Ifng
Recombinant Mouse Interferon gamma (His Tag)

Catalog No.	CRM683A-His CRM683B-His	**Quantity:**	20 µg 100 µg
Alternate Names:	Interferon gamma, IFN-gamma		
Description:	Interferon gamma is a secreted protein which belongs to the type I I interferon family. IFN-gamma is produced predominantly by natural killer and natural killer T cells as part of the innate immune response, and by CD4 and CD8 cytotoxic T lymphocyte effector T cells once antigen-specific immunity develops. IFN-gamma has antiviral, immunoregulatory, and anti-tumor properties. IFN-gamma, in addition to having antiviral activity, has important immunoregulatory functions, it is a potent activator of macrophages, and has antiproliferative effects on transformed cells and it can potentiate the antiviral and antitumor effects of the type I interferons. The IFN-gamma monomer consists of a core of six α-helices and an extended unfolded sequence in the C-terminal region. IFN-gamma is critical for innate and adaptive immunity against viral and intracellular bacterial infections and for tumor control. Aberrant IFN-gamma expression is associated with a number of autoinflammatory and autoimmune diseases. The importance of IFN-gamma in the immune system stems in part from its ability to inhibit viral replication directly, and most importantly from its immunostimulatory and immunomodulatory effects. IFN-gamma also promotes NK cell activity.		
UniProt ID:	P01580		
Accession Number:	NP_032363.1		
Protein Construction:	A DNA sequence encoding the mouse IFNG (Met 1-Cys 155) was expressed, fused with a polyhistidine tag at the C-terminus.		
Source:	HEK293 Cells		
Formulation:	Lyophilized from sterile PBS, pH 7.4 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.		
Molecular Weight:	The rmIFNG comprises 144 aa with a predicted MW of 17 kDa and migrates at ~21 kDa in SDS-PAGE under reducing conditions, due to glycosylation.		
Purity:	> 75 % as determined by SDS-PAGE.		
Endotoxin Level:	< 1.0 EU per µg of the protein as determined by the LAL method		
Biological Activity:	1. Measured in antiviral assay using L929 cells infected with vesicular stomatitisvirus (VSV). The ED50 for this effect is typically 0.2-1 ng/mL. 2. Measured by its binding ability in a functional ELISA. Immobilized mouse IFNG-His at 10 µg/ml (100 µl/well) can bind mouse IFNGR1-Fc. The EC50 of mouse IFNGR1-Fc is 58.2-135.9 ng/ml.		
Predicted N-terminal:	His 23		

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Reconstitution: **Centrifuge vial prior to opening.** Add sterile distilled water to a concentration of 0.1 mg/mL and gently pipette the solution up and down the sides of the vial. **DO NOT VORTEX**. Allow several minutes for complete reconstitution.

Storage & Stability: Stable for up to 1 year from date of receipt at -20°C to -80°C
After reconstitution, store working aliquots at -20°C to -80°C.
Avoid repeated freeze-thaw cycles.

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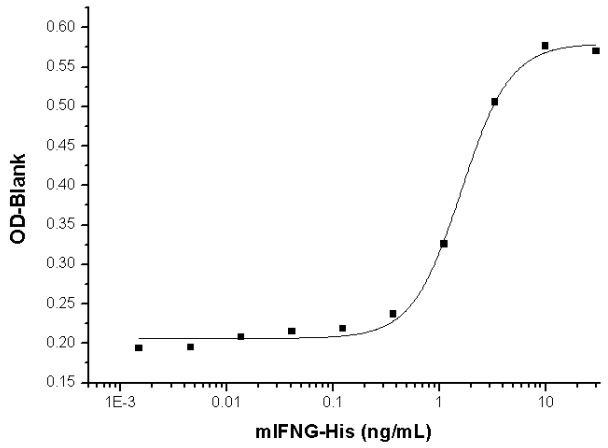
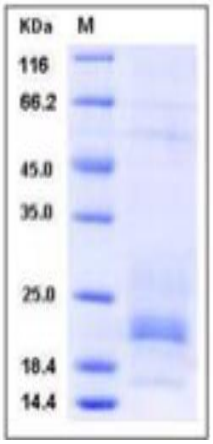


SDS-PAGE



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