

Catalog Number: HZ-1301

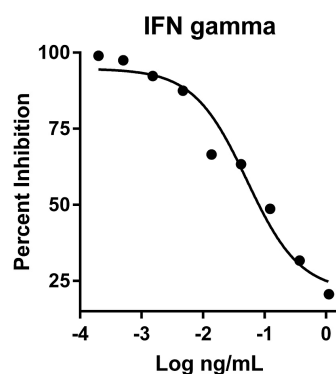
HEK293 expressed

Endotoxin-free

Animal-component free

Technical Specifications

Species	Human
Expression	HEK293
Activity	Typically ≤ 0.05 ng/mL EC50
Purity	>95%
Endotoxin	<1 EU/ μ g
Molecular Mass	29-32 kDa
Formulation	1x PBS, See Certificate of Analysis for details
Gene ID	3458



Reconstitution Buffer

Briefly centrifuge the vial before opening. It is recommended to reconstitute the protein in sterile 1x PBS containing 0.1% endotoxin-free recombinant human albumin (HSA).

The activity was determined by dose dependent inhibition of proliferation of HT-29 cells using Promega CellTiter96[®] Aqueous Non-Radioactive Cell Proliferation Assay.

Stability and Storage

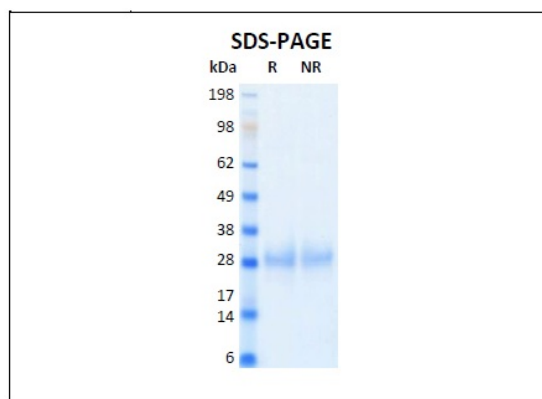
Lyophilized proteins are stable for 1 year from the date of receipt if stored between (-20°C) and (-80°C). Upon reconstitution we recommend that the solution can be stored at (4°C) for short term or at (-20°C) to (-80°C) for long term. Repeated freeze thaw cycles should be avoided with reconstituted products.

Product Description

Recombinant Human Interferon gamma (IFN γ), is a cytokine also known as type II interferon that provides immunity against bacterial, viral and protozoan infections. In its active form, IFN γ occurs as a glycosylated, non-covalently linked homodimer of 29-32 kDa subunits. It is produced by a number of immune cell types such as the natural killer cells, natural killer T cells, and effector lymphocyte T cells following antigenic and inflammatory triggers. Following secretion, the IFN γ dimer binds to its receptor which has two subunits: IFN- γ R1 which is the ligand-binding chain (α chain) and IFN- γ R2, the signal-transducing chain (β chain). The activation of the IFN γ receptor leads to activation of the JAK/STAT pathway which in turn activates IFN γ responsive genes. While IFN γ can inhibit viral replication, it also works as an immune-modulator and immune-stimulator by increasing surface expression of class I MHC proteins.

Synonyms

IFNgamma



The protein was resolved by SDS-polyacrylamide gel electrophoresis and the gel was stained with Coomassie blue. R represents reducing conditions and NR represents non-reducing conditions.

References

- Billiau A & Matthys P. (2009) Interferon-gamma: a historical perspective. *Cytokine Growth Factor Rev* 20(2): 97-113.
- Schroder K et al. (2004) Interferon-gamma: an overview of signals, mechanisms and functions. *J Leukoc Biol* 75(2): 163-89

For technical support and original validation data for this product please contact:

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