

# Mouse IFN- $\gamma$ Antibody

## Monoclonal Antibody

### Product Information

**Product No.:** I-669  
**Clone:** 37895  
**RRID:** AB\_2830790  
**Isotype:** Rat IgG2a  
**Storage:** -20° to -70°C

### Product Description

#### Specificity:

Rat Anti-Mouse Interferon Gamma (IFN- $\gamma$ ) (Clone 37895) recognizes an epitope on Mouse IFN- $\gamma$ . This monoclonal antibody was purified using multi-step affinity chromatography methods such as Protein A or G depending on the species and isotype. This antibody does not cross-react with rhIFN- $\gamma$ , rIFN- $\gamma$ , rpIFN- $\gamma$ , rrmIFN- $\gamma$ , rfeIFN- $\gamma$  or rcalIFN- $\gamma$ .

#### Background:

Mouse IFN-gamma is an acid-labile interferon produced by CD4 and CD8 T lymphocytes as well as activated NK cells. IFN-gamma receptors are present in most immune cells, which respond to IFN-gamma signaling by increasing the surface expression of class I MHC proteins. This promotes the presentation of antigen to T-helper (CD4+) cells. IFN-gamma signaling in antigen-presenting cells and antigen-recognizing B and T lymphocytes regulates the antigen-specific phases of the immune response. Additionally, IFN-gamma stimulates a number of lymphoid cell functions including the anti-microbial and anti-tumor responses of macrophages, NK cells, and neutrophils. Human IFN-gamma species-specific and is biologically active only in human and primate cells.

#### Known Reactivity Species:

Mouse

#### Format:

Purified No Carrier Protein

#### Immunogen:

E. coli-Derived Recombinant Mouse IFN- $\gamma$

#### Formulation

This monoclonal antibody has been 0.2  $\mu$ m filtered and lyophilized from modified Dulbecco's phosphate buffered saline (1X PBS) pH 7.2 - 7.3 containing 5.0% w/v trehalose with no calcium, magnesium or preservatives present.

#### Endotoxin

<0.1 EU/ $\mu$ g as determined by the LAL method

#### Storage and Stability

The lyophilized antibody can be stored desiccated at -20°C to -70°C for up to twelve months. The reconstituted antibody can be stored for at least four weeks at 2-8°C. For long-term storage of the reconstituted antibody, aseptically aliquot into working volumes and store at -20°C to -70°C in a manual defrost freezer.

**Avoid repeated freeze thaw cycles.** No detectable loss of activity was observed after six months

## Applications

### Applications and Recommended Usage (Quality Tested By Leinco):

**FC** It is recommended to use the indirect method for signal enhancement when enumerating cells expressing IFN- $\gamma$ . A suggested method would be to stain cells expressing IFN- $\gamma$  with 0.25  $\mu\text{g}$  per  $1 - 2.5 \times 10^6$  cells in a total staining volume of  $\leq 200 \mu\text{l}$  followed by PN:R485.

**WB** To detect Mouse IFN- $\gamma$  in western blotting, this monoclonal antibody can be used at a concentration of 1-2  $\mu\text{g}/\text{ml}$ . This monoclonal antibody should be used in conjunction with compatible second-step reagents such as PN:R377 and a chromogenic substrate such as PN:T343. The detection limit for Mouse IFN- $\gamma$  is 100 ng/lane under either reducing or non-reducing conditions. The sensitivity of detection may increase up to 50 fold when a chemiluminescent substrate is used.

### Other Applications Reported in Literature:

**N** This antibody is useful for neutralization of Mouse IFN- $\gamma$  bioactivity. The antibody dose required to neutralize 50% (ND50) of the biological activity of Mouse IFN- $\gamma$  (at 2.5 ng/ml) is 0.075 - 0.3  $\mu\text{g}/\text{ml}$ .

**CyTOF®** Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.

### Country of Origin

USA