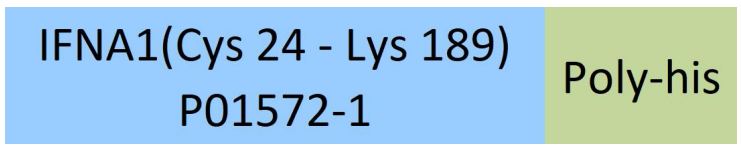
Synonym

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

Source

Mouse IFN-alpha 1, His Tag(IFA-M52H3) is expressed from human 293 cells (HEK293). It contains AA Cys 24 - Lys 189 (Accession # P01572-1).
Predicted N-terminus: Cys 24

Molecular Characterization



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

The protein has a calculated MW of 21.0 kDa. The protein migrates as 24-27 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per μg by the LAL method / rFC method.

Purity

>90% as determined by SDS-PAGE.

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

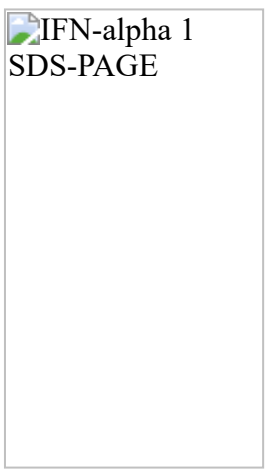
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

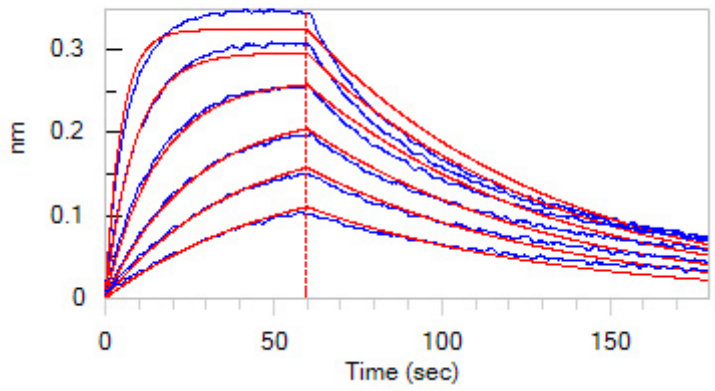
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE

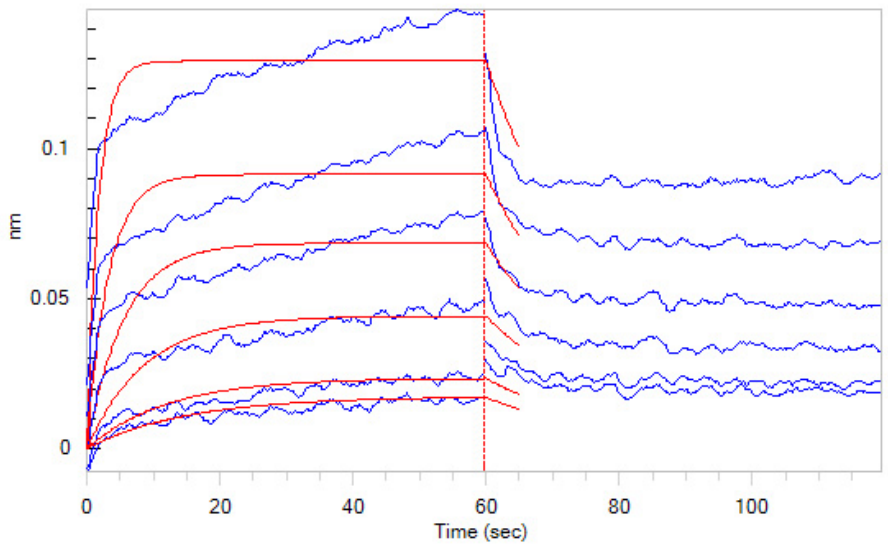


Mouse IFN-alpha 1, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

Bioactivity-BLI



Loaded Mouse IFN-alpha 1, His Tag (Cat. No. IFA-M52H3) on HIS1K Biosensor, can bind Human IFNAR1, Fc Tag (Cat. No. IF1-H5253) with an affinity constant of 0.17 μM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).



Loaded Mouse IFN-alpha 1, His Tag (Cat. No. IFA-M52H3) on HIS1K Biosensor, can bind Human IFNAR2, Fc Tag (Cat. No. IF2-H5255) with an affinity constant of 1.0 μM as determined in BLI assay (ForteBio Octet Red96e) (Routinely 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.