

## **PRODUCT INFORMATION**

Clone ID	DMC441
Target	CD5L
Synonyms	AIM; API6; CT-2; hAIM; PRO229; SP-ALPHA; Spalpha
Host Species	Rabbit
Description	Anti-CD5L antibody(DMC441); IgG1 Chimeric mAb
Delivery	In Stock
Uniprot ID	043866
lgG 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. Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution if not
Storage & Shipping	intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.



## Cat. No. DMC100441

Background	Secreted protein that acts as a key regulator of lipid synthesis: mainly expressed by macrophages in lymphoid and inflamed tissues and regulates mechanisms in adjucytes. Following incorporation into mature adjocytes via CD36-mediated endocytosis; associates with cytosolic FASN; inhibiting fatty acid synthase activity and leading to lipolysis; the degradation of triacylglycerols into glycerol and free fatty acids (FFA). CD5L- induced lipolysis ocurs with progression of obesity: participates in obesity-associated inflammatory macrophages into adjose tissues; a cause of insulin resistance and obesity-related metabolic disease. Regulation of intracellular lipids mediated by CD5L has a direct effect on transcription regulation mediated by nuclear receptors ROR-gamma (RORC). Acts as a key regulator of metabolic switch in T-helper Th17 cells. Regulates the expression of pro- inflammatory genes in Th17 cells by altering the lipid content and limiting synthesis of cholesterol ligand of RORC; the master transcription factor of Th17-cell differentiation. CD5L is mainly present in non-pathogenic Th17 cells; where it decreases the content of polynasturated fatty acyls (PUFA); affecting two metabolic proteins MSM01 and CYP51A1; which synthesize ligands of RORC; limiting RORC activity and expression of pro- inflammatory genes. Participates in obesity- associated autoimmunity via its association with lgM; interfering with the binding of IgM to Fcalpha-mu receptor and enhancing the development of long-lived plasma cells that produce high-affinity IgG autoantibodies (By similarity). Also acts as an inhibitor of apoptosis in macrophages: promotes macrophage survival from the apoptotic effects of oxidized lipids in case of atherosclerosis (PubMed:24225828). Involved in early response to microbial infection against various pathogens by acting as a pattern
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.

Email: info@dimabio.com Website: www.dimabio.com









**Figure 1.** Flow cytometry analysis with Anti-CD5L (DMC441) on HEK293 cells transfected with human CD5L (Blue histogram) or HEK293 transfected with irrelevant protein (Red histogram).

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