Anti-IFN gamma Antibody
Catalog # ABO10812

Specification

Anti-IFN gamma Antibody - Product Information

Application	**WB**
Primary Accession	[P01579](P01579)
Host	**Rabbit**
Reactivity	**Human**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Interferon gamma(IFNG) detection. Tested with WB in Human.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-IFN gamma Antibody - Additional Information

Gene ID 3458

Other Names
Interferon gamma, IFN-gamma, Immune interferon, IFNG

Calculated MW
19348 MW KDa

Application Details
Western blot, 0.1-0.5 µg/ml, Human

Subcellular Localization
Secreted.

Tissue Specificity
Released primarily from activated T lymphocytes.

Protein Name
Interferon gamma(IFN-gamma)

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen
A synthetic peptide corresponding to a sequence at the C-terminus of human IFN gamma(151-166aa KRKRSQMLFRGRRASQ).

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins

Storage	At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities
Belongs to the type II (or gamma) interferon family.

Anti-IFN 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.

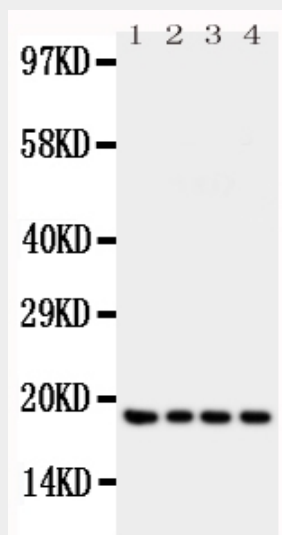## Anti-IFN gamma Antibody - Protocols

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](#)

Anti-IFN gamma Antibody - Images

Anti-IFN gamma antibody, ABO10812, Western blottingAll lanes: Anti IFN gamma (ABO10812) at 0.5ug/mlLane 1: Recombinant Human IFN gamma Protein 10ngLane 2: Recombinant Human IFN gamma Protein 5ngLane 3: Recombinant Human IFN gamma Protein 2.5ngLane 4: Recombinant Human IFN gamma Protein 1.25ngPredicted bind size: 19KDObserved bind size: 19KD

Anti-IFN gamma Antibody - Background

Interferon-gamma(IFN-gamma) is an inflammatory cytokine that has been implicated in the development of fibrosis in inflamed tissues. The production of IFN-gamma, which is under genetic control, can influence the development of fibrosis in lung allografts. IFN-gamma is also produced by natural killer(NK) cells and most prominently by CD8 cytotoxic T cells, and is vital for the control of microbial pathogens. Interferon gamma is believed to be crucial for host defence against many infections. Genetically determined variability in IFN-gamma and expression might be important for the development of tuberculosis. IFN-gamma activates human macrophage oxidative metabolism and antimicrobial activity. In addition to having antiviral activity, IFN-gamma has important immunoregulatory functions. IFN-gamma plays an important role in the control of neointima proliferation.