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APOA1 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1160a

Product Information

Application	WB, E
Primary Accession	P02647
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	5F4F5
Isotype	IgG1
Calculated MW	30778
Description	APOA1: apolipoprotein A-I, it is the major protein component of high density lipoprotein (HDL) in plasma. The protein promotes cholesterol efflux from tissues to the liver for excretion, and it is a cofactor for lecithin cholesterolacyltransferase (LCAT) which is responsible for the formation of most plasma cholesteryl esters. Defects in the Apolipoprotein A I gene are associated with HDL deficiency and Tangier disease. The therapeutic potential of apoA-I has been recently assessed in patients with acute coronary syndromes, using a recombinant form of a naturally occurring variant of apoA-I. The availability of recombinant normal apoA-I should facilitate further investigation into the potential usefulness of apoA-I in preventing atherosclerotic vascular diseases.
Immunogen	Purified recombinant fragment of human APOA1 expressed in E. Coli.
Formulation	Ascitic fluid containing 0.03% sodium azide.

Additional Information

Gene ID	335
Other Names	Apolipoprotein A-I, Apo-AI, ApoA-I, Apolipoprotein A1, Proapolipoprotein A-I, ProapoA-I, Truncated apolipoprotein A-I, Apolipoprotein A-I(1-242), APOA1
Dilution	WB~~1/500 - 1/2000 E~~N/A
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	APOA1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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

References

1. J Mol Med. 2006,Jul, 84(7):561-72. Epub 2006 May 17. 2. Clin Endocrinol (Oxf). 2006,Mar, 64(3):260-4.

Images

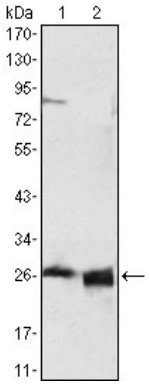


Figure 1: Western blot analysis using APOA1 mouse mAb against HepG2 cell lysate (1) and human serum (2).

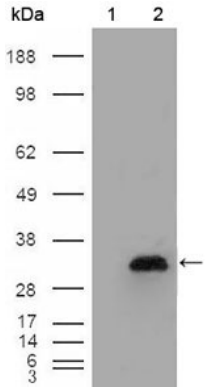
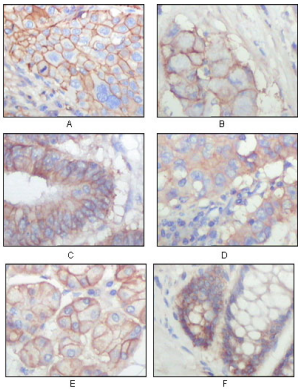


Figure 2: Western blot analysis using APOA1 mouse mAb against HEK293T cells transfected with the pCMV6-ENTRY control (1) and pCMV6-ENTRY APOA1 cDNA (2).

Figure 2: Immunohistochemical analysis of paraffin-embedded human lung squamous cell carcinoma (A), lung adenocarcinoma (B), colon carcinoma (C), breast carcinoma (D), normal sublingual gland (E), normal rectal (F), showing membrane localization with DAB staining using EphB3 mouse mAb.



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