



Recombinant Protein Technical Manual  
Recombinant Mouse CD16 Protein (His Tag)(Active)  
RPES2843

### Product Data:

**Product SKU:** RPES2843

**Size:** 50µg

**Species:** Mouse

**Expression host:** HEK293 Cells

**Uniprot:** P08508

### Protein Information:

**Molecular Mass:** 22.6 kDa

**AP Molecular Mass:**

**Tag:** C-His

**Bio-activity:** Measured by its binding ability in a functional ELISA. Immobilized mouse FCGR3-His at 10 µg/ml (100 µl/well) can bind biotinylated human IgG1. The EC50 of biotinylated human IgG1 is 0.12-0.28 µg/ml.

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

**Endotoxin:** < 1.0 EU per µg of the protein 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:** Functional ELISA

**Synonyms:** CD16 Protein, Mouse

## Immunogen Information:

**Sequence:** Met 1-Thr 215

## Background:

Fc receptors bind the most common class of antibody, IgG, are called Fc gamma receptors (FcγR). FcγR is divided into three classes, Fc γ RI (CD64), Fc γ RII (CD32), and Fc γ RIII (CD16). CD16 protein is a multifunctional, low/intermediate affinity receptor, which belongs to the immunoglobulin superfamily. It is found on the surface of natural killer cells, neutrophil polymorphonuclear leukocytes, monocytes and macrophages. Mouse CD16 is encoded by a single gene, while, human CD16 is expressed as two distinct forms (CD16a/FcγRIIIa and CD16b/FcγRIIIb) encoded by two different highly homologous genes in a cell type-specific manner. CD16 is involved in phagocytosis, secretion of enzymes, inflammatory mediators, antibody-dependent cellular cytotoxicity (ADCC), and clearance of immune complexes.