

Interferon-β1b

Human, Recombinant (rHuIFN-β1b)

Expressed in *E. coli*

Cat. No. CRP0889

Lot. No. (See product label)

PRODUCT INFORMATION

Description: Interferon-beta is one of the type I interferons produced by fibroblasts in response to stimulation by live or inactivated virus or by double-stranded RNA. It is a cytokine with antiviral, antiproliferative, and immunomodulating activity. The synthesis of IFN-beta can be induced by common inducers of interferons, including viruses, double-stranded RNA, and micro-organisms. It is induced also by some cytokines such as TNF and IL-1.

Amino-Acid Sequence: 165aa, non-glycosylated

M. W.: approximately 18.5kDa

Recombinant: Expressed in *E. coli*

Purity: >96% by SDS-PAGE and HPLC analyses.

Formulation: Lyophilized from a 0.2μm filtered concentrated (1mg/ml) solution in PBS, pH 7.4, containing 3% mannitol.

Endotoxin: Less than 1EU/μg of rHuIFN-β1b as determined by LAL method.

Reconstitution: We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/ml. Stock solutions should be apportioned into working aliquots and stored at <-20°C. Further dilutions should be made in appropriate buffered solutions.

Storage: This lyophilized preparation is stable for several weeks at 2-8°C, but should be kept at -20°C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -70°C. Avoid repeated freeze/thaw cycles.

FOR RESEARCH USE ONLY



[PDB](#) rendering based on 1au1.
Available structures: [1au1](#)

GENE INFORMATION

Gene Name: [IFNB1](#)

Synonyms: interferon, beta 1, fibroblast; IFNB; IFB, IFF; IFNB_HUMAN; Interferon beta Precursor; IFN-beta; Fibroblast interferon;MGC96956;IFNB

mRNA Refseq: [NM_002176](#)

Protein Refseq: [NP_002167](#)

MIM: [147640](#)

GeneID: [3456](#)

UniProt ID: P01574

Chromosome Location: 9p21

Pathway: Cytokine-cytokine receptor interaction; Jak-STAT signaling pathway; Natural killer cell mediated cytotoxicity; Toll-like receptor signaling pathway

Function: interferon-alpha/beta receptor binding

REFERENCES

- 1.Copeland KF (2006). Modulation of HIV-1 transcription by cytokines and chemokines. Mini reviews in medicinal chemistry 5 (12): 1093–101.
- 2.Silverman RH, Sengupta DN (1991). Translational regulation by HIV leader RNA, TAT, and interferon-inducible enzymes. J. Exp. Pathol. 5 (2): 69–77.
- 3.Flores I, Mariano TM, Pestka S (1991). Human interferon omega (omega) binds to the alpha/beta receptor. J. Biol. Chem. 266 (30): 19875–7.

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