

Anti-Apolipoprotein A I APOA1 Antibody Picoband™ (monoclonal, 17G5)

Catalog # ABO14241

Product Information

Application	E
Primary Accession	P02647
Host	Mouse
Isotype	Mouse IgG1
Reactivity	Human
Clonality	Monoclonal
Format	Lyophilized
Description	Anti-Apolipoprotein A I APOA1 Antibody Picoband™ (monoclonal, 17G5) . Tested in ELISA applications. This antibody reacts with Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500 µg/ml.

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 (HGNC:600)
Calculated MW	30778
Application Details	ELISA (Cap), 1-5 µg/ml
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.
Source	Eukaryota
Contents	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Clone Names	Clone: 17G5
Immunogen	E. coli-derived mouse Apolipoprotein A I recombinant protein (Position: D25-Q264). Mouse Apolipoprotein A I shares 64% and 68.6% amino acid (aa)

sequence identity with human and rat Apolipoprotein A I, respectively.

Purification

Affinity-chromatography

Cross Reactivity

No cross-reactivity with other proteins.

Storage

Store at -20 °C for one year from date of receipt. After reconstitution, at 4 °C for one month. It can also be aliquotted and stored frozen at -20 °C for six months. Avoid repeated freeze-thaw cycles.

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

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 is 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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.