

Anti-CD33 Monoclonal Antibody
Catalog # ABO14561

Specification

Anti-CD33 Monoclonal Antibody - Product Information

Application	WB, IP
Primary Accession	P20138
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Human
Clonality	Monoclonal
Format	Liquid

Description

Anti-CD33 Monoclonal Antibody . Tested in WB, IP applications. This antibody reacts with Human.

Anti-CD33 Monoclonal Antibody - Additional Information

Gene ID 945

Other Names

Myeloid cell surface antigen CD33, Sialic acid-binding Ig-like lectin 3, Siglec-3, gp67, CD33, CD33, SIGLEC3

Application Details

WB 1:500-1:2000
IP 1:50

Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen

A synthesized peptide derived from human CD33 Putative adhesion molecule of myelomonocytic-derived cells that mediates sialic-acid dependent binding to cells. Preferentially binds to alpha-2,6-linked sialic acid.

Purification

Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Anti-CD33 Monoclonal Antibody - 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), 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

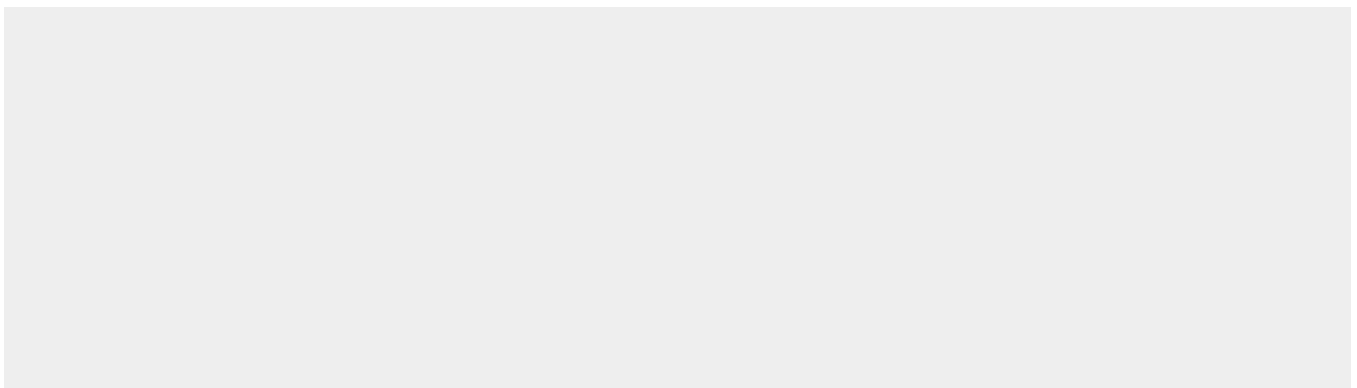
Monocytic/myeloid lineage cells. In the brain, CD33 is mainly expressed on microglial cells

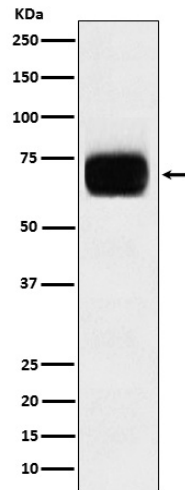
Anti-CD33 Monoclonal Antibody - Protocols

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-CD33 Monoclonal Antibody - Images





Western blot analysis of CD33 expression in THP1 cell lysate.