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IFN a 2a Human

IFN-Alpha 2a Human Recombinant
CYK0186

Product Overview

Name	IFN a 2a Human

Description

IFN-Alpha 2a Human Recombinant

Accession (Primary)	P01563

Synonyms

Leukocyte IFN, B cell IFN, Type I IFN, IFNA2, IFN-a 2a, Interferon-alpha-2a.

Introduction

IFN-alpha is produced by macrophages and has antiviral activities. IFN stimulates the production of two enzymes: protein kinase and an oligoadenylate synthetase.

Source

Escherichia Coli.

Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation

Lyophilized without additives.

Stability

Lyophilized IFNA-2A although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution IFN-alpha 2a should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Purity

Greater than 97.0% as determined by both: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.

Amino acid sequence

CDLPQTHSLGSRRTLMLLAQMR K ISLFSCLKDRHDFGFPQEEFGNQFQKAETIPVLHEM IQQIFNLFSTKDSSAAWDETLLDKFYTELYQQLNDLEACVIQGVGVTETPLMKEDSILAV RKYFQRITLYLKEKKYSPCAWEVVRAEIMRSFSLSTNLQESLRSKE. N-terminal methionine has been completely removed enzymatically.

Biological Activity

The specific activity as determined in a viral resistance assay using bovine kidney MDBK cells was found to be

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270,000,000 IU/mg.

Solubility

It is recommended to reconstitute the lyophilized Interferon-alpha-2a in sterile 18MΩ-cm H2O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

References

1. Title :Gender specificity of altered human immune cytokine profiles in aging. Publication :Published online before print May 7, 2010, doi: 10.1096/fj.10-160911 September 2010 The FASEB Journal vol. 24 no. 9 3580-3589 Link: IFN a 2a prospec publication 2. Title: Differential involvement of 5-HT1A and 5-HT1B/1D receptor in human IFN a-induced immobility Publication: Arzneimittel-Forschung 60.3 (2009): 109-115. Link: IFN-Alpha 2a prospec publication

Protein content

Protein quantitation was carried out by two independent methods: 1. UV spectroscopy at 280 nm using the absorbency value of 0.924 as the extinction coefficient for a 0.1% (1mg/ml) solution. This value is calculated by the PC GENE computer analysis program of protein sequences (IntelliGenetics). 2. Analysis by RP-HPLC, using a calibrated solution of IFN-a 2a as a Reference Standard.

Precautions

IFN a 2a Human is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: (P01563)