

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

Recombinant Antibody Catalog # APR10093

Product Information

Application	FC, Kinetics, Animal Model
Primary Accession	<u>P20138</u>
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG4SP
Calculated MW	39825

Additional Information

Target/Specificity	Siglec-3 / CD33
Endotoxin 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.

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: <u>10611343</u> , PubMed: <u>11320212</u> , PubMed: <u>15597323</u>). Preferentially recognizes and binds alpha-2,3- and more avidly alpha-2,6-linked sialic acid-bearing glycans (PubMed: <u>7718872</u>). 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: <u>10887109</u> , PubMed: <u>28325905</u>). 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: <u>10206955</u> , PubMed: <u>10887109</u>). One of the repressive effect of CD33 on monocyte activation requires phosphoinositide 3-kinase/PI3K

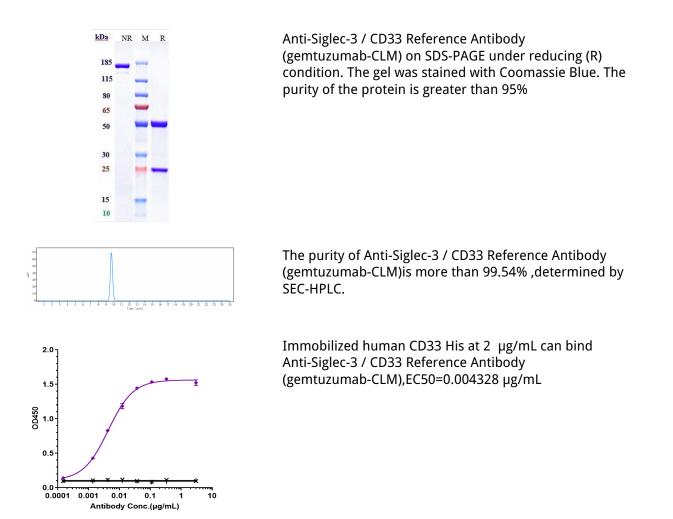
(PubMed:<u>15597323</u>).

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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