SANTA CRUZ BIOTECHNOLOGY, INC.

apoL1 (A-3): sc-390440

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-α *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.

CHROMOSOMAL LOCATION

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

SOURCE

apoL1 (A-3) is a mouse monoclonal antibody raised against amino acids 201-285 mapping within an internal region of apoL1 of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

apoL1 (A-3) is available conjugated to agarose (sc-390440 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390440 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390440 PE), fluorescein (sc-390440 FITC), Alexa Fluor® 488 (sc-390440 AF488), Alexa Fluor® 546 (sc-390440 AF546), Alexa Fluor® 594 (sc-390440 AF594) or Alexa Fluor® 647 (sc-390440 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-390440 AF680) or Alexa Fluor® 790 (sc-390440 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

STORAGE

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

APPLICATIONS

apoL1 (A-3) is recommended for detection of apoL1 of 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).

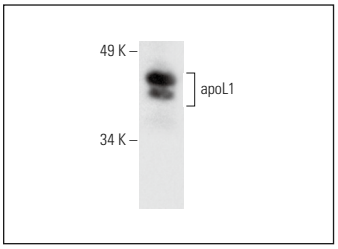
Suitable for use as control antibody for apoL siRNA (h): sc-41189, apoL shRNA Plasmid (h): sc-41189-SH and apoL shRNA (h) Lentiviral Particles: sc-41189-V.

Molecular Weight of apoL1: 35-42 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



apoL1 (A-3): sc-390440. Western blot analysis of apoL1 in human plasma.

SELECT PRODUCT CITATIONS

1. Lan, X., et al. 2014. apoL1 risk variants enhance podocyte necrosis through compromising lysosomal membrane permeability. Am. J. Physiol. Renal Physiol. 307: F326-F336.
2. Haque, S., et al. 2017. Effect of apoL1 disease risk variants on apoL1 gene product. Biosci. Rep. 37: BSR20160531.
3. Chang, H.Y., et al. 2019. Multiple functions of KBP in neural development underlie brain anomalies in Goldberg-Shprintzen syndrome. Front. Mol. Neurosci. 12: 265.

RESEARCH USE

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