

apoB (A-6): sc-393636



The Power to Question

BACKGROUND

Post-transcriptional editing of apolipoprotein B (apoB) mRNA is regulated by APOBEC1 (also designated human (or rat) small intestinal apolipoprotein B mRNA editing protein, HEPR, or REPR) in hepatic cells to achieve a steady state proportion of edited and unedited RNA molecules. Two forms of apoB are known to circulate in the plasma of mammals. apoB-100 is a protein primarily synthesized in the liver as a structural component of very-low-density lipoprotein particles. A truncated form of apoB-100, apoB-48, is synthesized in the small intestine and contains the amino-terminal 2,152 amino acids of the larger protein. This organ-specific partitioning of apoB production is the result of RNA editing of a common apoB gene.

CHROMOSOMAL LOCATION

Genetic locus: APOB (human) mapping to 2p24.1; Apob (mouse) mapping to 12 A1.1.

SOURCE

apoB (A-6) is a mouse monoclonal antibody raised against amino acids 1-300 of apoB of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

apoB (A-6) is available conjugated to agarose (sc-393636 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-393636 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393636 PE), fluorescein (sc-393636 FITC), Alexa Fluor® 488 (sc-393636 AF488), Alexa Fluor® 546 (sc-393636 AF546), Alexa Fluor® 594 (sc-393636 AF594) or Alexa Fluor® 647 (sc-393636 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-393636 AF680) or Alexa Fluor® 790 (sc-393636 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

apoB (A-6) is recommended for detection of apoB of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for apoB siRNA (h): sc-41180, APOBEC1 siRNA (m): sc-41183, apoB shRNA Plasmid (h): sc-41180-SH, APOBEC1 shRNA Plasmid (m): sc-41183-SH, apoB shRNA (h) Lentiviral Particles: sc-41180-V and APOBEC1 shRNA (m) Lentiviral Particles: sc-41183-V.

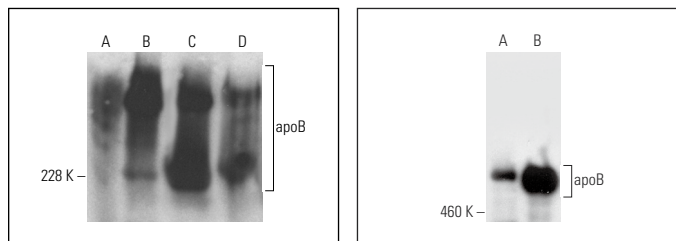
Molecular Weight of apoB: 512 kDa.

Positive Controls: human liver extract: sc-363766, human plasma extract: sc-364374 or Hep G2 cell lysate: sc-2227.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

DATA



apoB (A-6) HRP: sc-393636 HRP. Direct western blot analysis of apoB expression in human liver (A), human plasma (B) and mouse plasma (C) tissue extracts and Hep G2 whole cell lysate (D).

apoB (A-6): sc-393636. Western blot analysis of apoB expression in human liver tissue extract (A) and apoB in human plasma (B).

SELECT PRODUCT CITATIONS

- Lara, S., et al. 2017. Identification of receptor binding to the biomolecular corona of nanoparticles. *ACS Nano* 11: 1884-1893.
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- Yu, H., et al. 2019. GPR146 deficiency protects against hypercholesterolemia and atherosclerosis. *Cell* 179: 1276-1288.e14.
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- Alberts, A., et al. 2020. C-reactive protein (CRP) recognizes uric acid crystals and recruits proteases C1 and MASP1. *Sci. Rep.* 10: 6391.
- Alberts, A., et al. 2020. Binding of macrophage receptor MARCO, LDL, and LDLR to disease-associated crystalline structures. *Front. Immunol.* 11: 596103.
- Khan, N.Z., et al. 2021. Spinal cord injury alters microRNA and CD81+ exosome levels in plasma extracellular nanoparticles with neuroinflammatory potential. *Brain Behav. Immun.* 92: 165-183.
- Li, P., et al. 2021. Gut inflammation exacerbates high-fat diet induced steatosis by suppressing VLDL-TG secretion through HNF4α pathway. *Free Radic. Biol. Med.* 172: 459-469.
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RESEARCH USE

For research use only, not for use in diagnostic procedures.