

Mouse IFNGR1 / CD119 Protein (His Tag)

Catalog Number: 50705-M08H



Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

CD119; Ifgr; IFN-gammaR; Ifngr; Nktar

Protein Construction:

A DNA sequence encoding the mouse IFNGR1 (P15261) extracellular domain (Met 1-Asp 253) was expressed, with a polyhistidine tag at the C-terminus.

Source: Mouse

Expression Host: HEK293 Cells

QC Testing

Purity: ≥ 98 % as determined by SDS-PAGE. ≥ 90 % as determined by SEC-HPLC.

Bio Activity:

1. Immobilized Mouse IFNGR1-His (Cat: 50705-M08H) at 2 µg/mL (100 µl/well) can bind mouse IFNG-Fc (Cat: 50709-M02H), The EC₅₀ of mouse IFNG-Fc (Cat: 50709-M02H) is 20-100 ng/mL. 2. Measured by its ability to inhibit mIFNγ mediated protection of L929 cells infected with vesicular stomatitisvirus (VSV). The ED₅₀ for this effect is 40-200 ng/mL.

Endotoxin:

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

Predicted N terminal: Gly 23

Molecular Mass:

The recombinant mouse IFNGR1 consists of 242 amino acids and has a predicted molecular mass of 27.4 kDa. In SDS-PAGE under reducing conditions, the apparent molecular mass of rIFNGR1 is approximately 40-45 kDa 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

Stability & Storage:

Samples are stable for twelve months from date of receipt at -20°C to -80°C.

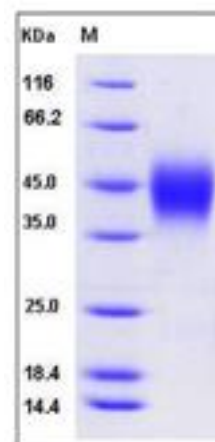
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

The cluster of differentiation (CD) system is commonly used as cell markers in Immunophenotyping. Different kinds of cells in the immune system can be identified through the surface CD molecules associating with the immune function of the cell. There are more than 320 CD unique clusters and subclusters have been identified. Some of the CD molecules serve as receptors or ligands important to the cell through initiating a signal cascade which then alters the behavior of the cell. Some CD proteins do not take part in the cell signal process but have other functions such as cell adhesion. CD119 (cluster of differentiation 119), also known as IFNGR1 (interferon-gamma receptor 1), is part of the heterodimeric gamma interferon receptor which consists of IFNGR1 (CD119) and IFNGR2. The IFNGR1 gene encodes the ligand-binding chain (alpha) of the interferon receptor while the IFNGR2 gene encodes the non-ligand binding partner. The ability of the interferon-γ was achieved through binding to the interferon receptor CD119. After binding, the products of activated T-lymphocytes interferon-γ exerts antiviral activity, growth inhibitory effect, and several immune-regulatory activities on a variety of cell types.

References

1. Zola H, *et al.* (2007) CD molecules 2006-human cell differentiation molecules. *J Immunol Methods.* 318 (1-2): 1-5.
2. Ho IC, *et al.* (2009) GATA3 and the T-cell lineage: essential functions before and after T-helper-2-cell differentiation. *Nat Rev Immunol.* 9 (2): 125-35.
3. Matesanz-Isabel J, *et al.* (2011) New B-cell CD molecules. *Immunology Letters.* 134 (2): 104-12