

PRODUCT INFORMATION

Clone ID	DM28
Target	CD38
Synonyms	T10; cADPr hydrolase 1
Host Species	Rabbit
Description	Anti-CD38 antibody(DM28); Rabbit mAb
Delivery	In Stock
Uniprot ID	P28907
IgG type	Rabbit IgG
Clonality	Monoclonal
Reactivity	Human
Applications	ELISA; IHC; WB; 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	CD antigen CD38 is also known as ADP-ribosyl cyclase 1; which belongs to the ADP-ribosyl cyclase family. CD38 is expressed at high levels in pancreas; liver; kidney; brain; testis; ovary; placenta; malignant lymphoma and neuroblastoma. CD38 is a multifunctional ectoenzyme that catalyzes the synthesis and hydrolysis of cyclic ADP-ribose (cADPR) from NAD to ADP-ribose. These reaction products are essential for the regulation of intracellular Ca ²⁺ . The loss of CD38 function is associated with impaired immune responses; metabolic disturbances; and behavioral modifications. The CD38 protein is a marker of cell activation. It has been connected to HIV infection; leukemias; myelomas; solid tumors; type II diabetes mellitus and bone metabolism. CD38 has been used as a prognostic marker in leukemia.
Usage	Research use only
Conjugate	Unconjugated



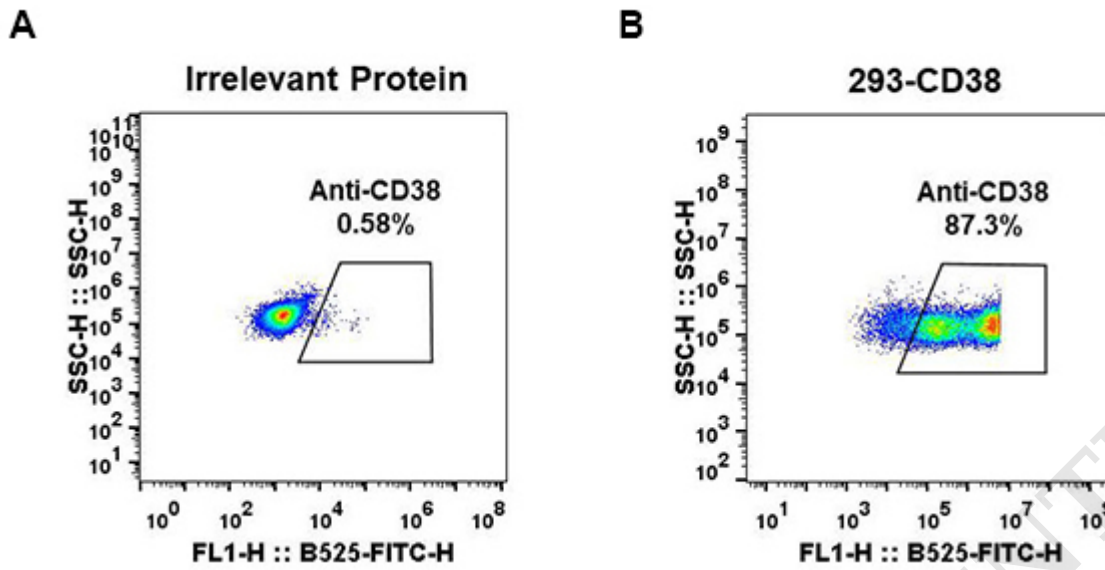


Figure 1. Expi 293 cell line transfected with irrelevant protein (left) and human CD38 (right) were surface stained with Rabbit anti-CD38 monoclonal antibody $1\mu\text{g/ml}$ (clone: DM28) followed by Alexa 488-conjugated anti-rabbit IgG secondary antibody.

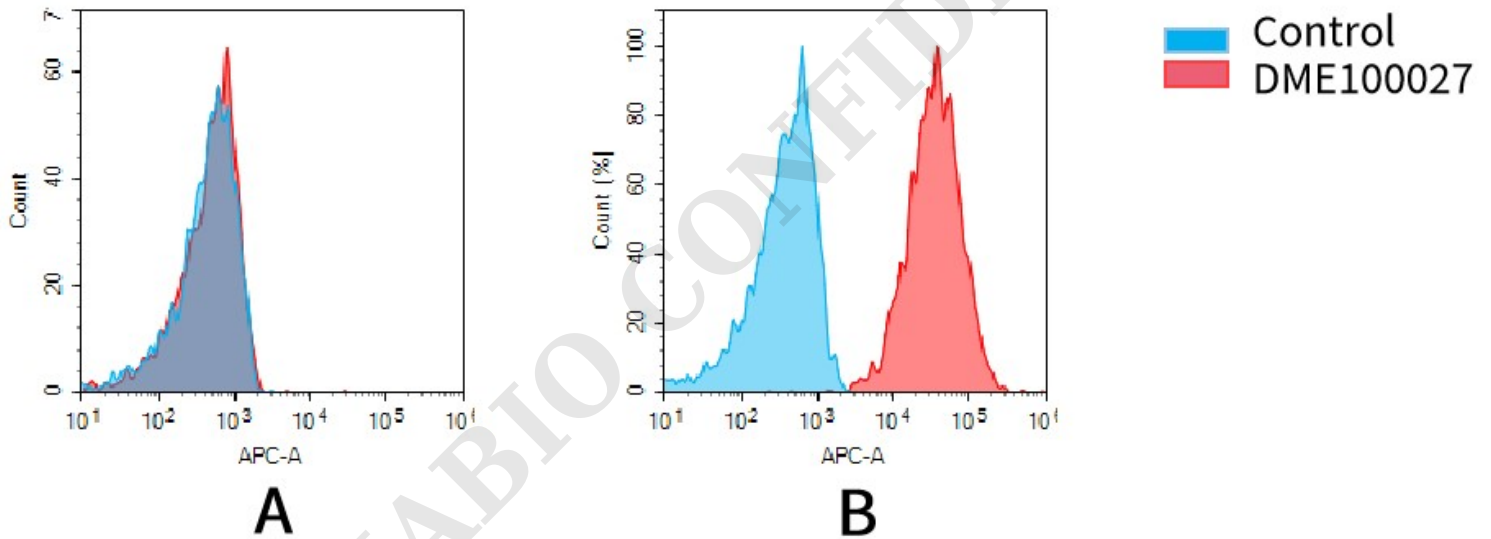


Figure 2. Flow cytometry analysis of antigen binding of rabbit anti-human CD38 mAb (DME100027). (A) DME100027 does not bind to 293T cells that do not express CD38. (B) A clear peak shift of DME100027 was seen compared to the control when incubated with CD38-expressing H929 cells, indicating strong binding of DME100027 to CD38. Antibodies were incubated at $5\mu\text{g/mL}$.



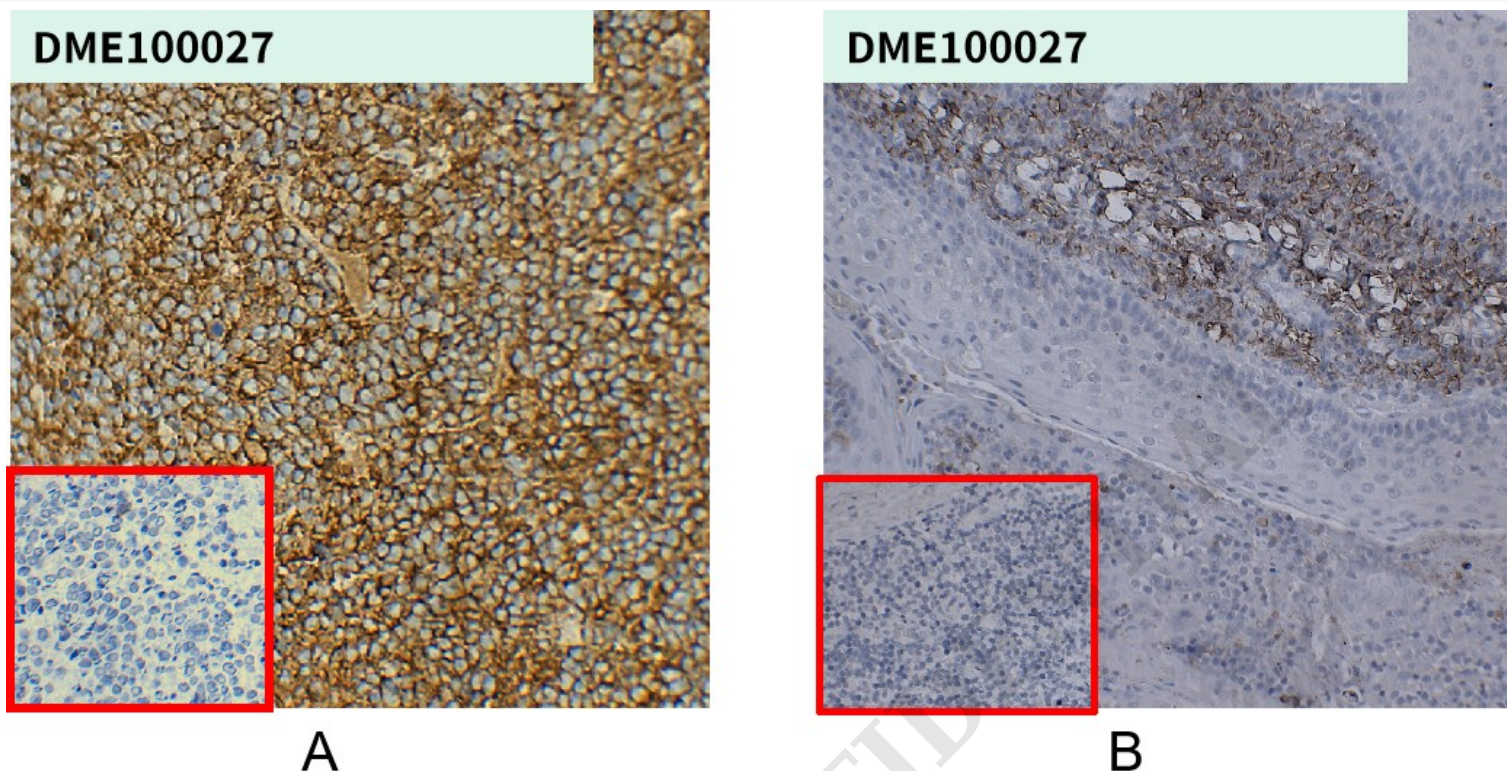


Figure 3. A. DME100027 at 5 μ g/ml staining CD38 in RPMI-8226 MM xenografts in NSG mice by IHC (SKU# DME100027); B: DME100027 at 5 μ g/ml staining CD38 in human tonsil tissue by IHC (SKU# DME100027);

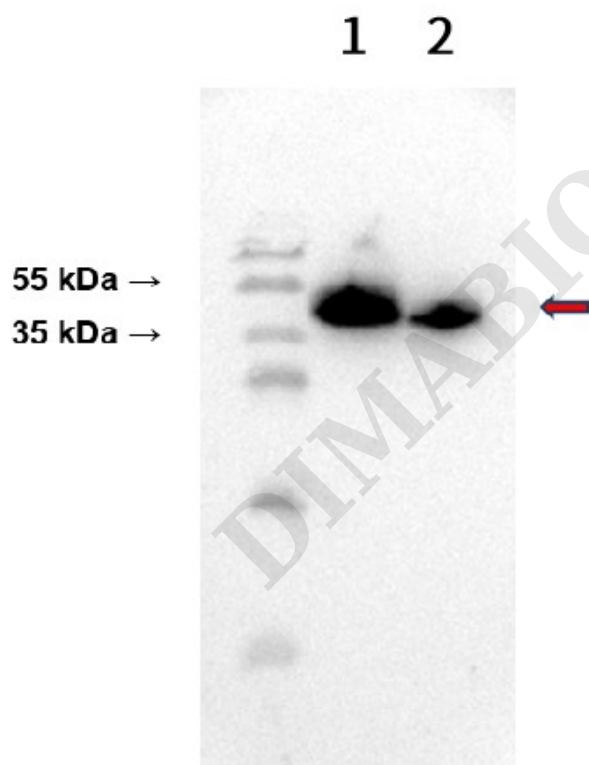
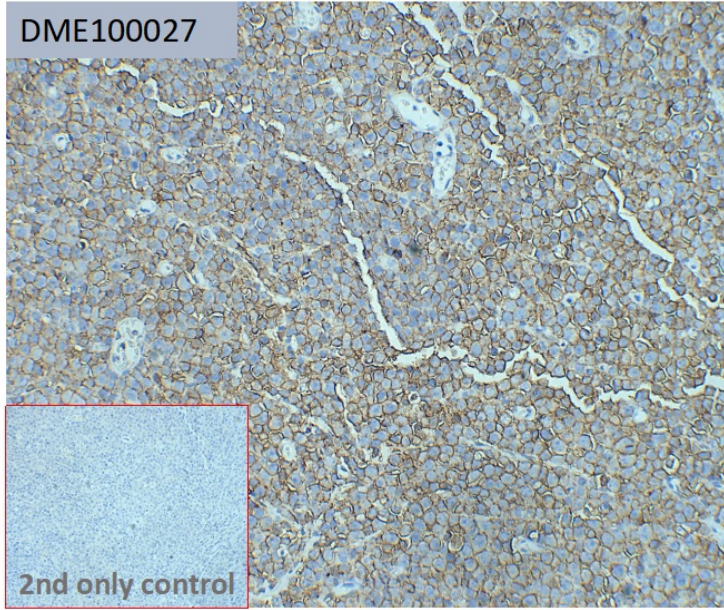


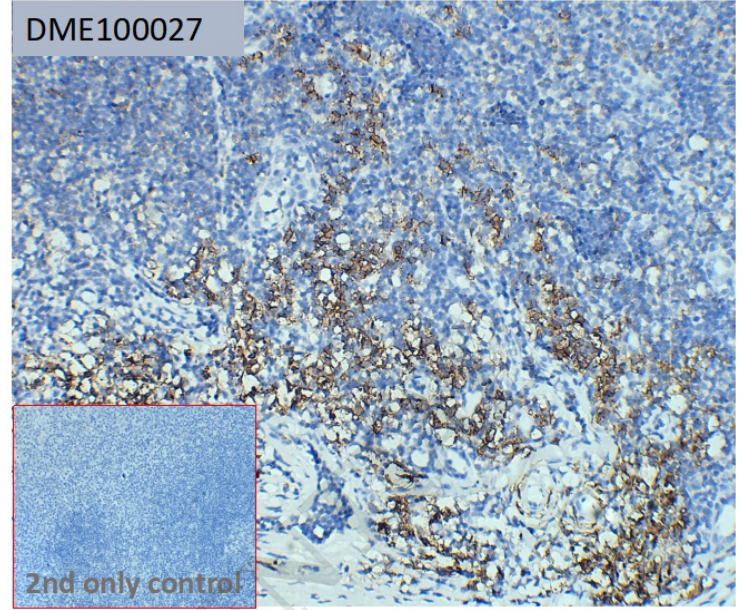
Figure 4. Western blot analysis of CD38 protein using Anti-CD38 antibody (Cat. DME100027) at 1:1000 dilution. Secondary antibody: HRP Goat Anti-Rabbit IgG (H L) at 1:5000 dilution.

- 1. MM.1S cell lysate (native CD38 protein)
- 2. H929 cell lysate (native CD38 protein)





A



B

Figure 5. A. DME100027 at 10 μ g/ml staining CD38 in M-NSG Daudi DiSliceX™ SlideSet section by IHC (SKU# DME100027); B. DME100027 at 10 μ g/ml staining CD38 in human tonsil tissue by IHC (SKU# DME100027).

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