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 syalylated 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.
Usage	Research use only
Conjugate	Unconjugated
DIMA Disclaimer	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.

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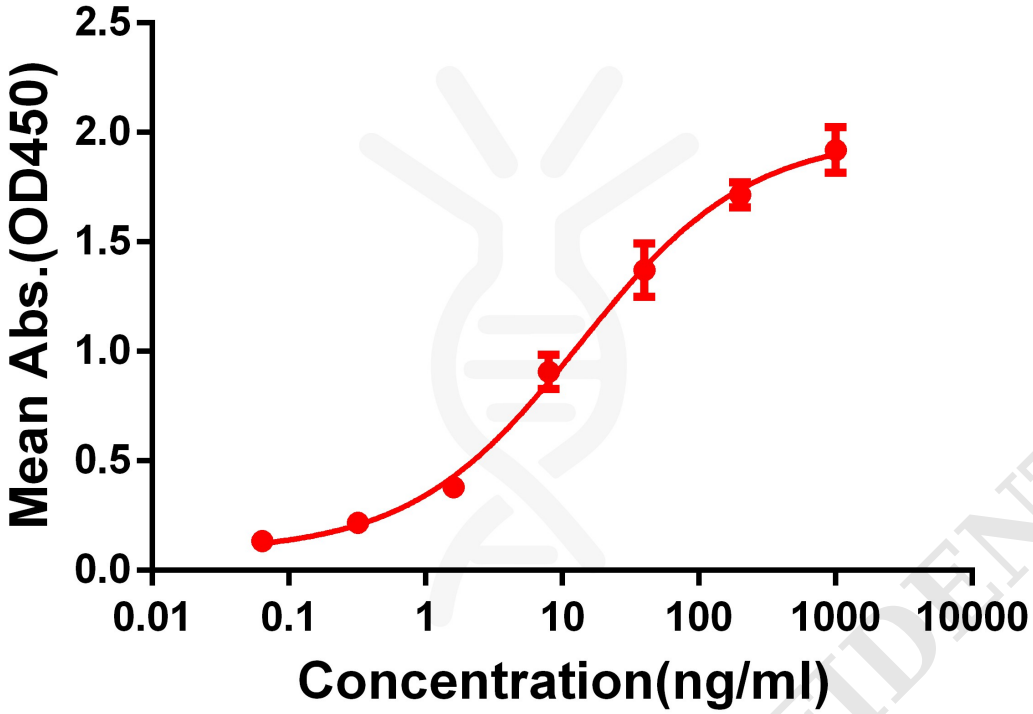

Figure 1. ELISA plate pre-coated by 2 μg/ml (100 μl/well) Human CD33 protein, hFc-His tagged protein PME100039 can bind Rabbit anti-CD33 monoclonal antibody (clone: DM77) in a linear range of 1-100 ng/ml.

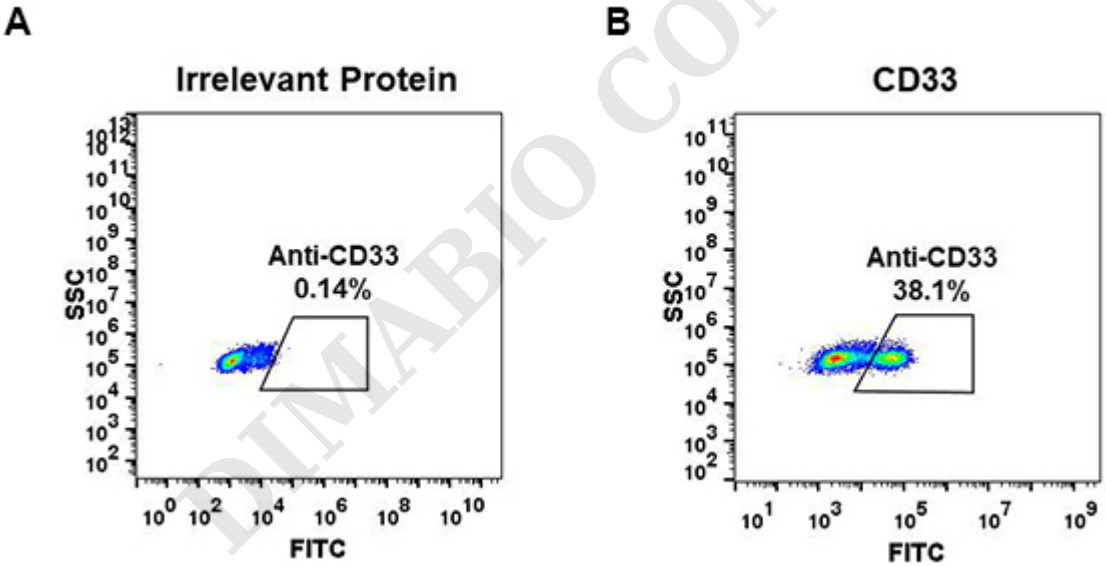

Figure 2. Expi 293 cell line transfected with irrelevant protein (A) and human CD33 (B) were surface stained with Rabbit anti-CD33 monoclonal antibody 1μg/ml (clone: DM77) followed by Alexa 488-conjugated anti-rabbit IgG secondary antibody.

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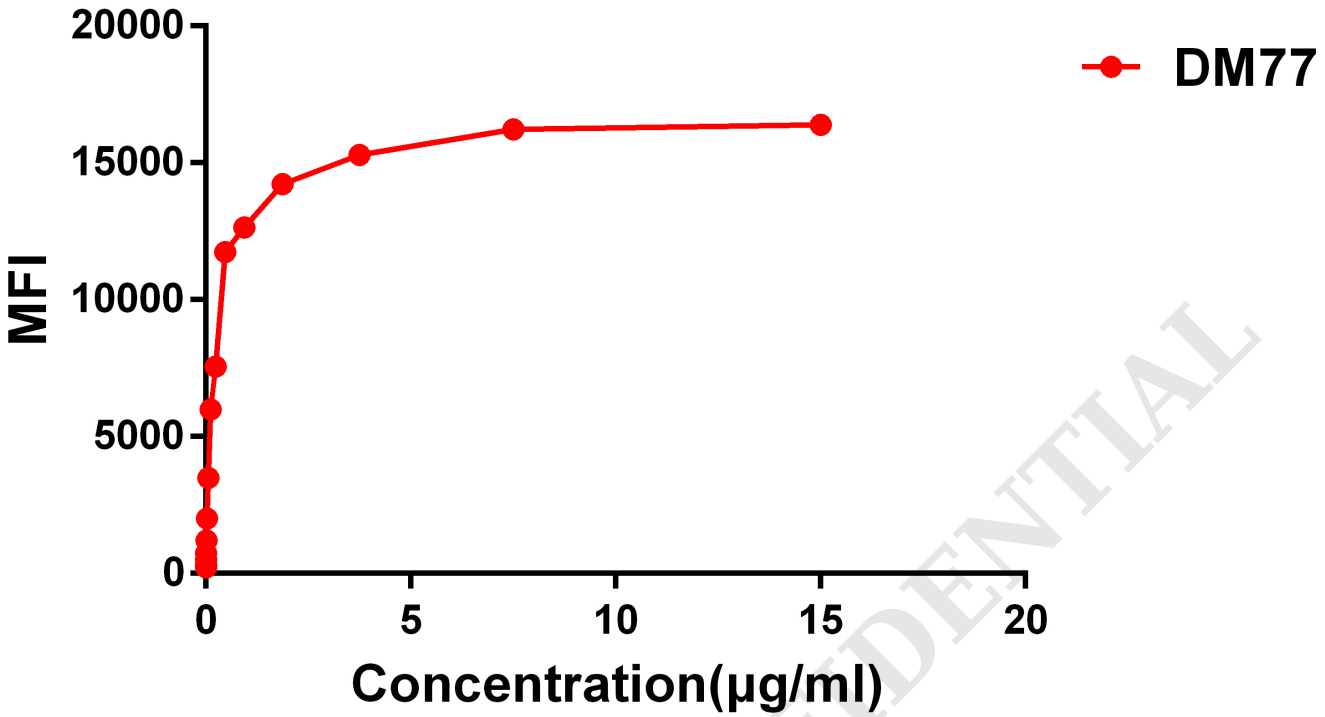

Figure 3. Flow cytometry data of serially titrated Rabbit anti-CD33 monoclonal antibody (clone: DM77) on Expi 293 cell line transfected with human CD33. The Y-axis represents the mean fluorescence intensity (MFI) while the X-axis represents the concentration of IgG used.

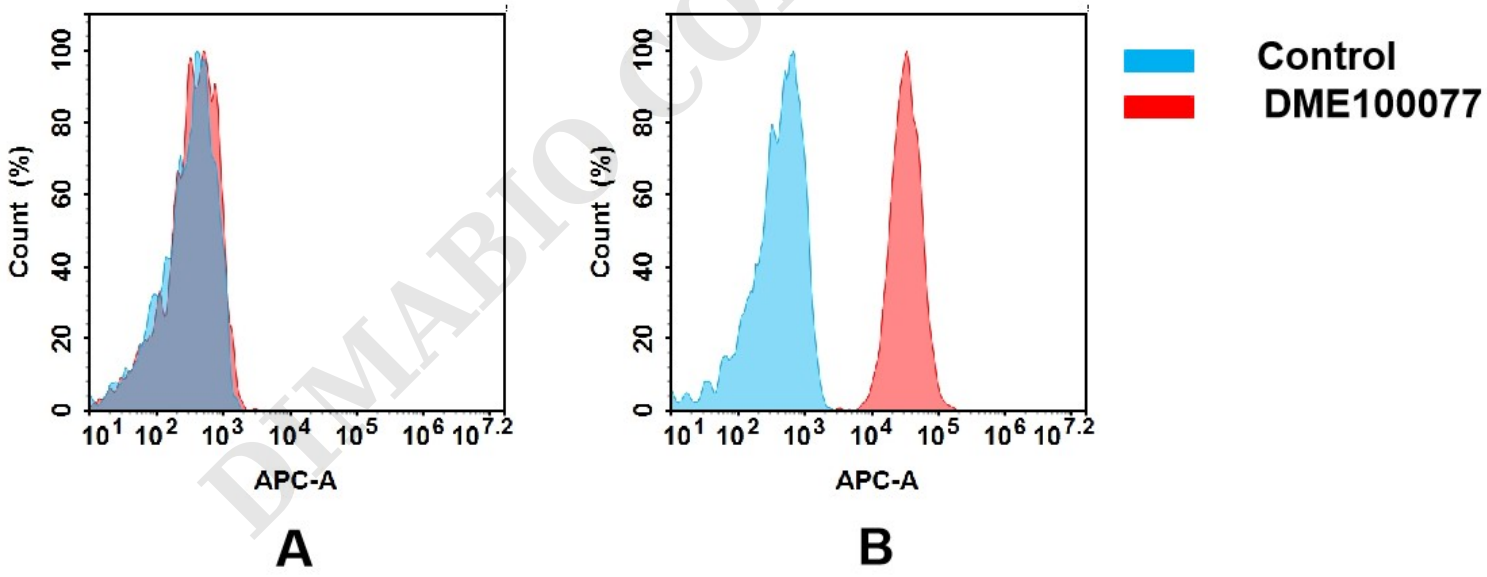

Figure 4. Flow cytometry analysis of antigen binding of rabbit anti-human CD33 mAb(DME100077).

(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.

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