Human IFN-alpha / beta R1 Protein, His Tag, low endotoxin (MALS verified)

Catalog # IF1-H5225

Synonyms

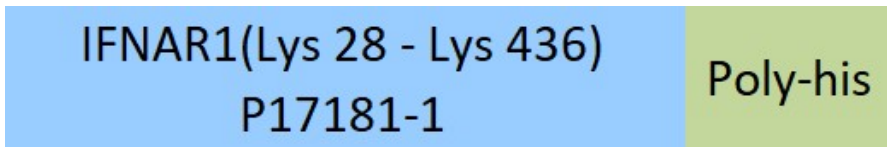
IFNAR1, IFNAR, CRF2-1, IFN-R-1, IFNAR-1

Source

Human IFN-alpha / beta R1 Protein, His Tag (IF1-H5225) is expressed from human 293 cells (HEK293). It contains AA Lys 28 - Lys 436 (Accession # P17181-1).

Predicted N-terminus: Lys 28

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 49.0 kDa. The protein migrates as 65-100 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 0.01 EU per μg by the LAL method / rFC method.

Purity

>95% as determined by SDS-PAGE.

>95% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 μm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Shipping and Storage

This product is shipped at ambient temperature.

For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

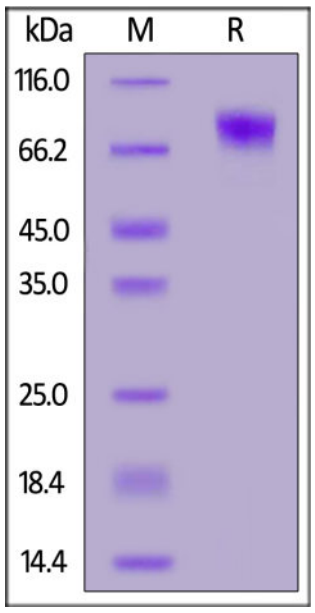
This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

ACRO Quality Management System

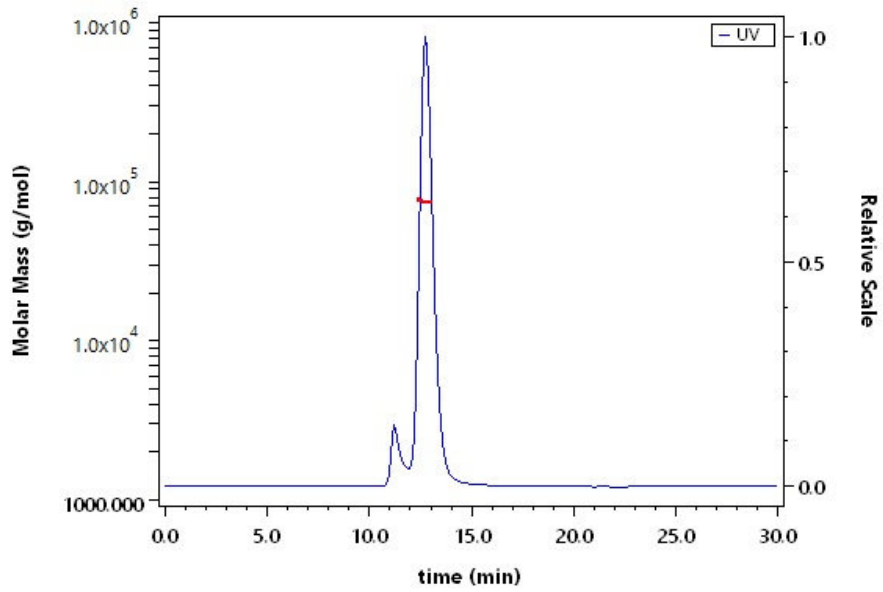
- QMS(ISO, GMP)
- Quality Advantages
- Quality Control Process

SDS-PAGE



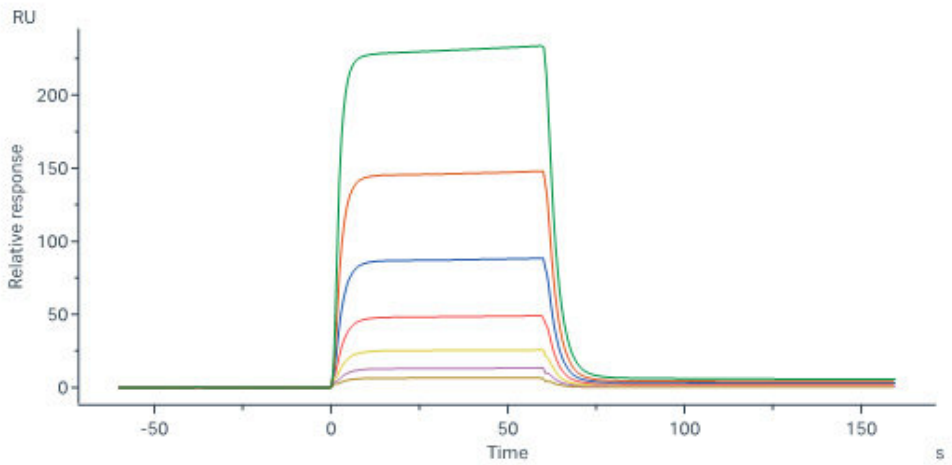
Human IFN-alpha / beta R1 Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

SEC-MALS



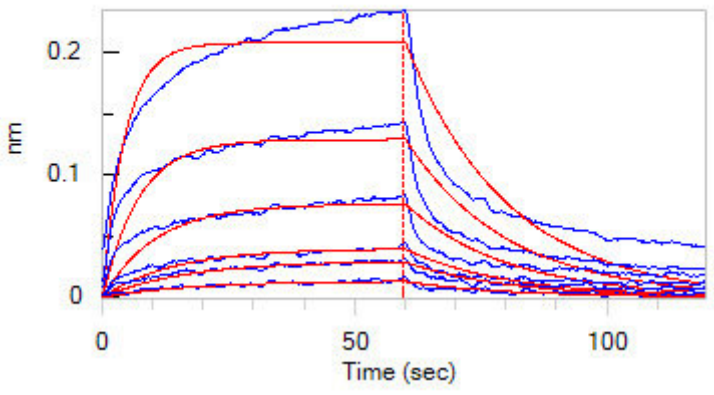
The purity of Human IFN-alpha / beta R1 Protein, His Tag (Cat. No. IF1-H5225) is more than 95% and the molecular weight of this protein is around 60-81 kDa verified by SEC-MALS.

Bioactivity-SPR

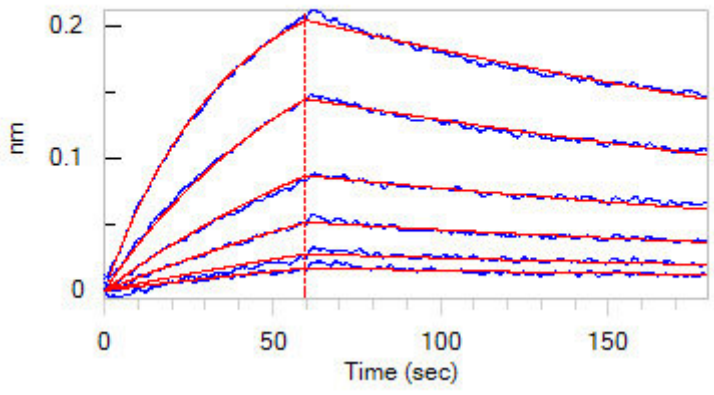


Human IFN-alpha 1, Fc Tag (Cat. No. IFA-H5258) captured on Protein A Chip can bind Human IFN-alpha / beta R1 Protein, His Tag (Cat. No. IF1-H5225) with an affinity constant of 5.14 μM as determined in a SPR assay (Biacore 8K) (Routinely tested).

Bioactivity-BLI



Loaded Human IFNAR1, His Tag (Cat. No. IF1-H5225) on NTA Biosensor, can bind Human IFN-alpha 2b Protein, Fc Tag (Cat. No. IFB-H5253) with an affinity constant of 0.689 μM as determined in BLI assay (ForteBio Octet Red96e) (QC tested).



Loaded Human IFN-alpha / beta R1, His Tag (Cat. No. IF1-H5225) on NTA Biosensor, can bind Human IFN-alpha 1, Fc Tag (Cat. No. IFA-H5258) with an affinity constant of 11.3 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

Background

Interferon alpha/beta receptor 1 (IFR1) is also known as Cytokine receptor class-II member 1, Cytokine receptor family 2 member 1 (CRF2-1), Type I interferon receptor 1, IFR, which belongs to the type II cytokine receptor family. IFR1 /IFR contains four fibronectin type-III domains. IFR1 associates with IFR2 to form the

type I interferon receptor. IFR1 is receptor for interferons alpha and beta. IFR1 can transduce IFNB signals without the help of IFR2, and not activating the Jak-STAT pathway.