

Ifng

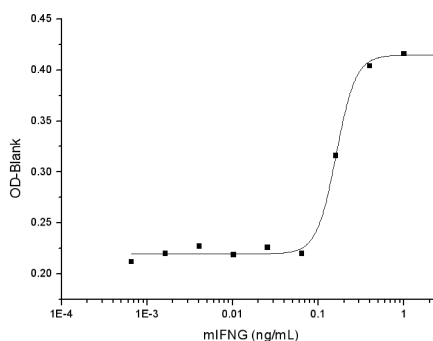
## Recombinant Mouse Interferon gamma

<b>Catalog No.</b>	CRM683A CRM683B CRM683C	<b>Quantity:</b>	100 µg 200 µg 1 mg
<b>Alternate Names:</b>	Interferon gamma, IFN-gamma		
<b>Description:</b>	Interferon gamma is a secreted protein which belongs to the type 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 $\alpha$ -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.		
<b>UniProt ID:</b>	P01580		
<b>Accession Number:</b>	NP_032363.1		
<b>Protein Construction:</b>	A DNA sequence encoding the mouse IFNG (Met1-Cys155) was expressed and purified.		
<b>Source:</b>	HEK293 Cells		
<b>Formulation:</b>	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.		
<b>Molecular Weight:</b>	The rmIFNG consists of 133 aa with a predicted MW of 15.5 kDa and migrates at 19.6 kDa and 15.4 kDa in SDS-PAGE, under reducing conditions.		
<b>Purity:</b>	> 85 % as determined by SDS-PAGE.		
<b>Endotoxin Level:</b>	< 1.0 EU per µg of the protein as determined by the LAL method		
<b>Biological Activity:</b>	1. In a functional ELISA, immobilized mouse IFNG at 10 µg/mL (100 µL/well) can bind mouse IFNGR1-Fc. The EC <sub>50</sub> of mouse IFNGR1-Fc is 0.04-0.08 µg/mL. 2. Measured in antiviral assays using L929 cells infected with vesicular stomatitisvirus (VSV). The ED <sub>50</sub> for this effect is 0.05-0.3 ng/mL.		
<b>Predicted N-terminal:</b>	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 assays using L929 cells infected with vesicular stomatitisvirus (VSV). The ED50 for this effect is 0.05-0.3 ng/mL.



**NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.**