

apoM (C-16): sc-67806

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 pre β -HDL formation. Pre β -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

- Zhang, X.Y., Dong, X., Zheng, L., Luo, G.H., Liu, Y.H., Ekström, U., Nilsson-Ehle, P., Ye, Q. and Xu, N. 2003. Specific tissue expression and cellular localization of human apolipoprotein M as determined by *in situ* hybridization. *Acta Histochem.* 105: 67-72.
- Wolfrum, C., Poy, M.N. and Stoffel, M. 2005. Apolipoprotein M is required for pre β -HDL formation and cholesterol efflux to HDL and protects against atherosclerosis. *Nat. Med.* 11: 418-422. 3
- Christoffersen, C., Nielsen, L.B., Axler, O., Andersson, A., Johnsen, A.H. and Dahlbäck, B. 2006. Isolation and characterization of human apolipoprotein M-containing lipoproteins. *J. Lipid Res.* 47: 1833-1843.
- Dahlbäck, B. and Nielsen, L.B. 2006. Apolipoprotein M — a novel player in high-density lipoprotein metabolism and atherosclerosis. *Curr. Opin. Lipidol.* 17: 291-295.
- Christoffersen, C., Dahlbäck, B. and Nielsen, L.B. 2006. Apolipoprotein M: progress in understanding its regulation and metabolic functions. *Scand. J. Clin. Lab. Invest.* 66: 631-637.
- Xu, X., Ye, Q., Xu, N., He, X., Luo, G., Zhang, X., Zhu, J., Zhang, Y. and Nilsson-Ehle, P. 2006. Effects of ischemia-reperfusion injury on apolipoprotein M expression in the liver. *Transplant. Proc.* 38: 2769-2773.
- Ahnström, J., Faber, K., Axler, O. and Dahlbäck, B. 2007. Hydrophobic ligand binding properties of the human lipocalin apolipoprotein M. *J. Lipid Res.* 48: 1754-1762.
- Axler, O., Ahnström, J. and Dahlbäck, B. 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 (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of apoM of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-67806 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

apoM (C-16) 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 μ g per 100-500 μ g 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).

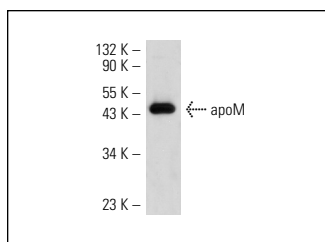
apoM (C-16) is also recommended for detection of apoM in additional species, including equine, canine, bovine and porcine.

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.

DATA



apoM (C-16): sc-67806. 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.


 MONOS
Satisfaction
Guaranteed

Try **apoM (A-10): sc-365139** or **apoM (D-4): sc-398762**, our highly recommended monoclonal alternatives to apoM (C-16).