

CD5L Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19894a**Specification**

CD5L Antibody (N-term) - Product Information

Application	WB,E
Primary Accession	O43866
Other Accession	NP_005885.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	38088
Antigen Region	64-93

CD5L Antibody (N-term) - Additional Information**Gene ID** 922**Other Names**

CD5 antigen-like, CT-2, IgM-associated peptide, SP-alpha, CD5L, API6

Target/Specificity

This CD5L antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 64-93 amino acids from the N-terminal region of human CD5L.

Dilution

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

CD5L Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CD5L Antibody (N-term) - Protein Information**Name** CD5L**Synonyms** API6

Function Secreted protein that acts as a key regulator of lipid synthesis: mainly expressed by macrophages in lymphoid and inflamed 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 Fc α /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:[24295828](#)). Involved in early response to microbial infection against various pathogens by acting as a pattern recognition receptor and by promoting autophagy (PubMed:[16030018](#), PubMed:[24223991](#), PubMed:[24583716](#), PubMed:[25713983](#)).

Cellular Location

Secreted. Cytoplasm {ECO:0000250|UniProtKB:Q9QWK4} Note=Secreted by macrophages and circulates in the blood (PubMed:24223991, PubMed:24804991). Transported in the cytoplasm via CD36-mediated endocytosis (By similarity) {ECO:0000250|UniProtKB:Q9QWK4, ECO:0000269|PubMed:24223991, ECO:0000269|PubMed:24804991}

Tissue Location

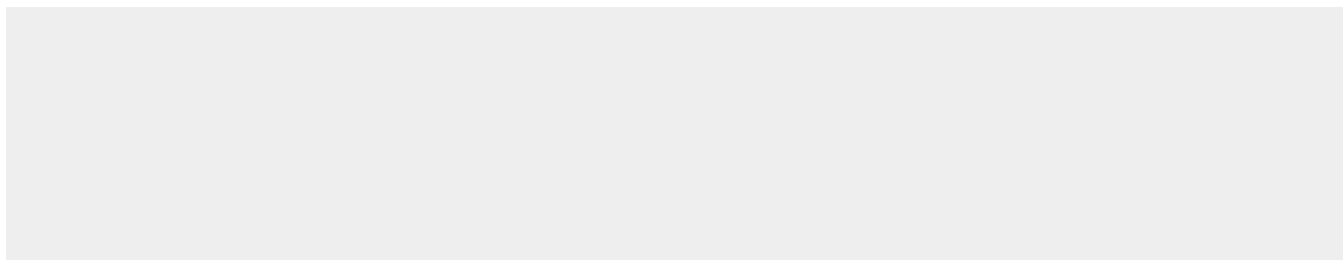
Expressed in spleen, lymph node, thymus, bone marrow, and fetal liver, but not in non-lymphoid tissues

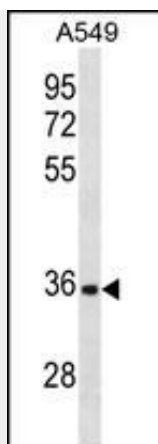
CD5L Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

CD5L Antibody (N-term) - Images





CD5L Antibody (N-term) (Cat. #AP19894a) western blot analysis in A549 cell line lysates (35ug/lane). This demonstrates the CD5L antibody detected the CD5L protein (arrow).

CD5L Antibody (N-term) - Background

CD5L may play a role in the regulation of the immune system. Seems to play a role as an inhibitor of apoptosis.

CD5L Antibody (N-term) - References

Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :
Davila, S., et al. Genes Immun. 11(3):232-238(2010)
Chapuis, J., et al. Mol. Psychiatry 14(11):1004-1016(2009)
Qu, P., et al. J. Immunol. 182(3):1648-1659(2009)
Kim, W.K., et al. Exp. Mol. Med. 40(6):677-685(2008)