

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

Anti-sCD40L Antibody - Product Information

Application	WB, IHC-P
Primary Accession	P29965
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
Western blot, 0.1-0.5 µg/ml, Human

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 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

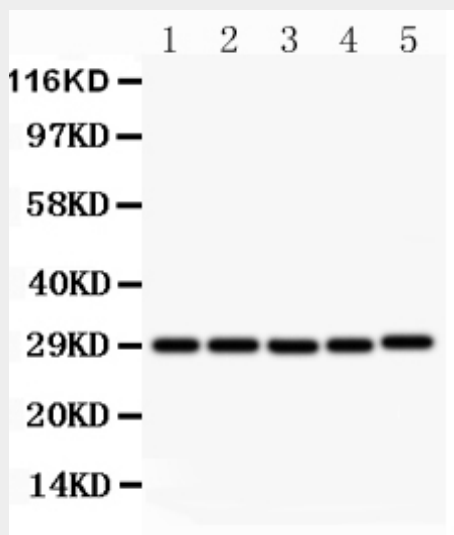
Anti-sCD40L Antibody - Protocols

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

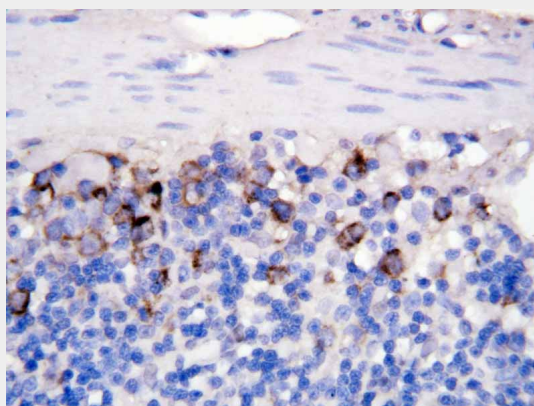
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)

- [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.