

apoA-IV (M-150): sc-50376

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.

REFERENCES

1. 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.
2. 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; ApoA4 (mouse) mapping to 9 A5.2.

SOURCE

apoA-IV (M-150) is a rabbit polyclonal antibody raised against amino acids 149-298 mapping within an internal region of apoA-IV of mouse 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 (M-150) is recommended for detection of apoA-IV of mouse, rat and 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) 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 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.

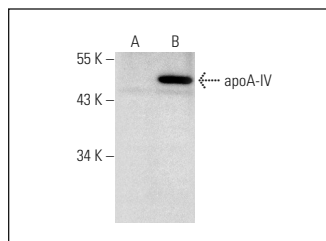
Molecular Weight of apoA-IV: 46 kDa.

Positive Controls: poA-IV (h2): 293T Lysate: sc-373359.

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.

DATA



apoA-IV (M-150): sc-50376. Western blot analysis of apoA-IV expression in non-transfected: sc-117752 (A) and human apoA-IV transfected: sc-373359 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

1. Reichardt, F., et al. 2012. Kaolinite ingestion facilitates restoration of body energy reserves during refeeding after prolonged fasting. *Fundam. Clin. Pharmacol.* 26: 577-588.
2. Bae, N., et al. 2013. Network of brain protein level changes in glutaminase deficient fetal mice. *J. Proteomics* 80: 236-249.

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 or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **apoA-IV (G-8): sc-374543**, our highly recommended monoclonal alternative to apoA-IV (M-150).