

Rev06
 Update: Aug,20,2025

DATASHEET

IFN- λ 1, Human

Cat. No.: Z02742

Product Introduction

Species	Human
Protein Construction	IFN- λ 1 (Gly20-Thr200) Accession # Q8IU54
Purity	> 97% as analyzed by SDS-PAGE > 97% as analyzed by HPLC
Endotoxin Level	< 1 EU/ μ g of protein by LAL method
Biological Activity	Fully biologically active when compared to standard. The ED ₅₀ as determined by an anti-viral assay using human HepG2 cells infected with encephalomyocarditis is less than 5.0 ng/ml, corresponding to a specific activity of > 2.0 $\times$ 10 ⁵ IU/mg.
Expression System	E. coli
Theoretical Molecular Weight	19.8 kDa
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS, pH 7.4.
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 sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/ml.
Storage & Stability	Upon receiving, this product remains stable for 6 months at -70°C or -20°C. Upon reconstitution, the product should be stable for 1 week at 4°C or for 3 months at -20°C. Avoid repeated freeze-thaw cycles.

Background

Target Background : IL-28A, IL-28B, and IL-29, also named interferon- λ 2 (IFN- λ 2), IFN- λ 3, and IFN- λ 1, respectively, are newly identified class II cytokine receptor ligands that are distantly related to members of the IL-10 family (11-13% aa sequence identity) and the type I IFN family (15-19% aa sequence identity). The expression of IL-28A, B, and IL-29 is induced by virus infection or double-stranded RNA. All three cytokines exert bioactivities that overlap those of type I IFNs, including antiviral activity and up-regulation of MHC class I antigen expression. The three proteins signal through the same heterodimeric receptor complex that is composed of the IL-10 receptor β (IL-10 R β) and a novel IL-28 receptor α (IL-28 R α , also known as IFN- λ R1). Ligand binding to the receptor complex induces Jak kinase activation and STAT1 and STAT2 tyrosine phosphorylation.

Synonyms : Interferon- λ 1; IFN λ 1

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

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