

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

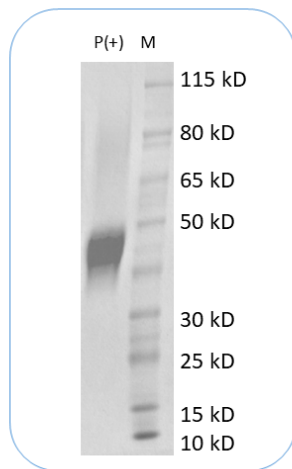
Product Details

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 μ m filtered
Endotoxin level: Not tested
Protein Concentration: 25 μ g size is bottled at 0.2mg/mL concentration. 100 μ g 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 μ m-filtered PBS buffer (pH 7.4). For long-term storage, the diluted stock solution should be aliquoted and stored at $\leq -70^{\circ}\text{C}$ to minimize freeze-thaw cycles. If additional dilution is required, carrier proteins such as FBS or BSA should be added to maintain protein stability.

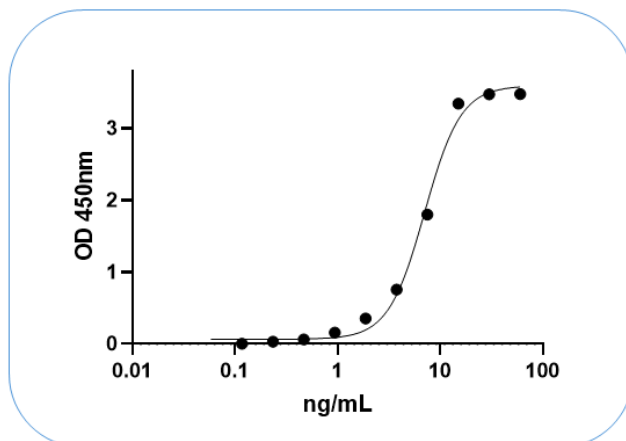
Background Information

CD64, also known as Fc γ RI 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 ug_{mL} (100ng_{well}). Human CD64 can bind human IgG1 in the dose dependent manner. The ED50 is about 3-10 ng_{mL}.