SANTA CRUZ BIOTECHNOLOGY, INC.

apoD (N-20): sc-34762

SANTA CRUZ BIOTECHNOLOGY
The Power to Question

BACKGROUND

Lipids, such as phospholipids, triacylglycerols and cholesterol, are weakly soluble in aqueous solution and therefore are transported by circulation as components of lipoproteins. Lipoproteins are globular particles that consist of a non-polar core of triacylglycerols and cholesteryl esters surrounded by phospholipid, cholesterol and an amphiphilic coating of protein, known as apolipoprotein (apo). These complexes allow the dissolution and shuttling of their non-polar lipid components. At least nine different apo are distributed in significant amounts in different human lipoproteins. ApoD is a member of the lipocalin superfamily of transporter proteins that bind small hydrophobic molecules, including arachidonic acid (AA). The ability of apoD to bind AA implicates it in pathways associated with membrane phospholipid signal transduction and metabolism. ApoD expression has been shown to correlate both with cell cycle arrest and with prognosis in several types of malignancy, including central nervous system astrocytomas and medulloblastomas.

REFERENCES

1. Yao, J.K., et al. 2005. Association of plasma apoD with RBC membrane arachidonic acid levels in schizophrenia. Schizophr. Res. 72: 259-266.
2. Ganfornina, M.D., et al. 2005. Molecular characterization and developmental expression pattern of the chicken apoD gene: implications for the evolution of vertebrate lipocalins. Dev. Dyn. 232: 191-199.
3. Hildebrand, M.S., et al. 2005. Expression of the carrier protein apoD in the mouse inner ear. Hear. Res. 200: 102-114.
4. Utsunomiya, T., et al. 2005. Clinicopathologic and prognostic values of apoD alterations in hepatocellular carcinoma. Int. J. Cancer 116: 105-109.
5. Desai, P.P., et al. 2005. ApoD is a component of compact but not diffuse amyloid-β plaques in Alzheimer's disease temporal cortex. Neurobiol. Dis. 20: 574-582.
6. Hunter, S., et al. 2005. ApoD is downregulated during malignant transformation of neurofibromas. Hum. Pathol. 36: 987-993.

CHROMOSOMAL LOCATION

Genetic locus: APOD (human) mapping to 3q29; Apod (mouse) mapping to 16 B2.

SOURCE

apoD (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of apoD of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-34762 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

apoD (N-20) is recommended for detection of apoD of human and, to a lesser extent, mouse and rat origin by Western Blotting (starting dilution 1:200, 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 apoD siRNA (h): sc-45518, apoD siRNA (m): sc-45519, apoD shRNA Plasmid (h): sc-45518-SH, apoD shRNA Plasmid (m): sc-45519-SH, apoD shRNA (h) Lentiviral Particles: sc-45518-V and apoD shRNA (m) Lentiviral Particles: sc-45519-V.

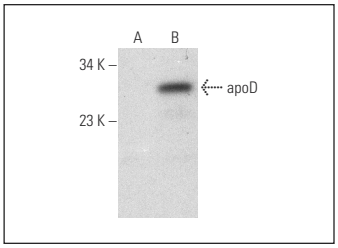
Molecular Weight of apoD: 30 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: 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



apoD (N-20): sc-34762. Western blot analysis of apoD expression in non-transfected: sc-117752 (**A**) and mouse DPH5 transfected: sc-119830 (**B**) 293T whole cell lysates.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

MONOS Satisfaction Guaranteed

Try **apoD (C-1): sc-373965** or **apoD (D-12): sc-166612**, our highly recommended monoclonal alternatives to apoD (N-20).