

Human IFN-beta 1b

Human Interferon- β 1b, recombinant

Synonyms: Leukocyte IFN, B cell IFN, Type I IFN, IFNB1, IFB, IFF, IFNB, IFN-b 1b, MGC96956.

PLEASE NOTE: ALWAYS CENTRIFUGE VIAL BEFORE OPENING

Size	Order #	Lot #	Expiry Date
2 μ g	1475.950.002		
10 μ g	1475.950.010		
1 mg	1475.950.199		

Please enquire for bulk quantities and other vial sizes

Description

Recombinant Human Interferon beta 1b is an 18.5kDa single, non-glycosylated mutein (variant form) of human Interferon beta-1b polypeptide chain containing 165 amino acids. The IFN-beta gene was cloned from human fibroblasts and altered to substitute Serine for the Cysteine residue found at position 17. IGF-beta 1b has antiviral, antibacterial and anticancer activities.

- **Biological activity** $\geq 3.2 \times 10^7$ units/mg
- **Source** *E. Coli*
- **Purity** $\geq 98\%$ (SDS-PAGE, RP-HPLC)
- **Endotoxin level** $\leq 0.1\text{ng}/\mu\text{g}$ ($\leq 1\text{EU}/\mu\text{g}$)
- **Stabilizer** None
- **Buffer** 50mg Human Albumin (HSA), 50mg Dextrose*
- **Physical state** Sterile filtered, lyophilized

Protein content

Protein quantitation was carried out by two independent methods:

1. UV spectroscopy at 280 nm using the absorbency value of 1.493 as the extinction coefficient for a 0.1% (1mg/ml) solution. The PC GENE computer analysis program of protein sequences (IntelliGenetics) calculates this value.
2. Analysis by RP-HPLC, using a calibrated solution of IFN-beta as a reference standard.

Biological Activity

The specific activity as determined in a viral resistance assay (human "Wish" cell line and VSV virus or the monkey VERO cell line with EMCV virus) was found to be $\geq 3.2 \times 10^7$ units/mg.

Reconstitution

We recommend a quick spin followed by reconstitution in water to a concentration of at least 100 μ g/ml. This solution can then be diluted into other aqueous solutions.

Stability

Lyophilized Human Interferon-beta 1b although stable at room temperature for 3 weeks, should be stored desiccated below -20°C . Upon reconstitution, Human IFN-beta 1b should be stored at 4°C between 2-7 days and below -20°C for future use. For long term storage we recommend to add at least 0.1% HSA (order number: 2835.955.xyz or 2835.958.xyz) or BSA (order number: 2835.919.xyz). **Please avoid repeated freeze-thaw cycles.**

Amino Acid Sequence

The sequence of the first five N-terminal amino acids was determined and was found to be Ser-Tyr-Asn-Leu-Leu.

Usage: For research use only. Not for use in diagnostic or therapeutic procedures. Not for human use.

*The Buffer may vary depending on the Lot #. Please contact our technical support if you have specific requirements.