

**Interferon gamma (IFNG) Antibody - With BSA and Azide**  
**Mouse Monoclonal Antibody [Clone SPM408 ]**  
**Catalog # AH11505**

**Specification**

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**Interferon gamma (IFNG) Antibody - With BSA and Azide - Product Information**

Application	,3,4,
Primary Accession	<a href="#">P01579</a>
Other Accession	<a href="#">3458</a> , <a href="#">856</a>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG1, kappa
Calculated MW	20-25kDa KDa

**Interferon gamma (IFNG) Antibody - With BSA and Azide - Additional Information**

**Gene ID** 3458

**Other Names**

Interferon gamma, IFN-gamma, Immune interferon, IFNG

**Storage**

Store at 2 to 8°C. Antibody is stable for 24 months.

**Precautions**

Interferon gamma (IFNG) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

**Interferon gamma (IFNG) Antibody - With BSA and Azide - 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](http://www.uniprot.org/citations/16914093), PubMed: [8666937](http://www.uniprot.org/citations/8666937)). Primarily signals through the JAK-STAT pathway after interaction with its receptor IFNGR1 to affect gene regulation (PubMed: [8349687](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/16914093)). Plays a role in class I antigen presentation pathway by inducing a replacement of catalytic proteasome subunits with immunoproteasome subunits (PubMed:

[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.

### **Interferon gamma (IFNG) Antibody - With BSA and Azide - 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 (IFNG) Antibody - With BSA and Azide - Images**

### **Interferon gamma (IFNG) Antibody - With BSA and Azide - Background**

Recognizes a protein of 20-25kDa, identified as human interferon. This MAb is specific to human IFN- and recognizes both recombinant and native human IFN- $\gamma$ . It does not neutralize the activity of IFN-. T lymphocytes and NK cells mainly produce IFN-. It is a pleiotropic cytokine involved in the regulation of nearly all phases of immune and inflammatory responses, including the activation, growth and differentiation of T cell, B cells, macrophages, NK cells and other cell types such as endothelial cells and fibroblasts. It has weak anti-viral and anti-proliferative activity, and potentiates the antiviral and anti-tumor effects of IFN- (type I interferon).

### **Interferon gamma (IFNG) Antibody - With BSA and Azide - References**

Vilcek J. Forty years of interferon, forty years of cytokines. Cytokine Growth Factor Rev 1997,8(4):239 | Farrar MA and Schreiber RD. The molecular cell biology of interferon-gamma and its receptor. Annu Rev Immunol 1993, 11:571-611 | Vilcek J et al. Induction of human interferon gamma with phorbol esters and phytohemagglutinin. Methods Enzymol 1986,119:48-54 |