

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 FC
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



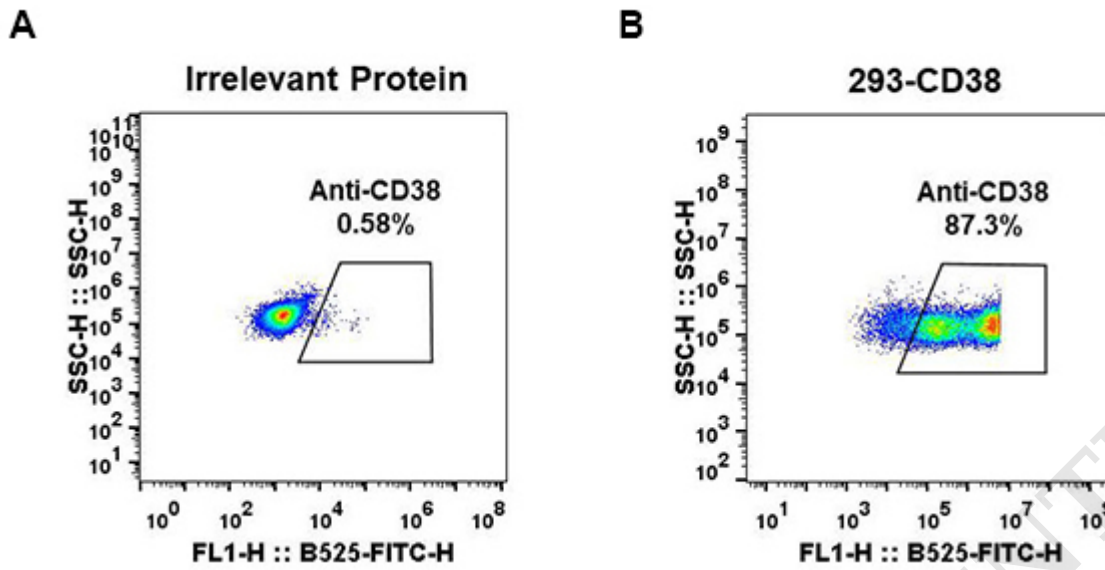


Figure 1. Expi 293 cell line transfected with irrelevant protein (left) and human CD38 (right) were surface stained with Rabbit anti-CD38 monoclonal antibody $1\mu\text{g/ml}$ (clone: DM28) followed by Alexa 488-conjugated anti-rabbit IgG secondary antibody.

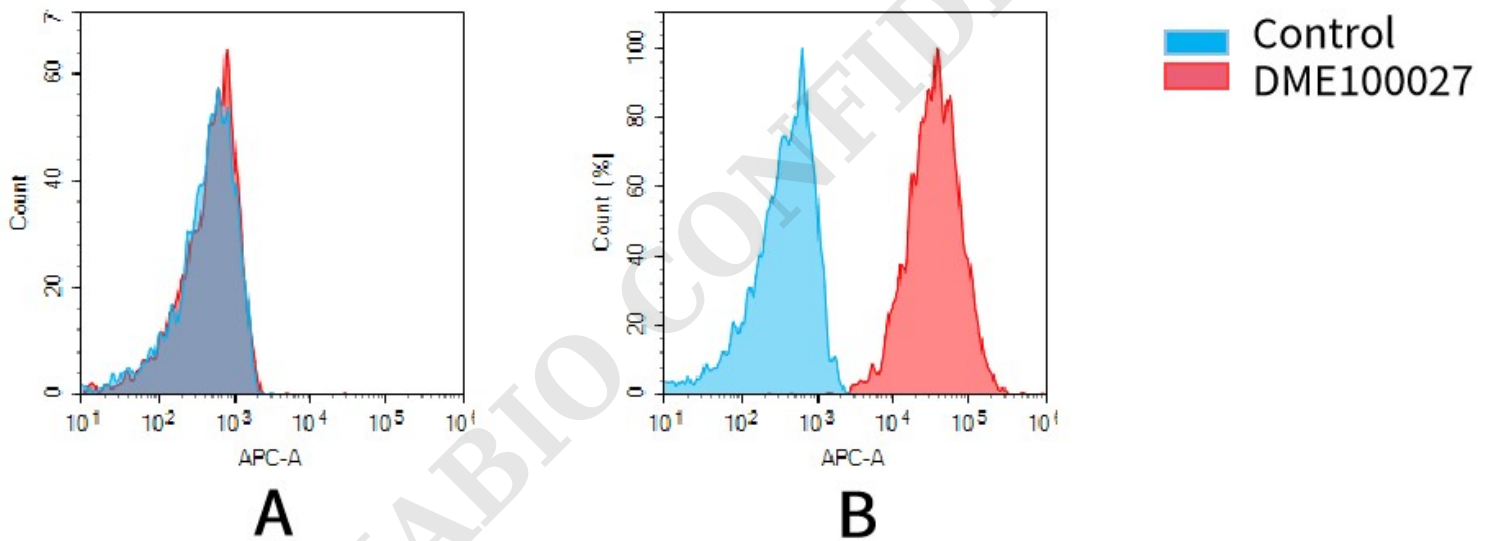


Figure 2. Flow cytometry analysis of antigen binding of rabbit anti-human CD38 mAb (DME100027). (A) DME100027 does not bind to 293T cells that do not express CD38. (B) A clear peak shift of DME100027 was seen compared to the control when incubated with CD38-expressing H929 cells, indicating strong binding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



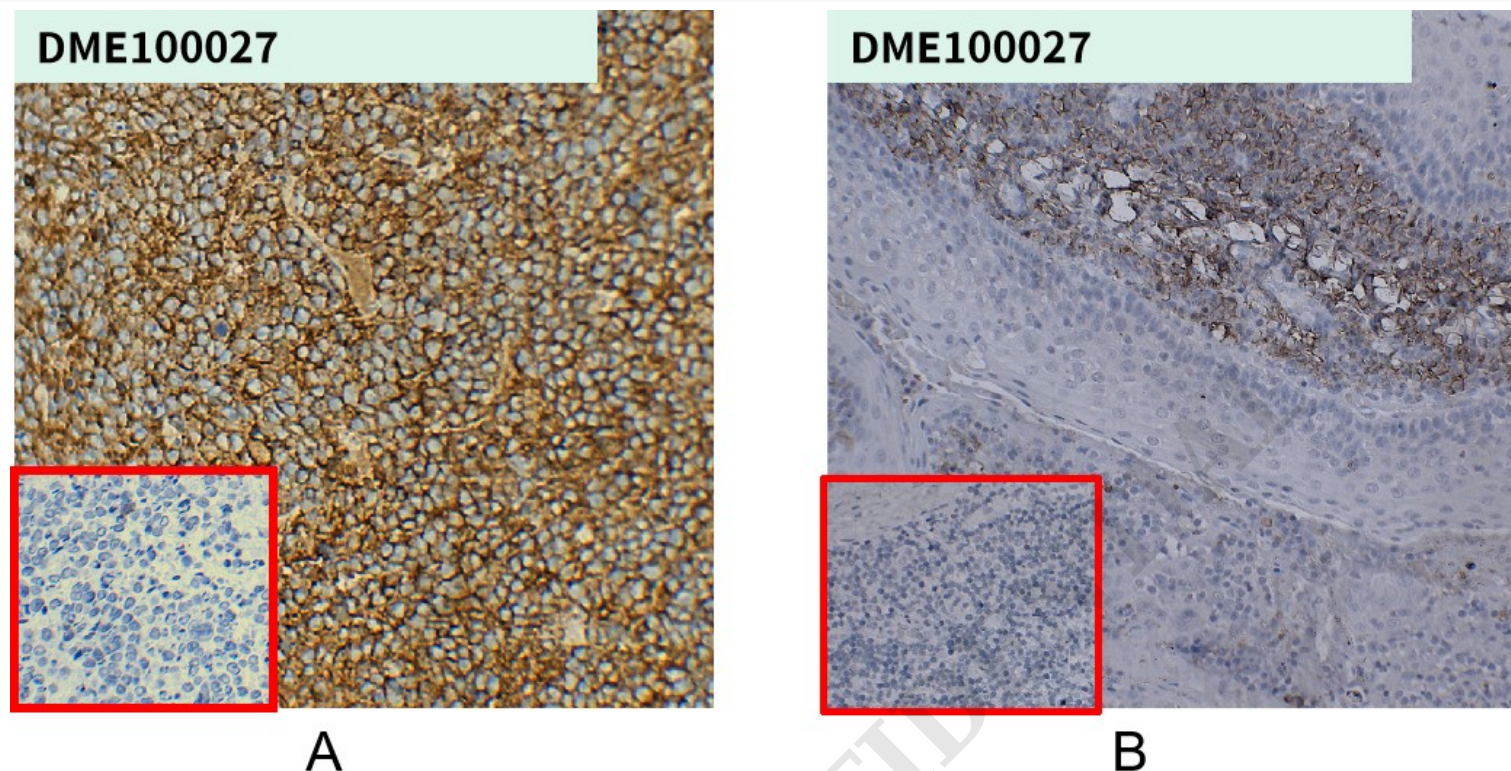


Figure 3. A. DME100027 at 5 μ g/ml staining CD38 in RPMI-8226 MM xenografts in NSG mice by IHC (SKU# DME100027); B: DME100027 at 5 μ g/ml staining CD38 in human tonsil tissue by IHC (SKU# DME100027);

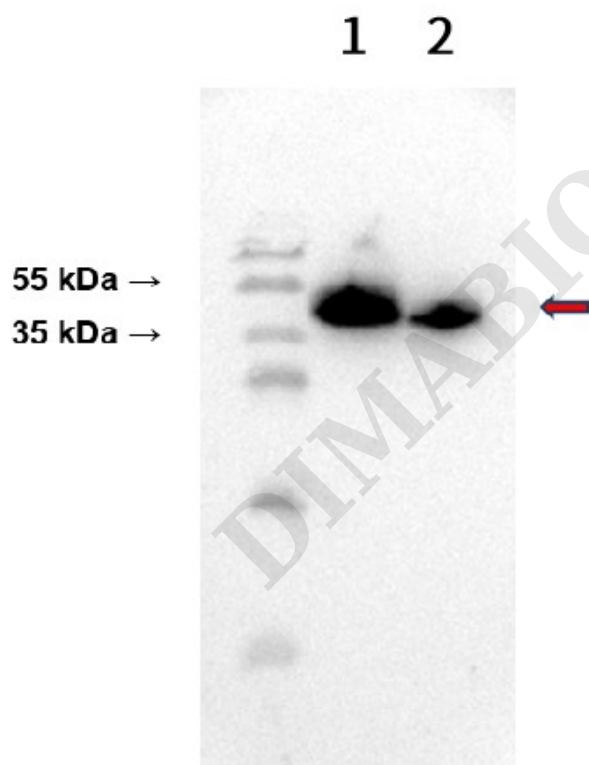
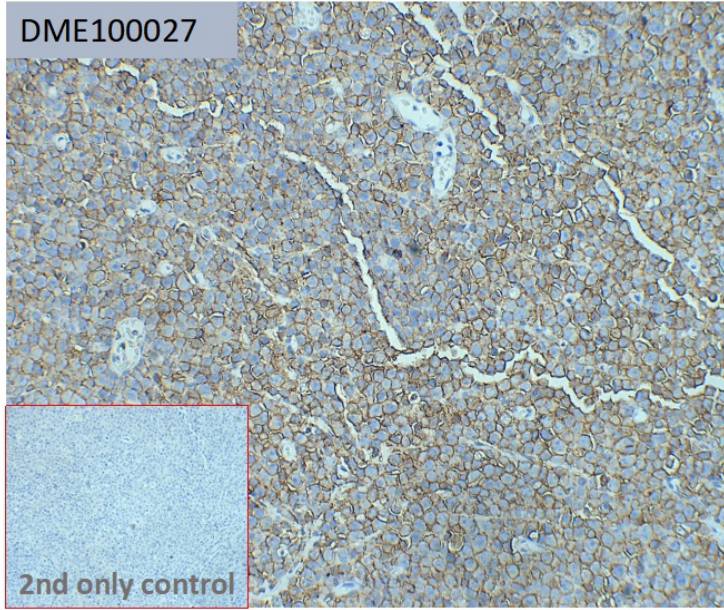


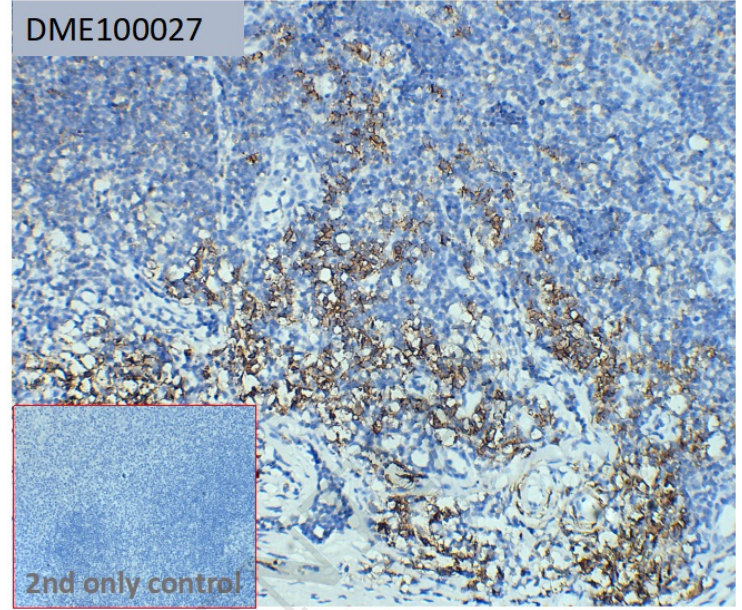
Figure 4. Western blot analysis of CD38 protein using Anti-CD38 antibody (Cat. DME100027) at 1:1000 dilution. Secondary antibody: HRP Goat Anti-Rabbit IgG (H L) at 1:5000 dilution.

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).

DIMABIO CONFIDENTIAL

