

Anti-CD40L Picoband Antibody
Catalog # ABO12924**Specification****Anti-CD40L Picoband Antibody - Product Information**

Application	WB, IHC
Primary Accession	P27548
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for CD40L detection. Tested with WB, IHC-P, Direct ELISA in Human;Mouse;Rat.

Reconstitution

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

Anti-CD40L Picoband Antibody - Additional Information

Gene ID 21947

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

Application Details

Western blot, 0.1-0.5 µg/ml
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml
Direct ELISA, 0.1-0.5 µg/ml

Subcellular Localization

Cell membrane.

Tissue Specificity

Specifically expressed on activated CD4+ T- lymphocytes.

Contents

Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg NaN₃.

Immunogen

E. coli-derived mouse CD40L recombinant protein (Position: E107-L260).

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.

Anti-CD40L Picoband Antibody - Protein Information

Name Cd40lg

Synonyms Cd40l, Tnfsf5

Function

Cytokine that acts as a ligand to CD40/TNFRSF5 (By similarity). Costimulates T-cell proliferation and cytokine production (By similarity). 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 (By similarity). Induces the activation of NF-kappa-B (By similarity). Induces the activation of kinases MAPK8 and PAK2 in T-cells (By similarity). Mediates B-cell proliferation in the absence of co-stimulus as well as IgE production in the presence of IL4 (PubMed:1374165). Involved in immunoglobulin class switching (PubMed:1374165).

Cellular Location

Cell membrane {ECO:0000250|UniProtKB:P29965}; Single-pass type II membrane protein {ECO:0000250|UniProtKB:P29965} Cell surface {ECO:0000250|UniProtKB:P29965}

Tissue Location

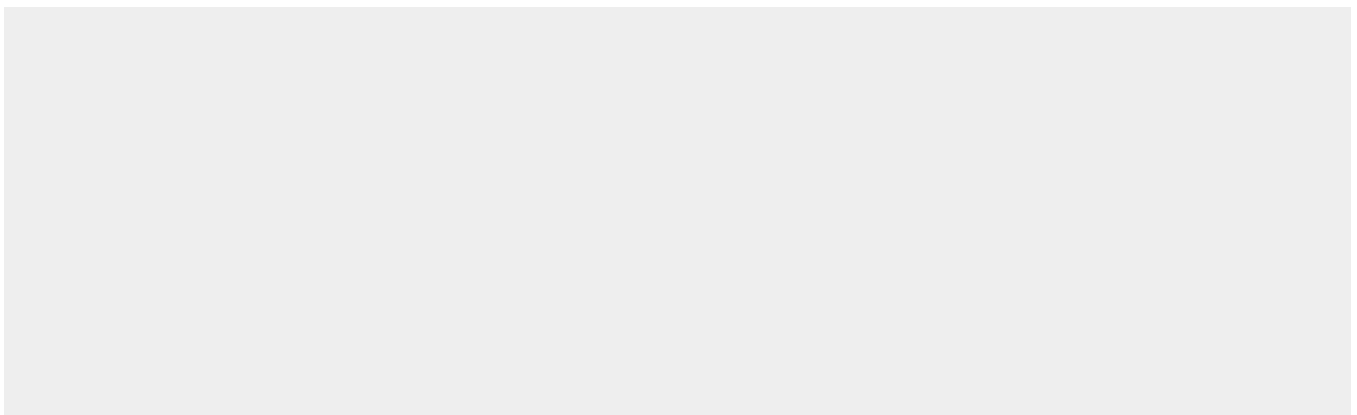
Specifically expressed on activated CD4+ T- lymphocytes

Anti-CD40L Picoband 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-CD40L Picoband Antibody - Images



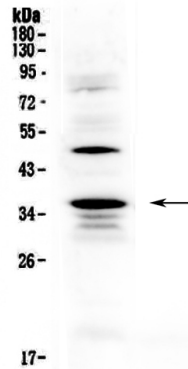


Figure 1. Western blot analysis of CD40L using anti-CD40L antibody (ABO12924). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: rat spleen tissue lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-CD40L antigen affinity purified polyclonal antibody (Catalog # ABO12924) at 0.5 μ g/mL overnight at 4 $^{\circ}$ C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for CD40L at approximately 36KD. The expected band size for CD40L is at 29KD.

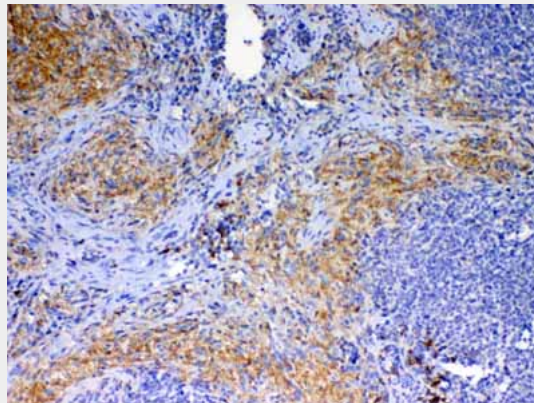


Figure 2. IHC analysis of CD40L using anti-CD40L antibody (ABO12924). CD40L was detected in paraffin-embedded section of mouse spleen tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 μ g/ml rabbit anti-CD40L Antibody (ABO12924) overnight at 4 $^{\circ}$ C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 $^{\circ}$ C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

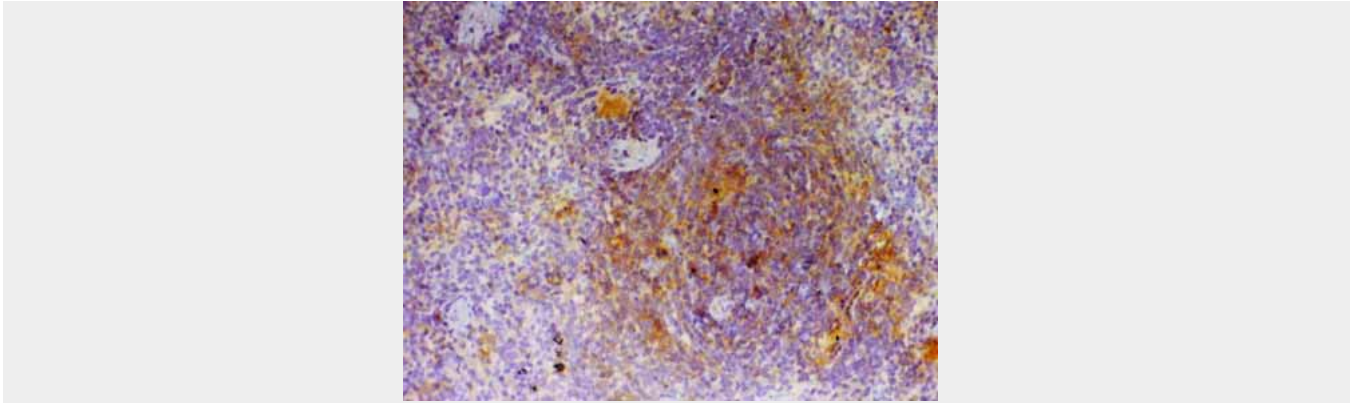


Figure 3. IHC analysis of CD40L using anti-CD40L antibody (ABO12924). CD40L was detected in paraffin-embedded section of rat spleen tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 μ g/ml rabbit anti-CD40L Antibody (ABO12924) overnight at 4 $^{\circ}$ C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 $^{\circ}$ C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

Anti-CD40L Picoband 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.