

# Product Data Sheet

## Recombinant Mouse IFN- $\gamma$ (carrier-free)

**Catalog # / Size:** 575302 / 10  $\mu$ g  
575304 / 25  $\mu$ g  
575306 / 100  $\mu$ g  
575308 / 500  $\mu$ g

**Source:** Mouse IFN- $\gamma$ , amino acids His23-Cys155 (Accession # NM\_008337) was expressed in *E. coli*.

**Molecular Mass:** The 134 amino acid N-terminal methionylated recombinant protein has a predicted molecular mass of 15,652 Da. The DTT-reduced and non-reduced protein migrate at approximately 13 kD by SDS-PAGE.

**Purity:** Purity is >98%, as determined by Coomassie stained SDS-PAGE.

**Endotoxin Level:** Endotoxin level is <0.1 EU/ $\mu$ g (<0.01ng/ $\mu$ g) protein as determined by the LAL method.

**Activity:** The ED<sub>50</sub> is 0.2-0.6 ng/ml, corresponding to a specific activity of 5 - 1.67 x 10<sup>6</sup> units/mg, as determined by inhibition of WEHI-279 cell proliferation induced by mouse IFN $\gamma$ .

**Preparation:** 10-100 $\mu$ g sizes are bottled at 100 $\mu$ g/ml. 500 $\mu$ g and larger sizes are bottled at the concentration indicated on the vial.

**Formulation:** 0.22  $\mu$ m filtered protein solution is in 20 mM HEPES, 150 mM NaCl, 5 mM TCEP; pH 7.2

**Storage:** Unopened vial can be stored from -20°C to -70°C for six months. For maximum results, quick spin vial prior to opening. Stock solutions should be prepared at no less than 10  $\mu$ g/ml in buffer containing carrier protein such as 1% BSA or HSA or 10% FBS. After dilution, the cytokine can be stored at 4°C for one month or from -20°C to -70°C for up to 3 months. **Avoid repeated freeze/thaw cycles.**

## Applications:

**Applications:** Bioassay

**Recommended Usage:** Use when high specific biological activity is required.

**Application References:**

1. Reynolds DS, *et al.* 1987. *J. Immunol.* 139:767. (BA)
2. Dey S, *et al.* 2010. *Mol. Cell. Biol.* 30:2181. PubMed
3. Sun T, *et al.* 2012. *Proc. Natl. Acad. Sci. USA* 109:E2117. PubMed

**Description:** Interferon- $\gamma$  is a potent multifunctional cytokine which is secreted primarily by activated NK cells and T cells. Originally characterized based on anti-viral activities, IFN- $\gamma$  also exerts anti-proliferative, immunoregulatory, and proinflammatory activities. IFN- $\gamma$  can upregulate MHC class I and II antigen expression by antigen-presenting cells.

**Antigen References:**

1. Fitzgerald K, *et al.* Eds. 2001. *The Cytokine FactsBook*. Academic Press San Diego.
2. De Maeyer E, *et al.* 1992. *Curr. Opin. Immunol.* 4:321.
3. Farrar M, *et al.* 1993. *Annu. Rev. Immunol.* 11:571.
4. Gray P, *et al.* 1987. *Lymphokines* 13:151.



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