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# Anti-CD33 Monoclonal Antibody

Catalog # ABO14561

## Product Information

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| **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

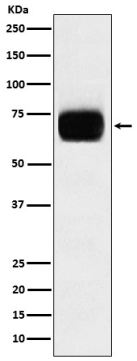
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| **Gene ID** | 945 |
| **Other Names** | Myeloid cell surface antigen CD33, Sialic acid-binding Ig-like lectin 3, Siglec-3, gp67, CD33, CD33, SIGLEC3 |
| **Calculated MW** | 39825 |
| **Application Details** | WB 1:500-1:2000<br>IP 1:50 |
| **Source** | 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

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| **Name** | CD33 |
| **Synonyms** | SIGLEC3 |

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| **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




Western blot analysis of CD33 expression in THP1 cell lysate.

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