

### **ApoO Antibody**

Purified Mouse Monoclonal Antibody Catalog # AO1262a

## **Specification**

### **ApoO Antibody - Product Information**

Application WB, IHC, ICC, IF

Primary Accession Q9BUR5

Reactivity Human, Mouse

Host Mouse
Clonality Monoclonal
Isotype IgG1

Calculated MW 22.2kDa KDa

**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. <br/> />

### **Formulation**

Ascitic fluid containing 0.03% sodium azide.

### **ApoO Antibody - Additional Information**

**Gene ID 79135** 

## **Other Names**

Apolipoprotein O, Protein FAM121B, APOO, FAM121B

### **Dilution**

WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 ICC~~1:200~~1000 IF~~1:200~1000.

# **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.



# **ApoO Antibody - 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:<a href="http://www.uniprot.org/citations/25764979" target="\_blank">25764979</a>). Can promote cardiac lipotoxicity by enhancing mitochondrial respiration and fatty acid metabolism in cardiac myoblasts (PubMed:<a href="http://www.uniprot.org/citations/24743151" target="\_blank">24743151</a>/a>). 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:<a href="http://www.uniprot.org/citations/16956892" target="\_blank">16956892</a>/a>).

#### **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.

## **ApoO Antibody - Protocols**

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## **ApoO Antibody - Images**



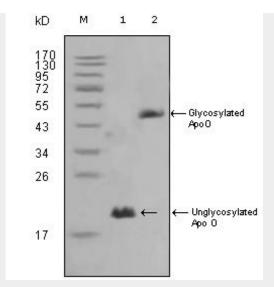


Figure 1: Western blot analysis using ApoO mouse mAb against HepG2 (1) and 3T3L1(2) cell lysate.

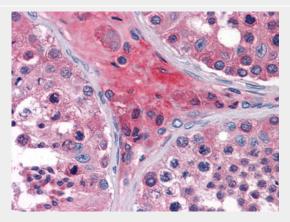


Figure 2: Immunohistochemical analysis of paraffin-embedded human Testis tissues using ApoO mouse mAb

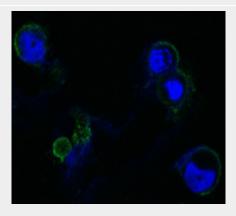


Figure 2: Confocal immunofluorescence analysis of methanol-fixed HEK293 cells trasfected with FGFR4-hlgGFc using FGFR4 mouse mAb(green), showing membrane localization. Blue: DRAQ5 fluorescent DNA dye.



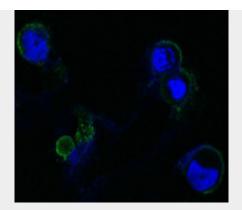


Figure 2: Confocal immunofluorescence analysis of methanol-fixed HEK293 cells trasfected with FGFR4-hlgGFc using anti-FGFR4 monoclonal antioby(green), showing membrane localization. Blue: DRAQ5 fluorescent DNA dye.

# **ApoO Antibody - References**

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