

Anti-CD40L/CD40LG Antibody

Catalog Number: PA1020

About CD40LG

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- α and - β , 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.

Overview

Product Name	Anti-CD40L/CD40LG Antibody
Reactive Species	Human, Rat
Description	Boster Bio Anti-CD40L/CD40LG Antibody catalog # PA1020. Tested in IHC, WB applications. This antibody reacts with Human, Rat.
Application	IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Thimerosal, 0.05mg NaN ₃ .
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P29965

Technical Details

Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human CD40L, different from the related mouse sequence by three amino acids, rat sequence by four amino acids.
Predicted Reactive Species	Chicken
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
Cross Reactivity	No cross-reactivity with other proteins
Isotype	Rabbit IgG

Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	<p>Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.</p> <p>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.</p> <p>Some PubMed article(s) citing the expression level of this target are as follows:</p> <p>Boster Bio's internal QC testing used:</p> <p>Western blot, 0.1-0.5ug/ml, Human</p> <p>Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human, Rat, By Heat</p>

Anti-CD40L/CD40LG Antibody (PA1020) Images

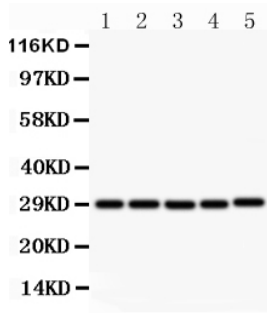


Figure 1. Western blot analysis of sCD40L using anti-sCD40L antibody (PA1020).

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: MCF-7 Whole Cell Lysate,
Lane 2: HELA Whole Cell Lysate,
Lane 3: JURKAT Whole Cell Lysate,
Lane 4: HMY2 Whole Cell Lysate,
Lane 5: COLO320 Whole Cell Lysate.

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-sCD40L antigen affinity purified polyclonal antibody (Catalog # PA1020) at 0.5 ug/mL overnight at 4°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 (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for sCD40L at approximately 29KD. The expected band size for sCD40L is at 29KD.

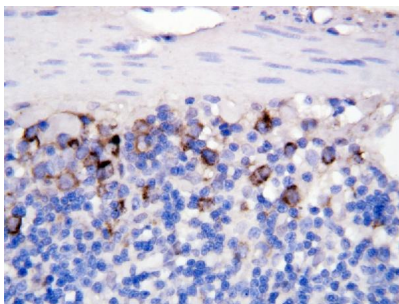


Figure 2. IHC analysis of sCD40L using anti-sCD40L antibody (PA1020).

sCD40L was detected in paraffin-embedded section of rat intestine tissues. 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 1ug/ml rabbit anti-sCD40L Antibody (PA1020) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

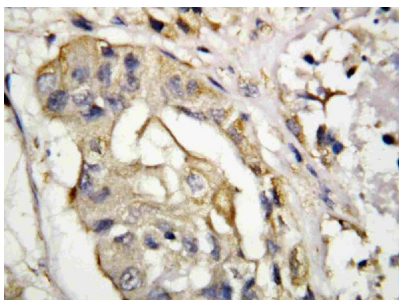


Figure 3. IHC analysis of sCD40L using anti-sCD40L antibody (PA1020).

sCD40L was detected in paraffin-embedded section of human mammary cancer tissues. 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 1ug/ml rabbit anti-sCD40L Antibody (PA1020) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

1. PubMed ID: 19204010, Yang G, Fang Z, Liu Y, Zhang H, Shi X, Ji Q, Lin Q, Lin R. Evid Based Complement Alternat Med. 2011;2011:930324. Doi: 10.1093/Ecam/Nep013. Epub 2011 Jun 5. Protective Effects Of Chinese Traditional Medicine Buyang Huanwu Decoction On Myocardial In...

Visit bosterbio.com/anti-cd40l-antibody-pa1020-boster.html to see all 1 publications.

Submit a product review to Biocompare.com

Submit a review of this product to Biocompare.com to receive a \$20 Amazon.com giftcard! Your reviews help your fellow scientists make the right decisions. Thank you for your contribution.



Anti-CD40L/CD40LG Antibody