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Anti-Interferon gamma IFNG Antibody Picoband™ (monoclonal, 8E9)

Catalog # ABO14343

Specification

Anti-Interferon gamma IFNG Antibody Picoband™ (monoclonal, 8E9) - Product Information

Application	**E**
Primary Accession	P01581
Host	**Mouse**
Isotype	**Mouse IgG1**
Reactivity	**Rat**
Clonality	**Monoclonal**
Format	**Lyophilized**

Description
Anti-Interferon gamma IFNG Antibody Picoband™ (monoclonal, 8E9) . Tested in ELISA applications. This antibody reacts with Rat.

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

Anti-Interferon gamma IFNG Antibody Picoband™ (monoclonal, 8E9) - Additional Information

Gene ID 25712

Other Names
Interferon gamma, IFN-gamma, Ifng

Application Details
ELISA (Cap), 1-5 µg/ml

Subcellular Localization
Secreted.

Tissue Specificity
Released primarily from activated T lymphocytes.

Contents
Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen
E. coli-derived rat Interferon gamma recombinant protein (Position: Q23-C156). Rat Interferon gamma shares 38% and 86% amino acid (aa) sequence identity with human and mouse Interferon gamma, respectively.

Cross Reactivity
No cross-reactivity with other proteins.

Storage	**Store at -20˚C for one year from date of**

receipt. After reconstitution, at 4˚C for one month. It can also be aliquotted and stored frozen at -20˚C for six months. Avoid repeated freeze-thaw cycles.

Anti-Interferon gamma IFNG Antibody Picoband™ (monoclonal, 8E9) - 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. Primarily signals through the JAK-STAT pathway after interaction with its receptor IFNGR1 to affect gene regulation. 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. Plays a role in class I antigen presentation pathway by inducing a replacement of catalytic proteasome subunits with immunoproteasome subunits. In turn, increases the quantity, quality, and repertoire of peptides for class I MHC loading. 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. 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 (By similarity). 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 {ECO:0000250|UniProtKB:P01579}.

Tissue Location
Released primarily from activated T lymphocytes.

Anti-Interferon gamma IFNG Antibody Picoband™ (monoclonal, 8E9) - 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 Picoband™ (monoclonal, 8E9) - Images

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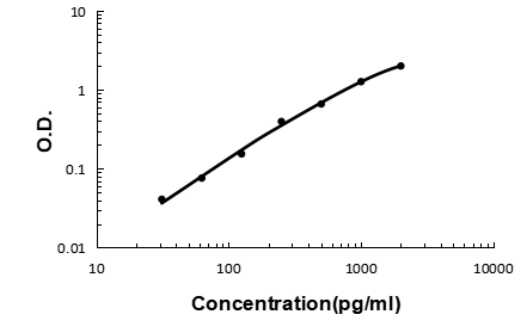

Figure 1. Sandwich ELISA - Recombinant rat Interferon gamma protein standard curve.
Use in combination with reagents from Rat Interferon gamma ELISA Kit EZ-Set (DIY Antibody Pairs) (EZ0374).

Anti-Interferon gamma IFNG Antibody Picoband™ (monoclonal, 8E9) - 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.