

APC Human CD16a (FcγRIIIa) Protein (C-His, 176V)

Catalog Number:	800303, 800304
Size:	25 ug, 100 ug
Target Name:	CD16A, FCGR3A, FCG3, FCGR3, IGFR3,
Regulatory Status:	RUO

PRODUCT DETAILS

Application:	Flow Cytometry
Format:	Liquid, APC
Expression Host:	HEK293
Species:	Human
Sources:	Recombinant Human CD16a (Gly17-Gln208, V176) with C-terminus His is expressed in HEK293 cell and conjugated to APC.
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 APC 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.