

Human IFN α 4 / IFN α 4 / Interferon alpha-4 Protein (His Tag)

Catalog Number: 10336-H08B



Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

INFA4, MGC142200

Protein Construction:

A DNA sequence encoding the human IFN α 4a (NP_066546.1) (Met 1-Asp 189) was fused with a polyhistidine tag at the C-terminus.

Source: Human

Expression Host: Baculovirus-Insect Cells

QC Testing

Purity: > 88 % as determined by SDS-PAGE

Bio-Activity

Measured in antiviral assays using WISH human amnion cells infected with vesicular stomatitis virus(VSV).
The ED50 for this effect is typically 2-8 pg/mL.

Endotoxin:

< 1.0 EU per μ g 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 human IFN α 4a consists of 176 amino acids and predicts a molecular mass of 20.7 kDa. It migrates as an approximately 20 kDa band in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile 20mM Tris, 500mM NaCl, pH 7.4, 10% gly

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.

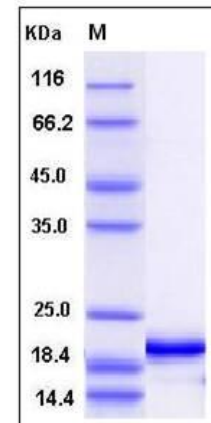
Usage Guide

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 alpha-4, also known as IFN-alpha-4, Interferon alpha-4B, Interferon alpha-76, Interferon alpha-M1 and IFNA4, is a secreted protein which belongs to the alpha / beta interferon family. Interferon alpha-4 / IFNA4 is produced by macrophages, IFN-alpha have antiviral activities. Interferon stimulates the production of two enzymes: a protein kinase and an oligoadenylate synthetase. Interferons (IFNs) are proteins made and released by host cells in response to the presence of pathogens such as viruses, bacteria, or parasites or tumor cells. They allow communication between cells to trigger the protective defenses of the immune system that eradicate pathogens or tumors. IFNs belong to the large class of glycoproteins known as cytokines. IFNs have other functions: they 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 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. Morikawa K. et al., 1987, J Immunol. 139: 761-6.
2. Sato K. et al., 2001, Eur J Immunol. 31: 3146-88.
3. Takaoka A. et al., 2003, Nature. 424: 516-23.
4. Hardy. et al., 2004, Genomics. 84: 331-45.
5. Pirhonen J. et al., 2007, J Leukoc Biol. 82: 1185-92.
6. Badr G. et al., 2005, Int Immunol. 17: 459-67.
7. Hussain M. et al., 1997, J Interferon Cytokine Res. 17: 559-66.

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