

Product Information

Interferon- γ from rat recombinant, expressed in *Escherichia coli* cell culture tested

Catalog Number **I3275**
Storage Temperature -20°C

Synonym: IFN- γ

Product Description

Interferon- γ is produced by activated T cells, and natural killer cells stimulated by alloantigens, tumors, and mitogens.¹ IFN- γ exerts a variety of biological effects including antiviral activity,² inhibition of cell or tumor growth,^{3,4} and promotion of terminal differentiation of B cells into immunoglobulin-producing cells.^{5,6} In addition, IFN- γ activates macrophages, boosts the cytotoxicity of natural killer cells, and stimulates T cell cytotoxicity.^{7,8} IFN- γ is synergistic with TNF in its cytotoxicity.⁹ IFN- γ acts on cells via specific cell surface receptors.¹⁰

Molecular mass: 15.5 kDa

This product is lyophilized from a 0.2 μm filtered solution of phosphate buffered saline containing 50 μg of bovine serum albumin per 1 μg of cytokine.

Purity: $\geq 97\%$ (SDS-PAGE)

Endotoxin: <1.0 Endotoxin Unit/ μg of IFN- γ

The biological activity of recombinant rat IFN- γ is measured in an antiviral assay using L-929 cells infected with EMC virus.¹¹

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

Reconstitute the contents of the vial using 0.2 μm filtered PBS and 1 mM DTT containing at least 0.1% BSA or HSA to prepare a working stock solution of ≥ 0.1 mg/ml.

Storage/Stability

Product can be stored at -20°C for greater than 6 months. After reconstitution, store at $2-8^{\circ}\text{C}$ for a maximum of three months. For extended storage, freeze in working aliquots at -70°C or -20°C . Repeated freezing and thawing is not recommended.

References

1. Hibino, Y., et al., *J. Biol. Chem.*, **266**, 6948 (1991).
2. Vilcek, J., et al., *Lymphokines*, **11**, 1 (1985).
3. Gresser, I., et al., *Proc. Natl. Acad. Sci. USA*, **66**, 1052 (1970).
4. Knight, E., Jr., *Nature*, **262**, 302 (1976).
5. Perussia, B., et al., *J. Exp. Med.*, **158**, 1092 (1983).
6. Opdenakker, G., et al., *Experimenta (Basel)*, **45**, 513 (1989).
7. Friedman, R.M., et al., *Adv. Immunol.*, **34**, 97 (1983).
8. Vilcek, J., et al., *Interferon and the Immune System*, (1984).
9. Fransen, L., et al., *Cell Immunol.*, **100**, 260, (1986).
10. Pestka, S., et al., *Annu. Rev. Biochem.*, **56**, 727 (1987).
11. Meager, A. *Lymphokines and Interferons, a Practical Approach*, Clemens, M.J., Morris, A.G. and Gearing, A.J.H eds., IRL Press, p.129 (1987).

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