

PRODUCT INFORMATION

Clone ID	DMC463
Target	CD142
Synonyms	TF; Coagulation factor III; F3
Host Species	Rabbit
Description	Anti-CD142 antibody(DMC463); IgG1 Chimeric mAb
Delivery	In Stock
Uniprot ID	P13726
IgG type	Rabbit/Human Fc chimeric IgG1
Clonality	Monoclonal
Reactivity	Human
Applications	Flow Cyt
Recommended Dilutions	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	This gene encodes coagulation factor III which is a cell surface glycoprotein. This factor enables cells to initiate the blood coagulation cascades; and it functions as the high-affinity receptor for the coagulation factor VII. The resulting complex provides a catalytic event that is responsible for initiation of the coagulation protease cascades by specific limited proteolysis. Unlike the other cofactors of these protease cascades; which circulate as nonfunctional precursors; this factor is a potent initiator that is fully functional when expressed on cell surfaces; for example; on monocytes. There are 3 distinct domains of this factor: extracellular; transmembrane; and cytoplasmic. Platelets and monocytes have been shown to express this coagulation factor under procoagulatory and proinflammatory stimuli; and a major role in HIV-associated coagulopathy has been described. Platelet-dependent monocyte expression of coagulation factor III has been described to be associated with Coronavirus Disease 2019 (COVID-19) severity and mortality. This protein is the only one in the coagulation pathway for which a congenital deficiency has not been described. Alternate splicing results in multiple transcript variants.[provided by RefSeq; Aug 2020]
Usage	Research use only



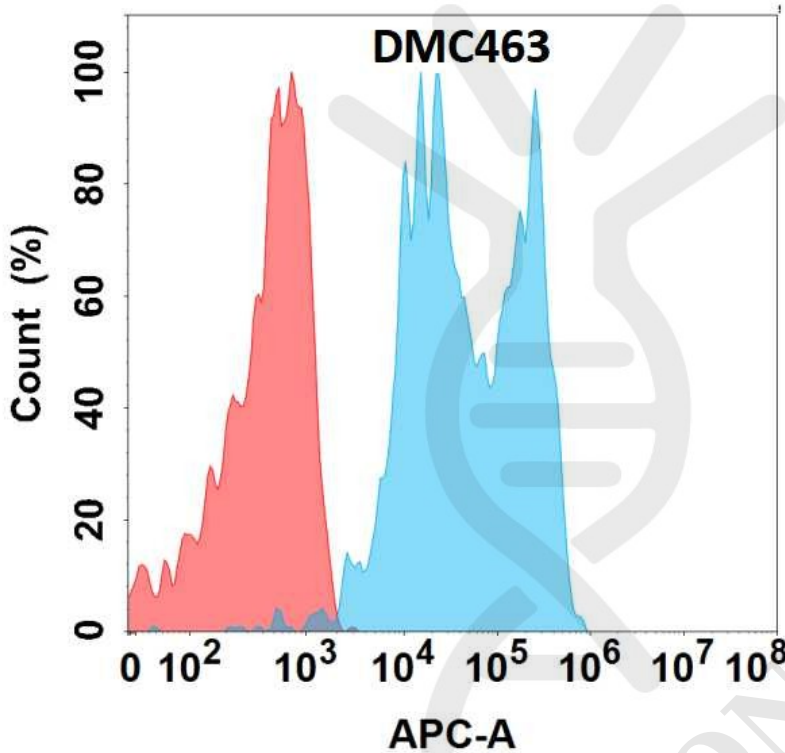


Figure 1. Flow cytometry analysis with Anti-CD142 (DMC463) on Expi293 cells transfected with human CD142 (Blue histogram) or Expi293 transfected with irrelevant protein (Red histogram).

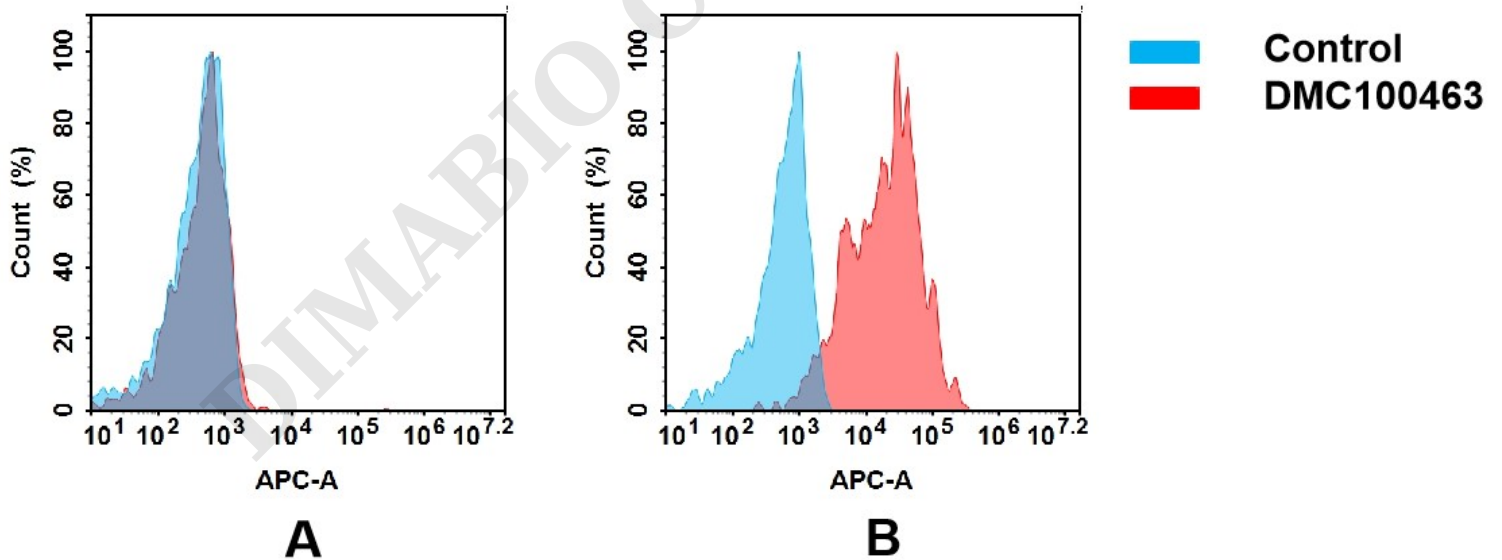


Figure 2. Flow cytometry analysis of antigen binding of anti-human CD142 mAb(DMC100463).

(A) DMC100463 does not bind to CHO-S cells that do not express CD142.

(B) A clear peak shift of DMC100463 was seen compared to the control when incubated with CD142-expressing Hela cells, indicating strong binding of DMC100463 to CD142. Antibodies were incubated at 5 µg/mL.

