Mouse IFN-alpha / beta R2 Protein, His Tag

Catalog # IF2-M5225

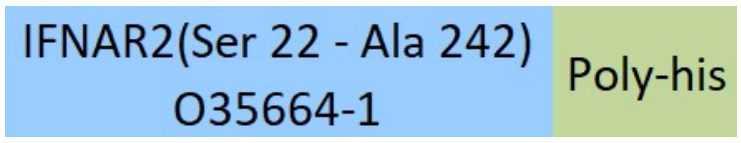
Synonym

IFNAR2,IFNARB,IFNABR,IFN-R-2,IFN-alpha,beta receptor 2

Source

Mouse IFN-alpha / beta R2, His Tag(IF2-M5225) is expressed from human 293 cells (HEK293). It contains AA Ser 22 - Ala 242 (Accession # O35664-1). Predicted N-terminus: Ser 22

Molecular Characterization



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

The protein has a calculated MW of 26.6 kDa. The protein migrates as 45-55 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.

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

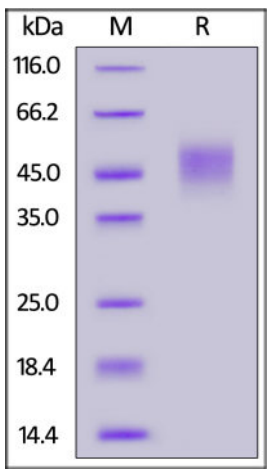
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

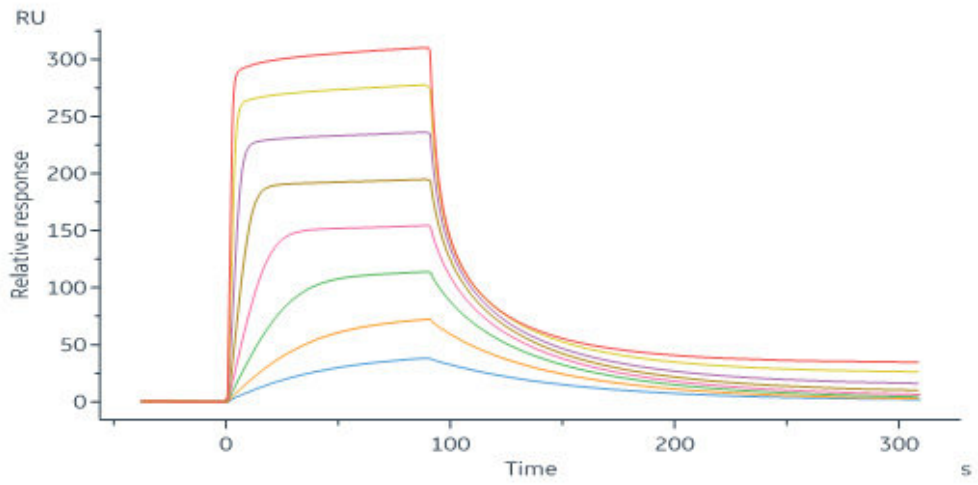
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



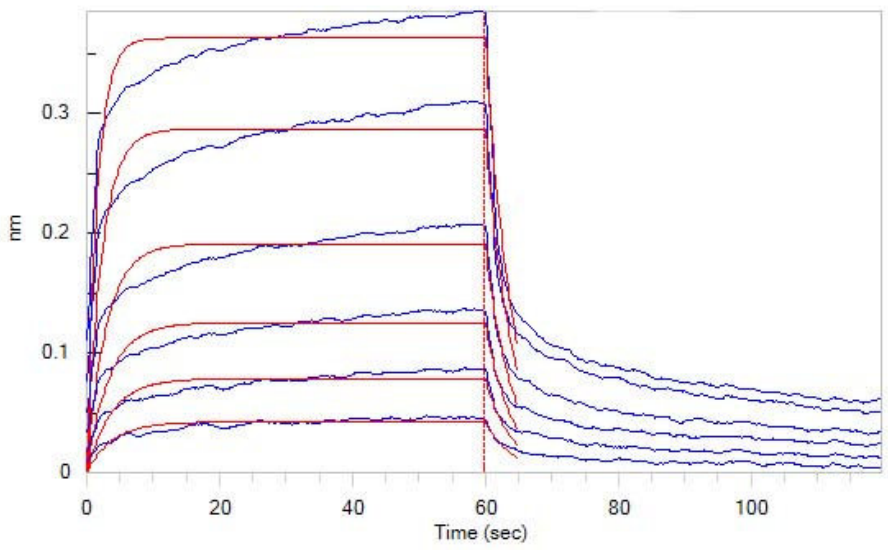
Mouse IFN-alpha / beta R2, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-SPR



Mouse IFN-alpha / beta R2, His Tag (Cat. No. IF2-M5225) immobilized on CM5 Chip can bind Mouse IFN-alpha 1, His Tag (Cat. No. IFA-M52H3) with an affinity constant of 0.109 μM as determined in a SPR assay (Biacore 8K) (Routinely tested).

Bioactivity-BLI



Loaded Mouse IFN-alpha / beta R2, His Tag (Cat. No. IF2-M5225) on NTA Biosensor, can bind Human IFN-alpha 2b Protein, Fc Tag (Cat. No. IFB-H5253) with an affinity constant of 1.9 μM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

Background

Interferon alpha/beta receptor 2 (IFNAR2) is also known as IFN-alpha binding protein, IFN-alpha/beta receptor 2, Type I interferon receptor 2, IFNABR and IFNARB, which is a single-pass type I membrane protein and belongs to the type II cytokine receptor family. IFNAR2 can associate with IFNAR1 to form the type I interferon receptor. IFNAR2 is a receptor for interferons alpha and beta.IFNAR2 involves in IFN-mediated STAT1, STAT2 and STAT3 activation. Isoform 1 and isoform 2 of IFNAR2 are directly involved in signal transduction due to their association with the TYR kinase, JAK1. Isoform 3 of IFNAR2 is a potent inhibitor of type I IFN receptor activity.Genetic variations in IFNAR2 influence susceptibility to hepatitis B virus (HBV) infection.

Clinical and Translational Updates