10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-Interferon gamma (IFNG) Antibody
Mouse Monoclonal Antibody
Catalog # AH13311

Specification

Anti-Interferon gamma (IFNG) Antibody - Product Information

Application	**IHC-P, IF, FC**
Primary Accession	P01579
Other Accession	856
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**Mouse / IgG2b, kappa**
Calculated MW	**19348**

Anti-Interferon gamma (IFNG) Antibody - Additional Information

Gene ID 3458

Other Names
AMCF1; Beta thromboglobulin like protein; CXC chemokine ligand 8 (CXCL8); Emoctakin; Granulocyte chemotactic protein 1 (GCP1); IFG; IFI; IFN Immune; IFN-gamma (IFNG); Interleukin 8; Interferon gamma; LECT; LUCT; Lymphocyte derived neutrophil activating factor; LYNAP; Macrophage Activating Factor (MAF); Monocyte derived neutrophil activating protein (MONAP); Monocyte derived neutrophil chemotactic factor (MDNCF); Neutrophil activating factor (NAF); Neutrophil activating peptide 1 (NAP1); Neutrophil activating protein 1 (NAP1); SCYB8; T cell chemotactic factor; T Cell Interferon; Type II Interferon

Application Note
IHC-P~~N/A<br \>IF~~1:50~200<br \>FC~~1:10~50

Format
200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

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

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

Anti-Interferon gamma (IFNG) 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.

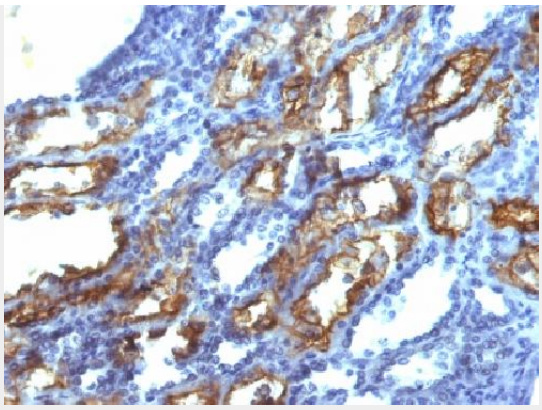
Anti-Interferon gamma (IFNG) Antibody - Protocols

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

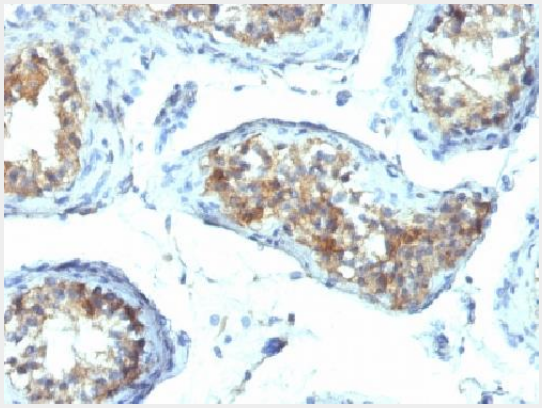
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Interferon gamma (IFNG) Antibody - Images

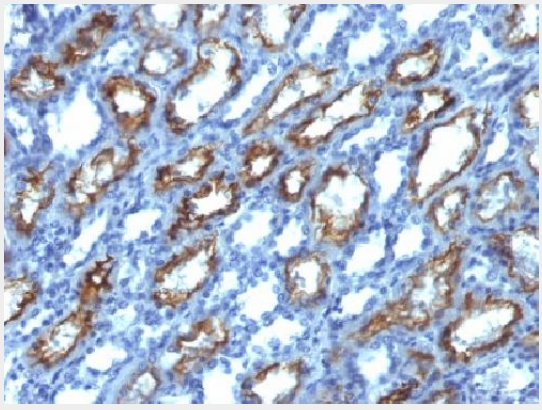
10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



Formalin-fixed, paraffin-embedded human Renal Cell Carcinoma stained with Interferon gamma Monoclonal Antibody (IFNG/466)



Formalin-fixed, paraffin-embedded human Testicular Carcinoma stained with Interferon gamma Monoclonal Antibody (IFNG/466)



Formalin-fixed, paraffin-embedded human Renal Cell Carcinoma stained with Interferon gamma Monoclonal Antibody (IFNG/466)

Anti-Interferon gamma (IFNG) Antibody - 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. 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).