SANTA CRUZ BIOTECHNOLOGY, INC.

apoB (H-300): sc-25542

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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.

REFERENCES

1. Mehrabian, M., et al. 1985. Human apolipoprotein B: identification of cDNA clones and characterization of mRNA. Nucleic Acids Res. 13: 6937-6953.
2. Law, S.W., et al. 1986. Human liver apolipoprotein B-100 cDNA: complete nucleic acid and derived amino acid sequence. Proc. Natl. Acad. Sci. USA 83: 8142-8146.

CHROMOSOMAL LOCATION

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

SOURCE

apoB (H-300) is a rabbit polyclonal antibody raised against amino acids 1-300 of apoB of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

apoB (H-300) is recommended for detection of apoB 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).

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.

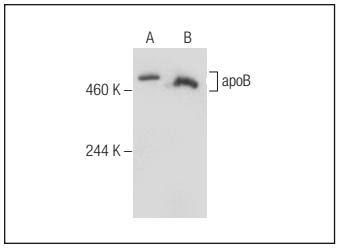
Molecular Weight of apoB: 512 kDa.

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

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



apoB (H-300): sc-25542. Western blot analysis of apoB in human plasma (**A**) and mouse plasma (**B**).

SELECT PRODUCT CITATIONS

1. Jun, J.Y., et al. 2011. Spontaneously diabetic Ins2^{+}/Akita:apoE-deficient mice exhibit exaggerated hypercholesterolemia and atherosclerosis. Am. J. Physiol. Endocrinol. Metab. 301: E145-E154.
2. Layeghkhavidaki, H., et al. 2014. Inhibitory action of benzo[α]pyrene on hepatic lipoprotein receptors *in vitro* and on liver lipid homeostasis in mice. PLoS ONE 9: e102991.

RESEARCH USE

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

PROTOCOLS

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