

Mouse IFNGR2 Protein (His Tag)



Sino Biological
Biological Solution Specialist

Catalog Number: 50665-M08H

General Information

Gene Name Synonym:

Ifgr2; Ifgt

Protein Construction:

A DNA sequence encoding the extracellular domain of mouse IFNGR2 (NP_032364.1) (Met 1-Val 243) was expressed, with a C-terminal polyhistidine tag.

Source: Mouse

Expression Host: HEK293 Cells

QC Testing

Purity: > 97 % as determined by SDS-PAGE

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°C

Predicted N terminal: Ser 20

Molecular Mass:

The secreted recombinant mouse IFNGR2 comprises 234 amino acids and has a calculated molecular mass of 26.7 kDa. As a result of glycosylation, the apparent molecular mass of the recombinant protein is approximately 40-45 kDa in SDS-PAGE under reducing conditions.

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:

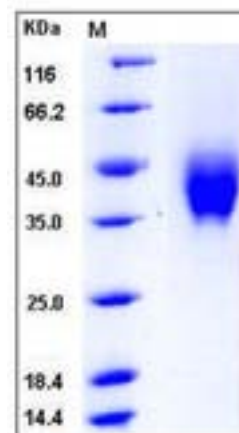
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Interferon gamma receptor beta chain (IFN γ R2), also known as IFNGR2, belongs to the type II cytokine receptor family, whose deficiency is a cause of autosomal recessive mendelian susceptibility to mycobacterial disease (MSMD), also known as familial disseminated atypical mycobacterial infection. This accessory factor is an integral part of the IFN- γ signal transduction pathway and is likely to interact with GAF, JAK1, and/or JAK2. IFNGR2 is a component of the IFN γ receptor complex along with the IFN γ R alpha chain (IFNGR1), and is a new Bax suppressor. The C-terminal fragment (cytoplasmic domain) of IFN γ R2 is expressed in human cancer cell lines of megakaryocytic cancer (DAMI), breast cancer (MDA-MD-468), and prostate cancer (PC3 cells). The Th1 cytokine IFN γ , acting through its heterodimeric receptors, IFN γ R1 and IFN γ R2, in the induction/proliferation of Th1 cells, might suppress the Th2 responses that may underlie atopic asthma. IFNGR2 has always been seen as a key mechanism for shielding T lymphocytes from the antiproliferative effects of the IFN γ -signal transducer and activator of transcription 1 (STAT1) pathway.

References

1. Gao PS, *et al.* (1999). Nonpathogenic common variants of IFNGR1 and IFNGR2 in association with total serum IgE levels. *Biochem Biophys Res Commun.* 263(2): 425-9.
2. Regis G, *et al.* (2006). IFN γ R2 trafficking tunes IFN γ -STAT1 signaling in T lymphocytes. *Trends Immunol.* 27(2):96-101.
3. Al-Muhsen S, *et al.* (2008). The genetic heterogeneity of mendelian susceptibility to mycobacterial diseases. *J Allergy Clin Immunol.* 122 (6): 1043-51.

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