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Apolipoprotein O Rabbit pAb

Catalog # AP96840

Product Information

Application	WB
Primary Accession	Q9BUR5
Other Accession	Q9BUR5
Reactivity	Rat
Predicted	Pig, Human, Mouse, Rabbit, Chicken, Dog, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	22285
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human ApoO/Apolipoprotein O
Epitope Specificity	101-198/198
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the apolipoprotein O family.
Post-translational modifications	O-glycosylation; glycosaminoglycan of chondroitin-sulfate type.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Apolipoproteins are a family of fatty-acid binding proteins that transport fat through the bloodstream in the form of lipoproteins. ApoO (Apolipoprotein O), also known as FAM121B or My025, is a 198 amino acid single-pass membrane protein that belongs to the apolipoprotein family. Expressed ubiquitously with particularly high expression in diabetic heart tissue, apoO functions to promote the transport of cholesterol from macrophage cells and may be involved in regulatory mechanisms that protect lipid accumulation within the heart. ApoO is present in high density lipoproteins (HDLs) and low density lipoproteins (LDLs) and is secreted by an MTP (microsomal triglyceride transfer protein)-dependent mechanism. Two isoforms of apoO exist due to alternative splicing events.

Additional Information

Gene ID	79135
Other Names	FAM121B; MIC26; MICOS26; Mic23; My025; 0610008C08Rik; 1110019O03Rik; MIC26_HUMAN; APOO; Apolipoprotein O; MICOS complex subunit MIC23; Protein FAM121B; MIC26_MOUSE; family with sequence similarity 121B; mitochondrial contact site and cristae organizing system subunit 26
Dilution	WB=1:500-2000

Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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.

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