

Technical Data Sheet

Recombinant human IFN-gamma protein



bioxcell.com

Attention: Use of this product constitutes an agreement to Bio X Cell's Terms and Conditions which are included with this product in print and can also be found at <https://bioxcell.com/terms-and-conditions>.

Lot Specific Information

Lot Number: Lot Specific*

Total Protein: Lot Specific*

*This information will be noted on the certificate of analysis that ships with this product.

Shelf Life

This product has a guaranteed shelf-life of one year from the date of customer receipt when stored as recommended.

Product Website Link: <https://bioxcell.com/recombinant-human-ifn-gamma-protein-rp031>

Product Information

Catalog Number:	RP031
Protein Identity:	Confirmed identity with expected mass, determined by mass spectrometry
Formulation:	Lyophilized, white powder
Endotoxin:	≤0.5 EU/mg, LAL assay
Purity:	≥95%; SDS-PAGE
Reconstitution:	Resuspend in sterile-filtered water at >50 µg/ml. Once reconstituted, store in single-use aliquots to avoid freeze-thaw cycles. Store reconstituted protein at -20 °C to -80 °C for a maximum of 12 months or until the expiry date if sooner.
Sterility:	Sterile
Production:	Microbial. Expressed in E. coli
Molecular Weight:	16.9 kDa (monomer)
Bioactivity Assay:	No significant difference between EC50 of reference and test lots
Mycoplasma:	Negative

Description

Recombinant human IFN-gamma protein (interferon-gamma / IFN-γ) is a non-covalent, α-helical dimeric cytokine and a critical driver of the immune response, produced primarily by CD4+ and CD8+ T cells and natural killer (NK) cells. IFN-gamma activates macrophages, enhances antigen presentation via MHC class I and II, and drives the Th1 immune response, with additional antiviral, antiproliferative and immunoregulatory functions. It binds the interferon-gamma receptor (IFNGR1/IFNGR2) to trigger JAK-STAT signaling and transcription of interferon-stimulated genes (ISGs). Widely used for its immunomodulatory effects, recombinant IFN-gamma is applied in cancer immunotherapy to boost tumor detection and clearance, in autoimmune disease research (e.g., multiple sclerosis and rheumatoid arthritis), in cell culture to model inflammatory environments and activate macrophages and other immune cells, and in vaccine development to enhance antigen presentation and immune efficacy, making it a versatile reagent for immunology research. This protein is optimized for in vivo and functional applications: low-endotoxin, tag-free, and carrier-free, supporting reproducible performance in demanding preclinical and bioactivity studies. Species reactivity: human. Species similarity: mouse - 40%, rat - 38%, bovine - 61%, porcine - 59%.

Storage

Store at the stock concentration at 4°C . **Do not freeze.**

It is not uncommon for a floccule or precipitate to appear during storage. The floccule is typically buffer salts precipitating out of solution or a small bit of protein aggregation. For information on how to remove floccules or precipitates see our FAQ's at <https://bioxcell.com/faqs>.

Store lyophilized protein between -20 °C and -80 °C until the date of expiry. Avoid freeze-thaw cycles

Bio X Cell, LLC

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

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