

**IFN- $\gamma$  Polyclonal Antibody**  
**Catalog # AP70462****Specification****IFN- $\gamma$  Polyclonal Antibody - Product Information**

Application	<b>WB, IHC-P</b>
Primary Accession	<a href="#">P01579</a>
Reactivity	<b>Human</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>

**IFN- $\gamma$  Polyclonal Antibody - Additional Information****Gene ID** 3458**Other Names**

IFNG; Interferon gamma; IFN-gamma; Immune interferon

**Dilution**

WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/40000. Not yet tested in other applications.

IHC-P~~N/A

**Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

**Storage Conditions**

-20°C

**IFN- $\gamma$  Polyclonal 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:<a href="http://www.uniprot.org/citations/16914093" target="\_blank">16914093</a>, PubMed:<a href="http://www.uniprot.org/citations/8666937" target="\_blank">8666937</a>). Primarily signals through the JAK-STAT pathway after interaction with its receptor IFNGR1 to affect gene regulation (PubMed:<a href="http://www.uniprot.org/citations/8349687" target="\_blank">8349687</a>). 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:<a href="http://www.uniprot.org/citations/16914093" target="\_blank">16914093</a>). Plays a role in class I antigen presentation pathway by inducing a replacement of catalytic proteasome subunits with immunoproteasome subunits (PubMed:<a href="http://www.uniprot.org/citations/16914093" target="\_blank">16914093</a>).

[8666937](http://www.uniprot.org/citations/8666937)). In turn, increases the quantity, quality, and repertoire of peptides for class I MHC loading (PubMed:<[8163024](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/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

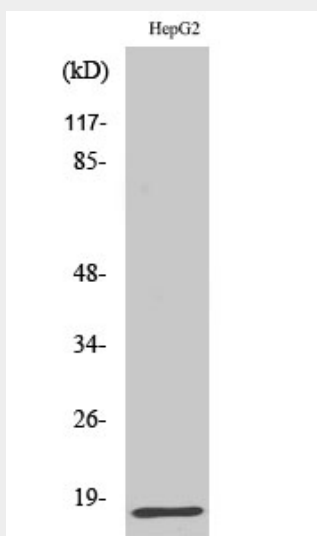
Released primarily from activated T lymphocytes.

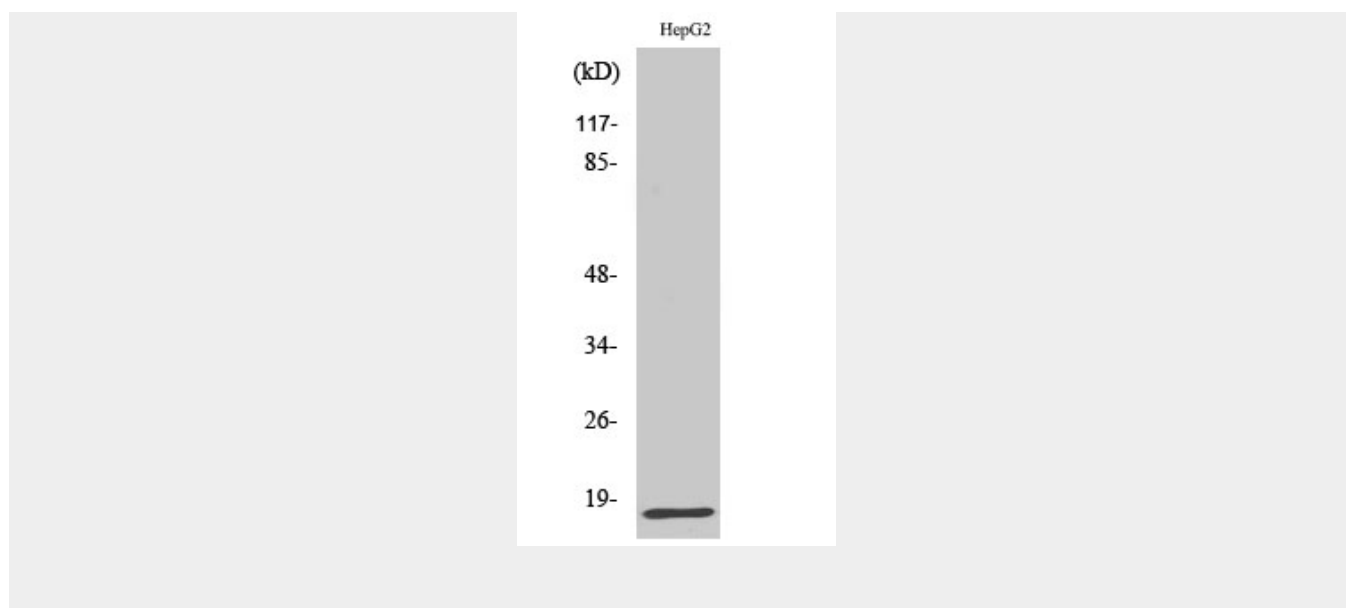
### IFN- $\gamma$ Polyclonal Antibody - Protocols

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](#)

### IFN- $\gamma$ Polyclonal Antibody - Images





#### IFN-γ Polyclonal 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.