

# CD33 Antibody

Rabbit mAb Catalog # AP91592

#### **Product Information**

ApplicationWB, IPPrimary AccessionP20138ReactivityHumanClonalityMonoclonal

Other Names CD33; gp67; My9; p67; SIGLEC3;

IsotypeRabbit IgGHostRabbitCalculated MW39825

## **Additional Information**

**Dilution** WB 1:500~1:2000 IP 1:50 **Purification** Affinity-chromatography

**Immunogen** A synthesized peptide derived from human CD33

**Description** Putative adhesion molecule of myelomonocytic-derived cells that mediates

sialic-acid dependent binding to cells. Preferentially binds to alpha-2,6-linked

sialic acid.

**Storage Condition and Buffer** 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**

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:<u>10206955</u>, PubMed:<u>10556798</u>, PubMed:<u>10887109</u>). 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

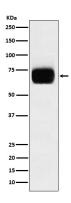
(PubMed: 15597323).

**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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