

PRODUCT INFORMATION

Clone ID	DM9
Target	CS1
Synonyms	SLAM7 (19A; CD319; CRACC; CS1)
Host Species	Rabbit
Description	Anti-CS1 antibody(DM9); Rabbit mAb
Delivery	In Stock
Uniprot ID	Q9NQ25
IgG type	Rabbit IgG
Clonality	Monoclonal
Reactivity	Human
Applications	ELISA; 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	Self-ligand receptor of the signaling lymphocytic activation molecule (SLAM) family. SLAM receptors triggered by homo- or heterotypic cell-cell interactions are modulating the activation and differentiation of a wide variety of immune cells and thus are involved in the regulation and interconnection of both innate and adaptive immune response. Activities are controlled by presence or absence of small cytoplasmic adapter proteins; SH2D1A:SAP and/or SH2D1B:EAT-2. Isoform 1 mediates NK cell activation through a SH2D1A-independent extracellular signal-regulated ERK-mediated pathway (PubMed:11698418). Positively regulates NK cell functions by a mechanism dependent on phosphorylated SH2D1B. Downstream signaling implicates PLCG1; PLCG2 and PI3K (PubMed:16339536). In addition to heterotypic NK cells-target cells interactions also homotypic interactions between NK cells may contribute to activation. However; in the absence of SH2D1B; inhibits NK cell function. Acts also inhibitory in T-cells (By similarity). May play a role in lymphocyte adhesion (PubMed:11802771). In LPS-activated monocytes negatively regulates production of proinflammatory cytokines (PubMed:23695528).
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.

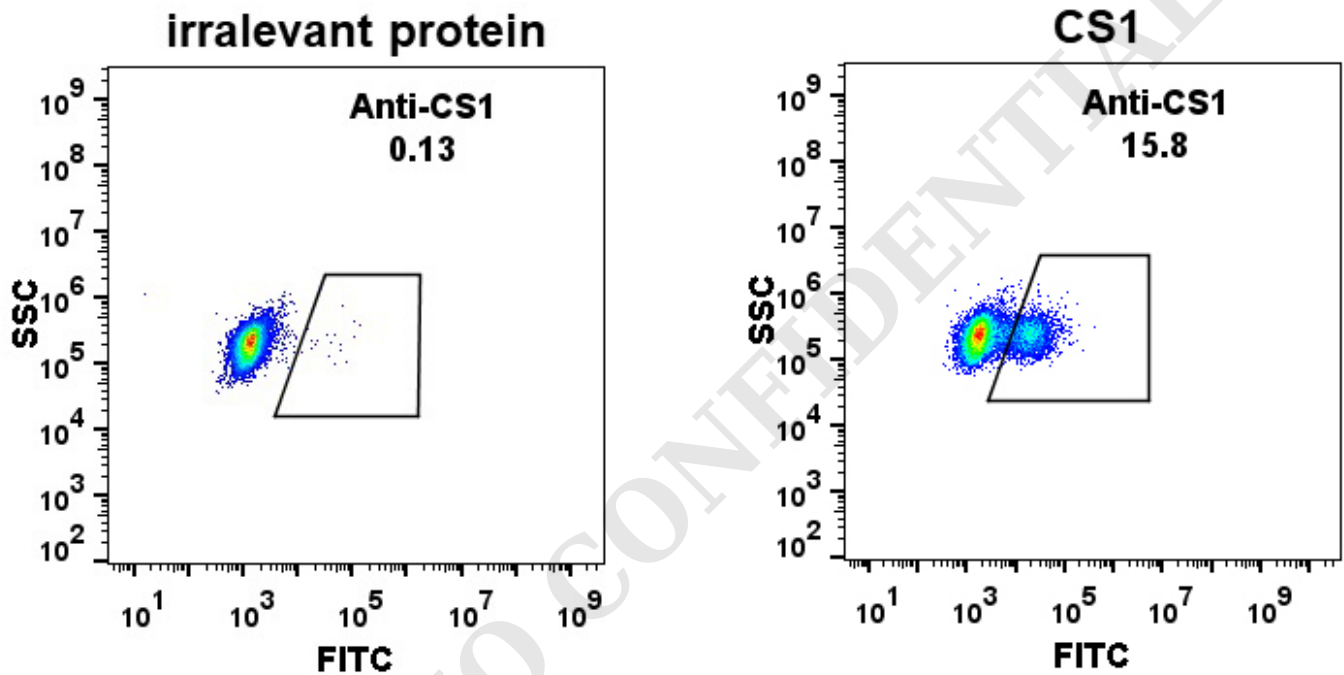


Figure 1. HEK293 cell line transfected with irrelevant protein (left) and human CS1 (right) were surface stained with Rabbit anti-CS1 monoclonal antibody $1\mu\text{g/ml}$ (clone: DM9) followed by Alexa 488-conjugated anti-rabbit IgG secondary antibody.



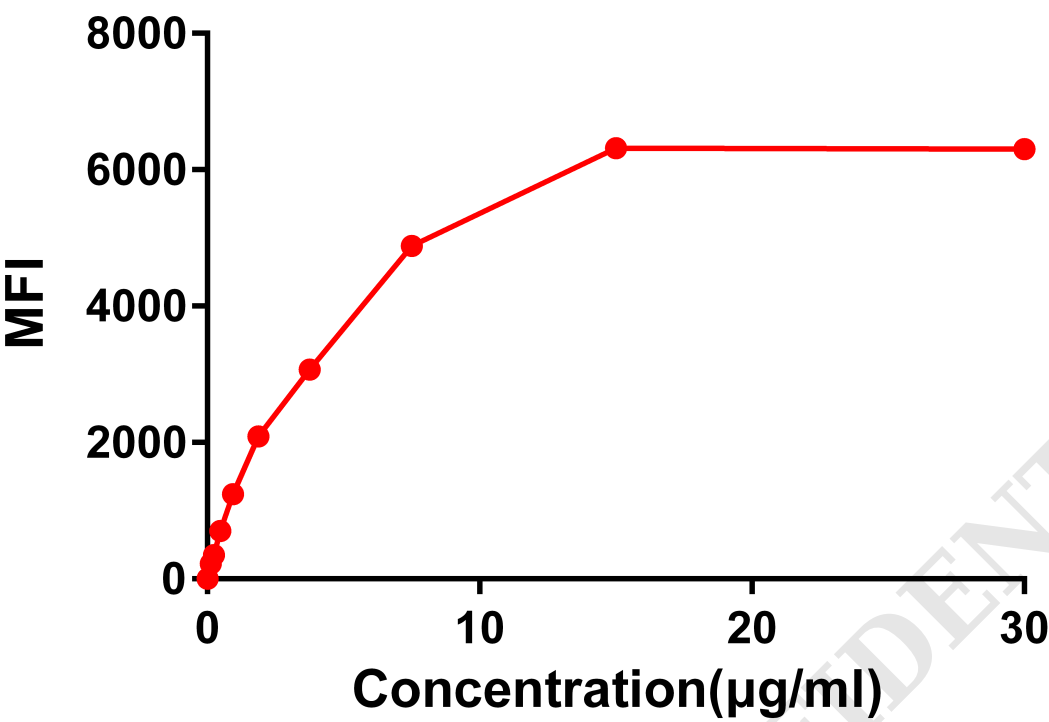


Figure 2. Flow cytometry data of serially titrated Rabbit anti-CS1 monoclonal antibody (clone: DM9) on Raji cells. The Y-axis represents the mean fluorescence intensity (MFI) while the X-axis represents the concentration of IgG used.

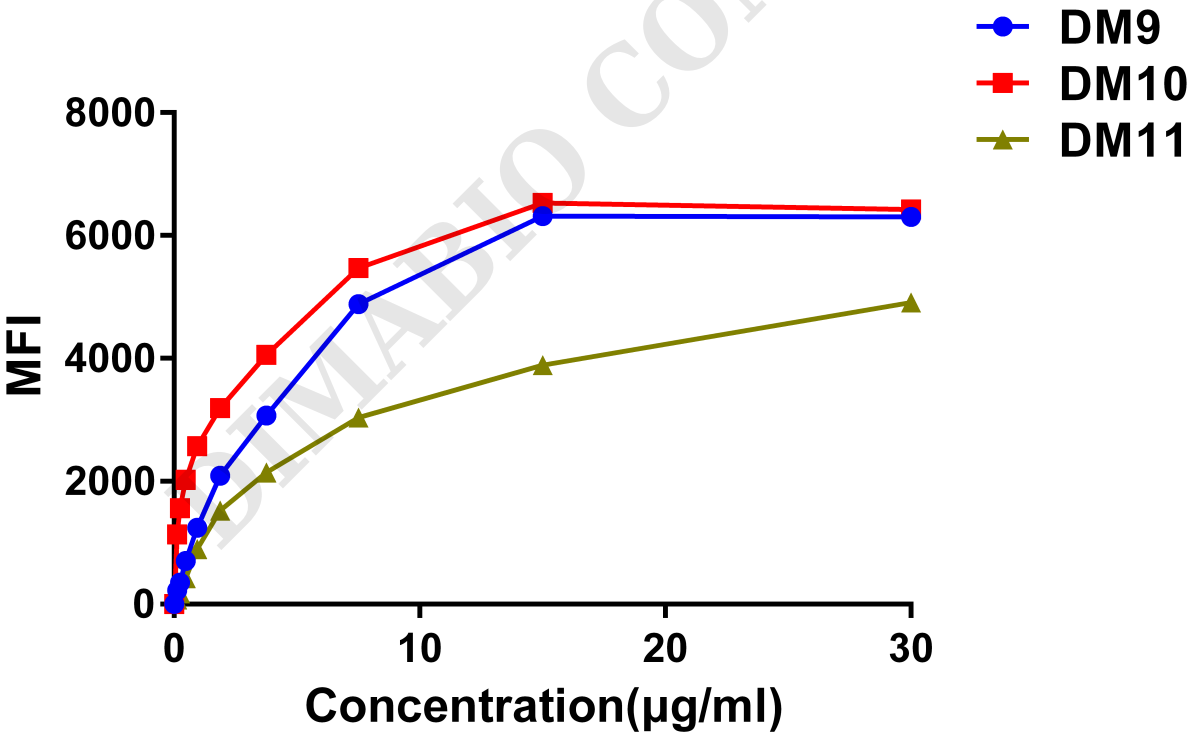


Figure 3. Affinity ranking of different Rabbit anti-CS1 mAb clones by titration of different concentration onto Raji cells. The Y-axis represents the mean fluorescence intensity (MFI) while the X-axis represents the concentration of IgG used.



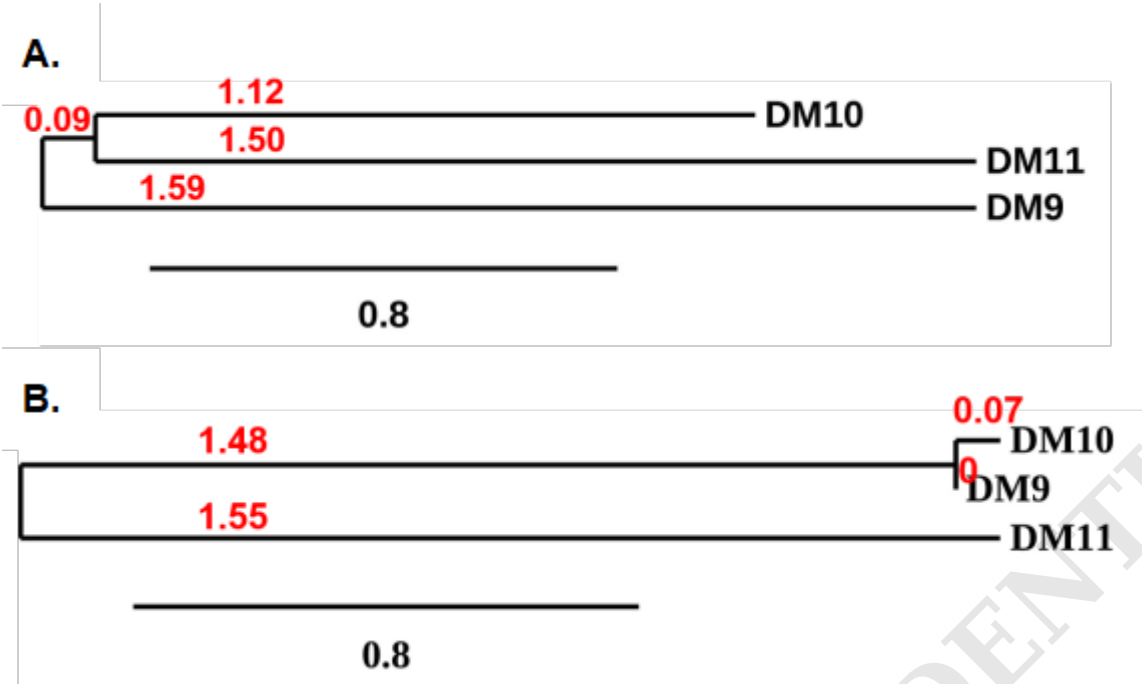


Figure 4. Phylogenetic analysis of amino acid sequence of different Rabbit Anti-CS1 mAb clones. A) Heavy chain and B) Light chain.

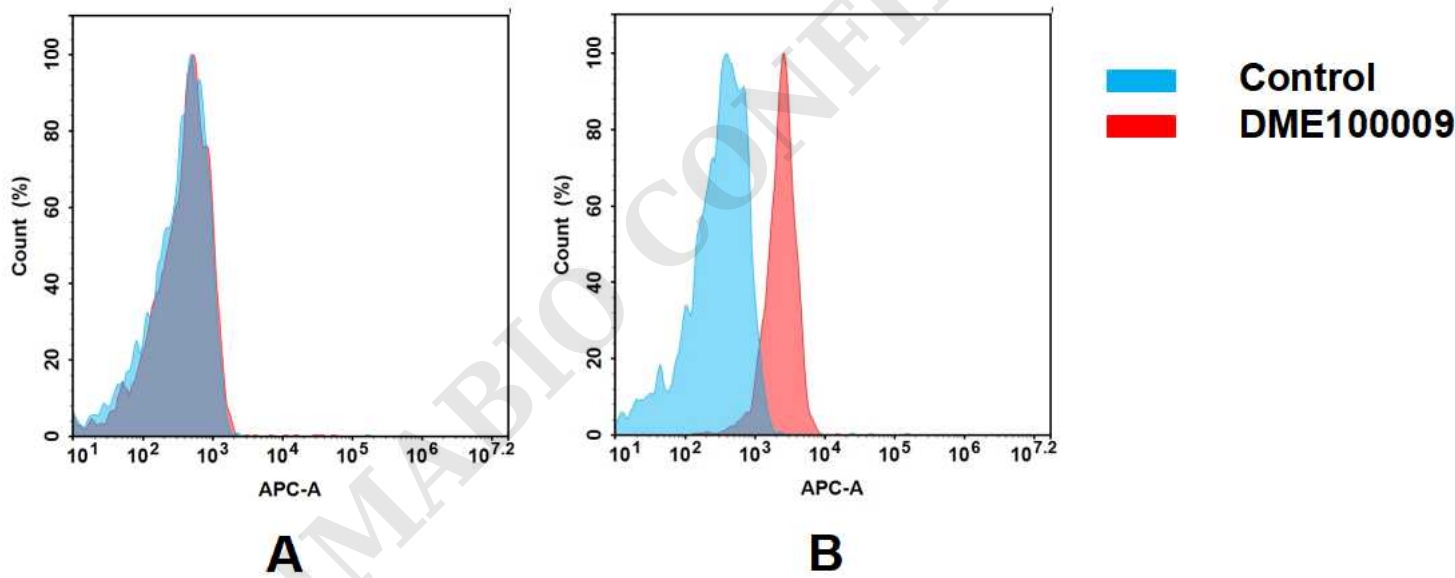


Figure 5. Flow cytometry analysis of antigen binding of rabbit anti-human CS1 mAb(DME100009).

(A) DME100009 does not bind to 293T cells that do not express CS1.
(B) A clear peak shift of DME100009 was seen compared to the control when incubated with CS1-expressing MM.1S cells, indicating strong binding of DME100009 to CS1. Antibodies were incubated at 2 µg/mL.

