10320 Camino Santa Fe, Suite G
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Interferon gamma Antibody
Rabbit mAb
Catalog # AP91102

Specification

Interferon gamma Antibody - Product Information

Application	**WB, FC, ICC**
Primary Accession	P01579
Reactivity	**Rat**
Clonality	**Monoclonal**

Other Names
IFG; IFI; IFN gamma; IFN, immune; IFN-gamma; IFNG; Immune interferon; Interferon gamma;

Isotype	**Rabbit IgG**
Host	**Rabbit**
Calculated MW	**19348 Da**

Interferon gamma Antibody - Additional Information

Dilution	**WB~~1:1000** **FC~~1:10~50** **ICC~~N/A**
Purification	**Affinity-chromatography**
Immunogen	**A synthesized peptide derived from human Interferon gamma**
Description	**Interferon (IFN)-γ is an antiviral and antiparasitic agent produced by CD4+/CD8+ lymphocytes and natural killer cells that undergo activation by antigens, mitogens or alloantigens. It is a potent activator of macrophages, it has antiproliferative effects on transformed cells and it can potentiate the antiviral and antitumor effects of the type I interferons.**
Storage Condition and Buffer	**Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.**

Interferon gamma Antibody - Protein Information

Name IFNG

Function
Type II interferon produced by immune cells such as T-cells and NK cells that plays crucial roles in antimicrobial, antiviral, and antitumor responses by activating effector immune cells and enhancing antigen presentation (PubMed:16914093, PubMed:<a href="http://www.uniprot.org/citations/8666937"

target="_blank">8666937). Primarily signals through the JAK-STAT pathway after interaction with its receptor IFNGR1 to affect gene regulation (PubMed:8349687). Upon IFNG binding, IFNGR1 intracellular domain opens out to allow association of downstream signaling components JAK2, JAK1 and STAT1, leading to STAT1 activation, nuclear translocation and transcription of IFNG-regulated genes. Many of the induced genes are transcription factors such as IRF1 that are able to further drive regulation of a next wave of transcription (PubMed:16914093). Plays a role in class I antigen presentation pathway by inducing a replacement of catalytic proteasome subunits with immunoproteasome subunits (PubMed:8666937). In turn, increases the quantity, quality, and repertoire of peptides for class I MHC loading (PubMed:8163024). Increases the efficiency of peptide generation also by inducing the expression of activator PA28 that associates with the proteasome and alters its proteolytic cleavage preference (PubMed:11112687). Up-regulates as well MHC II complexes on the cell surface by promoting expression of several key molecules such as cathepsins B/CTSB, H/CTSH, and L/CTSL (PubMed:7729559). Participates in the regulation of hematopoietic stem cells during development and under homeostatic conditions by affecting their development, quiescence, and differentiation (By similarity).

Cellular Location
Secreted.

Tissue Location
Released primarily from activated T lymphocytes.

Interferon gamma Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Interferon gamma Antibody - Images

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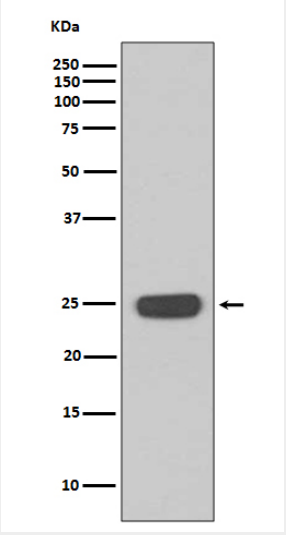

Western blot analysis of Interferon gamma expression in Jurkat cell lysate.