

## Technical Data Sheet

### PE Conjugated Human CD64 Protein (C-His)

**Catalog Number:** 800501, 800502  
**Size:** 25 ug, 100 ug  
**Target Name:** CD64, FCGR1A, FCG1, FCGR1, IGFR1  
**Regulatory Status:** RUO

#### Product Details

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**Application:** FC  
**Format:** Liquid, PE  
**Expression Host:** CHO  
**Species:** Human  
**Sources:** Recombinant human CD64 (Gln16–Thr287) with a C-terminal His tag is expressed in CHO cells and conjugated to PE.  
**Accession Number:** P12314  
**Molecular Weight:** The protein has a predicted molecular weight of 32kDa. Under DTT-reducing conditions, it migrates at approximately 50–60 kDa on SDS-PAGE prior to conjugation.  
**Affinity Tag:** C-His  
**Formulation:** 1xPBS buffer, pH7.4, 0.09% NaN<sub>3</sub> with a carrier protein  
**Endotoxin level:** Not tested  
**Protein Concentration:** 25µg size is bottled at 0.1mg/mL concentration. 100 µg size is bottled at lot specific concentration.  
**Storage and Handling:** Briefly centrifuge the vial upon receipt. An unopened vial may be stored at 2–8°C for up to six months.

#### Background Information

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CD64, also known as FcγRI or FcR I, is a 72 kDa type I glycoprotein and a member of the immunoglobulin superfamily. This high-affinity IgG Fc receptor is predominantly expressed on monocytes, macrophages, dendritic cells, and activated granulocytes. Its expression can be upregulated by IFN-γ stimulation, enhancing its role in immune responses. CD64 binds IgG immune complexes and is involved in several crucial immune functions, including antigen capture, phagocytosis of IgG/antigen complexes, and antibody-dependent cellular cytotoxicity (ADCC). By mediating these processes, CD64 contributes to the activation of innate immune responses and the clearance of immune complexes.