

Rat IFN-alpha / IFNA1 / IFN Protein (Fc Tag)

Catalog Number: 80174-R02H



Sino Biological Inc.

Biological Solution Specialist

General Information

Gene Name Synonym:

IFN-alpha1

Protein Construction:

A DNA sequence encoding the rat IFNA1 (P05011) (Met 1-Ser 192) was fused with the Fc region of human IgG1 at the C-terminus.

Source: Rat

Expression Host: Human Cells

QC Testing

Purity: > 90 % as determined by SDS-PAGE

Bio-Activity

Measured in antiviral assays using L929 cells infected with vesicular stomatitisvirus (VSV).

The ED50 for this effect is 1-10 µg/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: Cys 24

Molecular Mass:

The recombinant rat IFNA1/Fc is a disulfide-linked homodimer. The reduced monomer comprises 410 amino acids and predicts a molecular mass of 46.4 kDa. The apparent molecular mass of the rat IFNA1/Fc monomer is approximately 50 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.

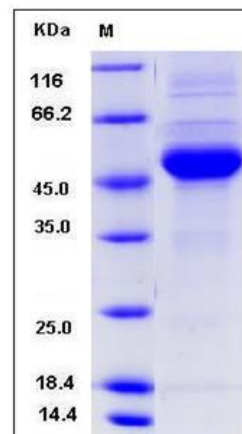
Usage Guide

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

IFN (interferon-alpha 1, human IgG1-Fc chimera), also known as IFN-alpha, IFNA13 and IFNA1, belongs to the alpha/beta interferon family. IFN antiviral activities. Interferon stimulates the production of two enzymes: a protein kinase and an oligoadenylate synthetase. IFNs belong to the large class of glycoproteins known as cytokines. IFNs are proteins made and released by host cells in response to the presence of pathogens such as viruses, bacteria, parasites or tumor cells. They allow for communication between cells to trigger the protective defenses of the immune system that eradicate pathogens or tumors. IFNs can activate immune cells, such as natural killer cells and macrophages; they increase recognition of infection or tumor cells by up-regulating antigen presentation to T lymphocytes; and they also increase the ability of uninfected host cells to resist new infection by virus. Certain host symptoms, such as aching muscles and fever, are related to the production of IFNs during infection.

References

1. Olopade OI. et al., 1992, Genomics. 14 (2): 437-43.
2. Conti L. et al., 2005, Immunobiology. 209 (1-2): 99-115.
3. Bekisz J. et al., 2005, Growth Factors. 22 (4): 243-51.

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Fax :+86-10-51029969 • Tel:+86-400-890-9989 • <http://www.sinobiological.com>