chain which is required for receptor signaling. The extracellular portion of both the IFN gamma receptor alpha and beta chains must be species matched. The IFN gamma receptor beta chain is expressed on T and B cells, NK cells, monocytes/ macrophages, and fibroblasts. Binding of IFN gamma induces receptor dimerization, internalization, Jak1 and Jak2 protein

kinase activation and, ultimately, STAT1 activation. It is also likely to interact with GAF. IFN gamma initiates and regulates a variety of immune responses and is required for signal transduction. Contains 2 fibronectin type III domains. Defects in IFN gamma Receptor beta are a cause of mendelian susceptibility to mycobacterial disease (MSMD), a rare condition that confers predisposition to illness caused by several mycobacteria strains.

Additional Information

Gene ID	3460
Other Names	Interferon gamma receptor 2 {ECO:0000312|HGNC:HGNC:5440}, IFN-gamma receptor 2, IFN-gamma-R2, Interferon gamma receptor accessory factor 1, AF-1, Interferon gamma receptor beta-chain, IFN-gamma-R-beta, Interferon gamma transducer 1 {ECO:0000312|HGNC:HGNC:5440}, IFNGR2 (HGNC:5440)
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
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	IFNGR2 (HGNC:5440)
Function	Associates with IFNGR1 to form a receptor for the cytokine interferon gamma (IFNG) (PubMed:7615558, PubMed:7673114, PubMed:8124716). Ligand binding stimulates activation of the JAK/STAT signaling pathway (PubMed:15356148, PubMed:7673114, PubMed:8124716). Required for signal transduction in contrast to other receptor subunit responsible for ligand binding (PubMed:7673114).
Cellular Location	Cell membrane; Single-pass type I membrane protein. Cytoplasmic vesicle membrane; Single-pass type I membrane protein. Golgi apparatus membrane; Single-pass type I membrane protein. Endoplasmic reticulum membrane; Single-pass type I membrane protein. Cytoplasm. Note=Has low cell surface expression and high cytoplasmic expression in T cells. The bias towards cytoplasmic expression may be due to ligand-independent receptor internalization and recycling.
Tissue Location	Expressed in T-cells (at protein level).

Background

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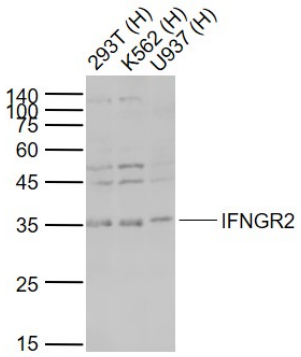
predisposition to illness caused by several mycobacteria strains.

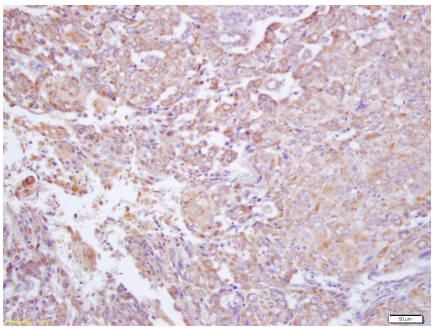
References

Soh J.,et al.Cell 76:793-802(1994).
Rhee S.,et al.J. Biol. Chem. 271:28947-28952(1996).
Vogt G.,et al.Nat. Genet. 37:692-700(2005).

Images



Sample:
Lane 1: Human 293T cell lysates
Lane 2: Human K562 cell lysates
Lane 3: Human U937 cell lysates
Primary: Anti-IFNGR2 (AP50884) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 36 kD
Observed band size: 35 kD



Tissue/cell: human laryngocarcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, 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℃ for 20 min;
Incubation: Anti-IFNGR2 Polyclonal Antibody, Unconjugated(AP50884) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining