

# **Mouse CD5L Antibody**

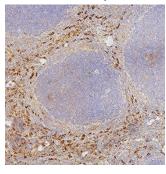
Antigen Affinity-purified Polyclonal Goat IgG Catalog Number: AF2834

DESCRIPTION		
Species Reactivity	Mouse	
Specificity	Detects mouse CD5L in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 10% cross-reactivity with recombinant human CD5L is observed and less than 1% cross-reactivity with recombinant mouse CD5 is observed.	
Source	Polyclonal Goat IgG	
Purification	Antigen Affinity-purified	
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse CD5L Glu22-Val352 Accession # Q9QWK4	
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.	

APPLICATIONS  Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.			
Western Blot	0.1 μg/mL	Recombinant Mouse CD5L (Catalog # 2834-CL)	
Immunohistochemistry	5-15 μg/mL	Immersion fixed paraffin-embedded sections of mouse spleen	

### DATA

### Immunohistochemistry



CD5L in Mouse Spleen. CD5L was detected in immersion fixed paraffinembedded sections of mouse spleen using Goat Anti-Mouse CD5L Antigen Affinitypurified Polyclonal Antibody (Catalog # AF2834) at 5 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Goat IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC004). Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to lymphocytes. Staining was performed using our protocol for IHC Staining with VisUCyte HRP Polymer Detection Reagents.





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#### BACKGROUND

CD5L (CD5 antigen-like), also known as Spα and AIM, is a 50 kDa secreted glycoprotein that belongs to the SRCR (scavenger receptor cysteine-rich) group B family of proteins. Group B proteins are distinguished by SRCR domains that are encoded by a single exon (1-3). The human CD5L cDNA encodes a 347 amino acid (aa) precursor that includes a 19 aa signal sequence and three SRCR domains (4, 5). Among group B proteins, CD5L is most closely related to CD5 and CD6, with which it shares 18% and 31% aa sequence identity, respectively. CD5L is upregulated in macrophages at inflammatory sites. It sustains inflammatory reactions by both increasing the phagocytic capacity of macrophages and impeding the apoptosis of local macrophages, NK cells, and T cells (6, 7). Agonists of the LXR and RXR nuclear hormone receptors induce CD5L upregulation in macrophages and reduce macrophage apoptosis (8, 9). Oxidized LDL (which acts through LXR/RXR) is taken up by macrophages, promoting their development into foam cells. The increased level of CD5L protects foam cells from apoptosis but permits more rapid cellular accumulation and atherosclerotic plaque formation (9). In activated B cells, however, the combination of CD5L and TGF-β inhibits proliferation. The binding of CD5L to splenic B cells is increased following TGF-β exposure, suggesting that TGF-β increases the expression or availability of an unidentified CD5L receptor (5, 10). CD5L also functions as a pattern recognition molecule by binding both lipoteichoic acid on Gram positive and lipopolysaccharide on Gram negative bacteria (11). In the thymic cortex, CD5L protects cortical CD4<sup>+</sup>CD8<sup>+</sup> thymocytes from apoptosis (12). CD5L circulates in the serum in complex with IgM (13).

#### References:

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