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ApoO Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1262a

Product Information

Application	WB, IHC, E
Primary Accession	Q9BUR5
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Clone Names	2F1
Isotype	IgG1
Calculated MW	22285
Description	ApoO: apolipoprotein O, also known as MYO25, FAM121B, MGC4825. Entrez Protein NP_077027. It is a chrondroitin-sulfate chain containing member of the apolipoprotein family and is an original glycoprotein up-regulated by diabetes in human Heart. 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. May be involved in myocardium-protective mechanisms against lipid accumulation.
Immunogen	Purified recombinant fragment of ApoO expressed in E. Coli.
Formulation	Ascitic fluid containing 0.03% sodium azide.

Additional Information

Gene ID	79135
Other Names	Apolipoprotein O, Protein FAM121B, APOO, FAM121B
Dilution	WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 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	ApoO Antibody 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.

References

1. J Biol Chem. 2006 Nov 24;281(47):36289-302. 2. Genome Res. 2003 Oct;13(10):2265-70.

Images

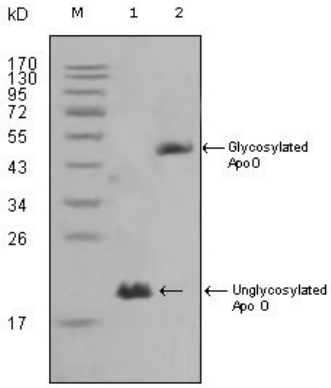

Figure 1: Western blot analysis using ApoO mouse mAb against HepG2 (1) and 3T3L1(2) cell lysate.

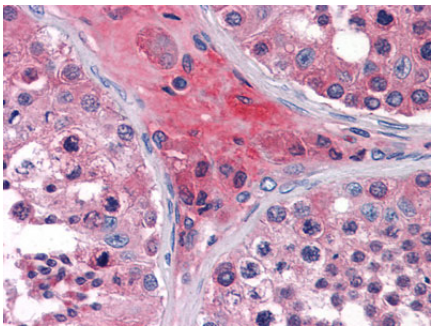

Figure 2: Immunohistochemical analysis of paraffin-embedded human Testis tissues using ApoO mouse mAb

Figure 2: Confocal immunofluorescence analysis of methanol-fixed HEK293 cells trasfected with FGFR4-hIgGFc using FGFR4 mouse mAb(green), showing membrane localization. Blue: DRAQ5 fluorescent DNA dye.

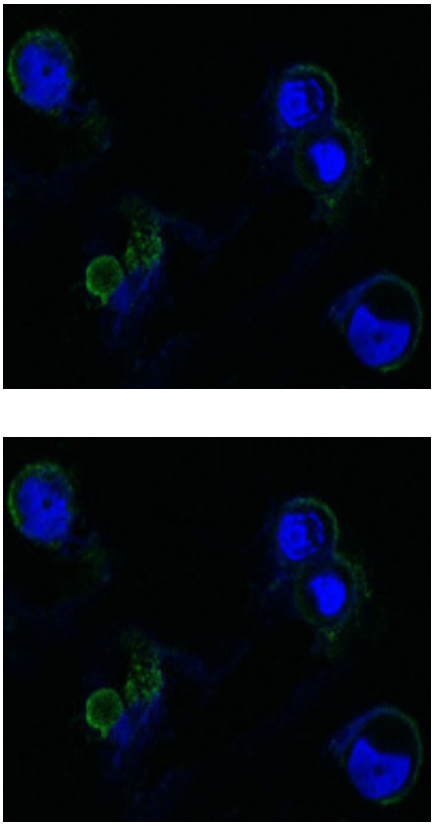

Figure 2: Confocal immunofluorescence analysis of methanol-fixed HEK293 cells trasfected with FGFR4-hIgGFc using anti-FGFR4 monoclonal antioby(green), showing membrane localization. Blue: DRAQ5 fluorescent DNA dye.