

ApoB Antibody

Purified Mouse Monoclonal Antibody Catalog # A01564a

Specification

ApoB Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW **Description**

WB, FC, ICC, E <u>P04114</u> Human Mouse Monoclonal IgG1 516kDa KDa

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.

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 WB~~1/500 - 1/2000 FC~~1/200 - 1/400 ICC~~N/A E~~1/10000

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



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.

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>







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 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.