

# Recombinant Protein Technical Manual Recombinant Mouse CD64/FCGR1 Protein (His Tag)

**RPES0609** 

#### **Product Data:**

**Product SKU:** RPES0609 **Size:** 10μg

Species: Mouse Expression host: Human Cells

Uniprot: P26151

#### **Protein Information:**

Molecular Mass: 31.5 kDa

AP Molecular Mass: 40-60 kDa

Tag: C-6His

**Bio-activity:** 

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

**Endotoxin:**  $< 1.0 \text{ EU per } \mu\text{g}$  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 a 0.2 μm filtered solution of PBS, pH7.4.

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

**Application:** 

**Synonyms:** High affinity immunoglobulin gamma Fc receptor I; IgG Fc receptor I; Fc-gamma RI;

FcRI; CD64;FcgammaRI;IGGHAFC

## Immunogen Information:

Sequence: Glu25-Pro297

### Background:

CD64, also known as Fc-gamma receptor 1 (Fc $\gamma$ RI), is a type of integral membrane glycoprotein that binds monomeric IgG-type antibodies with high affinity. After binding IgG, CD64 interacts with an accessory chain known as the common  $\gamma$  chain ( $\gamma$  chain), which possesses an ITAM motif that is necessary for triggering cellular activation. CD64 is composed of a signal peptide, three extracellular immunoglobulin domains of the C2-type used to bind antibody, a hydrophobic transmembrane domain, and a short cytoplasmic tail. CD64 mediates endocytosis, phagocytosis, antibody-dependent cellular cytotoxicity, cytokine release, and superoxide production. It is normally expressed on the surfaces of monocytes and macrophages.