

Anti-CD33 Monoclonal Antibody

Catalog # ABO14561

Product Information

Application	WB, IP
Primary Accession	P20138
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Human
Clonality	Monoclonal
Format	Liquid
Description	Anti-CD33 Monoclonal Antibody . Tested in WB, IP applications. This antibody reacts with Human.

Additional Information

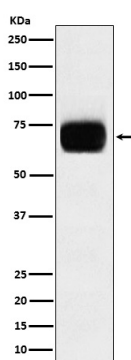
Gene ID	945
Other Names	Myeloid cell surface antigen CD33, Sialic acid-binding Ig-like lectin 3, Siglec-3, gp67, CD33, CD33, SIGLEC3
Calculated MW	39825
Application Details	WB 1:500-1:2000 IP 1:50
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: ADGE-3
Immunogen	A synthesized peptide derived from human CD33 Putative adhesion molecule of myelomonocytic-derived cells that mediates sialic-acid dependent binding to cells. Preferentially binds to alpha-2,6-linked sialic acid.
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

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 sialylated 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



Western blot analysis of CD33 expression in THP1 cell lysate.

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