

Rev03 DATASHEET

Update: Dec,14,2021

## IFN-β, Human

Cat. No.: Z03109

## **Product Introduction**

Species	Human
Protein Construction	IFN-β (Met22-Asn187) Accession # P01574
Purity	> 95% as analyzed by SDS-PAGE
Endotoxin Level	$<$ 0.2 EU/ $\mu g$ of protein by gel clotting method
Biological Activity	ED <sub>50</sub> < 0.1 ng/ml, measured in a proliferation assay using TF-1 Cells.
Expression System	HEK 293
Apparent Molecular Weight	~23 kDa, on SDS-PAGE under reducing conditions.
Formulation	Lyophilized after extensive dialysis against PBS.
Reconstitution	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH <sub>2</sub> O or PBS up to 100 $\mu$ g/ml.
Storage & Stability	Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

## **Background**

**Target Background :** Interferon-beta (IFN- $\beta$ ), acting via STAT1 and STAT2, is known to upregulate and downregulate a wide variety of genes, most of which are involved in the antiviral immune response. It is a member of Type I IFNs, which include IFN- $\alpha$ , - $\beta$ ,  $\tau$ , and - $\omega$ . IFN- $\beta$  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.

**Synonyms:** Leukocyte interferon; B cell interferon; Type I interferon

For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.