

# apoM (8F12C6B8): sc-81165

## 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  $\beta$  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 pre $\beta$ -HDL formation. Pre $\beta$ -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 are associated with diabetes.

## REFERENCES

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- Wolfrum, C., et al. 2005. Apolipoprotein M is required for pre $\beta$ -HDL formation and cholesterol efflux to HDL and protects against atherosclerosis. *Nat. Med.* 11: 418-422.
- Christoffersen, C., et al. 2006. Isolation and characterization of human apolipoprotein M-containing lipoproteins. *J. Lipid Res.* 47: 1833-1843.
- Dahlback, B. and Nielsen, L.B. 2006. Apolipoprotein M—a novel player in high-density lipoprotein metabolism and atherosclerosis. *Curr. Opin. Lipidol.* 17: 291-295.
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- Ahnström, J., et al. 2007. Hydrophobic ligand binding properties of the human lipocalin apolipoprotein M. *J. Lipid Res.* 48: 1754-1762.
- Axler, O., et al. 2007. An ELISA for apolipoprotein M reveals a strong correlation to total cholesterol in human plasma. *J. Lipid Res.* 48: 1772-1780.

## CHROMOSOMAL LOCATION

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

## SOURCE

apoM (8F12C6B8) is a mouse monoclonal antibody raised against full length recombinant apoM of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

apoM (8F12C6B8) is recommended for detection of apoM of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

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.

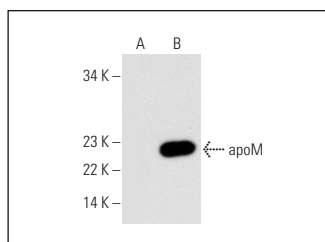
Molecular Weight of glycosylated apoM: 25 kDa.

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

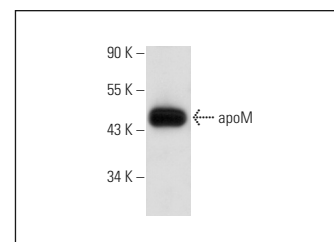
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  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-IgG $\kappa$  BP-FITC: sc-516140 or m-IgG $\kappa$  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



apoM (8F12C6B8): sc-81165. Western blot analysis of apoM expression in non-transfected: sc-117752 (A) and mouse ApoM transfected: sc-118491 (B) 293T whole cell lysates.



apoM (8F12C6B8): sc-81165. Western blot analysis of human recombinant apoM.

## 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](http://www.scbt.com) for detailed protocols and support products.