

Anti-APOA1 Antibody

Catalog # ABO10623

Specification

Anti-APOA1 Antibody - Product Information

Application WB
Primary Accession P02647
Host Rabbit

Reactivity Human, Mouse, Rat

Clonality Polyclonal Lyophilized

Description

Rabbit IgG polyclonal antibody for Apolipoprotein A-I(APOA1) detection. Tested with WB in Human; Mouse; Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-APOA1 Antibody - 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

Calculated MW 30778 MW KDa

Application Details

Western blot, 0.1-0.5 μg/ml, Human, Rat, Mouse

Subcellular Localization

Secreted.

Tissue Specificity

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.

Protein Name

Apolipoprotein A-I(Apo-AI/ApoA-I)

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen



A synthetic peptide corresponding to a sequence at the N-terminus of human APOA1 (42-58aa YVDVLKDSGRDYVSQFE), different from the related mouse and rat sequences by two amino acids.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the apolipoprotein A1/A4/E family.

Anti-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

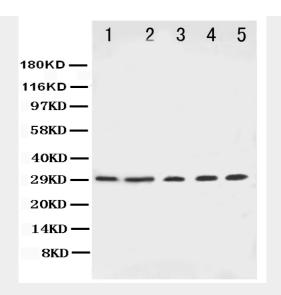
Anti-APOA1 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-APOA1 Antibody - Images





Anti-APOA1 antibody, ABO10623, Western blottingLane 1: MCF-7 Cell LysateLane 2: HELA Cell LysateLane 3: MM453 Cell LysateLane 4: SMMC Cell LysateLane 5: HT1080 Cell Lysate

Anti-APOA1 Antibody - Background

Apolipoprotein A-1, also known as APOA1, is a human protein with a specific role in lipid metabolism. It binds to lipopolysaccharide or endotoxin, and has a major role in the anti-endotoxin function of HDL. The gene is mapped to 11q23. And it is a single polypeptide chain with 243 amino acid residues of known primary amino acid sequence. The ApoA-I protein promotes cholesterol efflux from tissues to the liver for excretion. It is a cofactor for lecithin cholesterolacyltransferase(LCAT) which is responsible for the formation of most plasma cholesteryl esters. ApoA-I was also isolated as a prostacyclin(PGI2) stabilizing factor, and thus may have an anticlotting effect. Defects in the gene encoding it are associated with HDL deficiencies, including Tangier disease, and with systemic non-neuropathic amyloidosis.Additionally, ApoA-I overexpression promotes macrophage-specific reverse cholesterol transport.