

## **Growth Factor Data Sheet**

GoldBio growth factors are manufactured for RESEARCH USE ONLY and cannot be sold for human consumption!

Interferon alpha1 belongs to the type I interferon family and is encoded by the IFNA1 gene in humans. It is expressed in peripheral blood leukocytes and lymphoblastoid cells. It plays an important role in inducing non-specific resistance against a broad range of viral infections. It also affects cell proliferation and modulates immune responses. Interferon alpha proteins represent a group of related but distinct

proteins that share over 95 % amino acid sequence homology. IFNA1 contains four highly conserved cysteine residues which form two disulfide bonds, one of which is necessary for biological activity. IFNalpha1B differs from IFNalpha1A by having one valine residue in a position where IFNalpha1A has an alanine.

Catalog Number Product Name	1160-02 IFN-alpha1B, Human Recombinant Human Interferon, alpha 1B IFNA1 Interferon, Leukocyte (IFL) B-cell Interferon Interferon-alphaD
Source	Escherichia coli
MW	~19.5 kDa (167 amino acids)
Sequence	MCDLPETHSL DNRRTLMLLA QMSRISPSSC LMDRHDFGFP QEEFDGNQFQ KAPAISVLHE LIQQIFNLFT TKDSSAAWDE DLLDKFCTEL YQQLNDLEAC VMQEERVGET PLMNVDSILA VKKYFRRITL YLTEKKYSPC AWEVVRAEIM RSLSLSTNLQ ERLRRKE
Accession Number	<u>P01562</u>
Purity	>96% by SDS-PAGE and HPLC analyses
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.
Formulation	Sterile filtered white lyophilized powder. Purified and tested for use in cell culture.
Storage/Handling	This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage. The reconstituted sample can be apportioned into working aliquots and stored at -80 °C for up to 6 months. Avoid repeated freeze/thaw cycles.
Reconstitution	The sample should be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in a siliconized tube using PBS that contains a 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Reconstituted solutions are stable for up to one week at 2-8°C. Stock solutions should be aliquoted and stored at -80°C. Further dilutions should be made in appropriate buffered solutions containing BSA or serum.