

**Anti-Siglec-3 / CD33 Reference Antibody (gemtuzumab-CLM)
Recombinant Antibody
Catalog # APR10093****Specification**

Anti-Siglec-3 / CD33 Reference Antibody (gemtuzumab-CLM) - Product Information

Application	FC, E, FTA
Primary Accession	P20138
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG4SP
Calculated MW	145.22 KDa

Anti-Siglec-3 / CD33 Reference Antibody (gemtuzumab-CLM) - 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.**Storage**
-80°C for 2 years under sterile conditions □ -20°C for 1 year under sterile conditions □ Avoid repeated freeze-thaw cycles.**Anti-Siglec-3 / CD33 Reference Antibody (gemtuzumab-CLM) - 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](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)), PubMed: [28325905](http://www.uniprot.org/citations/28325905)). These phosphorylations provide docking sites for the recruitment and activation of protein-tyrosine phosphatases PTPN6/SHP-1 and PTPN11/SHP-2 (PubMed: [10206955](http://www.uniprot.org/citations/10206955)), PubMed: [10556798](http://www.uniprot.org/citations/10556798)), PubMed: [10887109](http://www.uniprot.org/citations/10887109)). In turn, these phosphatases regulate downstream pathways through dephosphorylation of signaling molecules (PubMed: [10206955](http://www.uniprot.org/citations/10206955)), PubMed: [10887109](http://www.uniprot.org/citations/10887109)). One of the repressive effect of CD33 on monocyte activation requires phosphoinositide 3-kinase/PI3K (PubMed: [15597323](http://www.uniprot.org/citations/15597323)).

Cellular Location

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

Tissue Location

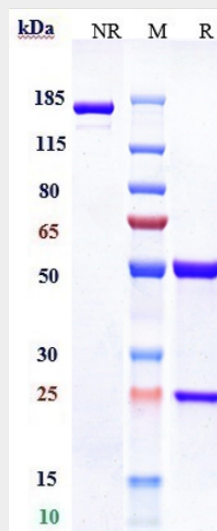
Monocytic/myeloid lineage cells. In the brain, CD33 is mainly expressed on microglial cells

Anti-Siglec-3 / CD33 Reference Antibody (gemtuzumab-CLM) - Protocols

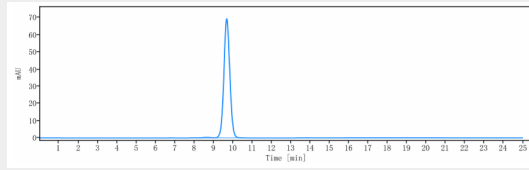
Provided below are standard protocols that you may find useful for product applications.

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

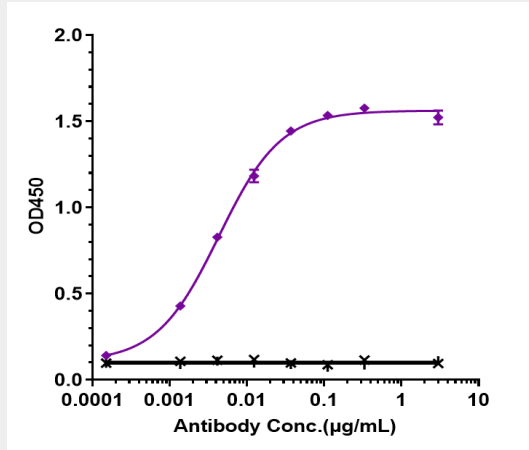
Anti-Siglec-3 / CD33 Reference Antibody (gemtuzumab-CLM) - Images



Anti-Siglec-3 / CD33 Reference Antibody (gemtuzumab-CLM) 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-CLM) 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-CLM) $EC_{50} = 0.004328 \mu\text{g/mL}$