

## Technical Data Sheet

### Human CD64 Protein (C-His-Avi)

**Catalog Number:** 800401, 800402

**Size:** 25 ug, 100 ug

**Target Name:** CD64, FCGR1A, FCG1, FCGR1, IGFR1

**Regulatory Status:** RUO

#### Product Details

---

**Application:** ELISA, BLI

**Format:** Liquid, Purified

**Expression Host:** CHO

**Species:** Human

**Sources:** Human CD64 protein (Accession Number P12314) (Gln16-Thr287) with C-terminus His tag and Avi tag is expressed in CHO cells.

**Accession Number:** P12314

**Molecular Weight:** The 307 amino acid protein has a predicted molecular weight of 34.2kDa. The protein migrates at approximately 50-60 kDa on SDS-PAGE with DTT-reduced conditions.

**Affinity Tag:** C-His-Avi

**Purity:** >85% based on SDS-PAGE under reducing condition

**Formulation:** 1xPBS buffer, pH7.4, 0.22 µm filtered

**Endotoxin level:** Not tested

**Protein Concentration:** 25µg size is bottled at 0.2mg/mL concentration. 100 µg size is supplied at a lot-specific concentration.

**Storage and Handling:** Briefly centrifuge the vial upon receipt. An unopened vial can be stored at 4°C for up to 2 weeks, or at -20°C or below for up to six months. The protein may be further diluted to 0.1 mg/mL using 0.22 µm-filtered PBS buffer (pH 7.4). For long-term storage, the diluted stock solution should be aliquoted and stored at ≤ -70°C to minimize freeze-thaw cycles. If additional dilution is required, carrier proteins such as FBS or BSA should be added to maintain protein stability.

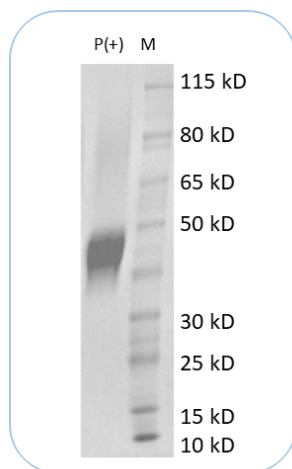
#### Background Information

---

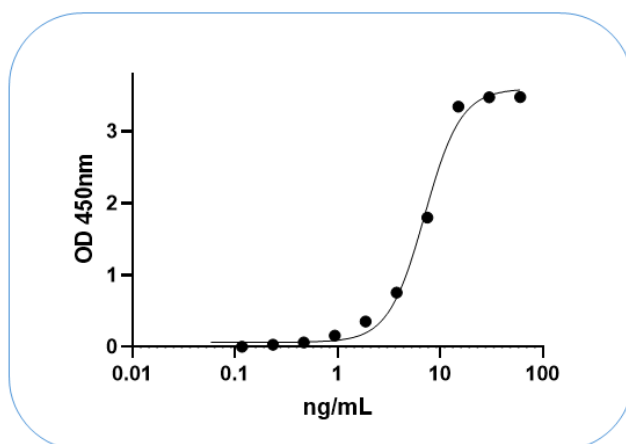
CD64, also known as FcγRI or FcR I, is a 72 kDa type I glycoprotein and a member of the immunoglobulin superfamily. This high-affinity IgG Fc receptor is predominantly expressed on monocytes, macrophages, dendritic cells, and activated granulocytes. Its expression can be upregulated by IFN-γ stimulation, 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.

**Product Data**


---



Recombinant human CD64 (C-His-Avi) protein on SDS-PAGE under reducing condition. The gel was stained for 1 hour with BlinkBlue (catalog 700102). The purity of this protein appears to be greater than 85%.



Human IgG1 isotype is coated at 1  $\mu$ g/mL (100ng\_well). Human CD64 can bind human IgG1 in the dose dependent manner. The ED50 is about 3-10 ng/mL.