

apoOL (G-6): sc-390958

BACKGROUND

Apolipoproteins are a family of fatty-acid binding proteins that transport fat through the bloodstream in the form of lipoproteins. ApoO promotes the transport of cholesterol from macrophage cells and may be involved in regulatory mechanisms that protect lipid accumulation within the heart. ApoO is present in high density lipoproteins (HDLs) and low density lipoproteins (LDLs), and is secreted by an MTP (microsomal triglyceride transfer protein)-dependent mechanism. ApoOL (apolipoprotein O-like), also known as FAM121A, is a 268 amino acid secreted protein belonging to the apolipoprotein O family and may be involved in cholesterol transport. ApoOL is encoded by a gene located on human chromosome X, which contains nearly 153 million base pairs and houses over 1,000 genes.

REFERENCES

1. Bjorkegren, J., et al. 2001. Lipoprotein secretion and triglyceride stores in the heart. *J. Biol. Chem.* 276: 38511-38517.
2. van der Vliet, H.N., et al. 2001. Apolipoprotein A-V: a novel apolipoprotein associated with an early phase of liver regeneration. *J. Biol. Chem.* 276: 44512-44520.
3. Offer, T. and Samuni, A. 2002. Nitroxides inhibit peroxyl radical-mediated DNA scission and enzyme inactivation. *Free Radic. Biol. Med.* 32: 872-881.
4. Nielsen, L.B. 2002. Lipoprotein production by the heart: a novel pathway of triglyceride export from cardiomyocytes. *Scand. J. Clin. Lab. Invest. Suppl.* 237: 35-40.

CHROMOSOMAL LOCATION

Genetic locus: APOOL (human) mapping to Xq21.1; Apool (mouse) mapping to X E1.

SOURCE

apoOL (G-6) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 239-262 near the C-terminus of apoOL 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.

apoOL (G-6) is available conjugated to agarose (sc-390958 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390958 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390958 PE), fluorescein (sc-390958 FITC), Alexa Fluor® 488 (sc-390958 AF488), Alexa Fluor® 546 (sc-390958 AF546), Alexa Fluor® 594 (sc-390958 AF594) or Alexa Fluor® 647 (sc-390958 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-390958 AF680) or Alexa Fluor® 790 (sc-390958 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-390958 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA

APPLICATIONS

apoOL (G-6) is recommended for detection of apoOL 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).

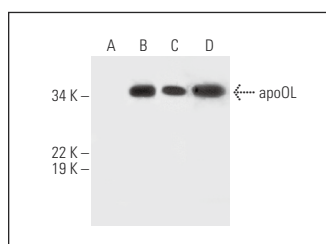
apoOL (G-6) is also recommended for detection of apoOL in additional species, including equine, canine and bovine.

Suitable for use as control antibody for apoOL siRNA (h): sc-91074, apoOL siRNA (m): sc-141176, apoOL shRNA Plasmid (h): sc-91074-SH, apoOL shRNA Plasmid (m): sc-141176-SH, apoOL shRNA (h) Lentiviral Particles: sc-91074-V and apoOL shRNA (m) Lentiviral Particles: sc-141176-V.

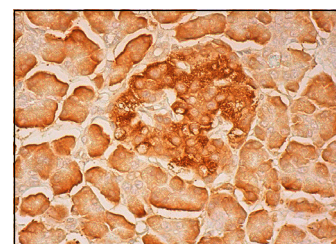
Molecular Weight of apoOL: 29 kDa.

Positive Controls: apoOL (m): 293T Lysate: sc-118495, T24 cell lysate: sc-2292 or HeLa whole cell lysate: sc-2200.

DATA



apoOL (G-6): sc-390958. Western blot analysis of apoOL expression in non-transfected 293T: sc-117752 (A), mouse apoOL transfected 293T: sc-118495 (B), T24 (C) and HeLa (D) whole cell lysates.



apoOL (G-6): sc-390958. Immunoperoxidase staining of formalin fixed, paraffin-embedded human pancreas tissue showing cytoplasmic and nuclear staining of exocrine glandular cells and Islets of Langerhans.

SELECT PRODUCT CITATIONS

1. Carvalho, F., et al. 2020. *Listeria monocytogenes* exploits mitochondrial contact site and cristae organizing system complex subunit mic10 to promote mitochondrial fragmentation and cellular infection. *mBio* 11: e03171-19.
2. Li, S., et al. 2020. Altered MICOS morphology and mitochondrial ion homeostasis contribute to Poly(Gr) toxicity associated with C9-ALS/FTD. *Cell Rep.* 32: 107989.

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.