

Datasheet for 012-001-V20-1000**rRat INF gamma Protein****Overview**

Description:	Rat Interferon gamma Recombinant Protein - 012-001-V20-1000
Item No.:	012-001-V20-1000
Size:	1 mg
Applications:	SDS-PAGE, Cellular Assay
Origin:	Rat
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. Recombinant rat IFN γ is a non-glycosylated protein, containing 135 amino acids, with a molecular weight of 15.6 kDa.
Synonyms:	Type II interferon, T cell interferon, Immune Interferon, MAF
Species of Origin:	Rat
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 - P01581

Application Details

Tested Applications:	SDS-PAGE
Suggested Applications:	Cellular Assay (Based on references)
Application Note:	Interferon-gamma Recombinant Protein has been tested by SDS-PAGE and biological activity and is suitable as a control for polyclonal or monoclonal anti-Interferon-gamma in immunological assays. Lyophilized in 10 mM sodium phosphate, 100 mM sodium chloride, pH 7.5.
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 determined in a viral challenge assay using EMC virus on L929 and is typically less than 0.1 ng/mL.

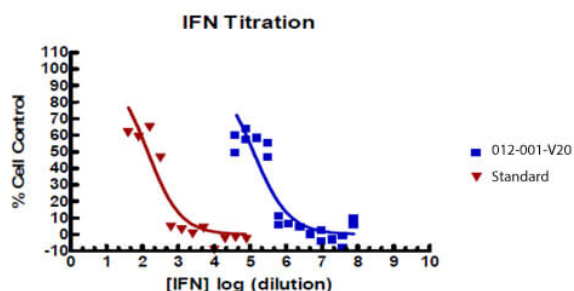
Formulation

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

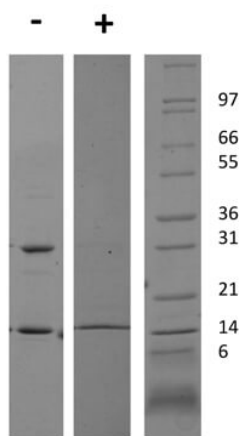
Shipping Condition:	Ambient
Storage Condition:	Store vial at 4° C prior to restoration. Dilute only prior to immediate use. Maintain sterility. This product DOES NOT contain preservative. DO NOT VORTEX. We recommend adding a carrier protein such as HSA or BSA to 0.1% (i.e. 1.0 mg/mL). For best results 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 Rat Interferon gamma Recombinant Protein. The specific activity, as determined in a viral challenge assay using EMC virus on L929 cells, is $8 \times 10^6 - 1.9 \times 10^7$ Units/mg. The corresponding ED50 is 0.125-0.05 ng/ml. This value lies within the expected range of less than 0.1 ng/ml, corresponding to a specific activity of greater than 1×10^7 units/mg.



SDS-PAGE

SDS-PAGE Rat Interferon gamma Recombinant Protein. Lane 1: 1 µg Rat IFN gamma in non-reducing conditions (-). Lane 2: 1 µg Rat IFN gamma in reducing conditions (+). Lane 3: Molecular weight marker. Rat IFN gamma has a predicted MW of 15.6 kDa.

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.