

# Product datasheet

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ARG62818 anti-CD33 antibody [HIM3-4]

Package: 100 μg Store at: -20°C

## Summary

Product Description Mouse Monoclonal antibody [HIM3-4] recognizes CD33

Tested Reactivity Hu, NHuPrm

Tested Application FACS

Specificity The clone HIM3-4 reacts with CD33, a 67 kDa type I transmembrane glycoprotein (immunoglobulin

superfamily) expressed on myeloid progenitors, monocytes, granulocytes, dendritic cells and mast cells;

it is absent on platelets, lymphocytes, erythrocytes and hematopoietic stem cells.

HLDA V; WS Code M MA112 HLDA VI; WS Code M MA47

Host Mouse

**Clonality** Monoclonal

Clone HIM3-4

Isotype IgG1

Target Name CD33

Species Human

Immunogen NFMY-9s human cell line

Conjugation Un-conjugated

Alternate Names p67; Sialic acid-binding Ig-like lectin 3; SIGLEC-3; CD antigen CD33; gp67; Siglec-3; Myeloid cell surface

antigen CD33; SIGLEC3

### **Application Instructions**

Application table	Application	Dilution
	FACS	1 - 5 μg/ml
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

#### **Properties**

Form Liquid

Purification Purified by protein A

Purity > 95% (by SDS-PAGE)

Buffer PBS (pH 7.4) and 15 mM Sodium azide

Preservative 15 mM Sodium azide

Concentration 1 mg/ml

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

before a

Note For laboratory research only, not for drug, diagnostic or other use.

#### Bioinformation

Database links GeneID: 945 Human

Swiss-port # P20138 Human

Gene Symbol CD33

Gene Full Name CD33 molecule

Background CD33 is a transmembrane protein of the sialic acid-binding immunoglobulin-like lectin (Siglec) family. It

belongs to the immunoreceptor tyrosine-based inhibitory motif (ITIM)-containing molecules able of recruiting protein tyrosine phosphatases SHP-1 and SHP-2 to signal assemblies; these ITIMs are also used for ubiquitin-mediated removal of the receptor from the cell surface. CD33 is expressed on cells of myelomonocytic lineage, binds sialic acid residues in N- and O-glycans on cell surfaces, and is a

therapeutic target for acute myeloid leukemia.

Function CD33: 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:15597323, PubMed:11320212). 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:28325905, PubMed:10887109). These phosphorylations provide docking sites for the recruitment and activation of

protein-tyrosine phosphatases PTPN6/SHP-1 and PTPN11/SHP-2 (PubMed:10556798,

PubMed:10206955, 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). [UniProt]

Highlight Related products:

CD33 antibodies; CD33 ELISA Kits; CD33 Duos / Panels; Anti-Mouse IgG secondary antibodies;

Related news:

New antibody panels and duos for Tumor immune microenvironment

Anti-SerpinB9 therapy, a new strategy for cancer therapy

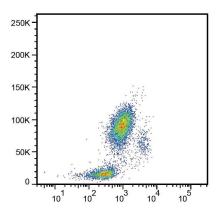
Research Area Developmental Biology antibody; Immune System antibody; Human MDSC Marker antibody; Myeloid-

derived suppressor cell antibody

Calculated Mw 40 kDa

PTM Phosphorylation of Tyr-340 is involved in binding to PTPN6 and PTPN11. Phosphorylation of Tyr-358 is

involved in binding to PTPN6.



# ARG62818 anti-CD33 antibody [HIM3-4] FACS image

Flow Cytometry: Human peripheral blood leukocytes stained with FITC-conjugated ARG62818 anti-CD33 antibody [HIM3-4].