# apoA-IV (C-20): sc-19038



The Power to Overtin

#### **BACKGROUND**

Apolipoproteins are protein components of plasma lipoproteins. The human apoA-I gene 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. It 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 encodes the second most abundant protein of HDL particles, where it influences plasma levels of free fatty acids (FFA). The human apoA-IV gene 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 LCAT *in vitro*. The human apoA-V gene encodes a 366 amino acid protein that is believed to be an important determinant of plasma triglyceride levels.

# **CHROMOSOMAL LOCATION**

Genetic locus: APOA4 (human) mapping to 11q23.3; Apoa4 (mouse) mapping to 9 A5.2.

#### SOURCE

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

## **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-19038 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

# **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## **APPLICATIONS**

apoA-IV (C-20) is recommended for detection of apoA-IV 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  $\mu g$  per 100-500  $\mu g$  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).

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

Suitable for use as control antibody for apoA-IV siRNA (h): sc-41178, apoA-IV siRNA (m): sc-41179, apoA-IV shRNA Plasmid (h): sc-41178-SH, apoA-IV shRNA Plasmid (m): sc-41179-SH, apoA-IV shRNA (h) Lentiviral Particles: sc-41178-V and apoA-IV shRNA (m) Lentiviral Particles: sc-41179-V.

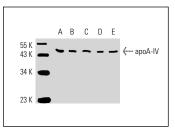
Molecular Weight of apoA-IV: 46 kDa.

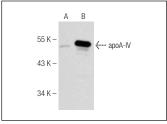
Positive Controls: Y79 cell lysate: sc-2240, Hep G2 cell lysate: sc-2227 or apoA-IV (h): 293T Lysate: sc-373359.

#### **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**





apoA-IV (C-20): sc-19038. Western blot analysis of apoA-IV expression in Y79 (**A**), Hep G2 (**B**), HeLa (**C**), ME-180 (**D**) and CaSki (**E**) whole cell lysates.

apoA-IV (C-20): sc-19038. Western blot analysis of apoA-IV expression in non-transfected: sc-117752 (A) and human apoA-IV transfected: sc-373359 (B) 293T whole cell Ivsates.

## **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.



Try **apoA-IV (G-8): sc-374543**, our highly recommended monoclonal alternative to apoA-IV (C-20).

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