

Human IFN alpha/beta R1 Protein

Cat. No. IFN-HM4R1

Description

Source	Recombinant Human IFN alpha/beta R1 Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus. It contains Lys28-Lys436.
Accession	P17181-1
Molecular Weight	The protein has a predicted MW of 50.2 kDa. Due to glycosylation, the protein migrates to 74-95 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 1EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

Formulation and Storage

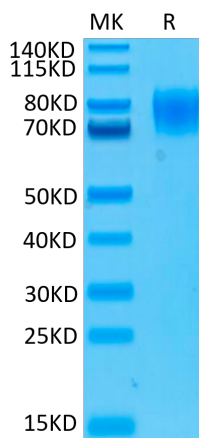
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

IFN-alpha / beta R1, also known as IFNAR1, belongs to the class II cytokine receptor family of proteins. Class II cytokine receptors form heterodimeric receptor complexes that mediate class II cytokine signals. Subunits of the different receptor complexes are shared and serve multiple functions. Functions in general as heterodimer with IFNAR2. Type I interferon binding activates the JAK-STAT signaling cascade, and triggers tyrosine phosphorylation of a number of proteins including JAKs, TYK2, STAT proteins and the IFNR alpha- and beta-subunits themselves.

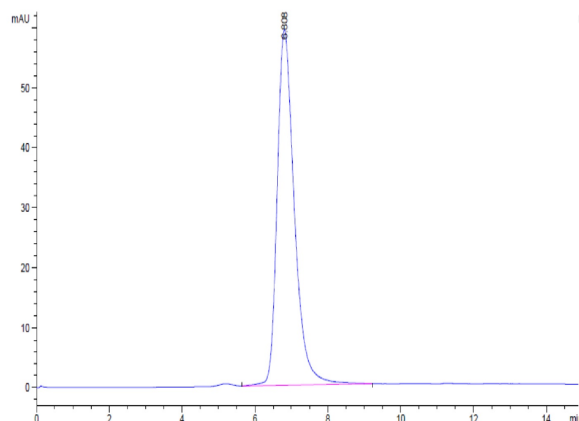
Assay Data

Bis-Tris PAGE



Human IFN alpha/beta R1 on Bis-Tris PAGE under reduced conditions. The purity is greater than 95%.

SEC-HPLC



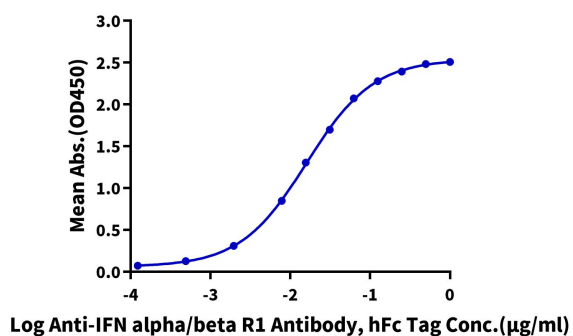
The purity of Human IFN alpha/beta R1 is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

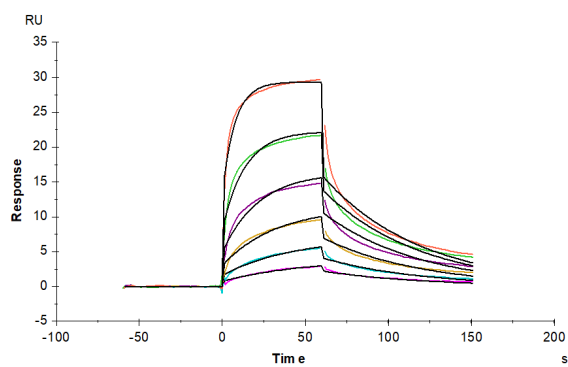
Human IFN alpha/beta R1, His Tag ELISA

0.2µg Human IFN alpha/beta R1, His Tag Per Well



Immobilized Human IFN alpha/beta R1, His Tag at 2µg/ml (100µl/well) on the plate. Dose response curve for Anti-IFN alpha/beta R1 Antibody, hFc Tag with the EC50 of 16.0ng/ml determined by ELISA (QC Test).

SPR Data



Human IFN alpha/beta R1, His Tag captured on CM5 Chip via anti-his antibody can bind Human IFN alpha 1, hFc Tag with an affinity constant of 0.12 µM as determined in SPR assay (Biacore T200).