

Datasheet for 009-001-V20-1000**rHuman INF gamma Protein****Overview**

Description:	Human Interferon-gamma Recombinant Protein - 009-001-V20-1000
Item No.:	009-001-V20-1000
Size:	1 mg
Applications:	Cellular Assay
Origin:	Human
Expressed in:	E. coli

Product Details

Background:	Interferon gamma, IFN γ , is a major immune-modulating molecule produced mainly by T cells and natural killer cells activated by antigens, mitogens or alloantigens. Most immune cells express IFN- γ receptors and respond to IFN γ -induced signaling by up-regulating MHC class I expression. Human IFN γ does not show cross-reactivity with mouse. Recombinant human IFN γ is a non-glycosylated protein, containing 144 amino acids, with a molecular weight of 16.88 kDa.
Synonyms:	Type II interferon, T cell interferon, Immune Interferon, MAF
Species of Origin:	Human
Expressed in:	E. coli
Type:	Recombinant Protein
Low Endotoxin:	Yes

Target Details

Gene Name:	IFNG
Purity/Specificity:	Interferon-gamma purity was determined to be greater than 95% as determined by HPLC, analysis by UV-Spectroscopy at 280nm, and by reducing and non-reducing SDS-pAGE.
Relevant Links:	• UniProtKB - P01579

Application Details

Suggested Applications:	Cellular Assay (Based on references)
Application Note:	Lyophilized from an aqueous solution containing 10mM Sodium Phosphate, 50mM Sodium Chloride, pH 7.5. Interferon-gamma Recombinant Protein has been tested by biological activity and is suitable as a control for polyclonal or monoclonal anti-Interferon-gamma in immunological assays.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
Other:	Endotoxin Level: Measured by kinetic LAL analysis and is typically ≤ 1 EU/ μ g protein. Biologic Activity: The activity is measured in antiviral assays using virally infected L929 cells and is typically less than 0.1 ng/mL.

Formulation

Physical State:	Lyophilized
Buffer:	See application note.
Preservative:	None
Stabilizer:	None
Reconstitution Volume:	1.0 mL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

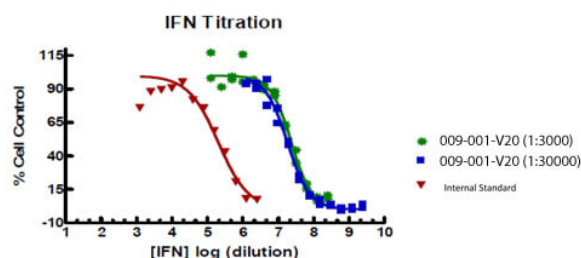
Shipping & Handling

Shipping Condition:	Ambient
Storage Condition:	Store vial at 4° C prior to restoration. Dilute only prior to immediate use. Maintain sterility. This product DOES NOT contain preservative. DO NOT VORTEX. We recommend adding a carrier protein such as HSA or BSA to 0.1% (i.e. 1.0 mg/mL). For best results aliquot contents and freeze at -20° C or colder. Avoid cycles of freezing and thawing. Centrifuge vial before each opening to dislodge contents from the cap and to clarify if contents are not clear after standing at room temperature.
Expiration:	Expiration date is six (6) months from date of receipt.

Images

SDS-PAGE

Bioactivity of Human Interferon-gamma Recombinant Protein. The specific activity, as determined in a viral challenge assay using EMC virus on L929 cells, is 5.8-8.64 x 10⁷ Units/mg. The corresponding ED₅₀ is 0.02-0.011 ng/ml.



Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.