

Human IFN-β Catalog # PBG10576

Specification

Human IFN-β - Product Information

Human IFN-β - Additional Information

Description

Proteins of this family play an important role in inducing non-specific resistance against a broad range of viral infections. They also affect cell proliferation and modulate immune responses. Produced by peripheral blood leukocytes and lymphoblastoid cells, IFN α is an acid stable molecule that signals through IFN $\alpha/\beta R$, which is also used by IFN β . Both IFNs have similar anti-viral activity and regulate expression of MHC class I antigens. IFN α contains four highly conserved cysteine residues which form two disulfide bonds, one of which is necessary for biological activity. Recombinant human IFN β is an 20.0 kDa protein containing 166 amino acid residues. Due to glycosylation, IFN β has an approximate MW of 22.3 kDa based on SDS-PAGE gel and Mass Spectrometry.

BiologicalActivity

Assay #1:Measured by its ability to induce apoptosis in HeLa cells. The expected ED₅₀ for this effect is 20-30 ng/ml.

 Assay #2: Determined by its ability to stimulate the proliferation of human TF-1 cells. The expected ED₅₀ is \leq 0.1 ng/ml, corresponding to a specific activity of \geq 1 x 10⁷ units/mg.

Authenticity

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

Endotoxin Endotoxin level is <0.1 ng/ μg of protein (<1EU/ μg).

Protein Content Verified by UV Spectroscopy and/or SDS-PAGE gel.

Storage -20°C

Precautions Human IFN- β is for research use only and not for use in diagnostic or therapeutic procedures.

Human IFN-β - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides



- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Human IFN-β - Images