

**CD33 Antibody**  
Rabbit mAb  
Catalog # AP91592

## Specification

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### CD33 Antibody - Product Information

Application	<b>WB, IP</b>
Primary Accession	<a href="#">P20138</a>
Clonality	<b>Monoclonal</b>
<b>Other Names</b>	
CD33; gp67; My9; p67; SIGLEC3;	
Isotype	<b>Rabbit IgG</b>
Host	<b>Rabbit</b>
Calculated MW	<b>39825 Da</b>

### CD33 Antibody - Additional Information

Purification	<b>Affinity-chromatography</b>
Immunogen	<b>A synthesized peptide derived from human CD33</b>
Description	<b>Putative adhesion molecule of myelomonocytic-derived cells that mediates sialic-acid dependent binding to cells. Preferentially binds to alpha-2,6-linked sialic acid.</b>
Storage Condition and Buffer	<b>Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.</b>

### CD33 Antibody - 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](http://www.uniprot.org/citations/10611343), PubMed: [11320212](http://www.uniprot.org/citations/11320212), PubMed: [15597323](http://www.uniprot.org/citations/15597323)). Preferentially recognizes and binds alpha-2,3- and more avidly alpha-2,6-linked sialic acid-bearing glycans (PubMed: [7718872](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/10887109))

target="\_blank">10887109</a>, PubMed:<a href="http://www.uniprot.org/citations/28325905" target="\_blank">28325905</a>). These phosphorylations provide docking sites for the recruitment and activation of protein-tyrosine phosphatases PTPN6/SHP-1 and PTPN11/SHP- 2 (PubMed:<a href="http://www.uniprot.org/citations/10206955" target="\_blank">10206955</a>, PubMed:<a href="http://www.uniprot.org/citations/10556798" target="\_blank">10556798</a>, PubMed:<a href="http://www.uniprot.org/citations/10887109" target="\_blank">10887109</a>). In turn, these phosphatases regulate downstream pathways through dephosphorylation of signaling molecules (PubMed:<a href="http://www.uniprot.org/citations/10206955" target="\_blank">10206955</a>, PubMed:<a href="http://www.uniprot.org/citations/10887109" target="\_blank">10887109</a>). One of the repressive effect of CD33 on monocyte activation requires phosphoinositide 3-kinase/PI3K (PubMed:<a href="http://www.uniprot.org/citations/15597323" target="\_blank">15597323</a>).

### Cellular Location

[Isoform CD33M]: Cell membrane; Single-pass type I membrane protein

### Tissue Location

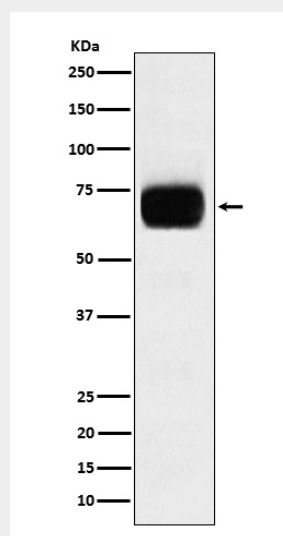
Monocytic/myeloid lineage cells. In the brain, CD33 is mainly expressed on microglial cells

### CD33 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### CD33 Antibody - Images



Western blot analysis of CD33 expression in THP1 cell lysate.