

Ifng

Recombinant Mouse Interferon gamma (Fc Tag)

Catalog No.	CRM683A-Fc CRM683B-Fc	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 fused with the Fc region of human IgG1 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 secreted rmIFNG/Fc is a disulfide-linked homodimer. The reduced monomer consists of 374 aa with a predicted MW of 42.5 kDa and migrates at ~55 kDa in SDS-PAGE under reducing conditions, due to glycosylation.		
Purity:	> 92 % 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 assays using L929 cells infected with vesicular stomatitisvirus (VSV). The ED50 for this effect is 2.5-15 ng/mL. 2. Measured by its ability to bind with recombinant mouse IFNGR1-His in a functional ELISA.		
Predicted N-terminal:	His 23		

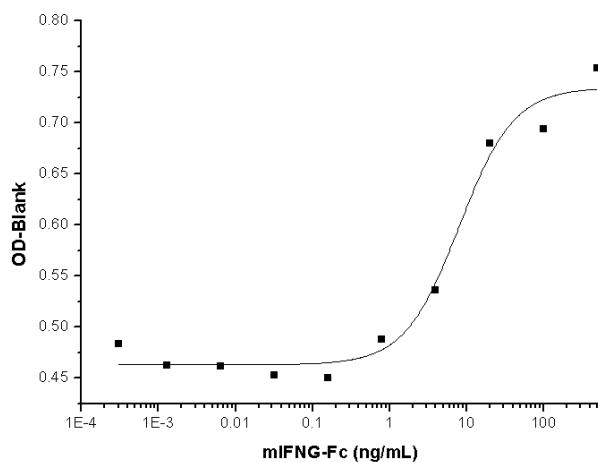
Reconstitution:

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.

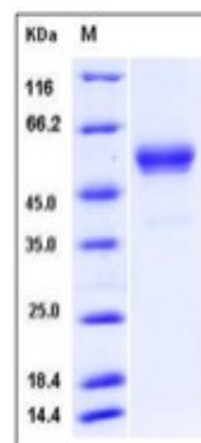
Storage & Stability:

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.

Measured in antiviral assay using L929 cells infected with vesicular stomatitisvirus (VSV). The ED50 for this effect is typically 20-80 ng/mL.



SDS-PAGE



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