

# Anti-Siglec-3 / CD33 Reference Antibody (IMGN779)

Recombinant Antibody

Catalog # APR10506

## Product Information

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<b>Application</b>	FC, Kinetics, Animal Model
<b>Primary Accession</b>	<a href="#">P20138</a>
<b>Reactivity</b>	Human
<b>Clonality</b>	Monoclonal
<b>Isotype</b>	IgG1
<b>Calculated MW</b>	39825

## Additional Information

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<b>Target/Specificity</b>	Siglec-3 / CD33
<b>Endotoxin</b>	
<b>Conjugation</b>	Unconjugated
<b>Expression system</b>	CHO Cell
<b>Format</b>	Purified monoclonal antibody supplied in PBS, pH6.0, without preservative. This antibody is purified through a protein A column.

## Protein Information

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<b>Name</b>	CD33
<b>Synonyms</b>	SIGLEC3
<b>Function</b>	<p>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:<a href="#">15597323</a>).</p>

**Cellular Location**

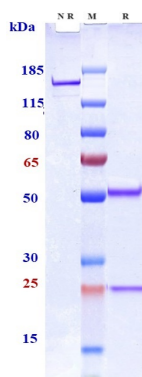
[Isoform CD33M]: Cell membrane; Single-pass type I membrane protein

**Tissue Location**

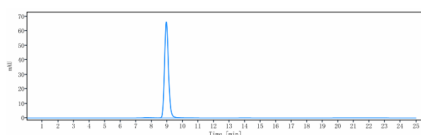
Monocytic/myeloid lineage cells. In the brain, CD33 is mainly expressed on microglial cells

**Images**

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Anti-Siglec-3 / CD33 Reference Antibody (IMG779) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%



The purity of Anti-Siglec-3 / CD33 Reference Antibody (IMG779) is more than 95% ,determined by SEC-HPLC.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.