Anti-CD5L antibody

Description	Unconjugated Rabbit polyclonal to CD5L

Model	STJ191677
Host	Rabbit
Reactivity	Human, Mouse
Applications	ELISA, WB
Immunogen	Synthesized peptide derived from human CD5L protein.
Immunogen Region	220-300aa
Gene ID	922
Gene Symbol	CD5L
Dilution range	WB 1:500-2000 ELISA 1:5000-20000
Specificity	CD5L Polyclonal Antibody detects endogenous levels of protein.
Tissue Specificity	Expressed in spleen, lymph node, thymus, bone marrow, and fetal liver, but not in non-lymphoid tissues.
Purification	CD5L antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	CD5 antigen-like Apoptosis inhibitor expressed by macrophages hAIM CT-2 IgM-associated peptide SP-alpha
Molecular Weight	38 kDa
Clonality	Polyclonal

Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid form in PBS containing 50% glycerol,and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:1690OMIM:602592
Alternative Names	CD5 antigen-like Apoptosis inhibitor expressed by macrophages hAIM CT-2 IgM-associated peptide SP-alpha
Function	Secreted protein that acts as a key regulator of lipid synthesis: mainly expressed by macrophages in lymphoid and inflammed tissues and regulates mechanisms in inflammatory responses, such as infection or atherosclerosis. Able to inhibit lipid droplet size in adipocytes. Following incorporation into mature adipocytes 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 occurs with progression of obesity: participates in obesity-associated inflammation following recruitment of inflammatory macrophages into adipose 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 polyunsaturated fatty acyls (PUFA), affecting two metabolic proteins MSMO1 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 IgM, 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 . Also acts as an inhibitor of apoptosis in macrophages: promotes macrophage survival from the apoptotic effects of oxidized lipids in case of atherosclerosis . Involved in early response to microbial infection against various pathogens by acting as a pattern recognition receptor and by promoting autophagy .
Cellular Localization	Secreted Cytoplasm. Secreted by macrophages and circulates in the blood . Transported in the cytoplasm via CD36-mediated endocytosis .
Post-translational Modifications	Not N-glycosylated . Probably not O-glycosylated .