

Recombinant Human Interferon-alpha 1beta (rh IFN-alpha 1b)

Synonyms: none

Introduction: Interferons are cytokines that are widely known to induce potent anti-viral activity. Interferon- α 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- α 1b is produced by macrophages, IFN- α 1b has antiviral activities and stimulates the production of two enzymes: a protein kinase and an oligoadenylate synthetase.

Description: Recombinant human IFN- α 1beta produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 166 amino acids and having a molecular mass of 19392 Dalton. It is purified by proprietary chromatographic techniques. The Interferon- α 1beta gene was obtained from human leukocytes.

Source: Escherichia Coli.

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

Formulation: Lyophilized from a 0.2 μ m filtered solution in PBS, pH 7.4, containing 4% mannitol and 1% HSA. The aliquots/samples of 1 μ g contain Trehalose 5% (w/vol) for better recovery.

Solubility: It is recommended to reconstitute the lyophilized rh IFN- α 1beta in sterile H₂O not less than 100 μ g/ml, which can then be further diluted to other aqueous solutions.

Stability: Lyophilized rh IFN- α 1beta although stable at room temperature for 3 weeks, should be stored desiccated below -18° C. Upon reconstitution rh IFN- α 1beta should be stored 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 96.0% 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-Glu.

Biological Activity: The specific activity as determined in a viral resistance assay using bovine kidney MDBK cells was found to be 1 x 10⁸ 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.

<i>small</i>	20 μ g	Cat.N°	11343594
<i>medium</i>	100 μ g	Cat.N°	11343596

ImmunoTools Excellent Quality - Advantageously priced

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