Recombinant Human Interferon-alpha 2 alpha (rh IFN-alpha 2a)

Synonyms: Leukocyte interferon, B cell interferon, Type I interferon, IFNA2

Introduction: Interferons are cytokines that are widely known to induce potent anti-viral activity. Interferon-a exerts a variety of other biological effects, including antitumor and immunomodulatory activities and are increasingly used clinically to treat a range of malignancies, myelodysplasias and autoimmune diseases.
IFN-alpha is produced by macrophages and has antiviral activities. Interferon stimulates the production of two enzymes: protein kinase and an oligoadenylate synthetase.

Description: Recombinant human IFN-alpha 2a produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 165 amino acids and having a molecular mass of 19241 Dalton. The Interferon-alpha 2a gene was obtained from human leukocytes.
The rh IFN-alpha 2a is purified by proprietary chromatographic techniques.

Source: *Escherichia Coli*.

Physical Appearance: Sterile filtered white lyophilized (freeze-dried) powder.

Formulation: Lyophilized without additives
The aliquots/samples of 1µg contain Trehalose 5% (w/vol) for better recovery

Solubility: It is recommended to reconstitute the lyophilized rh IFN-alpha 2a in sterile H_2O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Stability: Lyophilized rh IFN-alpha 2a although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution rh IFN-alpha 2a should be stored at 4°C between 2-7 days and for 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 RP-HPLC and by SDS-PAGE.

Amino acid sequence: The sequence of the first five N-terminal amino acids was determined and was found to be Cys-Asp-Leu-Pro-Gln, conforming to the sequence of native human IFN-alpha. N-terminal methionine has been completely removed enzymatically.

Biological Activity: Specific activity as determined in a viral resistance assay using bovine kidney MDBK cells was found to be 2.7 x 10^8 IU/mg.

This material is offered for **research use only.** Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

small	20 µg	Cat.N°	11343504
medium	100 µg	Cat.N°	11343506

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