

Recombinant Human IFN gamma

Catalog Number: **HZ-1301**

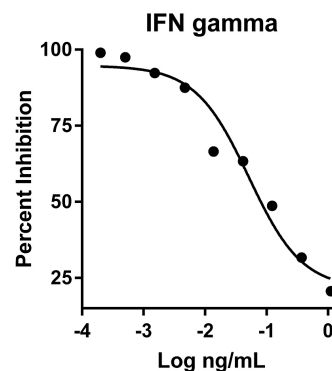
HEK293 expressed

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



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

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).

Stability and Storage

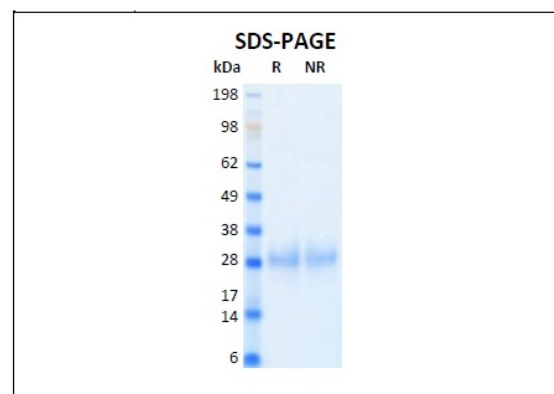
Lyophilized proteins are stable for 1 year from the date of receipt if stored between (-20°C) and (-80°C). Upon reconstitution we recommend that the solution can be stored at (4°C) for short term or at (-20°C) to (-80°C) for long term. Repeated freeze thaw cycles should be avoided with reconstituted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

IFG, IFI, IFN gamma, IFNG, Immune interferon, Interferon gamma, interferon, gamma



The protein was resolved by SDS-polyacrylamide gel electrophoresis and the gel was stained with Coomassie blue.

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:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or
1(312) 455-8498 (outside USA)

E: proteintech@ptglab.com
W: ptglab.com

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