

**Synonym**

Interferon-gamma ,Interferon- $\gamma$

**Source**

Mouse IFN-gamma / IFNG, His Tag(IFG-M52H3) is expressed from human 293 cells (HEK293). It contains AA His 23 - Cys 155 (Accession # [P01580](#) ).

Predicted N-terminus: His 23

**Molecular Characterization**

IFN-gamma(His 23 - Cys 155) P01580	Poly-his
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This protein carries a polyhistidine tag at the C-terminus

The protein has a calculated MW of 17.4 kDa. The protein migrates as 22-23 kDa and 27-28 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

**Endotoxin**

Less than 1.0 EU per  $\mu$ g by the LAL method.

**Purity**

>90% as determined by SDS-PAGE.

>95% as determined by SEC-MALS.

**Formulation**

Lyophilized from 0.22  $\mu$ m filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

**Reconstitution**

Please see Certificate of Analysis for specific instructions.

*For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.*

**Storage**

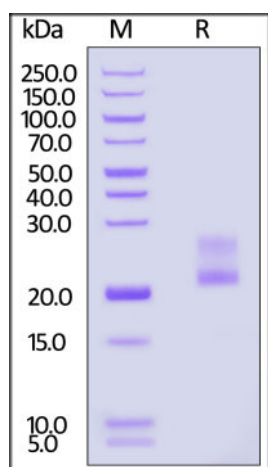
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

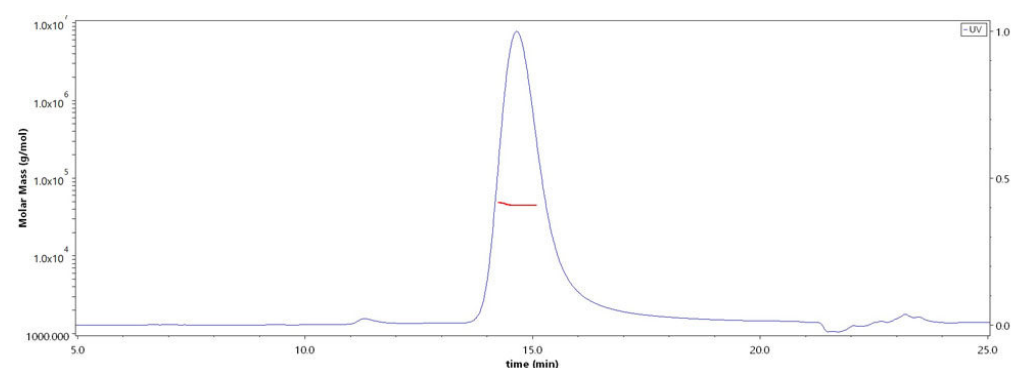
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

**SDS-PAGE**



Mouse IFN-gamma / IFNG, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.

**SEC-MALS**



The purity of Mouse IFN-gamma / IFNG, His Tag (Cat. No. IFG-M52H3) is more than 95% and the molecular weight of this protein is around 40-50 kDa verified by SEC-MALS.

[Report](#)

**Background**

Interferon-gamma (IFN- $\gamma$ /IFNG) is a dimerized soluble cytokine that is the only member of the type II class of interferon. This interferon was originally called macrophage-activating factor, a term now used to describe a larger family of proteins to which IFN- $\gamma$  belongs. IFN-gamma has been used in a wide variety of clinical indications. Interferon-gamma (IFN $\gamma$ ) is a central regulator of the immune response and signals via the Janus Activated Kinase (JAK)-Signal Transducer and

Activator of Transcription (STAT) pathway. Interferon gamma has broader roles in activation of innate and adaptive immune responses to viruses and tumors, in part through upregulating transcription of genes involved in cell cycle regulation, apoptosis, and antigen processing/presentation. Despite this, rodent and human trophoblast cells show dampened responses to IFNG that reflect the resistance of these cells to IFNG-mediated activation of major histocompatibility complex (MHC) class II transplantation antigen expression.

### Clinical and Translational Updates

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.