

Anti-APOE Picoband Antibody

Catalog # ABO12671

Product Information

Application	WB, IHC-P
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.

Additional Information

Gene ID	11816
Other Names	Apolipoprotein E, Apo-E, Apoe
Calculated MW	35867
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μ g/ml, Mouse, Rat, By Heat Western blot, 0.1-0.5 μ g/ml, Mouse
Subcellular Localization	Secreted .
Tissue Specificity	Secreted in plasma.
Source	Eukaryota
Protein Name	Apolipoprotein E
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
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.

Protein Information

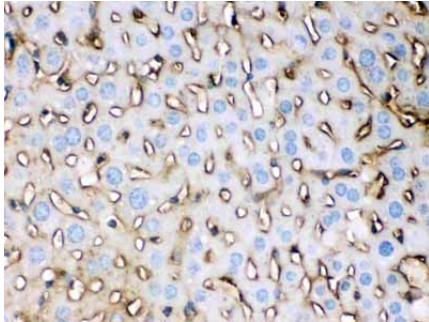
Name	ApoE
Function	APOE is an apolipoprotein, a protein associating with lipid particles, that mainly functions in lipoprotein-mediated lipid transport between organs via the plasma and interstitial fluids. APOE is a core component of plasma lipoproteins and is involved in their production, conversion 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 also has 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}

Background

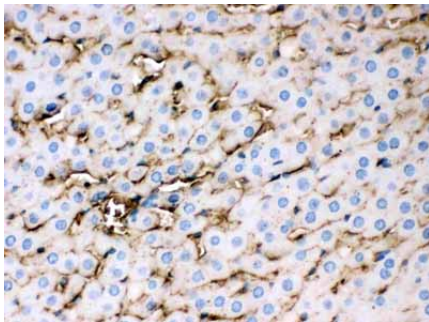
APOE is also known as AD2 or LPG. The protein encoded by this gene is a major apoprotein of the chylomicron. It binds to a specific liver and peripheral cell receptor, and is essential for the normal catabolism of triglyceride-rich lipoprotein constituents. This gene maps to chromosome 19 in a cluster 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.

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 μ g/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 μ g/mL. The immunohistochemical section was developed using SABC method .

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.