

# Mouse IFNGR1 / CD119 Protein (Fc Tag)

Catalog Number: 50705-M02H



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 fused with the Fc region of human IgG1 at the C-terminus.

**Source:** Mouse

**Expression Host:** HEK293 Cells

## QC Testing

**Purity:** > 95 % as determined by SDS-PAGE

### Bio Activity:

**Measured by its binding ability in a functional ELISA.**

**Immobilized mouse IFNG-His (Cat:50709-M08H) at 10  $\mu$ g/ml (100  $\mu$ l/well) can bind mouse IFNGR1-Fc (cat:50705-M02H). The EC<sub>50</sub> of IFNGR1-Fc (cat:50705-M02H) is 58.2-135.9 ng/ml.**

### Endotoxin:

< 1.0 EU per  $\mu$ g 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:** Gly 23

### Molecular Mass:

The recombinant mouse IFNGR1/Fc is a disulfide-linked homodimer. The reduced monomer consists of 472 amino acids and has a predicted molecular mass of 53 kDa. In SDS-PAGE under reducing conditions, the apparent molecular mass of rmlIFNGR1/Fc monomer is approximately 70-75 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

### Storage:

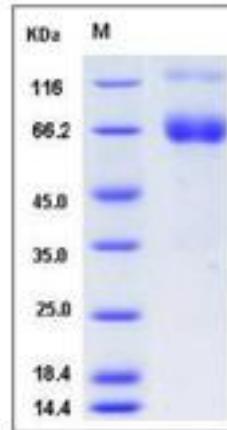
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**Avoid repeated freeze-thaw cycles.**

### Reconstitution:

Detailed reconstitution instructions are sent along with the products.

## SDS-PAGE:



## Protein Description

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 which associating with the immune function of the cell. There are more than 32 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 alter the behavior of the cell. Some CD proteins do not take part in 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 IFNGR gene encodes the non-ligand binding partner. The ability of the interferon-&gamma; was achieved through binding to the interferon receptor CD119. After binding, the products of activated T-lymphocytes interferon-&gamma; 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

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