

**Anti-Siglec-3 / CD33 Reference Antibody (Gemtuzumab)  
Recombinant Antibody  
Catalog # APR10092****Specification**

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**Anti-Siglec-3 / CD33 Reference Antibody (Gemtuzumab) - Product Information**

Application	FC, E, FTA
Primary Accession	<a href="#">P20138</a>
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG4SP
Calculated MW	145.22 KDa

**Anti-Siglec-3 / CD33 Reference Antibody (Gemtuzumab) - Additional Information****Target/Specificity**  
Siglec-3 / CD33**Endotoxin**  
< 0.001EU/ µg, determined by LAL method.**Conjugation**  
Unconjugated**Expression system**  
CHO Cell**Format**  
Purified monoclonal antibody supplied in PBS, pH6.0, without preservative. This antibody is purified through a protein A column.**Anti-Siglec-3 / CD33 Reference Antibody (Gemtuzumab) - 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

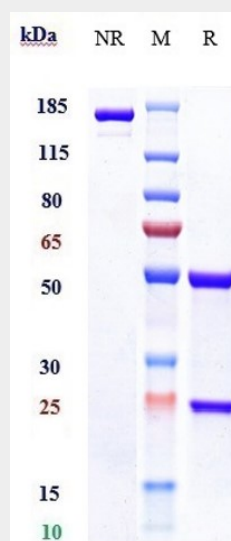
Monocytic/myeloid lineage cells. In the brain, CD33 is mainly expressed on microglial cells

### Anti-Siglec-3 / CD33 Reference Antibody (Gemtuzumab) - Protocols

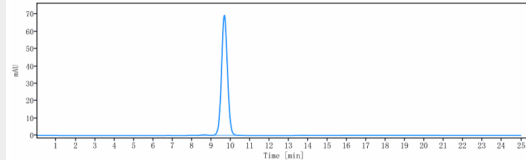
Provided below are standard protocols that you may find useful for product applications.

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

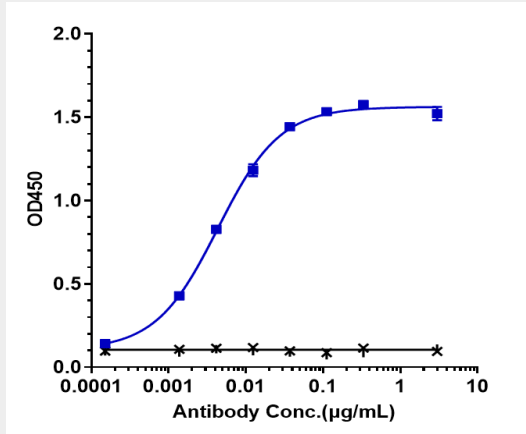
### Anti-Siglec-3 / CD33 Reference Antibody (Gemtuzumab) - Images



Anti-Siglec-3 / CD33 Reference Antibody (Gemtuzumab) 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 (Gemtuzumab) is more than 99.54% ,determined by SEC-HPLC.



Immobilized human CD33 His at 2 µg/mL can bind Anti-Siglec-3 / CD33 Reference Antibody (Gemtuzumab) EC50=0.00433 µg/mL