A Reliable Research Partner in Life Science and Medicine

# Recombinant Mouse IFNGR1 Protein (His Tag)

Catalog Number: PKSM041060

Note: Centrifuge before opening to ensure complete recovery of vial contents.

| $\mathbf{r}$ |    |   |   |   |   |    |   |
|--------------|----|---|---|---|---|----|---|
| H)           | es | C | m | n | т | ſΠ | ï |

**Species** Mouse

Source HEK293 Cells-derived Mouse IFNGR1 protein Ala26-Asp253, with an C-terminal His

Calculated MW26.9 kDaObserved MW38-55 kDaAccessionP15261

**Bio-activity** Not validated for activity

#### **Properties**

**Purity** > 95 % as determined by reducing SDS-PAGE.

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

**Storage** Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80

°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of

reconstituted samples are stable at < -20°C for 3 months.

ShippingThis product is provided as lyophilized powder which is shipped with ice packs.FormulationLyophilized from a 0.2 μm filtered solution of 20mM PB, 150mM NaCl, pH 7.4.

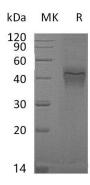
Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants

before lyophilization.

Please refer to the specific buffer information in the printed manual.

**Reconstitution** Please refer to the printed manual for detailed information.

# Data



> 95 % as determined by reducing SDS-PAGE.

## Background

The tetrameric receptor complex for IFN $\gamma$  consists of two subunits, IFNGR1 (IFN $\gamma$  R $\alpha$ ) and IFNGR2 (IFN $\gamma$  R $\beta$ ), through which the dimeric IFN- $\gamma$  exerts its biological functions, including antiviral, antiproliferation and immune-modulatory activity in mammals. Both IFNGR1 and IFNGR2 are single transmembrane proteins belonging to the class II cytokine family. FNGR1, widely expressed in most host cells, is essential for IFN $\gamma$  binding, receptor trafficking, and signal transduction. IFNGR1 possesses an intracellular Janus tyrosine kinase (JAK) 1 binding site, a signal transducer and activator of transcription 1 (STAT1) binding site. The resulting STAT1 homodimers translocate from the cytoplasm to the nucleus and bind to the interferon-gamma activated sequence (GAS) promoter to induce expression of downstream interferon stimulated genes (ISGs).

## For Research Use Only