



# Recombinant Protein Technical Manual

**Recombinant Human IFNGR1 Protein (His & Fc Tag)(Active)**  
RPES4591

## Product Data:

**Product SKU:** RPES4591

**Size:** 100µg

**Species:** Human

**Expression host:** HEK293 Cells

**Uniprot:** NP\_000407.1

## Protein Information:

**Molecular Mass:** 53.7 kDa

**AP Molecular Mass:** 75-80 kDa

**Tag:** C-His & Fc

**Bio-activity:** Measured by its ability to inhibit rhIFN-γ mediated protection of WISH cells infected with vesicular stomatitis virus(VSV). The ED50 for this effect is typically 0.4-2 µg/mL.

**Purity:** > 97 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** 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.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from sterile PBS, pH 7.4

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

**Application:**

**Synonyms:** CD119;IFNGR;IMD27A;IMD27B;Interferon gamma receptor 1;IFNGR1

## Immunogen Information:

**Sequence:** Met 1-Gly 245

## Background:

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 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 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 IFNGR2 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.