SANTA CRUZ BIOTECHNOLOGY, INC.

apoF (C-13): sc-107408



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 (cholesteryl 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

- 1. 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., et al. 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.
- Online Mendelian Inheritance in Man, OMIM™. 2007. Johns Hopkins University, Baltimore, MD. MIM Number: 107760. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- Morton, R.E., et al. 2008. Lipid transfer inhibitor protein (apolipoprotein F) concentration in normolipidemic and hyperlipidemic subjects. J. Lipid Res. 49: 127-135.

CHROMOSOMAL LOCATION

Genetic locus: APOF (human) mapping to 12q13.2.

SOURCE

apoF (C-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of apoF of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-107408 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

apoF (C-13) is recommended for detection of apoF of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 (h): sc-95822, apoF shRNA Plasmid (h): sc-95822-SH and apoF shRNA (h) Lentiviral Particles: sc-95822-V.

Molecular Weight of apoF: 33 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluo-rescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



apoF (C-13): sc-107408. Immunofluorescence staining of formalin-fixed Hep G2 cells showing cytoplasmic localization.

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 or our catalog for detailed protocols and support products.