apoD (K-20): sc-34759



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.

CHROMOSOMAL LOCATION

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

SOURCE

apoD (K-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of apoD 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-34759 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

apoD (K-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 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).

apoD (K-20) is also recommended for detection of apoD in additional species, including equine, canine, bovine and porcine.

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.

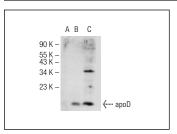
Molecular Weight of apoD: 30 kDa.

Postive Controls: apoD (h2): 293T Lysate: sc-170847 or 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 (K-20): sc-34759. Western blot analysis of apoD expression in non-transfected 293T: sc-117752 (**A**), human apoD transfected 293T: sc-170847 (**B**) and Hep G2 (**C**) 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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



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

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 Fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com