

PRODUCT INFORMATION

Clone ID	DM77
Target	CD33
Synonyms	CD33;SIGLEC3;gp67
Host Species	Rabbit
Description	Anti-CD33 antibody(DM77); Rabbit mAb
Delivery	In Stock
Uniprot ID	P20138
IgG type	Rabbit IgG
Clonality	Monoclonal
Reactivity	Human
Applications	ELISA; Flow Cyt
Recommended Dilutions	ELISA 1:5000-10000; Flow Cyt 1:100
Purification	Purified from cell culture supernatant by affinity chromatography
Formulation & Reconstitution	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.
Storage & Shipping	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.
Background	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.
Usage	Research use only



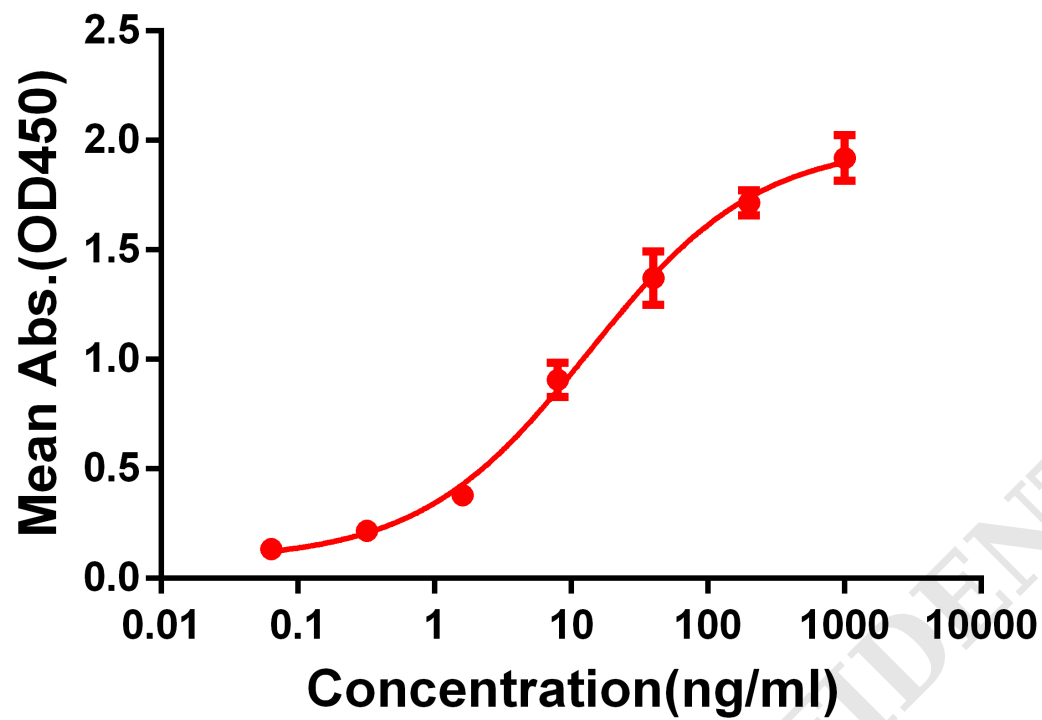


Figure 1. ELISA plate pre-coated by 2 μ g/ml (100 μ l/well) Human CD33 protein, hFc-His tagged protein PME100039 can bind Rabbit anti-CD33 monoclonal antibody (clone: DM77) in a linear range of 1-100 ng/ml.

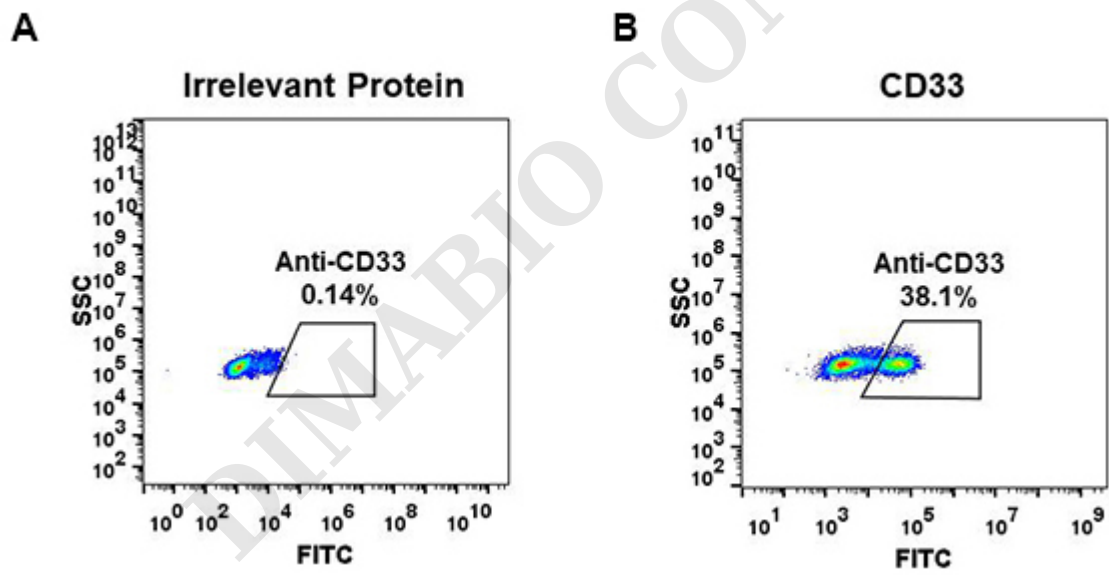


Figure 2. Expi 293 cell line transfected with irrelevant protein (A) and human CD33 (B) were surface stained with Rabbit anti-CD33 monoclonal antibody 1 μ g/ml (clone: DM77) followed by Alexa 488-conjugated anti-rabbit IgG secondary antibody.



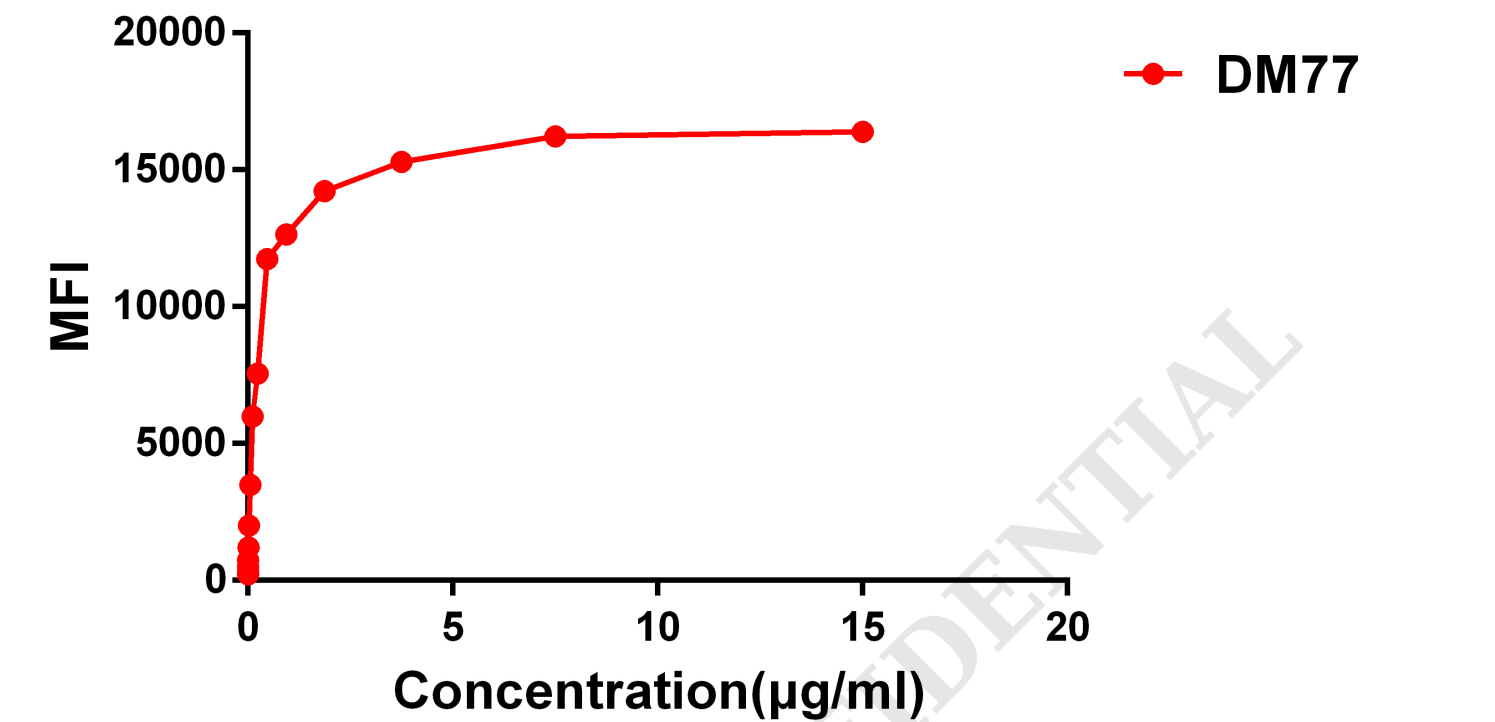


Figure 3. Flow cytometry data of serially titrated Rabbit anti-CD33 monoclonal antibody (clone: DM77) on Expi 293 cell line transfected with human CD33. The Y-axis represents the mean fluorescence intensity (MFI) while the X-axis represents the concentration of IgG used.

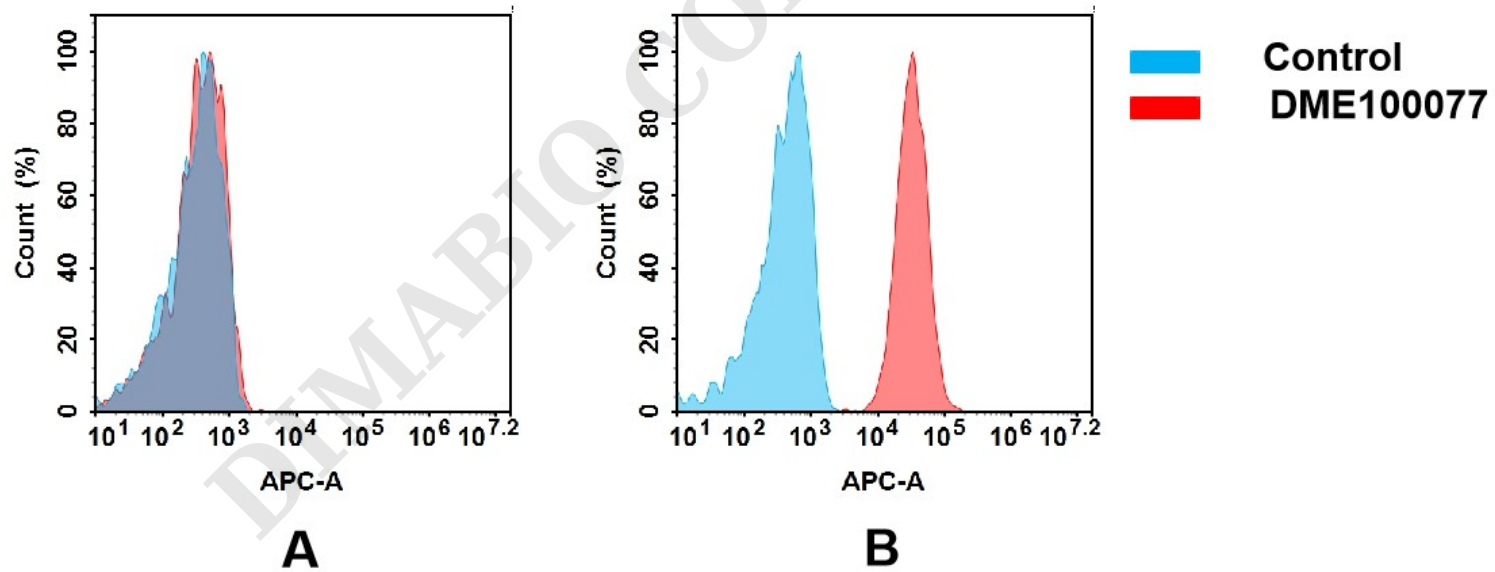


Figure 4. Flow cytometry analysis of antigen binding of rabbit anti-human CD33 mAb(DME100077).
(A) DME100077 does not bind to 293T cells that do not express CD33.
(B) A clear peak shift of DME100077 was seen compared to the control when incubated with CD33-expressing THP-1 cells, indicating strong binding of DME100077 to CD33. Antibodies were incubated at 10 µg/mL.

