

# CD33 Antibody

Rabbit mAb

Catalog # AP91592

## Product Information

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

## Additional Information

<b>Dilution</b>	WB 1:500~1:2000 IP 1:50
<b>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.

## Protein Information

<b>Name</b>	CD33
<b>Synonyms</b>	SIGLEC3
<b>Function</b>	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: <a href="#">10611343</a> , PubMed: <a href="#">11320212</a> , PubMed: <a href="#">15597323</a> ). Preferentially recognizes and binds alpha-2,3- and more avidly alpha-2,6-linked sialic acid-bearing glycans (PubMed: <a href="#">7718872</a> ). 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: <a href="#">10887109</a> , PubMed: <a href="#">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="#">10206955</a> , PubMed: <a href="#">10556798</a> , PubMed: <a href="#">10887109</a> ). In turn, these phosphatases regulate downstream pathways through dephosphorylation of signaling molecules (PubMed: <a href="#">10206955</a> , PubMed: <a href="#">10887109</a> ). One of the repressive effect of CD33

on monocyte activation requires phosphoinositide 3-kinase/PI3K (PubMed:[15597323](#)).

**Cellular Location**

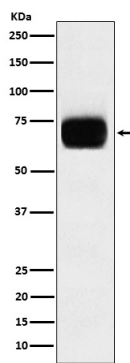
[Isoform CD33M]: Cell membrane; Single-pass type I membrane protein

**Tissue Location**

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

## Images

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Western blot analysis of CD33 expression in THP1 cell lysate.

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