



## Synonym

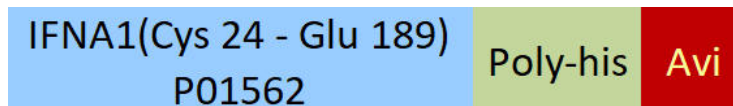
IFN-alpha 1,IFNA1,IFNalpha 1,IFN-alpha-1,LeIF D

## Source

Biotinylated Human IFN-alpha 1 Protein, His,Avitag(IFA-H82E4) is expressed from human 293 cells (HEK293). It contains AA Cys 24 - Glu 189 (Accession # [P01562](#)).

Predicted N-terminus: Cys 24

## Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (Avitag™).

The protein has a calculated MW of 23.1 kDa. The protein migrates as 23-26 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.

## Labeling

*Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.*

## Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

## Purity

>95% as determined by SDS-PAGE.

>90% as determined by SEC-HPLC.

## 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.*

## Storage

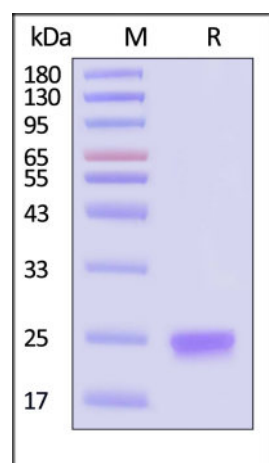
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*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.

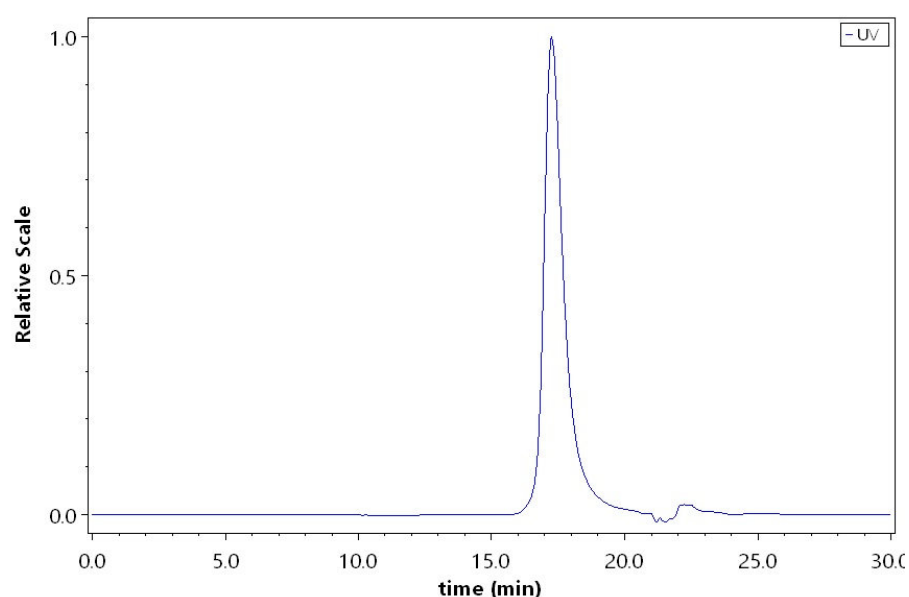
## SDS-PAGE



Biotinylated Human IFN-alpha 1 Protein, His,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With [Star Ribbon Pre-stained Protein Marker](#)).

## Bioactivity-SPR

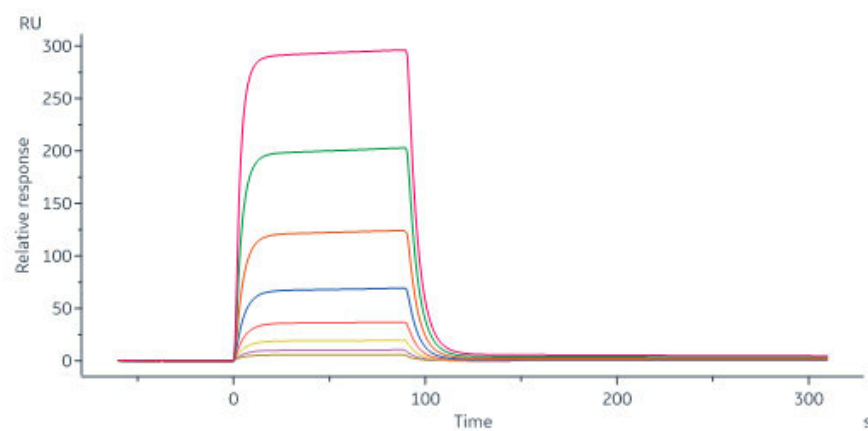
## SEC-HPLC



The purity of Biotinylated Human IFN-alpha 1 Protein, His,Avitag (Cat. No. IFA-H82E4) was greater than 90% as determined by SEC-HPLC.

Discounts, Gifts,  
and more!





Biotinylated Human IFN-alpha 1 Protein, His,Avitag (Cat. No. IFA-H82E4) captured on Biotin CAP-Series S Sensor Chip can bind Human IFNAR2, His Tag (Cat. No. IF2-H5224) with an affinity constant of 1.74  $\mu$ M as determined in a SPR assay (Biacore 8K) (QC tested).

### Background

Interferon alpha-1 is also known as IFN-alpha-1/13, Interferon alpha-D, LeIF D and IFNA1, belongs to the alpha / beta interferon family. Interferons alpha-1 and alpha-13 have identical protein sequences. Produced by macrophages, IFN-alpha have antiviral activities. Interferon stimulates the production of two enzymes: a protein kinase and an oligoadenylate synthetase. IFN-alpha can either suppress or promote the development of autoimmune diabetes. It is likely that IFN-alpha plays a complex role in the etiology of type 1 diabetes.

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