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



The Power to Question

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

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- 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.
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- 7. Ezeh, B., et al. 2003. Plasma distribution of apoA-IV in patients with coronary artery disease and healthy controls. J. Lipid Res. 44: 1523-1529.
- Gallagher, J.W., et al. 2004. apoA-IV tagged with the ER retention signal KDEL perturbs the intracellular trafficking and secretion of apoB. J. Lipid Res. 45: 1826-1834.
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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.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

CHROMOSOMAL LOCATION

Genetic locus: APOA4 (human) mapping to 11g23.3.

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 μ I per lane.

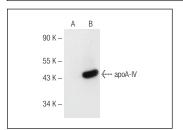
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

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-lgG κ BP-HRP: sc-516102 or m-lgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM 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.

RESEARCH USE

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