

**DATASHEET**  
Version 20181206**IFN- $\alpha$  1b, Human****Cat. No.:** Z02866-10**Size:** 10.0 ug**Synonyms:** Interferon- $\alpha$ 1b (IFN- $\alpha$ 1b), Human;**Description:**

At least 23 different variants of IFN-alpha are known. The individual proteins have molecular masses between 19-26 kDa and consist of proteins with lengths of 156-166 and 172 amino acids. All IFN-alpha subtypes possess a common conserved sequence region between amino acid positions 115-151 while the amino-terminal ends are variable. Many IFN-alpha subtypes differ in their sequences at only one or two positions. Naturally occurring variants also include proteins truncated by 10 amino acids at the carboxy-terminal end.

**Amino Acid Sequence:**

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00001 MCDLPETHSL DNRRTLMLLA QMSRISPSSC LMDRHDFGFP
00041 QEEFDGNQFQ KAPASVLHE LIQQIFNLFT TKDSSAAWDE
00081 DLLDKFCTEL YQLNDLEAC VMQEERVGET PLMNVDSILA
00121 VKKYFRITL YLTEKKYSPC AWEVVRAEIM RSLSLSTNLQ
00161 ERLRRKE
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**Source:** *E. coli***Species:** Human**Biological Activity:** Fully biologically active when compared to standard. The specific activity determined by an anti-viral assay is no less than  $1.0 \times 10^8$  IU/mg.**Molecular Weight:** Approximately 19.5 kDa, a single non-glycosylated polypeptide chain containing 167 amino acids.**Formulation:** Lyophilized from a 0.2  $\mu$ m filtered solution in PBS, pH 7.4, containing 4 % mannitol and 1 % HSA.**Appearance:** Sterile Filtered White lyophilized (freeze-dried) powder.**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  $\leq -20$  °C. Further dilutions should be made in appropriate buffered solutions.**Purity:** > 96 % by SDS-PAGE and HPLC analyses.**Endotoxin Level:** Less than 1 EU/ $\mu$ g of rHuIFN- $\alpha$ 1b as determined by LAL method.**Storage:** This lyophilized preparation is stable 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.