



apoA-II (C-20): sc-19032

BACKGROUND

Apolipoproteins are protein components of plasma lipoproteins. The apolipoprotein C gene family encodes four homologous proteins designated apoC-I to -IV, which specifically modulate the metabolism of triglyceride-rich lipoproteins. The human apoA-I gene maps to chromosome 11q23 and encodes a single chain, 243 amino acid protein, which promotes cholesterol efflux from tissues to the liver for excretion. Apolipoprotein A-I is the major protein component of high density lipoprotein (HDL) in the plasma. apoA1 can function as a cofactor for lecithin cholesterolacyltransferase (LCAT), which is responsible for the formation of most plasma cholesteryl esters. The human apoA-II gene maps to chromosome 1q21-q23 and encodes the second most abundant protein of HDL particles, where it influences plasma levels of free fatty acids (FFA). The human apoA-IV gene maps to chromosome 11q23 and encodes a 396 amino acid preprotein, which after proteolytic processing is secreted from the intestine in association with chylomicron particles. apoA-IV is a potent activator of lecithin-cholesterol acyltransferase *in vitro*. The human apoA-V gene maps to chromosome 11q23 and encodes a 366 amino acid protein that is believed to be an important determinant of plasma triglyceride levels.

REFERENCES

1. Online Mendelian Inheritance in Man, OMIM (™). Johns Hopkins University, Baltimore, MD. MIM Number: 107670: 07/05/1994. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
2. Duriez, P. and Fruchart, J.C. 1999. High-density lipoprotein subclasses and apolipoprotein A-I. *Clin. Chim. Acta* 286: 97-114.
3. Online Mendelian Inheritance in Man, OMIM (™). Johns Hopkins University, Baltimore, MD. MIM Number: 603743: 04/02/2001. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
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5. LocusLink Report (LocusID: 335). <http://www.ncbi.nlm.nih.gov/LocusLink/>
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SOURCE

apoA-II (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of apoA-II 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-19032 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

apoA-II (C-20) is recommended for detection of apoA-II 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 apoA-II siRNA (h): sc-43617, apoA-II shRNA Plasmid (h): sc-43617-SH and apoA-II shRNA (h) Lentiviral Particles: sc-43617-V.

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) 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.

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.