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Anti-CD33 Picoband Antibody
Catalog # ABO12617

Specification

Anti-CD33 Picoband Antibody - Product Information

Application	**WB, IHC-P, IHC-F, FC, ICC**
Primary Accession	P20138
Host	**Rabbit**
Reactivity	**Human**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Myeloid cell surface antigen CD33(CD33) detection. Tested with WB, IHC-P, IHC-F, ICC, FCM in Human.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-CD33 Picoband 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

Calculated MW
39825 MW KDa

Application Details
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, By Heat
Immunohistochemistry(Frozen Section), 0.5-1 µg/ml

 Immunocytochemistry, 0.5-1 µg/ml

Western blot, 0.1-0.5 µg/ml
Flow Cytometry, 1-3Î¼g/1x10⁶cells

Subcellular Localization
Cell membrane; Single-pass type I membrane protein.

Tissue Specificity
Monocytic/myeloid lineage cells.

Protein Name
Myeloid cell surface antigen CD33

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen
E. coli-derived human CD33 recombinant protein (Position: D18-H259). Human CD33 shares 61.6%

amino acid (aa) sequence identity with mouse CD33.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins

Storage	**At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.**

Anti-CD33 Picoband 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, PubMed:11320212, PubMed:15597323). Preferentially recognizes and binds alpha-2,3- and more avidly alpha-2,6-linked sialic acid-bearing glycans (PubMed:7718872). 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:10887109, PubMed:28325905). These phosphorylations provide docking sites for the recruitment and activation of protein-tyrosine phosphatases PTPN6/SHP-1 and PTPN11/SHP- 2 (PubMed:10206955, PubMed:10556798, PubMed:10887109). In turn, these phosphatases regulate downstream pathways through dephosphorylation of signaling molecules (PubMed:10206955, PubMed:10887109). One of the repressive effect of CD33 on monocyte activation requires phosphoinositide 3-kinase/PI3K (PubMed: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 Picoband Antibody - Protocols

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

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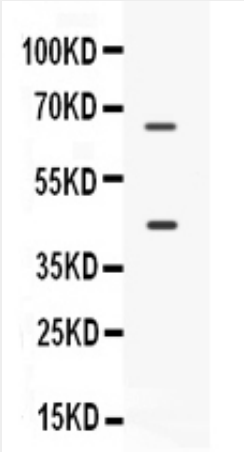
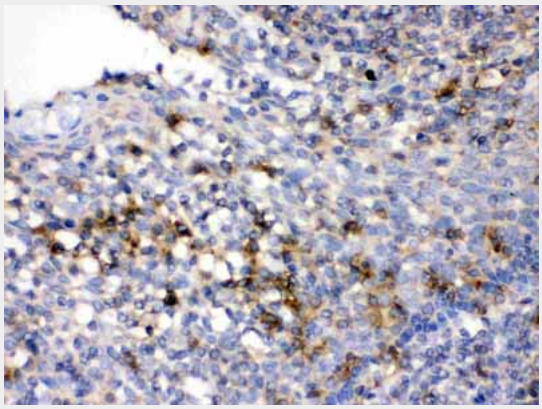
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-CD33 Picoband Antibody - Images



Western blot analysis of CD33 expression in SKOV3 whole cell lysates (lane 1). CD33 at 45KD; 67KD was detected using rabbit anti-CD33 Antigen Affinity purified polyclonal antibody (Catalog # ABO12617) at 0.5 ??g/mL. The blot was developed using chemiluminescence (ECL) method .



CD33 was detected in paraffin-embedded sections of human tonsil tissues using rabbit anti- CD33 Antigen Affinity purified polyclonal antibody (Catalog # ABO12617) at 1 Î¼g/mL. The immunohistochemical section was developed using SABC method .

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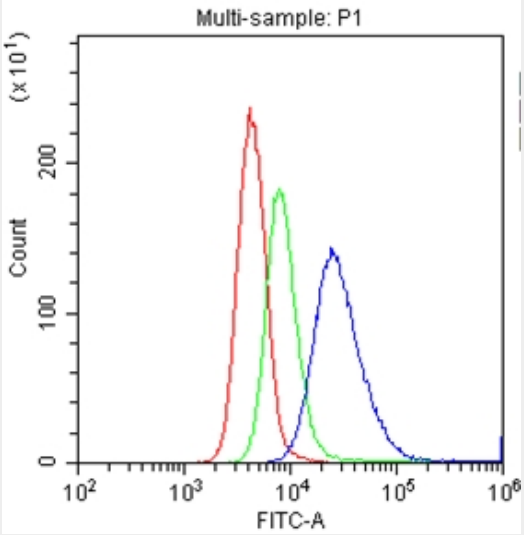

Figure 3. Flow Cytometry analysis of U937 cells using anti-CD33 antibody (ABO12617).Overlay histogram showing U937 cells stained with ABO12617 (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-CD33 Antibody (ABO12617,1Î¼g/1x106 cells) for 30 min at 20Â°C. DyLight?488 conjugated goat anti-rabbit IgG (BA1127, 5-10Î¼g/1x106 cells) was used as secondary antibody for 30 minutes at 20Â°C. Isotype control antibody (Green line) was rabbit IgG (1Î¼g/1x106) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

Anti-CD33 Picoband Antibody - Background

CD33, also known as Siglec-3 (sialic acid binding Ig-like lectin 3, SIGLEC3, SIGLEC-3, gp67, p67), is a transmembrane receptor expressed on cells of myeloid lineage. It is usually considered myeloid-specific, but it can also be found on some lymphoid cells. CD33 binds sialic acids, therefore is a member of the SIGLEC family of lectins. By fluorescence in situ hybridization, CD33 is mapped to 19q13.3-q13.4.