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PE conjuaged Human CD33 (C-His)

Catalog Number:	809401, 809402
Size:	25 ug, 100 ug
Target Name:	CD33, SIGLEC3, gp67
Regulatory Status:	RUO

PRODUCT DETAILS

Application:	Flow Cytometry
Format:	Liquid, PE
Expression Host:	CHO
Species:	Human
Sources:	Recombinant Human CD33 Protein (Asp18-His259) with C-terminus His-tag is expressed in CHO cell and conjugated to PE.
Accession Number:	P20138
Molecular Weight:	The protein has a predicted molecular weight of 28.3 kDa. Under DTT-reducing conditions, it migrates at approximately 45-55 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

CD33, also known as Siglec-3 or Sialic acid-binding Ig-like lectin 3, is a type I membrane glycoprotein and a member of the immunoglobulin superfamily. It contains one Ig-like V-type and one Ig-like C2-type domain. CD33 is primarily expressed on myelomonocytic cells, such as monocytes, granulocytes, and dendritic cells, where it functions as a sialic acid-dependent adhesion molecule. It preferentially binds to alpha-2,6-linked sialic acid on the surface of cells.In the immune response, CD33 acts as an inhibitory receptor. Upon ligand binding, it induces tyrosine phosphorylation and recruits phosphatases, which block signal transduction by dephosphorylating signaling molecules. This mechanism helps regulate immune activation. Additionally, CD33 is implicated in inducing apoptosis in acute myeloid leukemia cells.CD33's function as an adhesion molecule is modulated by interactions with sialoglycoconjugates, influencing its role in cell adhesion. It plays an essential role in immune modulation and cell signaling, making it a critical target in immune response regulation and certain leukemia therapies.