

ApoB Antibody

Purified Mouse Monoclonal Antibody Catalog # AO1564a

Specification

ApoB Antibody - Product Information

Application E, WB, IF, FC
Primary Accession P04114
Reactivity Human
Host Mouse
Clonality Monoclonal
Isotype IgG1
Calculated MW 516kDa KDa

Description

This gene product is the main apolipoprotein of chylomicrons and low density lipoproteins. It occurs in plasma as two main isoforms, apoB-48 and apoB-100: the former is synthesized exclusively in the gut and the latter in the liver. The intestinal and the hepatic forms of apoB are encoded by a single gene from a single, very long mRNA. The two isoforms share a common N-terminal sequence. The shorter apoB-48 protein is produced after RNA editing of the apoB-100 transcript at residue 2180 (CAA->UAA), resulting in the creation of a stop codon, and early translation termination. Mutations in this gene or its regulatory region cause hypobetalipoproteinemia, normotriglyceridemic hypobetalipoproteinemia, and hypercholesterolemia due to ligand-defective apoB, diseases affecting plasma cholesterol and apoB levels.

Immunogen

Purified recombinant fragment of human ApoB expressed in E. Coli.

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Formulation

Ascitic fluid containing 0.03% sodium azide.

ApoB Antibody - Additional Information

Gene ID 338

Other Names

Apolipoprotein B-100, Apo B-100, Apolipoprotein B-48, Apo B-48, APOB

Dilution

E~~1/10000 WB~~1/500 - 1/2000 IF~~1/200 - 1/1000 FC~~1/200 - 1/400

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions



Tel: 858.875.1900 Fax: 858.875.1999

ApoB Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

ApoB Antibody - Protein Information

Name APOB

Function

Apolipoprotein B is a major protein constituent of chylomicrons (apo B-48), LDL (apo B-100) and VLDL (apo B-100). Apo B- 100 functions as a recognition signal for the cellular binding and internalization of LDL particles by the apoB/E receptor.

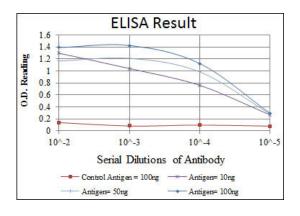
Cellular Location

Cytoplasm. Secreted. Lipid droplet

ApoB 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 Cytomety
- Cell Culture





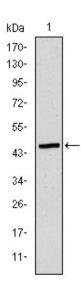


Figure 1: Western blot analysis using ApoB mAb against human ApoB (AA: 3900-4110) recombinant protein. (Expected MW is 45 kDa)

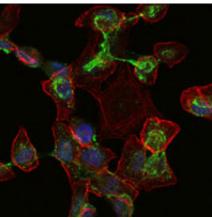


Figure 2: Immunofluorescence analysis of HepG2 cells using ApoB mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

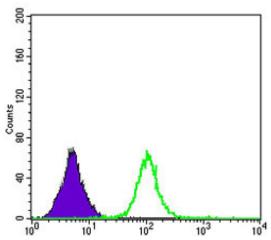


Figure 3: Flow cytometric analysis of serun using ApoB mouse mAb (green) and negative control (purple).



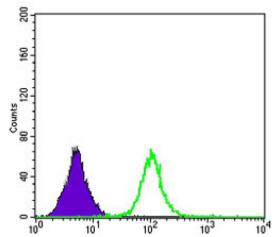


Figure 3: Flow cytometric analysis of PBMC using ApoB mouse mAb (green) and negative control (purple).

ApoB Antibody - References

1. Cell Host Microbe. 2008 Dec 11;4(6):555-66. 2. Atherosclerosis. 2009 Sep;206(1):17-30.