

Rat IFN-gamma

Rat Interferon- γ , recombinant

Synonyms: Immune IFN, type II IFN, T cell IFN, MAF, IFNG, IFG, IFI, IFN-gamma.

PLEASE NOTE: ALWAYS CENTRIFUGE VIAL BEFORE OPENING

Size	Order #	Lot #	Expiry Date
20 μ g	1476.970.020		
100 μ g	1476.970.100		
1 mg	1476.970.199		

Please enquire for bulk quantities and other vial sizes

Description

Recombinant Rat IFN-gamma is a non-glycosylated 135 amino acid protein, with a molecular weight of 15,6 kDa. IFN-gamma is an acid-labile interferon produced by CD4 and CD8 T lymphocytes activated by specific antigens, 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 MHC class I 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.

- **Biological Activity** $\geq 1 \times 10^7$ units/mg
- **Source** *E. Coli*
- **Purity** $\geq 95\%$ (SDS-PAGE, RP-HPLC)
- **Endotoxin level** ≤ 0.1 ng/ μ g (≤ 1 EU/ μ g)
- **Buffer** PBS (pH 7.4)*
- **Physical state** Sterile filtered, lyophilized

Biological Activity

The ED₅₀ of ≤ 0.1 ng/ml was determined by a cytopathic inhibition assay with murine L929 cells challenged with EMC virus, corresponding to a specific activity of $\geq 1 \times 10^7$ units/mg.

Reconstitution

We recommend a quick spin followed by reconstitution water to a concentration of at least 100 μ g/ml. **Do not vortex.** This solution can be stored at 2-8°C for up to 1 week or in working aliquots at -20°C to -80°C. Working aliquots should be at the highest practical concentration. For long term storage we recommend adding at least 0.1% HSA (order number: [2835.955.xyz](#) or [2835.958.xyz](#)) or BSA (order number: [2835.919.xyz](#)).

Stability

The lyophilized protein is stable at room temperature for up to 1 month and at least until the lot specific expiry date if kept below -18°C. Reconstituted rat IFN-gamma stable for at least 3 months when stored in working aliquots at -20°C to -80°C with carrier protein. **Please avoid repeated freeze-thaw cycles.**

Amino Acid Sequence

MQGTLIESLE SLKNYFNSSS MDAMEGKSL LDIWRNWQKD GNTKILESQI ISFYLRRLFV LKDNQAISNN
 ISVIESHLIT NFFSNSKAKK DAFMSIAKFE VNNPQIQHKA VNELIRVIHQ LSPESLRKR KRSRC

Usage: For research use only. Not for use in diagnostic or therapeutic procedures. Not for human use.

*The Buffer may vary depending on the Lot #. Please contact our technical support if you have specific requirements.

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