

Anti-CD40 Antibody Picoband™

Catalog Number: PB10052

About Cd40

Carbonic anhydrase III (CA3) is an enzyme that in humans is encoded by the CA3 gene. CA3 is a member of a multigene family (at least six separate genes are known) that encode carbonic anhydrase isozymes. The gene spans 10.3 kb and contains seven exons and six introns. Using a cDNA clone of the CA3 gene in the study of human-rodent hybrids, the gene was mapped to chromosome 8 which carries a cluster of CA genes. The expression of the CA3 gene is strictly tissue specific and present at high levels in skeletal muscle and much lower levels in cardiac and smooth muscle. A proportion of carriers of Duchenne muscle dystrophy have a higher CA3 level than normal.

Overview

Product Name	Anti-CD40 Antibody Picoband™
Reactive Species	Human, Mouse
Description	Boster Bio Anti-CD40 Antibody Picoband™ catalog # PB10052. Tested in ELISA, Flow Cytometry, IHC, ICC, WB applications. This antibody reacts with Human, Mouse.
Application	ELISA, Flow Cytometry, IHC, ICC, WB
Clonality	Polyclonal
Formulation	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
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	P27512

Technical Details

Immunogen	E. coli-derived mouse CD40/TNFRSF5 recombinant protein (Position: L20-R193). Mouse CD40/TNFRSF5 shares 60.7% amino acid (aa) sequence identity with human CD40/TNFRSF5.
Predicted Reactive Species	Bovine, Canine, Chicken, Hamster, Horse, Monkey, Rabbit, Zebrafish
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), IHC(F) and ICC.
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	Dilute the sample so that the expected range of concentrations fall within the detection range of this kit. If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples. Some PubMed article(s) citing the expression level of this target are as follows: Boster Bio's internal QC testing used: Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, By Heat Immunohistochemistry (Frozen Section), 0.5-1ug/ml Immunocytochemistry, 0.5-1ug/ml ELISA , 0.1-0.5ug/ml Western blot, 0.1-0.5ug/ml Flow Cytometry, 1-3ug/1x10⁶ cells

Anti-CD40 Antibody Picoband™ (PB10052) Images

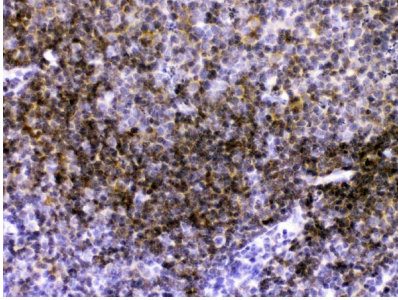


Figure 2. IHC analysis of CD40/TNFRSF5 using anti-CD40/TNFRSF5 antibody (PB10052). CD40/TNFRSF5 was detected in a paraffin-embedded section of mouse lymphaden tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 ug/ml rabbit anti-CD40/TNFRSF5 Antibody (PB10052) 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 1. Western blot analysis of CD40/TNFRSF5 using anti-CD40/TNFRSF5 antibody (PB10052). 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 30 ug of sample under reducing conditions. Lane 1: mouse spleen tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA 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-CD40/TNFRSF5 antigen affinity purified polyclonal antibody (Catalog # PB10052) 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 1:5000 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 CD40/TNFRSF5 at approximately 40 kDa. The expected band size for CD40/TNFRSF5 is at 32 kDa.

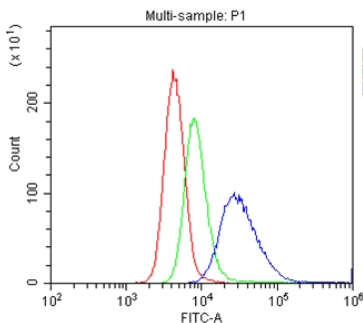


Figure 3. Flow Cytometry analysis of U937 cells using anti-CD40/TNFRSF5 antibody (PB10052). Overlay histogram showing U937 cells stained with PB10052 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-CD40/TNFRSF5 Antibody (PB10052, 1ug/1x10⁶ cells) for 30 min at 20°C. DyLight488 conjugated goat anti-rabbit IgG (BA1127, 5-10ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

1 Publications Citing This Product

1. PubMed ID: 10.1016/j.intimp.2009.07.014, Coxsackievirus B3 infection promotes generation of myeloid dendritic cells from bone marrow and accumulation in the myocardium

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