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APOO Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13324a

Product Information

Application	WB, IHC-P, E
Primary Accession	Q9BUR5
Other Accession	NP_077027.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB33349
Calculated MW	22285
Antigen Region	9-38

Additional Information

Gene ID	79135
Other Names	Apolipoprotein O, Protein FAM121B, APOO, FAM121B
Target/Specificity	This APOO antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 9-38 amino acids from the N-terminal region of human APOO.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	APOO Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	APOO
Function	Component of the MICOS complex, a large protein complex of the mitochondrial inner membrane that plays crucial roles in the maintenance of crista junctions, inner membrane architecture, and formation of contact sites to the outer membrane. Plays a crucial role in crista junction formation and

	mitochondrial function (PubMed:25764979). Can promote cardiac lipotoxicity by enhancing mitochondrial respiration and fatty acid metabolism in cardiac myoblasts (PubMed:24743151). Promotes cholesterol efflux from macrophage cells. Detected in HDL, LDL and VLDL. Secreted by a microsomal triglyceride transfer protein (MTTP)-dependent mechanism, probably as a VLDL-associated protein that is subsequently transferred to HDL (PubMed:16956892).
Cellular Location	Mitochondrion inner membrane; Single-pass membrane protein. Secreted. Mitochondrion. Golgi apparatus membrane. Endoplasmic reticulum membrane. Note=Exists in three distinct forms: a glycosylated and secreted form, an ER/Golgi-resident form and a non- glycosylated mitochondrial form.
Tissue Location	Expressed in all tissues examined. Up-regulated in diabetic heart.

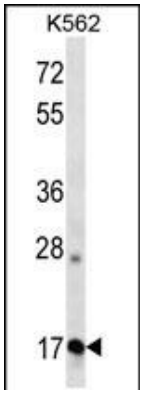
Background

This gene is a member of the apolipoprotein family. Members of this protein family are involved in the transport and metabolism of lipids. The encoded protein associates with HDL, LDL and VLDL lipoproteins and is characterized by chondroitin-sulfate glycosylation. This protein may be involved in preventing lipid accumulation in the myocardium in obese and diabetic patients. Alternative splicing results in multiple transcript variants. Pseudogenes of this gene are found on chromosomes 3, 4, 5, 12 and 16.

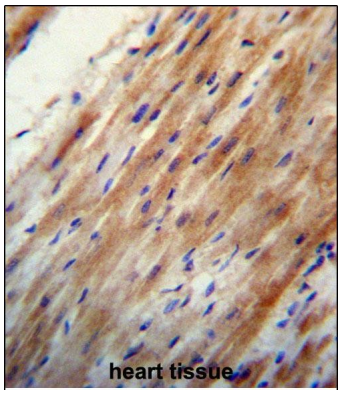
References

Bailey, S.D., et al. Diabetes Care (2010) In press :
Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)
Chapuis, J., et al. Mol. Psychiatry 14(11):1004-1016(2009)
Lamant, M., et al. J. Biol. Chem. 281(47):36289-36302(2006)

Images



APOO Antibody (N-term) (Cat. #AP13324a) western blot analysis in K562 cell line lysates (35ug/lane).This demonstrates the APOO antibody detected the APOO protein (arrow).



APOO Antibody (N-term) (Cat. #AP13324a)immunohistochemistry analysis in formalin fixed and paraffin embedded human heart tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of APOO Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

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