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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, IFNα is an acid stable molecule that signals through IFNα/βR, which is also used by IFNβ. Both IFNs have similar anti-viral activity and regulate expression of MHC class I antigens. IFNα contains four highly conserved cysteine residues which form two disulfide bonds, one of which is necessary for biological activity. Recombinant human IFNβ is an 20.0 kDa protein containing 166 amino acid residues. Due to glycosylation, IFNβ 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 ≤ 0.1 ng/ml, corresponding to a specific activity of ≥ 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.

- Western Blot
- Blocking Peptides

- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Human IFN-β - Images