

Recombinant Human IFN- α -1B Protein

Product Information

Product Name	Cat#	Size
Recombinant Human IFN- α -1B Protein	91202ES10	10 μ g
	91202ES60	100 μ g
	91202ES76	500 μ g

Product Description

Interferons (IFN) are a family of cytokines with potent antiviral, antiproliferative and immunomodulatory properties, classified based on their binding specificity to cell surface receptors. Human IFNA2 was originally cloned in the early '80s and now more than a dozen closely related IFN alpha subtypes have been identified in both the human and mouse genome, each sharing about 80% amino acid (aa) sequence homology. Structurally, type I IFNs belong to the class of five helical-bundle cytokines, with the IFNA subtypes containing 2 conserved disulfide bonds. The extracellular domain (ECD) of mature human IFNA1, also known as IFNA13, shares 63% aa sequence identity with mouse IFNA1. Two variants of human IFNA1 are known to exist, IFNA1a and IFNA1b, which only differ by a single residue at position 137. The type I IFNs bind to the interferon alpha receptor (IFNAR), which consists of two subunits: IFNAR1 (alpha - subunit) and IFNAR2 (beta - subunit).

Product Properties

Synonyms	Human IFN- α 1b
Accession	P01562
GeneID	3439
Source	E.coli-derived Human IFN- α 1b protein,Cys24-Glu189(A115).with an N-terminal Met.
Molecular Weight	Approximately 19.5 kDa
AA Sequence	MCDLPETHSL DNRRTMLLA QMSRISPSSC LMDRHDFGFP QEEFDGNQFQ KAPAI SVLHE LIQQIFNLFT TKDSSAAWDE DLLDKFCTEL YQQLNDLEAC VMQEERVGET PLMNVDSILA VKKYFRITL YLTEKKYSPC AWEVVRAEIM RSLSLSTNLQ ERLRRKE
Tag	None
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
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 1.0×10^8 IU/mg.
Endotoxin	< 1.0 EU per 1 μ g of the protein by the LAL method.
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS, pH 7.4, containing 4% mannitol and 1 % HSA. We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom.
Reconstitution	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.

Shipping and Storage

The products are shipped with ice pack and can be stored at -20 °C for 1 year.

1 month, 2 to 8 °C under sterile conditions after reconstitution.

3 months, -20 °C under sterile conditions after reconstitution.

Recommend to aliquot the protein into smaller quantities when first used and avoid repeated freeze-thaw cycles.

Cautions

1. Avoid repeated freeze-thaw cycle.
2. For your safety and health, please wear lab coats and disposable gloves for operation.
3. For research use only.