

ApoA1 Antibody

Catalog # ASC11311

Specification

ApoA1 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Application Notes WB <u>P02647</u> <u>P02647</u>, <u>113992</u> Human, Chicken Rabbit Polyclonal IgG ApoA1 antibody can be used for detection of ApoA1 by Western blot at 1 μg/mL.

ApoA1 Antibody - Additional Information

Gene ID Target/Specificity APOA1; 335

Reconstitution & Storage

ApoA1 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions

ApoA1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

ApoA1 Antibody - Protein Information

Name APOA1 (HGNC:600)

Function

Participates in the reverse transport of cholesterol from tissues to the liver for excretion by promoting cholesterol efflux from tissues and by acting as a cofactor for the lecithin cholesterol acyltransferase (LCAT). As part of the SPAP complex, activates spermatozoa motility.

Cellular Location Secreted.

Tissue Location

Major protein of plasma HDL, also found in chylomicrons. Synthesized in the liver and small intestine. The oxidized form at Met-110 and Met-136 is increased in individuals with increased risk for coronary artery disease, such as in carrier of the eNOSa/b genotype and exposure to cigarette smoking. It is also present in increased levels in aortic lesions relative to native ApoA-I and increased levels are seen with increasing severity of disease

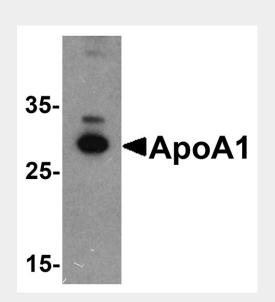


ApoA1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

ApoA1 Antibody - Images



Western blot analysis of ApoA1 in chicken liver tissue lysate with ApoA1 antibody at 1 $\mu\text{g/mL}$.

ApoA1 Antibody - Background

ApoA1 Antibody: Apolipoprotein A1 (ApoA1) is the major protein component of high density lipoprotein (HDL) in plasma, which is correlated with cardiovascular disease. ApoA1 is synthesized in the liver and small intestine and promotes cholesterol efflux from tissues to the liver for excretion. It is a cofactor for lecithin cholesterolacyltransferase (LCAT), the enzyme responsible for the formation of most plasma cholesteryl esters. Defects in ApoA1 are associated with HDL deficiency, Tangier disease, and systemic non-neuropathic amyloidosis.

ApoA1 Antibody - References

Zhu X, Wu G, Zeng W, et al. Cysteine mutants of human apolipoprotein A-I: a study of secondary structural and functional properties. J. Lipid Res. 2005; 46:1303-11

Sorci-Thomas MG, Prack MM, Dashti N, et al. Differential effects of dietary fat on the tissue-specific expression of the apolipoprotein A-I gene: relationship to plasma concentration of high density lipoproteins. J. Lipid Res. 1989; 30:1397-403

Lai C-Q, Parnell LD, and Ordovas JM. The APOA1 /C3/A4/A5 gene cluster, lipid metabolism and cardiovascular disease risk. Curr. Opin. Lipid. 2005; 16:153-66