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Anti-CD33 Antibody

Catalog # AP95501

Product Information

Application	FC, IF/IC
Primary Accession	P20138
Reactivity	Human
Host	Mouse
Clonality	Monoclonal (clone: HIM3-4)
Calculated MW	39825

Additional Information

Gene ID	945
Other Names	SIGLEC3; Myeloid cell surface antigen CD33; Sialic acid-binding Ig-like lectin 3; Siglec-3; gp67; CD antigen CD33
Target/Specificity	Native purified human CD33.
Dilution	FC~~FC (1/500 - 1/2000) IF/IC~~N/A
Format	Mouse IgG1. Liquid in PBS, pH 7.3, and 0.02% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

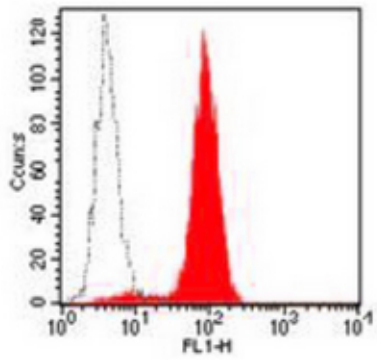
Protein Information

Name	CD33
Synonyms	SIGLEC3
Function	Sialic-acid-binding immunoglobulin-like lectin (Siglec) that plays a role in mediating cell-cell interactions and in maintaining immune cells in a resting state (PubMed:10611343, PubMed:11320212, PubMed:15597323). Preferentially recognizes and binds alpha-2,3- and more avidly alpha-2,6-linked sialic acid-bearing glycans (PubMed:7718872). Upon engagement of ligands such as C1q or syalylated glycoproteins, two immunoreceptor tyrosine-based inhibitory motifs (ITIMs) located in CD33 cytoplasmic tail are phosphorylated by Src-like kinases such as LCK (PubMed:10887109, PubMed:28325905). These phosphorylations provide docking sites for the recruitment and activation of protein-tyrosine phosphatases PTPN6/SHP-1 and PTPN11/SHP- 2 (PubMed:10206955, PubMed:10556798, PubMed:10887109). In turn, these phosphatases regulate downstream pathways through dephosphorylation of signaling molecules (PubMed:10206955, PubMed:10887109). One of the repressive effect of CD33 on monocyte activation requires phosphoinositide 3-kinase/PI3K

(PubMed:15597323).

Cellular Location	[Isoform CD33M]: Cell membrane; Single-pass type I membrane protein
Tissue Location	Monocytic/myeloid lineage cells. In the brain, CD33 is mainly expressed on microglial cells

Images



Flow cytometric analysis of HEL cells using Anti-CD33 Antibody, followed by anti-mouse IgG PE.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.