

## PRODUCT INFORMATION

<b>Clone ID</b>	DM202
<b>Target</b>	CD56
<b>Synonyms</b>	NCAM1; CD56; MSK39; NCAM
<b>Host Species</b>	Rabbit
<b>Description</b>	Anti-CD56 antibody(DM202); Rabbit mAb
<b>Delivery</b>	In Stock
<b>Uniprot ID</b>	P13591
<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. 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>Storage &amp; Shipping</b>	Lyophilized proteins are shipped at ambient temperature.
<b>Background</b>	This gene encodes a cell adhesion protein which is a member of the immunoglobulin superfamily. The encoded protein is involved in cell-to-cell interactions as well as cell-matrix interactions during development and differentiation. The encoded protein plays a role in the development of the nervous system by regulating neurogenesis; neurite outgrowth; and cell migration. This protein is also involved in the expansion of T lymphocytes; B lymphocytes and natural killer (NK) cells which play an important role in immune surveillance. This protein plays a role in signal transduction by interacting with fibroblast growth factor receptors; N-cadherin and other components of the extracellular matrix and by triggering signalling cascades involving FYN-focal adhesion kinase (FAK); mitogen-activated protein kinase (MAPK); and phosphatidylinositol 3-kinase (PI3K). One prominent isoform of this gene; cell surface molecule CD56; plays a role in several myeloproliferative disorders such as acute myeloid leukemia and differential expression of this gene is associated with differential disease progression. For example; increased expression of CD56 is correlated with lower survival in acute myeloid leukemia patients whereas increased severity of COVID-19 is correlated with decreased abundance of CD56-expressing NK cells in peripheral blood. Alternative splicing results in multiple transcript variants encoding distinct protein isoforms.
<b>Usage</b>	Research use only



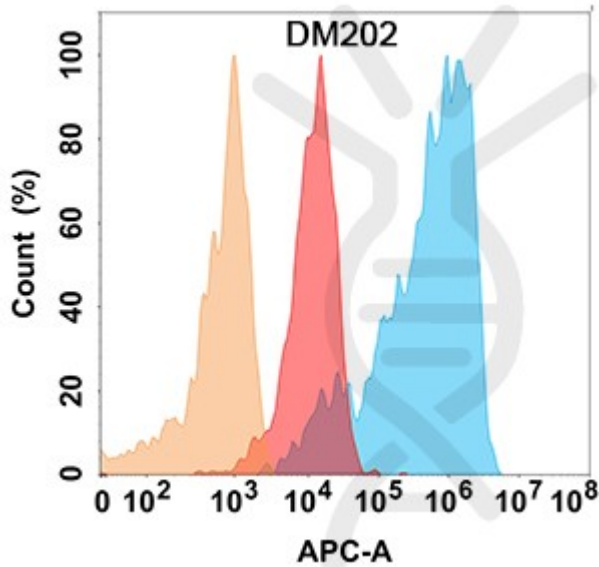


Figure 1. CD56 protein is highly expressed on the surface of Expi293 cell membrane. Flow cytometry analysis with Anti-CD56 (DM202) on Expi293 cells transfected with human CD56 (Blue histogram) or Expi293 transfected with irrelevant protein (Red histogram), and Isotype antibody on Expi293 transfected with irrelevant protein (Orange histogram).

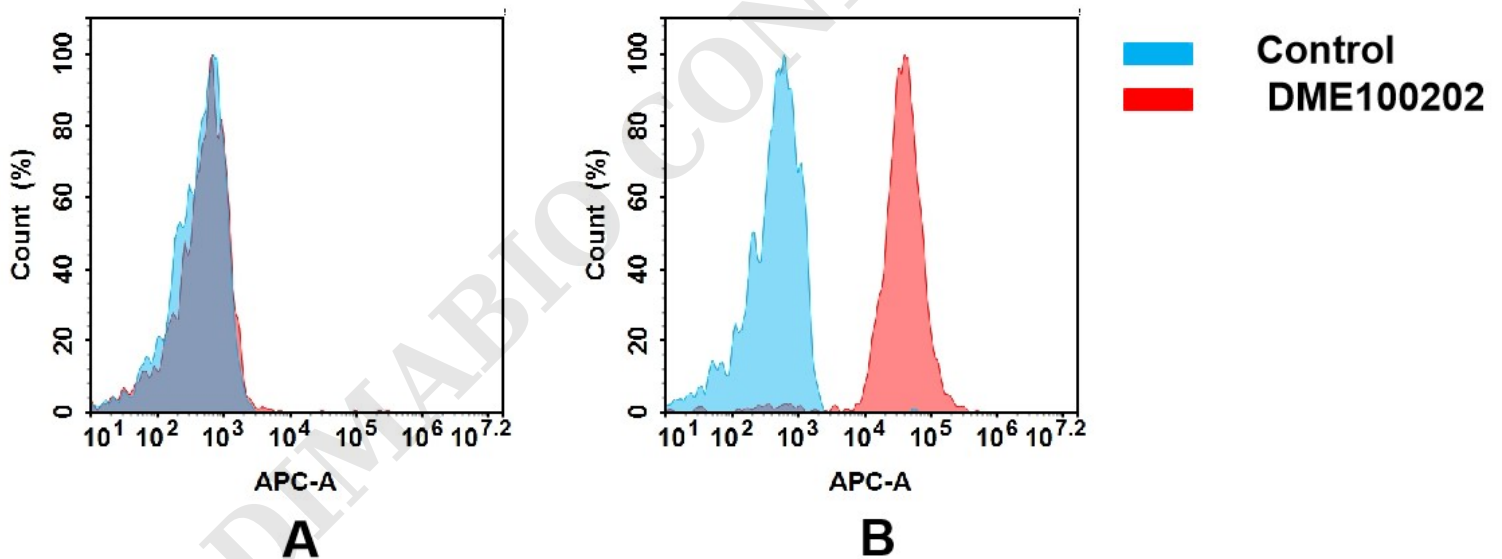


Figure 2. Flow cytometry analysis of antigen binding of rabbit anti-human CD56 mAb( DME100202).

(A) DME100202 does not bind to CHO-S cells that do not express CD56.

(B) A clear peak shift of DME100202 was seen compared to the control when incubated with CD56-expressing TT cells, indicating strong binding of DME100202 to CD56. Antibodies were incubated at 5  $\mu\text{g}/\text{mL}$ .

