apoM (A-10): sc-365139

SANTA CRUZ®
BIOTECHNOLOGY

The Power to Question

BACKGROUND

Apolipoproteins are protein components of plasma lipoproteins. apoM (Apolipoprotein M), also known as protein G3a, is a member of the Lipocalin family of proteins. apoM is exclusively expressed in kidney tubular epithelial cells and liver hepatocytes. Mature apoM retains its signal peptide, which acts as a hydrophobic anchor, and contains a structurally conserved eight stranded antiparallel β barrel which binds retinol and retinoic acid. apoM may play a key role in reverse cholesterol transport. It mainly associates with high density lipoprotein (HDL) and to a lesser extent with triglyceride-rich lipoprotein (TGRLP) and low-density lipoprotein (LDL). apoM is important for the preβ-HDL formation. Preβ-HDL is an important acceptor of peripheral cellular cholesterol. The concentration of apoM in plasma strongly correlates with total cholesterol. Low concentrations of apoM in plasma is associated with diabetes.

CHROMOSOMAL LOCATION

Genetic locus: APOM (human) mapping to 6p21.33; Apom (mouse) mapping to 17 B1.

SOURCE

apoM (A-10) is a mouse monoclonal antibody raised against amino acids 1-188 representing full length apoM of human origin.

PRODUCT

Each vial contains 200 µg IgG$_{2a}$ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

apoM (A-10) is available conjugated to agarose (sc-365139 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-365139 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-365139 PE), fluorescein (sc-365139 FITC), Alexa Fluor® 488 (sc-365139 AF488), Alexa Fluor® 546 (sc-365139 AF546), Alexa Fluor® 594 (sc-365139 AF594) or Alexa Fluor® 647 (sc-365139 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-365139 AF680) or Alexa Fluor® 790 (sc-365139 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

apoM (A-10) is recommended for detection of apoM 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), immunohistochemistry (including paraffin-embedded sections) (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 apoM siRNA (h): sc-61978, apoM siRNA (m): sc-61979, apoM shRNA Plasmid (h): sc-61978-SH, apoM shRNA Plasmid (m): sc-61979-SH, apoM shRNA (h) Lentiviral Particles: sc-61978-V and apoM shRNA (m) Lentiviral Particles: sc-61979-V.

Molecular Weight of non-glycosylated apoM: 23 kDa.

Molecular Weight of glycosylated apoM: 25 kDa.

Positive Controls: apoM (m): 293T Lysate: sc-118491.

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. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA
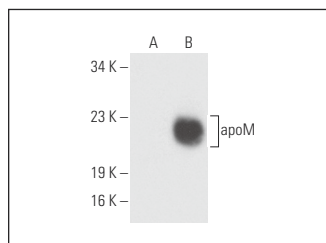
apoM (A-10): sc-365139. Western blot analysis of apoM expression in non-transfected: sc-117752 (**A**) and mouse apoM transfected: sc-118491 (**B**) 293T whole cell lysates.
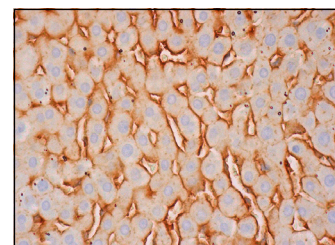
apoM (A-10): sc-365139. Immunoperoxidase staining of formalin fixed, paraffin-embedded human liver tissue showing membrane staining of hepatocytes and cytoplasmic and membrane staining of sinusoids.

SELECT PRODUCT CITATIONS

1. Zabel, B.A., et al. 2005. Chemokine-like receptor 1 expression and chemerin-directed chemotaxis distinguish plasmacytoid from myeloid dendritic cells in human blood. J. Immunol. 174: 244-251.

2. Borlak, J., et al. 2018. Serum proteome mapping of EGF transgenic mice reveal mechanistic biomarkers of lung cancer precursor lesions with clinical significance for human adenocarcinomas. Biochim. Biophys. Acta Mol. Basis Dis. 1864: 3122-3144.

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.

PROTOCOLS

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

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