SANTA CRUZ BIOTECHNOLOGY, INC.

apoL1 (N-20): sc-18759

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Apolipoproteins are protein components of plasma lipoproteins. The apolipoprotein L gene family encodes six highly homologous proteins designated apoL-I to -VI, which are associated with large high density type lipoproteins (HDL). The human apoL family maps to chromosome 22q12.3 within a 127,000 bp region. ApoL has been characterized as a pancreas-specific, 383 amino acid protein that contains a 12 amino acid secretory signal peptide. The apoL genes have TATA-less promoters and contain putative sterol regulatory elements, suggesting that transcription of these genes may be coordinated with that of the low density lipoprotein receptor and genes in pathways involving the synthesis of triglycerides and cholesterol. ApoL homologs can undergo 10-fold changes in expression during atherosclerotic changes in vascular endothelial cells, which includes the inflammatory reaction of atherosclerotic lesions.

REFERENCES

1. Duchateau, P.N., et al. 1997. Apolipoprotein L, a new human high density lipoprotein apolipoprotein expressed by the pancreas. Identification, cloning, characterization, and plasma distribution of apolipoprotein L. J. Biol. Chem. 272: 25576-25582.
2. Horrevoets, A.J., et al. 1999. Vascular endothelial genes that are responsive to tumor necrosis factor-alpha *in vitro* are expressed in atherosclerotic lesions, including inhibitor of apoptosis protein-1, stannin, and two novel genes. Blood 93: 3418-3431.
3 Page, N.M., et al. 2001. The human apolipoprotein L gene cluster: identification, classification, and sites of distribution. Genomics 74: 71-78.
4. Duchateau, P.N., et al. 2001. Apolipoprotein L gene family: tissue-specific expression, splicing, promoter regions; discovery of a new gene. J. Lipid Res. 42: 620-630.

CHROMOSOMAL LOCATION

Genetic locus: APOL1 (human) mapping to 22q12.3.

SOURCE

apoL1 (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of apoL1 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.

Blocking peptide available for competition studies, sc-18759 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

RESEARCH USE

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

APPLICATIONS

apoL1 (N-20) is recommended for detection of apoL1 of 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 apoL siRNA (h): sc-41189, apoL shRNA Plasmid (h): sc-41189-SH and apoL shRNA (h) Lentiviral Particles: sc-41189-V.

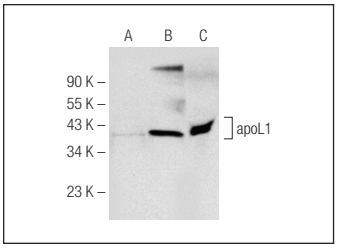
Molecular Weight of apoL1: 35-42 kDa.

Positive Controls: MES-SA/Dx5 cell lysate: sc-2284, human plasma extract: sc-364374 or human apoL transfected 293T whole cell lysate.

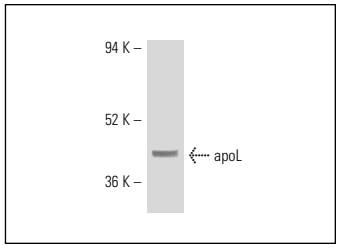
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



apoL1 (N-20): sc-18759. Western blot analysis of apoL1 expression in non transfected (**A**), human apoL1 transfected (**B**) 293T whole cell lysates and apoL1 in human plasma (**C**).



apoL1 (N-20): sc-18759. Western blot analysis of apoL1 expression in MES-SA/Dx5 whole cell lysate.

SELECT PRODUCT CITATIONS

1. Molina-Portela, M.P., et al. 2008. Distinct roles of apolipoprotein components within the trypanosome lytic factor complex revealed in a novel transgenic mouse model. J. Exp. Med. 205: 1721-1728.
2. Lecordier, L., et al. 2009. C-terminal mutants of apolipoprotein L-I efficiently kill both *Trypanosoma brucei brucei* and *Trypanosoma brucei* rhodesiense. PLoS Pathog. 5: e1000685.
3. Lan, X., et al. 2014. APOL1 risk variants enhance podocyte necrosis through compromising lysosomal membrane permeability. Am. J. Physiol. Renal Physiol. 307: F326-F336.