

Synonym

IFN-alpha 2b,IFNA2B,IFN-alpha 2 (alpha 2b),interferon alpha 2b

Source

Human IFN-alpha 2b, Fc Tag (IFB-H5253) is expressed from human 293 cells (HEK293). It contains AA Cys 24 - Glu 188 (Accession # P01563-1). Predicted N-terminus: Cys 24

Molecular Characterization

Fc(Pro 100 - Lys 330) P01563-1 Fc(Pro 100 - Lys 330)

This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 45.7 kDa. The protein migrates as 47-55 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

>90% 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.

Storage

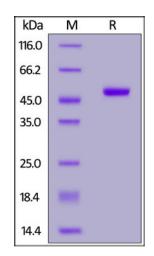
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

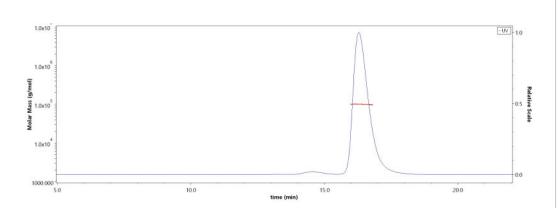
SDS-PAGE



Human IFN-alpha 2b, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA

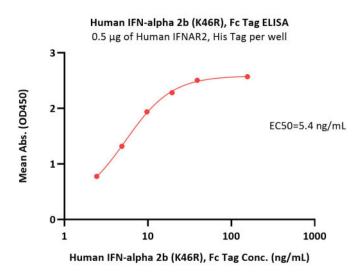
SEC-MALS



The purity of Human IFN-alpha 2b, Fc Tag (Cat. No. IFB-H5253) is more than 90% and the molecular weight of this protein is around 95-105 kDa verified by SEC-MALS.

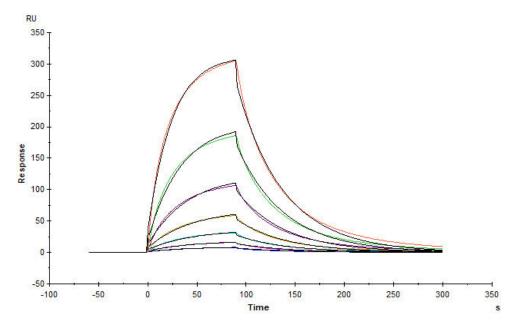
Report





Immobilized Human IFNAR2, His Tag (Cat. No. IF2-H5224) at 5 μ g/mL (100 μ L/well) can bind Human IFN-alpha 2b (K46R), Fc Tag (Cat. No. IFB-H5253) with a linear range of 2.4-10 ng/mL (QC tested).

Bioactivity-SPR



Human IFN-alpha 2b (K46R), Fc Tag (Cat. No. IFB-H5253) immobilized on CM5 Chip can bind Human IFNAR2, His Tag (Cat. No. IF2-H5224) with an affinity constant of 0.257 μ M as determined in SPR assay (Biacore T200) (Routinely tested).

Background

IFN-alpha is a cytokine that has an immunomodulatory function. It plays an important role not only in antiviral activity but also in several physiologic functions, such as activation of dendritic cells and accelerated expression of major histocompatibility complex I and II molecules that may cause increased antigen presentation. Variants of human leukocyte interferon alpha 2 (IFN-alpha 2a, alpha 2b, and alpha 2c) differ from each other by changes in their coding regions at nucleotide positions 137 and 170. IFN-alpha 2b (IFN α -2b) is an important cytokine and used for antiviral and anticancer treatment.

Clinical and Translational Updates

