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# apoA-IV (h2): 293T Lysate: sc-373359

## 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 cholesterol acyltransferase (LCAT), which is responsible for the formation of most plasma cholesterly 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

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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.
3. Fournier, N., et al. 2000. Human ApoA-IV overexpression in transgenic mice induces cAMP-stimulated cholesterol efflux from J774 macrophages to whole serum. *Arterioscler. Thromb. Vasc. Biol.* 20: 1283-1292.
4. Deeg, M.A., et al. 2001. GPI-specific phospholipase D associates with an apoA-I- and apoA-IV-containing complex. *J. Lipid Res.* 42: 442-451.
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6. Verges, B., et al. 2001. Increased plasma apoA-IV level is a marker of abnormal postprandial lipemia: a study in normoponderal and obese subjects. *J. Lipid Res.* 42: 2021-2029.
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9. Navarro, M.A., et al. 2004. Response of ApoA-IV in pigs to long-term increased dietary oil intake and to the degree of unsaturation of the fatty acids. *Br. J. Nutr.* 92: 763-769.

## CHROMOSOMAL LOCATION

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

## PRODUCT

apoA-IV (h2): 293T Lysate represents a lysate of human apoA-IV transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

## APPLICATIONS

apoA-IV (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive apoA-IV antibodies. Recommended use: 10-20 µl per lane.

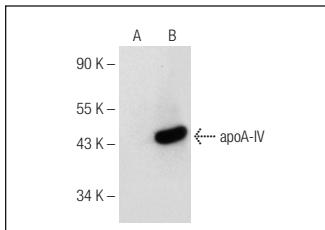
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

apoA-IV (G-8): sc-374543 is recommended as a positive control antibody for Western Blot analysis of enhanced human apoA-IV expression in apoA-IV transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:  
 1) Western Blotting: use m-IgG<sub>x</sub> BP-HRP: sc-516102 or m-IgG<sub>x</sub> BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

## DATA



apoA-IV (G-8): sc-374543. 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.

## STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. 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) for detailed protocols and support products.