

Anti-Apolipoprotein A I/APOA1 Antibody Picoband™

Catalog Number: PB9844

About ApoA1

Apolipoprotein A-1, also known as APOA1, is a human protein with a specific role in lipid metabolism. It binds to lipopolysaccharide or endotoxin, and has a major role in the anti-endotoxin function of HDL. The gene is mapped to 11q23. And it is a single polypeptide chain with 243 amino acid residues of known primary amino acid sequence. The ApoA-I protein promotes cholesterol efflux from tissues to the liver for excretion. It is a cofactor for lecithin cholesterolacyltransferase (LCAT) which is responsible for the formation of most plasma cholesteryl esters. ApoA-I is also isolated as a prostacyclin (PGI₂) stabilizing factor, and thus may have an anticlotting effect. Defects in the gene encoding it are associated with HDL deficiencies, including Tangier disease, and with systemic non-neuropathic amyloidosis. Additionally, ApoA-I overexpression promotes macrophage-specific reverse cholesterol transport.

Overview

Product Name	Anti-Apolipoprotein A I/APOA1 Antibody Picoband™
Reactive Species	Mouse
Description	Boster Bio Anti-Apolipoprotein A I/APOA1 Antibody Picoband™ catalog # PB9844. Tested in IHC, WB applications. This antibody reacts with Mouse.
Application	IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 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	Q00623

Technical Details

Immunogen	E. coli-derived mouse APOA1 recombinant protein (Position: D25-Q264). Mouse APOA1 shares 64% and 68.6% amino acid (aa) sequence identity with human and rat APOA1, respectively.
Predicted Reactive Species	Bovine
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	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, Mouse, By Heat Western blot, 0.1-0.5ug/ml, Mouse

Anti-Apolipoprotein A I/APOA1 Antibody Picoband™ (PB9844) Images



Figure 1. Western blot analysis of APOA1 using anti-APOA1 antibody (PB9844).

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 liver 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-APOA1 antigen affinity purified polyclonal antibody (Catalog # PB9844) 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 APOA1 at approximately 24 kDa. The expected band size for APOA1 is at 31 kDa.

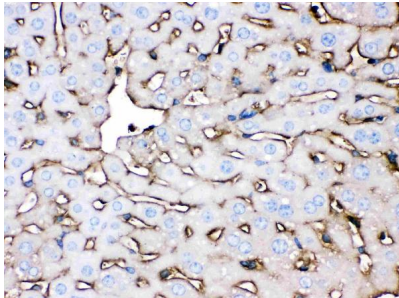


Figure 2. IHC analysis of APOA1 using anti-APOA1 antibody (PB9844).

APOA1 was detected in a paraffin-embedded section of mouse liver 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-APOA1 Antibody (PB9844) 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.

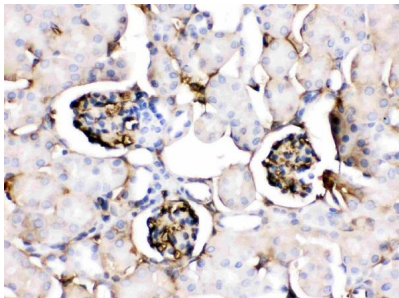


Figure 3. IHC analysis of APOA1 using anti-APOA1 antibody (PB9844).

APOA1 was detected in a paraffin-embedded section of mouse kidney 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-APOA1 Antibody (PB9844) 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 Publications Citing This Product

1. PubMed ID: 10.1016/j.jprot.2020.104098, Rapid glycosylation analysis of mouse serum glycoproteins separated by supported molecular matrix electrophoresis

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