

## PRODUCT INFORMATION

<b>Clone ID</b>	DM77
<b>Target</b>	CD33
<b>Synonyms</b>	CD33;SIGLEC3;gp67
<b>Host Species</b>	Rabbit
<b>Description</b>	Anti-CD33 antibody(DM77); Rabbit mAb
<b>Delivery</b>	In Stock
<b>Uniprot ID</b>	P20138
<b>IgG type</b>	Rabbit IgG
<b>Clonality</b>	Monoclonal
<b>Reactivity</b>	Human
<b>Applications</b>	ELISA; Flow Cyt
<b>Recommended Dilutions</b>	ELISA 1:5000-10000; Flow Cyt 1:100
<b>Purification</b>	Purified from cell culture supernatant by affinity chromatography
<b>Formulation &amp; Reconstitution</b>	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8% trehalose is added as protectants before lyophilization. Please see Certificate of Analysis for specific instructions of reconstitution.
<b>Storage&amp;Shipping</b>	Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.
<b>Background</b>	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. Preferentially recognizes and binds alpha-2,3- and more avidly alpha-2,6-linked sialic acid-bearing glycans. 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. These phosphorylations provide docking sites for the recruitment and activation of protein-tyrosine phosphatases PTPN6:SHP-1 and PTPN11:SHP-2. In turn; these phosphatases regulate downstream pathways through dephosphorylation of signaling molecules. One of the repressive effect of CD33 on monocyte activation requires phosphoinositide 3-kinase:PI3K.
<b>Usage</b>	Research use only
<b>Conjugate</b>	Unconjugated
<b>DIMA Disclaimer</b>	All DIMA recombinant antibodies are genuinely generated by DIMA Biotech. They are all under patent application. Any protein sequencing or reverse engineering attempt is prohibited. We are actively scrutinizing all patent application to ensure no IP infringement.



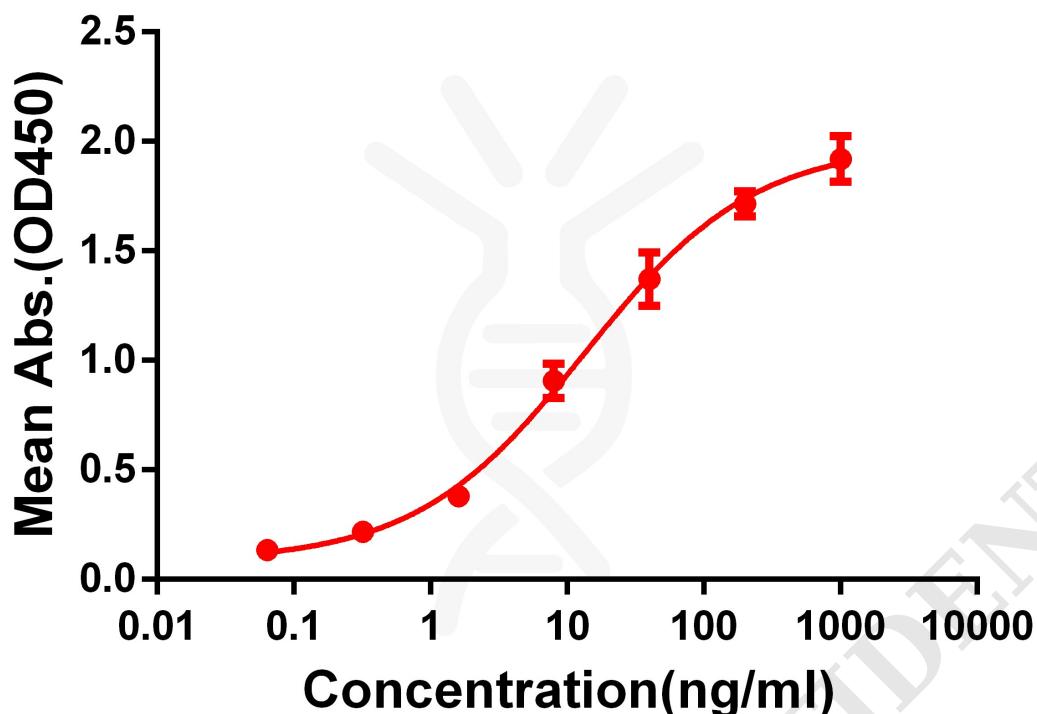
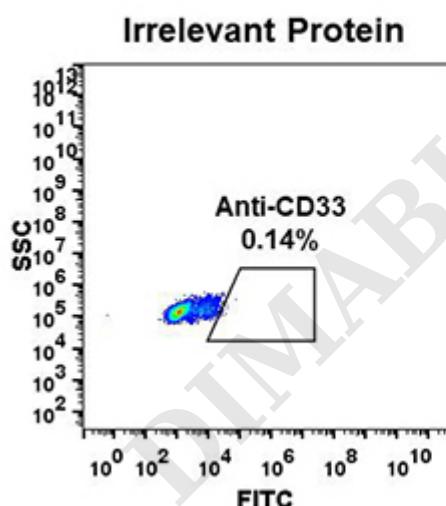


Figure 1. ELISA plate pre-coated by 2  $\mu$ g/ml (100  $\mu$ l/well) Human CD33 protein, hFc-His tagged protein PME100039 can bind Rabbit anti-CD33 monoclonal antibody (clone: DM77) in a linear range of 1-100 ng/ml.

A



B

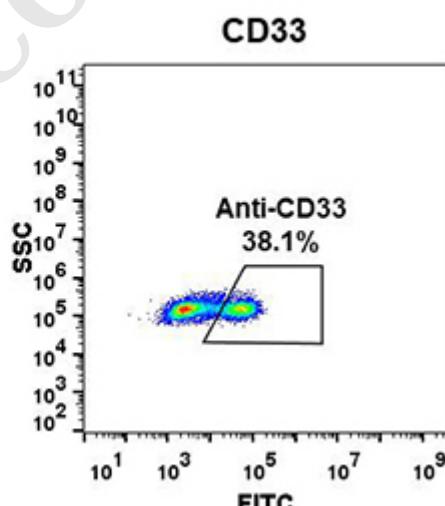


Figure 2. HEK293 cell line transfected with irrelevant protein (A) and human CD33 (B) were surface stained with Rabbit anti-CD33 monoclonal antibody 1 $\mu$ g/ml (clone: DM77) followed by Alexa 488-conjugated anti-rabbit IgG secondary antibody.



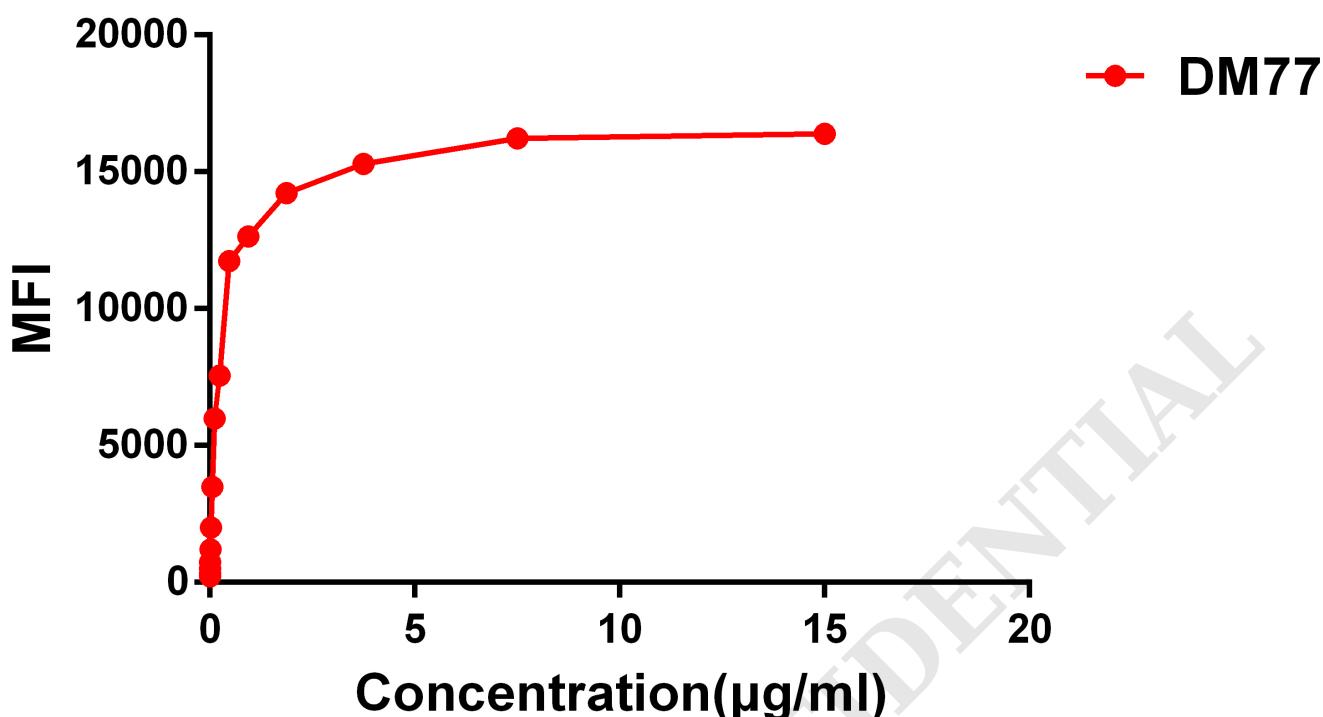


Figure 3. Flow cytometry data of serially titrated Rabbit anti-CD33 monoclonal antibody (clone: DM77) on HEK293 cell line transfected with human CD33. The Y-axis represents the mean fluorescence intensity (MFI) while the X-axis represents the concentration of IgG used.

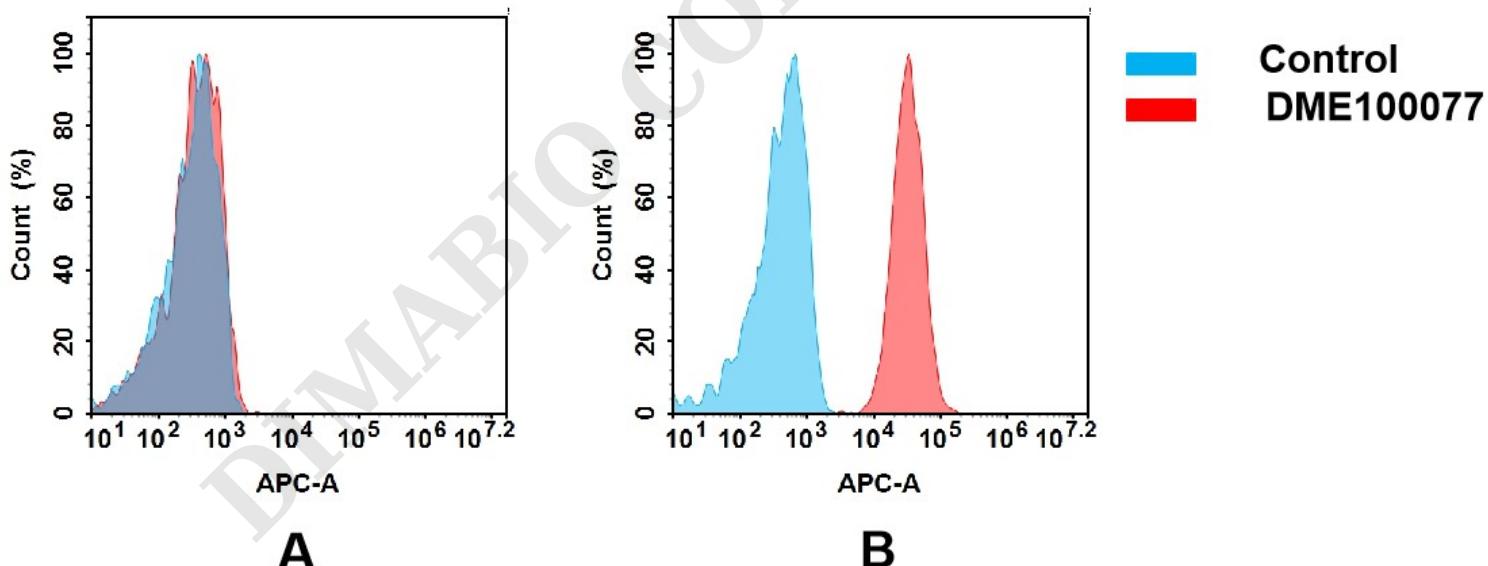


Figure 4. Flow cytometry analysis of antigen binding of rabbit anti-human CD33 mAb(DME100077).

(A) DME100077 does not bind to 293T cells that do not express CD33.

(B) A clear peak shift of DME100077 was seen compared to the control when incubated with CD33-expressing THP-1 cells, indicating strong binding of DME100077 to CD33. Antibodies were incubated at 10 μg/mL.

