

**Anti-sCD40L Antibody**  
Catalog # ABO10517**Specification****Anti-sCD40L Antibody - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">P29965</a>
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for CD40 ligand(CD40LG) detection. Tested with WB, IHC-P in Human.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-sCD40L Antibody - Additional Information**

**Gene ID** 959

**Other Names**

CD40 ligand, CD40-L, T-cell antigen Gp39, TNF-related activation protein, TRAP, Tumor necrosis factor ligand superfamily member 5, CD154, CD40 ligand, membrane form, CD40 ligand, soluble form, CD40LG, CD40L, TNFSF5, TRAP

**Calculated MW**

29274 MW KDa

**Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat<br>Western blot, 0.1-0.5 µg/ml, Human<br>

**Subcellular Localization**

Cell membrane; Single-pass type II membrane protein.

**Tissue Specificity**

Specifically expressed on activated CD4+ T- lymphocytes.

**Protein Name**

CD40 ligand(CD40-L)

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Thimerosal, 0.05mg NaN<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence at the N-terminus of human CD40L(47-65aa HRRLDKIEDERNLHEDFVF), different from the related mouse sequence by three amino acids, rat

sequence by four amino acids.

#### **Purification**

Immunogen affinity purified.

#### **Cross Reactivity**

No cross reactivity with other proteins

#### **Storage**

**At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.**

#### **Sequence Similarities**

Belongs to the tumor necrosis factor family.

### **Anti-sCD40L Antibody - Protein Information**

**Name** CD40LG

**Synonyms** CD40L, TNFSF5, TRAP

#### **Function**

Cytokine that acts as a ligand to CD40/TNFRSF5 (PubMed:[1280226](http://www.uniprot.org/citations/1280226), PubMed:[31331973](http://www.uniprot.org/citations/31331973)). Costimulates T-cell proliferation and cytokine production (PubMed:[8617933](http://www.uniprot.org/citations/8617933)). Its cross-linking on T-cells generates a costimulatory signal which enhances the production of IL4 and IL10 in conjunction with the TCR/CD3 ligation and CD28 costimulation (PubMed:[8617933](http://www.uniprot.org/citations/8617933)). Induces the activation of NF-kappa-B (PubMed:[15067037](http://www.uniprot.org/citations/15067037), PubMed:[31331973](http://www.uniprot.org/citations/31331973)). Induces the activation of kinases MAPK8 and PAK2 in T-cells (PubMed:[15067037](http://www.uniprot.org/citations/15067037)). Induces tyrosine phosphorylation of isoform 3 of CD28 (PubMed:[15067037](http://www.uniprot.org/citations/15067037)). Mediates B-cell proliferation in the absence of co-stimulus as well as IgE production in the presence of IL4 (By similarity). Involved in immunoglobulin class switching (By similarity).

#### **Cellular Location**

Cell membrane; Single-pass type II membrane protein. Cell surface

#### **Tissue Location**

Specifically expressed on activated CD4+ T- lymphocytes

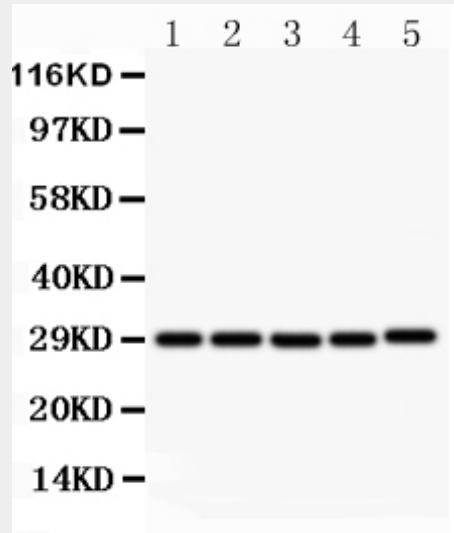
### **Anti-sCD40L Antibody - Protocols**

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

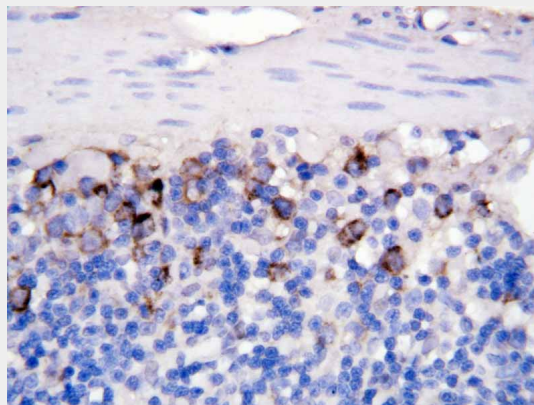
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)

- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Anti-sCD40L Antibody - Images



Anti- CD40L antibody, ABO10517, Western blotting All lanes: Anti CD40L (ABO10517) at 0.5ug/ml  
Lane 1: MCF-7 Whole Cell Lysate at 40ug  
Lane 2: HELA Whole Cell Lysate at 40ug  
Lane 3: JURKAT Whole Cell Lysate at 40ug  
Lane 4: HMY2 Whole Cell Lysate at 40ug  
Lane 5: COLO320 Whole Cell Lysate at 40ug  
Predicted bind size: 29KD  
Observed bind size: 29KD



Anti CD40L antibody, ABO10517 IHC(P) IHC(P): Rat Intestine Tissue

### Anti-sCD40L Antibody - Background

CD40 ligand (CD40L) is a type II membrane protein of 261 amino acids on activated T cells that induces B cell proliferation and immunoglobulin secretion. It has homology with tumour necrosis factor-alpha and -beta, and has important functions in B-cell activation and differentiation. Human CD40L with 5 exons, is mapped to the proximal region of the mouse X chromosome on Xq26.3-27.1, and can be detected on T cells but is absent from B cells and monocytes. Since CD40L is expressed on platelets and released from them on activation, its predictive value as a marker for clinical outcome and the therapeutic effect of inhibition of glycoprotein IIb /IIIa receptor in patients with acute coronary syndromes was investigated. The soluble CD40L may be involved in the process of restenosis and that it exerts its effect by triggering a complex group of inflammatory reactions on

endothelial and mononuclear cells. CD40L plays a central role in the pathophysiology of acute coronary syndromes, and has a role in the pathogenesis of coronary artery lesions.