Human IFNAR1 / IFNAR Protein (Fc Tag)

Catalog Number: 13222-H02H

General Information

Gene Name Synonym:

AVP; IFN-alpha-REC; IFNAR; IFNBR; IFRC

Protein Construction:

A DNA sequence encoding the human IFNAR1 isoform 1 (P17181-1) extracellular domain (Met 1-Lys 436) was fused with the Fc region of human IgG1 at the C-terminus.

Source: Human

Expression Host: HEK293 Cells

QC Testing

Purity: ≥ 88 % as determined by SDS-PAGE. ≥ 90 % as determined by SEC-HPLC.

Endotoxin:

< 1.0 EU per μg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: Lys 28

Molecular Mass:

The recombinant human IFNAR1/Fc is a disulfide-linked homodimeric protein. The reduced monomer consists of 650 amino acids and has a predicted molecular mass of 74 kDa. The apparent molecular mass of the reduced monomer is approximately 100-120 kDa in SDS-PAGE under reducing conditions due to glycosylation.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

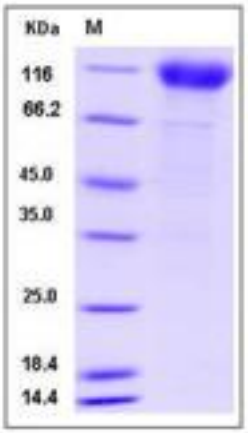
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Interferon-alpha/beta receptor alpha chain (IFNAR1) is a type I membrane protein that forms one of the two chains of a receptor for interferons alpha and beta. Binding and activation of the receptor stimulates Janus protein kinases, which in turn phosphorylate several proteins, including STAT1 and STAT2. The encoded protein also functions as an antiviral factor. Tyk2 slows down IFNAR1 degradation and that this is due, at least in part, to inhibition of IFNAR1 endocytosis. Mutant versions of IFNAR1, in which Tyr466 is changed to phenylalanine, can act in a dominant negative manner to inhibit phosphorylation of STAT2. These observations are consistent with a model in which IFNAR1 mediates the interaction between JAK kinases and the STAT transcription factors.

References

1.Yan H, *et al.* (1996) Phosphorylated interferon-alpha receptor 1 subunit (IFNaR1) acts as a docking site for the latent form of the 113 kDa STAT2 protein. EMBO J. 15(5): 1064-74. 2.Richter MF, *et al.* (1998) Specific contribution of Tyk2 JH regions to the binding and the expression of the interferon alpha/beta receptor component IFNAR1. J Biol Chem. 273(38): 24723-9. 3.Abramovich C, *et al.* (1997) A protein-arginine methyltransferase binds to the intracytoplasmic domain of the IFNAR1 chain in the type I interferon receptor. EMBO J. 16(2): 260-6.