

## **Anti-sCD40L Antibody**

**Catalog # ABO10517** 

## **Specification**

# **Anti-sCD40L Antibody - Product Information**

Application WB, IHC
Primary Accession P29965
Host 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  $\mu$ g/ml, Human, By Heat<br/>blot, 0.1-0.5  $\mu$ g/ml, Human<br/>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 Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

## **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 r°Constitution, 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: <a

href="http://www.uniprot.org/citations/1280226" target="\_blank">1280226</a>, PubMed:<a href="http://www.uniprot.org/citations/31331973" target="\_blank">31331973</a>). Costimulates T-cell proliferation and cytokine production (PubMed:<a

href="http://www.uniprot.org/citations/8617933" target="\_blank">8617933</a>). 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:<a

href="http://www.uniprot.org/citations/8617933" target="\_blank">8617933</a>). Induces the activation of NF-kappa-B (PubMed:<a href="http://www.uniprot.org/citations/15067037" target="\_blank">15067037</a>, PubMed:<a href="http://www.uniprot.org/citations/31331973" target="\_blank">31331973</a>). Induces the activation of kinases MAPK8 and PAK2 in T-cells (PubMed:<a href="http://www.uniprot.org/citations/15067037" target="\_blank">15067037</a>). Induces tyrosine phosphorylation of isoform 3 of CD28 (PubMed:<a

href="http://www.uniprot.org/citations/15067037" target="\_blank">15067037</a>). 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

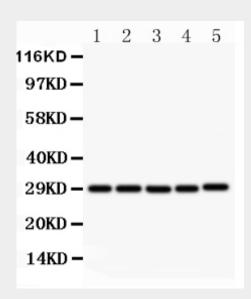
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot

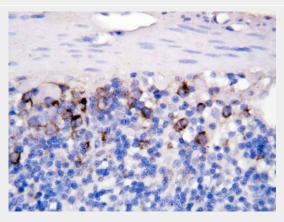


- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# Anti-sCD40L Antibody - Images



Anti- CD40Lantibody, ABO10517, Western blottingAll lanes: Anti CD40L (ABO10517) at 0.5ug/mlLane 1: MCF-7 Whole Cell Lysate at 40ugLane 2: HELA Whole Cell Lysate at 40ugLane 3: JURKAT Whole Cell Lysate at 40ugLane 4: HMY2 Whole Cell Lysate at 40ugLane 5: COLO320 Whole Cell Lysate at 40ugPredicted bind size: 29KDObserved bind size: 29KD



Anti CD40Lantibody, 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.