

Interferon gamma Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51278**Specification**

Interferon gamma Antibody - Product Information

Application	WB
Primary Accession	P01579
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	17 KDa
Antigen Region	11 - 70

Interferon gamma Antibody - Additional Information**Gene ID** 3458**Other Names**

Interferon gamma, IFN-gamma, Immune interferon, IFNG

Target/Specificity

KLH conjugated synthetic peptide derived from human Interferon gamma

Dilution

WB~~ 1:1000

Format

0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage

Store at -20 °C.Stable for 12 months from date of receipt

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: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

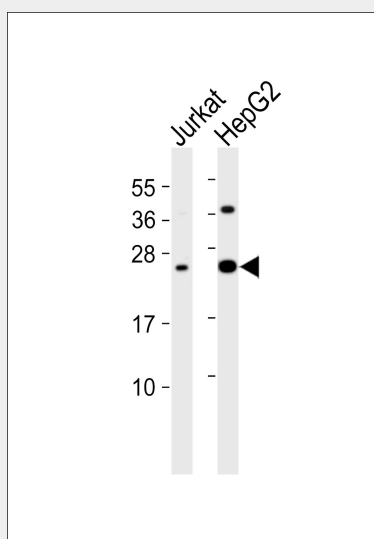
Released primarily from activated T lymphocytes.

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 Cytometry](#)
- [Cell Culture](#)

Interferon gamma Antibody - Images



All lanes : Anti-Interferon gamma Antibody at 1:1000 dilution Lane 1: Jurkat whole cell lysates
Lane 2: HepG2 whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit
IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 19 kDa
Blocking/Dilution buffer: 5% NFDM/TBST.

Interferon gamma Antibody - Background

Produced by lymphocytes activated by specific antigens or mitogens. IFN-gamma, in addition to having antiviral activity, has important immunoregulatory functions. 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.

Interferon gamma Antibody - References

Gray P.W., et al. Nature 298:859-863(1982).
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Nishi T., et al. J. Biochem. 97:153-159(1985).
Taya Y., et al. EMBO J. 1:953-958(1982).
Devos R., et al. Nucleic Acids Res. 10:2487-2501(1982).