

Anti-CD40L Picoband Antibody

Catalog # ABO12923

Specification

### Anti-CD40L Picoband Antibody - Product Information

ApplicationWB, EPrimary AccessionP29965HostRabbitReactivityHumanClonalityPolyclonalFormatLyophilizedDescriptionRabbit InG polyclonal antibody for CD40L detection. Tested with W

Rabbit IgG polyclonal antibody for CD40L detection. Tested with WB, Direct ELISA in Human.

Reconstitution

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

#### **Anti-CD40L Picoband 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

**Application Details** Western blot, 0.1-0.5 μg/ml<br> Direct ELISA, 0.1-0.5 μg/ml<br>

**Subcellular Localization** Cell membrane.

**Tissue Specificity** Specifically expressed on activated CD4+ T- lymphocytes.

Contents

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

Immunogen E. coli-derived human CD40L recombinant protein (Position: E108-L261).

**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, 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-CD40L Picoband Antibody - Protocols**

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-CD40L Picoband Antibody - Images







# 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.