

Mouse IFNG / Interferon Gamma Protein (His Tag)

Catalog Number: 50709-M08H



Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

IFN-g, Ifg

Protein Construction:

A DNA sequence encoding the mouse IFNG (P01580) (Met 1-Cys 155) was expressed, fused with a polyhistidine tag at the C-terminus.

Source: Mouse

Expression Host: Human Cells

QC Testing

Purity: > 75 % as determined by SDS-PAGE

Bio-Activity

1. Measured in antiviral assays 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 (cat:50709-M08H) at 10 µg/ml (100 µl/well) can bind mouse IFNGR1-Fc (Cat:50705-M02H). The EC50 of mouse IFNGR1-Fc (Cat:50705-M02H) is 58.2-135.9 ng/ml.

Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: His 23

Molecular Mass:

The recombinant mouse IFNG comprises 144 amino acids and has a calculated molecular mass of 17 kDa. As a result of glycosylation, the apparent molecular mass of rn IFNG is approximately 21 kDa in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose and mannitol are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

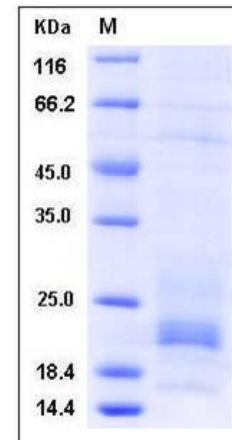
Usage Guide

Storage:

Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

SDS-PAGE:



Reconstitution:

Detailed reconstitution instructions are sent along with the products.

Protein Description

Interferon gamma, also known as IFN-gamma, Immune interferon and IFNG, is a secreted protein which belongs to the type II (or gamma) interferon family. IFN-gamma / IFNG is produced by lymphocytes and activated by specific antigens or mitogens. IFN-gamma / IFNG, in addition to having antiviral activity, has important immunoregulatory functions. It is a potent activator of macrophages, it has antiproliferative effects on transformed cells and it can potentiate the antiviral and antitumor effects of the type I interferons. Genetic variation in IFNG is associated with the risk of aplastic anemia (AA) which is a rare disease in which the reduction of the circulating blood cells results from damage to the stem cell pool in bone marrow. In most patients, the stem cell lesion is caused by an autoimmune attack. T-lymphocytes, activated by an endogenous or exogenous, and most often unknown antigenic stimulus, secrete cytokines, including IFN-gamma, which would in turn be able to suppress hematopoiesis.

References

1. Rinderknecht E. et al., 1984, J. Biol. Chem. 259: 6790-7.
2. Landar A. et al., 2000, J. Mol. Biol. 299: 169-79.
3. Dufour C. et al., 2004, Br. J. Haematol. 126: 682-5.
4. Goshima N. et al., 2008, Nat. Methods 5: 1011-7.

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