

apoF (B-6): sc-398151

BACKGROUND

Apolipoproteins are a family of fatty-acid binding proteins that transport fat through the bloodstream in the form of lipoproteins. apoF (apolipoprotein F), also known as LTIP (lipid transfer inhibitor protein), is a 308 amino acid secreted protein that belongs to the apolipoprotein family. Expressed in liver tissues and also existing in plasma, apoF inhibits the activity of CETP (cholesterol ester transfer protein) and, via this inhibition, functions to regulate cholesterol transport. The gene encoding apoF maps to human chromosome 12, which encodes over 1,100 genes and comprises approximately 4.5% of the human genome. Chromosome 12 is associated with a variety of diseases and afflictions, including hypochondrogenesis, achondrogenesis, Kniest dysplasia, Noonan syndrome and Trisomy 12p, which causes facial developmental defects and seizure disorders.

REFERENCES

- Olofsson, S.O., et al. 1978. Isolation and partial characterization of a new acidic apolipoprotein (apolipoprotein F) from high density lipoproteins of human plasma. *Biochemistry* 17: 1032-1036.
- Koren, E., et al. 1982. Isolation and characterization of simple and complex lipoproteins containing apolipoprotein F from human plasma. *Biochemistry* 21: 5347-5351.
- Day, J.R., et al. 1994. Purification and molecular cloning of human apolipoprotein F. *Biochem. Biophys. Res. Commun.* 203: 1146-1151.
- Wang, X., et al. 1999. Molecular cloning and expression of lipid transfer inhibitor protein reveals its identity with apolipoprotein F. *J. Biol. Chem.* 274: 1814-1820.
- Paromov, V.M. and Morton, R.E. 2003. Lipid transfer inhibitor protein defines the participation of high density lipoprotein subfractions in lipid transfer reactions mediated by cholesterol ester transfer protein (CETP). *J. Biol. Chem.* 278: 40859-40866.

CHROMOSOMAL LOCATION

Genetic locus: Apof (mouse) mapping to 10 D3.

SOURCE

apoF (B-6) is a mouse monoclonal antibody raised against amino acids 44-326 mapping at the C-terminus of apoF of mouse origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

apoF (B-6) is available conjugated to agarose (sc-398151 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-398151 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398151 PE), fluorescein (sc-398151 FITC), Alexa Fluor® 488 (sc-398151 AF488), Alexa Fluor® 546 (sc-398151 AF546), Alexa Fluor® 594 (sc-398151 AF594) or Alexa Fluor® 647 (sc-398151 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398151 AF680) or Alexa Fluor® 790 (sc-398151 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

apoF (B-6) is recommended for detection of apoF of mouse 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 apoF siRNA (m): sc-141160, apoF shRNA Plasmid (m): sc-141160-SH and apoF shRNA (m) Lentiviral Particles: sc-141160-V.

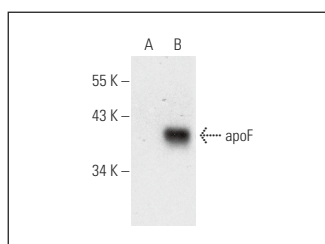
Molecular Weight of apoF: 33 kDa.

Positive Controls: apoF (m): 293T Lysate: sc-118485.

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



apoF (B-6): sc-398151. Western blot analysis of apoF expression in non-transfected: sc-117752 (A) and mouse apoF transfected: sc-118485 (B) 293T whole cell lysates.

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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