

apoB (S-18): sc-11795

BACKGROUND

Post-transcriptional editing of apolipoprotein B (apoB) mRNA is regulated by Apobec-1 (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. ApoB100 is a protein primarily synthesized in the liver as a structural component of very low density lipoprotein particles. A truncated form of apoB100, apoB48, 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 (S-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of apoB of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-11795 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

apoB (S-18) is recommended for detection of apoB-100 and apoB-48 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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).

apoB (S-18) is also recommended for detection of apoB-100 and apoB-48 in additional species, including bovine and porcine.

Suitable for use as control antibody for apoB siRNA (h): sc-41180, apoB siRNA (m): sc-41181, apoB shRNA Plasmid (h): sc-41180-SH, apoB shRNA Plasmid (m): sc-41181-SH, apoB shRNA (h) Lentiviral Particles: sc-41180-V and apoB shRNA (m) Lentiviral Particles: sc-41181-V.

Molecular Weight of apoB: 512 kDa.

Positive Controls: human plasma extract: sc-364374 or mouse plasma.

STORAGE

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

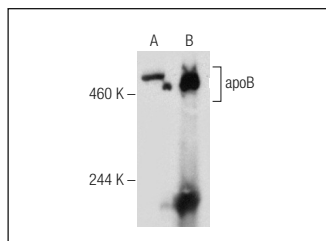
PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

RESEARCH USE

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

DATA



apoB (S-18): sc-11795. Western blot analysis of apoB in human plasma (A) and mouse plasma (B).

SELECT PRODUCT CITATIONS

1. Cho, K.H., et al. 2006. Anti-atherosclerotic effect of a new synthetic functional oil containing mono- and diacylglycerol from corn oil. *Ann. Nutr. Metab.* 50: 467-475.
2. Uchiyama, S., et al. 2006. CuZn-SOD deficiency causes apoB degradation and induces hepatic lipid accumulation by impaired lipoprotein secretion in mice. *J. Biol. Chem.* 281: 31713-31719.
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4. Soriguer, F., et al. 2010. Jejunal wall triglyceride concentration of morbidly obese persons is lower in those with type 2 diabetes mellitus. *J. Lipid Res.* 51: 3516-3523.
5. Lee, J.H., et al. 2010. A novel role for the dioxin receptor in fatty acid metabolism and hepatic steatosis. *Gastroenterology* 139: 653-663.
6. Lu, J., et al. 2011. Chronic dietary n-3 PUFA intervention improves dyslipidaemia and subsequent cardiovascular complications in the JCR:LA-cp rat model of the metabolic syndrome. *Br. J. Nutr.* 31: 1-11.
7. Tran, T.T., et al. 2011. Luminal lipid regulates CD36 levels and downstream signaling to stimulate chylomicron synthesis. *J. Biol. Chem.* 286: 25201-25210.
8. Zhou, L., et al. 2012. Cholecystokinin elevates mouse plasma lipids. *PLoS ONE* 7: e51011.
9. Dahabreh, D.F. and Medh, J.D. 2012. Activation of peroxisome proliferator activated receptor-γ results in an atheroprotective apolipoprotein profile in HepG2 cells. *Adv. Biol. Chem.* 2: 218-225.



Try **apoB (C1.4): sc-13538** or **apoB (A-6): sc-393636**, our highly recommended monoclonal alternatives to apoB (S-18). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **apoB (C1.4): sc-13538**.