

## Anti-Mouse IFN gamma FITC

Catalog Number :80812-50

RUO: For Research Use Only. Not for use in diagnostic procedures.

### Product Information

**Clone:** XMG1.2

**Format/Conjugate:** FITC

**Concentration:** 0.5 mg/mL

**Reactivity:** Mouse

**Laser:** Blue (488nm)

**Peak Emission:** 520nm

**Peak Excitation:** 494nm

**Filter:** 530/30

**Brightness (1=dim,5=brightest):** 3

**Isotype:** Rat IgG1, kappa

**Formulation:** Phosphate-buffered aqueous solution, ≤0.09% Sodium azide, may contain carrier protein/stabilizer, pH7.2.

**Storage:** Product should be kept at 2-8°C and protected from prolonged exposure to light.

**Applications:** FC

### Description

The XMG1.2 is a neutralizing antibody that binds with the mouse Interferon-gamma (IFN-γ) protein, a 15 -17 kDa cytokine with significant antibacterial, antiviral, and antitumoral properties. When secreted by natural killer cells and by natural killer T lymphocytes, it regulates the immune response and supports adaptive immunity when produced by Th1 or CD8+ T lymphocytes. IFN-γ plays an important role in the activation, the growth, and the differentiation of the macrophages, B and T lymphocytes, and natural killer cells. It interacts synergically with other cytokines, such as TNF-α, to inhibit proliferation of normal and transformed cells. IFN- γ is the primary cytokine that defines Th-1 cells.

The biological activity of IFN-γ is not affected by glycosylation.

### Preparation & Storage

The product should be stored undiluted at 4°C and should be protected from prolonged exposure to light. Do not freeze. The monoclonal antibody was purified utilizing affinity chromatography and unreacted dye was removed from the product.

### Application Notes

The antibody has been analyzed for quality through the flow cytometric analysis of the relevant cell type. For flow cytometric staining, the suggested use of this reagent is ≤0.125 ug per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

### References

1. Abrams, J. S., Roncarolo, M. G., Yssel, H., Andersson, U., Gleich, G. J., Silver, J. E. (1992). Strategies of anti-cytokine monoclonal antibody development: immunoassay of IL-10 and IL-5 in clinical samples. Immunological reviews,;127(1), 5-24.

2. Cherwinski, H. M., Schumacher, J. H., Brown, K. D., Mosmann, T. R. (1987). Two types of mouse helper T cell clone. III. Further differences in lymphokine synthesis between Th1 and Th2 clones revealed by RNA hybridization, functionally monospecific bioassays, and monoclonal antibodies.;The Journal of experimental medicine,;166(5), 1229-1244.

3. Zhang, Y., Xu, G., Zhang, L., Roberts, A. I., Shi, Y. (2008). Th17 cells undergo Fas-mediated activation-induced cell death independent of IFN- $\gamma$ .;The Journal of Immunology,;181(1), 190-196.