



apoA-IV (M-19): sc-19040

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 cholesterol acyltransferase (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

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CHROMOSOMAL LOCATION

Genetic locus: APOA4 (human) mapping to 11q23; ApoA4 (mouse) mapping to 9 A5.2.

SOURCE

apoA-IV (M-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of apoA-IV of mouse origin.

STORAGE

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

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-19040 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

apoA-IV (M-19) is recommended for detection of apoA-IV of mouse and rat 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-IV siRNA (m): sc-41179.

Molecular Weight of apoA-IV: 46 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) 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.