

### **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**

IFNAR2(Ser 22 - Ala 242) O35664-1

Poly-his

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  $\mu g$  by the LAL method.

## **Purity**

>95% as determined by SDS-PAGE.

#### **Formulation**

Lyophilized from 0.22  $\mu m$  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

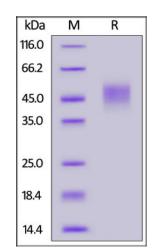
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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**

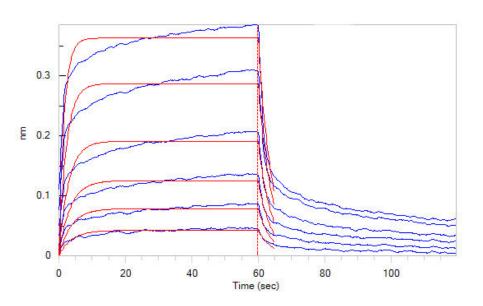


Mouse IFN-alpha / beta R2, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

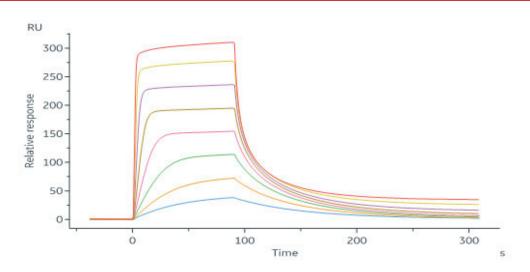
# **Bioactivity-SPR**







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  $\mu$ M as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).



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  $0.109~\mu M$  as determined in a SPR assay (Biacore 8K) (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**

Please contact us via <u>TechSupport@acrobiosystems.com</u> if you have any question on this product.