

Technical Data Sheet

PE Conjugated Human CD16a Protein (C-His, 176V)

Catalog Number: 800301, 800302

Size: 25 ug, 100 ug

Target Name: CD16A, FCGR3A, FCG3, FCGR3, IGFR3,

Regulatory Status: RUO

Product Details

Application: FC

Format: Liquid, PE

Expression Host: HEK293

Species: Human

Sources: Recombinant Human CD16a (Gly17-Gln208, V176) with C-terminus His is expressed in HEK293 cell and conjugated to PE.

Accession Number: P08637

Molecular Weight: The protein has a predicted molecular weight of 25kDa. Under DTT-reducing conditions, it migrates at approximately 40–50 kDa on SDS-PAGE prior to PE 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

CD16 is a low-affinity Fc receptor and exists in two isoforms: FcγRIIIa (CD16a) and FcγRIIIb (CD16b). These receptors bind to the Fc region of IgG antibodies with distinct tissue-specific expression pattern. CD16a is a transmembrane glycoprotein with intermediate affinity, expressed on natural killer (NK) cells, macrophages, subsets of T cells, immature thymocytes, and placental trophoblasts. In contrast, CD16b is a low-affinity, GPI-anchored receptor expressed primarily on neutrophils and eosinophils. CD16a plays a key role in mediating phagocytosis, antibody-dependent cellular cytotoxicity (ADCC), enzyme secretion, and immune complex clearance.