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Technical Data Sheet

Anti-Mouse IFN gamma PE-Cyanine7

Catalog Number :80812-77

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

Product Information

Clone: XMG1.2

Format/Conjugate: PE-Cyanine7

Concentration: 0.2 mg/mL

Reactivity: Mouse

Laser: Blue (488nm), Yellow/Green (532-561nm)

Peak Emission: Not Applicable

Peak Excitation: Not Applicable

Filter: Not Applicable

Brightness (1=dim,5=brightest): Not Applicable

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-γ.;The Journal of Immunology,;181(1), 190-196.