

Anti-APOE Picoband Antibody
Catalog # ABO12671

Specification

Anti-APOE Picoband Antibody - Product Information

Application	WB, IHC
Primary Accession	P08226
Host	Rabbit
Reactivity	Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Apolipoprotein E(APOE) detection. Tested with WB, IHC-P in Mouse;Rat.

Reconstitution

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

Anti-APOE Picoband Antibody - Additional Information

Gene ID 11816

Other Names

Apolipoprotein E, Apo-E, Apoe

Calculated MW

35867 MW KDa

Application Details

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Mouse, Rat, By Heat

Western blot, 0.1-0.5 µg/ml, Mouse

Subcellular Localization

Secreted .

Tissue Specificity

Secreted in plasma.

Protein Name

Apolipoprotein E

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg NaN₃.

Immunogen

E.coli-derived mouse Apolipoprotein E recombinant protein (Position: D55-Q294). Mouse Apolipoprotein E shares 75% and 94.6% amino acid (aa) sequence identity with human and rat Apolipoprotein E, respectively.

Purification

Immunogen affinity purified.

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-APOE Picoband Antibody - Protein Information**Name Apoe****Function**

APOE is an apolipoprotein, a protein associating with lipid particles, that mainly functions in lipoprotein-mediated lipid transport between organs via the plasma and interstitial fluids. APOE is a core component of plasma lipoproteins and is involved in their production, conversion and clearance. Apolipoproteins are amphipathic molecules that interact both with lipids of the lipoprotein particle core and the aqueous environment of the plasma. As such, APOE associates with chylomicrons, chylomicron remnants, very low density lipoproteins (VLDL) and intermediate density lipoproteins (IDL) but shows a preferential binding to high-density lipoproteins (HDL). It also binds a wide range of cellular receptors including the LDL receptor/LDLR and the very low-density lipoprotein receptor/VLDLR that mediate the cellular uptake of the APOE-containing lipoprotein particles (By similarity). Finally, APOE has also a heparin-binding activity and binds heparan-sulfate proteoglycans on the surface of cells, a property that supports the capture and the receptor-mediated uptake of APOE-containing lipoproteins by cells (PubMed:23676495).

Cellular Location

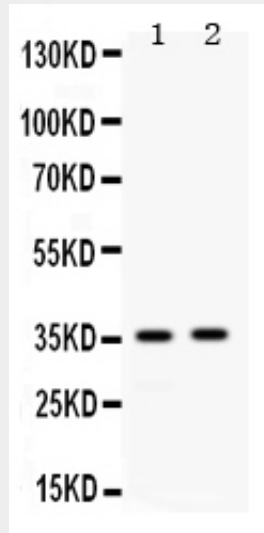
Secreted {ECO:0000250|UniProtKB:P02649}. Secreted, extracellular space {ECO:0000250|UniProtKB:P02649}. Secreted, extracellular space, extracellular matrix {ECO:0000250|UniProtKB:P02649}. Extracellular vesicle {ECO:0000250|UniProtKB:P02649}. Endosome, multivesicular body {ECO:0000250|UniProtKB:P02649}. Note=In the plasma, APOE is associated with chylomicrons, chylomicrons remnants, VLDL, LDL and HDL lipoproteins. Lipid poor oligomeric APOE is associated with the extracellular matrix in a calcium- and heparan-sulfate proteoglycans- dependent manner. Lipidation induces the release from the extracellular matrix. Colocalizes with CD63 and PMEL at exosomes and in intraluminal vesicles within multivesicular endosomes {ECO:0000250|UniProtKB:P02649}

Anti-APOE Picoband Antibody - Protocols

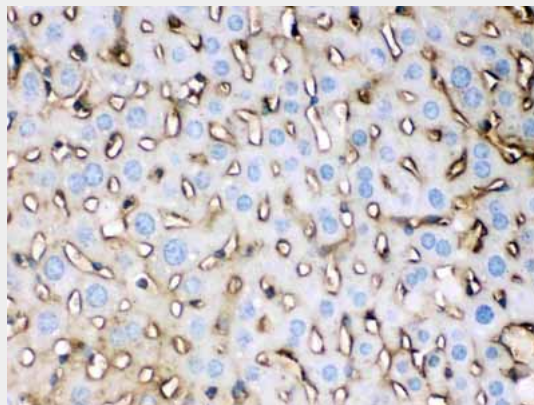
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

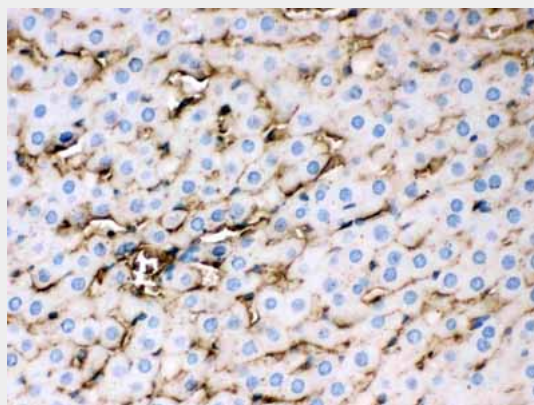
Anti-APOE Picoband Antibody - Images



Western blot analysis of Apolipoprotein E expression in mouse spleen extract (lane 1) and mouse kidney extract (lane 2). Apolipoprotein E at 36KD was detected using rabbit anti- Apolipoprotein E Antigen Affinity purified polyclonal antibody (Catalog # ABO12671) at 0.5 µg/mL. The blot was developed using chemiluminescence (ECL) method .



Apolipoprotein E was detected in paraffin-embedded sections of mouse liver tissues using rabbit anti- Apolipoprotein E Antigen Affinity purified polyclonal antibody (Catalog # ABO12671) at 1 µg/mL. The immunohistochemical section was developed using SABC method .



Apolipoprotein E was detected in paraffin-embedded sections of rat liver tissues using rabbit anti-

Apolipoprotein E Antigen Affinity purified polyclonal antibody (Catalog # ABO12671) at 1 µg/mL. The immunohistochemical section was developed using SABC method .

Anti-APOE Picoband Antibody - Background

APOE is also known as AD2 or LPG. The protein encoded by this gene is a major apoprotein of the chylomicron. It binds to a specific liver and peripheral cell receptor, and is essential for the normal catabolism of triglyceride-rich lipoprotein constituents. This gene maps to chromosome 19 in a cluster with the related apolipoprotein C1 and C2 genes. Mutations in this gene result in familial dysbetalipoproteinemia, or type III hyperlipoproteinemia (HLP III), in which increased plasma cholesterol and triglycerides are the consequence of impaired clearance of chylomicron and VLDL remnants. Alternative splicing results in multiple transcript variants.