

# apoA-IV (H-240): sc-50375

## 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 cholesterol 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.

## REFERENCES

- Vergnes, L., et al. 1997. The apolipoprotein A-I/C-III/A-IV gene cluster: apoC-III and apoA-IV expression is regulated by two common enhancers. *Biochim. Biophys. Acta* 1348: 299-310.
- Qin, S., et al. 2000. Phospholipid transfer protein gene knock-out mice have low high density lipoprotein levels, due to hypercatabolism, and accumulate apoA-IV-rich lamellar lipoproteins. *J. Lipid Res.* 41: 269-276.

## CHROMOSOMAL LOCATION

Genetic locus: APOA4 (human) mapping to 11q23.3.

## SOURCE

apoA-IV (H-240) is a rabbit polyclonal antibody raised against amino acids 135-374 mapping near the C-terminus of apoA-IV 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.

## APPLICATIONS

apoA-IV (H-240) is recommended for detection of apoA-IV of human 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), immunohistochemistry (including paraffin-embedded sections) (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 (h): sc-41178, apoA-IV shRNA Plasmid (h): sc-41178-SH and apoA-IV shRNA (h) Lentiviral Particles: sc-41178-V.

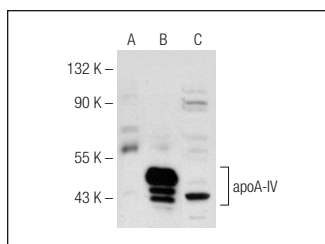
Molecular Weight of apoA-IV: 46 kDa.

Positive Controls: Y79 cell lysate: sc-2240, apoA-IV (h2) 293T Lysate: sc-373359 or HeLa whole cell lysate: sc-2200.

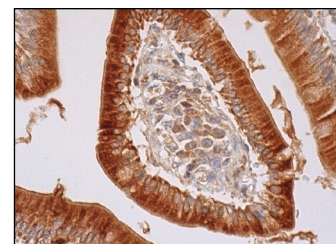
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

## DATA



apoA-IV (H-240): sc-50375. Western blot analysis of apoA-IV expression in non-transfected 293T: sc-117752 (A), human apoA-IV transfected 293T: sc-373359 (B) and HeLa (C) whole cell lysates.



apoA-IV (H-240): sc-50375. Immunoperoxidase staining of formalin fixed, paraffin-embedded human small intestine tissue showing cytoplasmic staining of glandular cells.

## SELECT PRODUCT CITATIONS

- Luczak, M., et al. 2011. Chronic kidney disease-related atherosclerosis-proteomic studies of blood plasma. *Proteome Sci.* 9: 25.

## STORAGE

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

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

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Try **apoA-IV (G-8): sc-374543**, our highly recommended monoclonal alternative to apoA-IV (H-240).