

## 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:SH-1 and PTPN11:SH-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



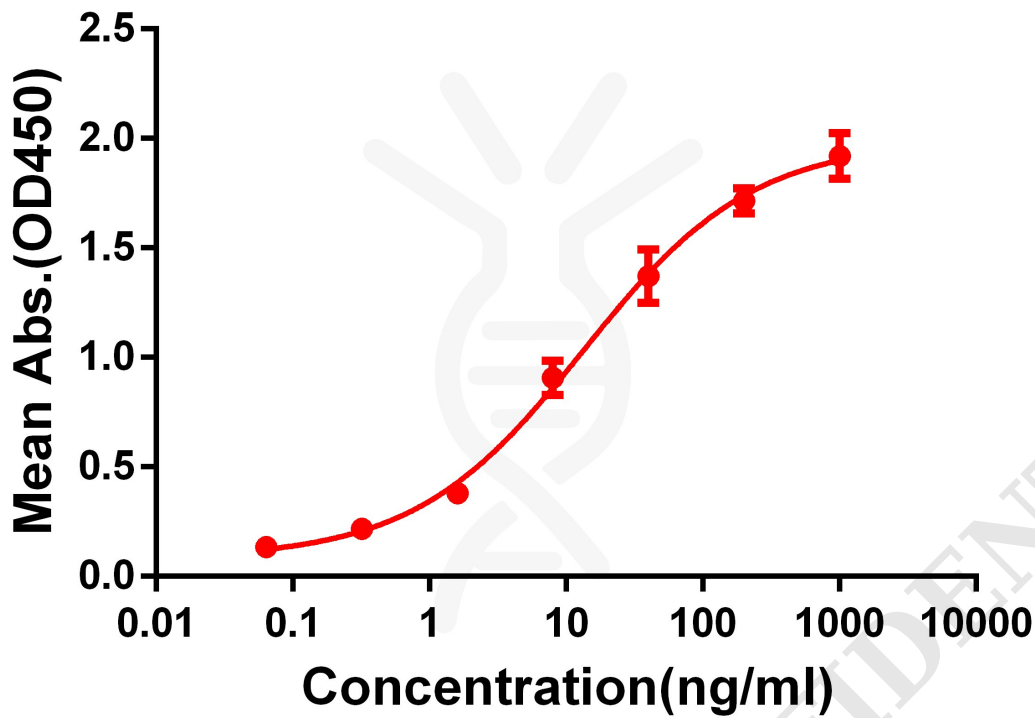


Figure 1. ELISA plate pre-coated by 2  $\mu\text{g/ml}$  (100  $\mu\text{l/well}$ ) Human CD33 protein, hFc-His tagged protein PME100039 can bind Rabbit anti-CD33 monoclonal antibody (clone: DM77) in a linear range of 1-100 ng/ml.

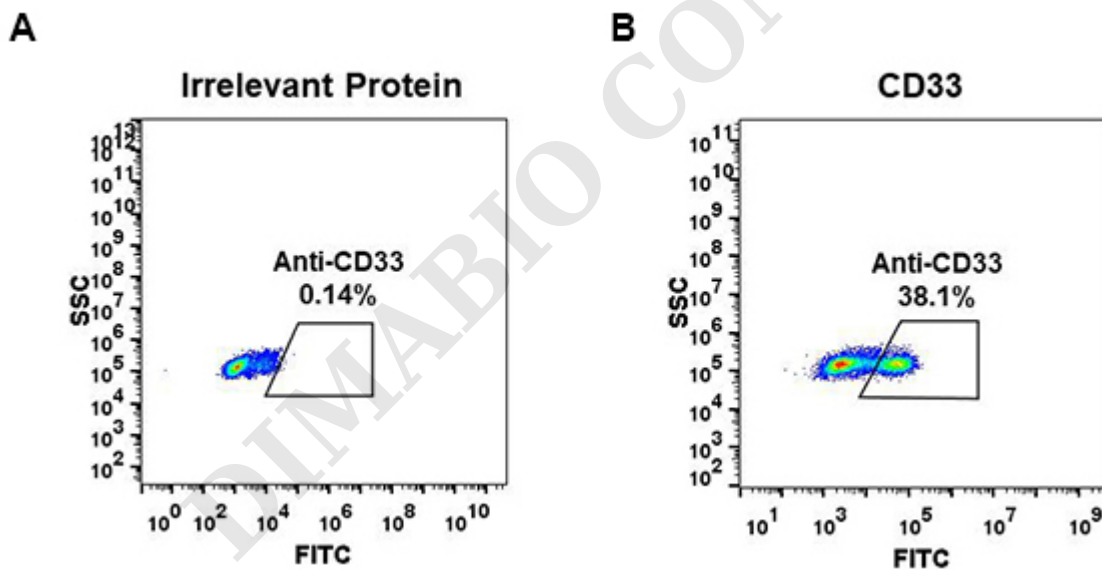


Figure 2. Expi 293 cell line transfected with irrelevant protein (A) and human CD33 (B) were surface stained with Rabbit anti-CD33 monoclonal antibody 1 $\mu\text{g/ml}$  (clone: DM77) followed by Alexa 488-conjugated anti-rabbit IgG secondary antibody.



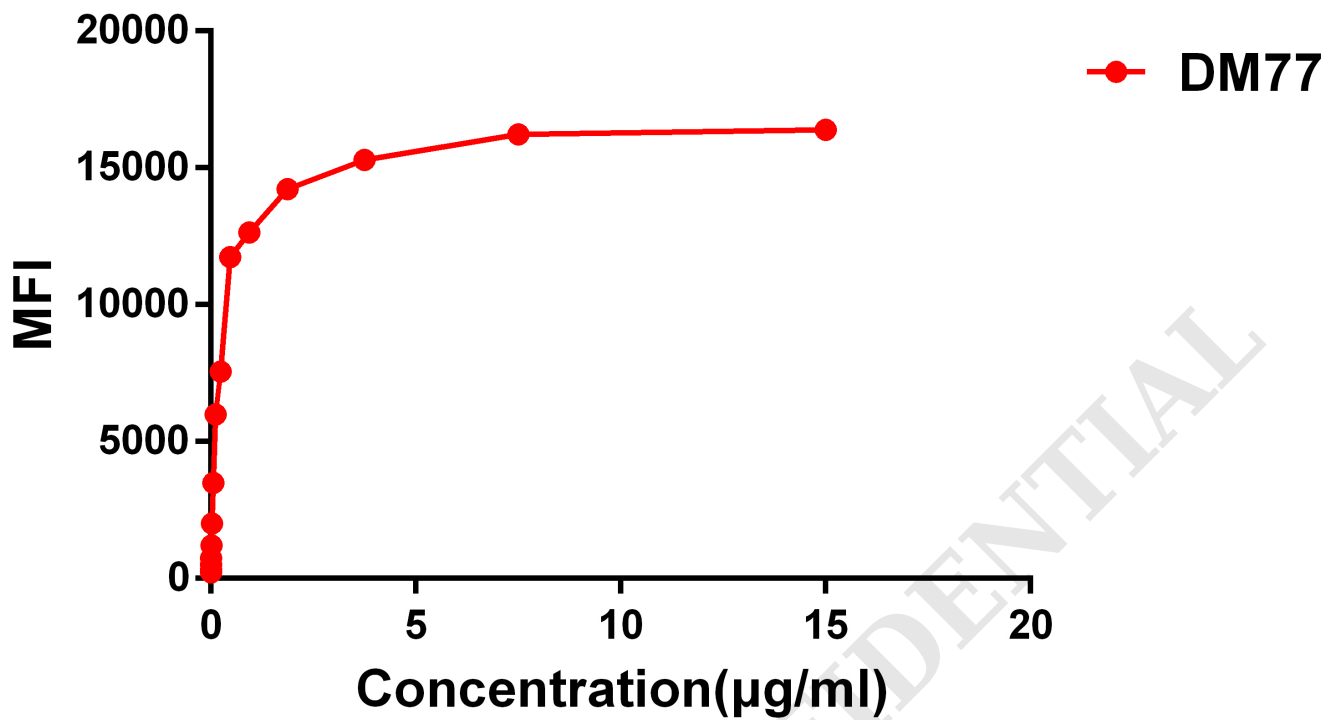


Figure 3. Flow cytometry data of serially titrated Rabbit anti-CD33 monoclonal antibody (clone: DM77) on Expi 293 cell line transfected with human CD33. The Y-axis represents the mean fluorescence intensity (MFI) while the X-axis represents the concentration of IgG used.

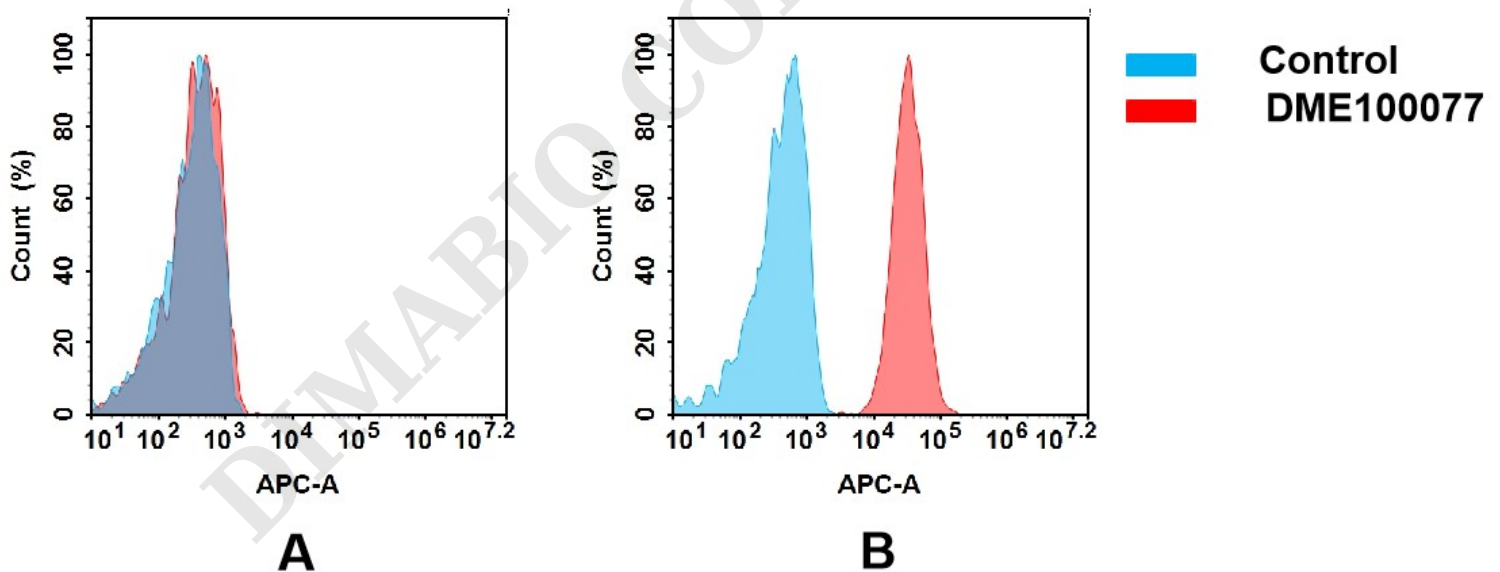


Figure 4. Flow cytometry analysis of antigen binding of rabbit anti-human CD33 mAb(DME100077).

(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.

