

Technical Data Sheet

APC Conjugated Human CD64 Protein (C-His)

Catalog Number: 800503, 800504
Size: 25 ug, 100 ug
Target Name: CD64, FCGR1A, FCG1, FCGR1, IGFR1
Regulatory Status: RUO

Product Details

Application: FC
Format: Liquid, APC
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 APC.
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% NaN₃ 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

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.