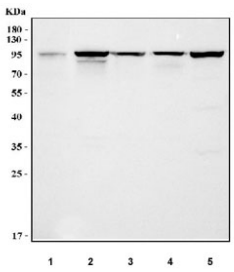
Interferon gamma receptor 1 Antibody / Ifngr1 (RQ8495)

Catalog No.	Formulation	Size
RQ8495	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 days
Species Reactivity	Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P15261
Applications	Western blot: 0.5-1ug/ml ELISA: 0.1-0.5ug/ml
Limitations	This Interferon gamma receptor 1 antibody is available for research use only.



Western blot testing of 1) rat thymus, 2) mouse thymus, 3) mouse spleen, 4) mouse lung and 5) mouse RAW264.7 cell lysate with Interferon gamma receptor 1 antibody. Predicted molecular weight: ~54 kDa (unmodified), 80-100 kDa (glycosylated).

Description

Interferon gamma receptor 1 (IFNGR1) also known as CD119 (Cluster of Differentiation 119), is a protein that in humans is encoded by the IFNGR1 gene. IFN-gamma plays key roles in both the innate and adaptive immune response. IFN-gamma activates the cytotoxic activity of innate immune cells, such as macrophages and NK cells. IFN-gamma production by NK cells and antigen presenting cells (APCs) promotes cell-mediated adaptive immunity by inducing IFN-gamma production by T lymphocytes, increasing class I and class II MHC expression, and enhancing peptide antigen presentation. Due to differences in the degree of glycosylation, there are 3 forms of IFN-gamma, with approximate

molecular weights of 25, 20, and 15.5 kDa by SDS-PAGE. The anti-viral activity of IFN-gamma is due to its induction of PKR and other regulatory proteins. Binding of IFN-gamma to the IFNGR1/IFNGR2 complex promotes dimerization of the receptor complexes to form the (IFNGR1/IFNGR2)2 -IFN-gamma dimer. Binding induces a conformational change in receptor intracellular domains and signaling involves Jak1, Jak2, and Stat1. The critical role of IFN-gamma in amplification of immune surveillance and function is supported by increased susceptibility to pathogen infection by IFN-gamma or IFNGR knockout mice and in humans with inactivating mutations in IFNGR1 or IFNGR2. IFN-gamma also appears to have a role in atherosclerosis.

Application Notes

Optimal dilution of the Interferon gamma receptor 1 antibody should be determined by the researcher.

Immunogen

An E.coli-derived mouse recombinant protein (amino acids L45-Q347) was used as the immunogen for the Interferon gamma receptor 1 antibody.

Storage

After reconstitution, the Interferon gamma receptor 1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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