

Rev03
Update: Dec,14,2021

DATASHEET

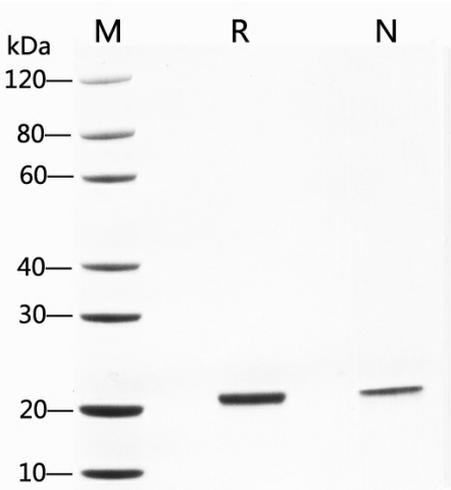
IFN- α 2a, Human

Cat. No.: Z03003

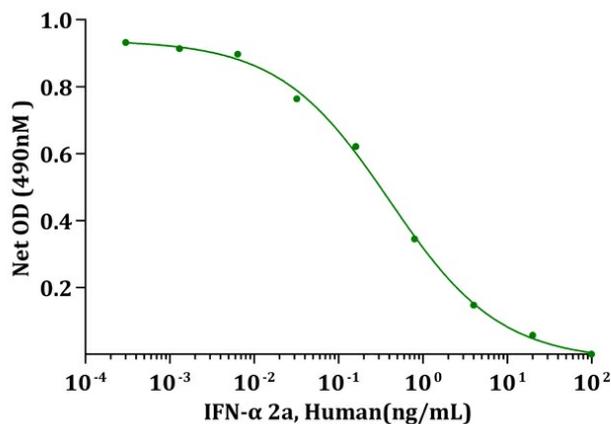
Product Introduction

Species	Human
Protein Construction	IFN-α 2a (Cys24-Glu188) Accession # P01563
Purity	> 95% as analyzed by SDS-PAGE > 95% as analyzed by HPLC
Endotoxin Level	< 0.2 EU/ μ g of protein by gel clotting method
Biological Activity	ED ₅₀ < 0.1 ng/ml, measured by a cytotoxicity assay using TF-1 Cells, corresponding to a specific activity of > 1.0 \times 10 ⁷ units/mg.
Expression System	E. coli
Apparent Molecular Weight	~19.2 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 ₂ O up to 100 μ 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.

Examples



2 µg of IFN-α 2a, Human (Cat. No. Z03003) was resolved with SDS-PAGE under reducing (R) and non-reducing (N) conditions and visualized by Coomassie Blue staining.



Biological Activity

IFN-alpha 2a, Human (Cat. No. Z03003) induced cytotoxicity of R&D TF-1 cells. The ED₅₀ for this effect is less than 0.1ng/mL.

Background

Target Background : Interferon-Alpha 2a (IFN-Alpha 2a), Human produced by leukocytes is a member of Interferon family. IFN-alpha is mainly involved in innate immune response against a broad range of viral infections. IFN-alpha 2 has three acid stable forms (a,b,c) signaling through IFNAR2. IFN-alpha 2a shares 99.4% , 98.8% aa sequence identity with IFN-alpha 2b and 2c respectively. IFN-alpha contains four highly conserved cysteine residues which form two disulfide bonds, one of which is necessary for biological activity.

Synonyms : Leukocyte interferon; B cell interferon; Type I interferon; IFNA2; IFN-a 2a

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