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APOA5 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1037a

Product Information

Application	WB, ICC, E
Primary Accession	Q6Q788
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	2G1H11; 1F1E8
Isotype	IgG1
Calculated MW	41213
Description	Apolipoprotein A5 (ApoA5) is fast gaining attention as a key regulator of serum triglyceride concentrations. An ApoA5 mouse knock-out model produced an approximately four fold increase in serum triglycerides, whereas a knock-in model with human ApoA5 produced 50–70% lower concentrations of mouse serum triglycerides. In addition, peroxisome proliferator-activated receptor- agonists, which are used clinically to lower serum triglyceride concentrations, cause increased ApoA5 mRNA expression. Despite these compelling molecular biology data, relatively little is known about ApoA5 protein in human serum.This antibody pair detected recombinant apoa5 protein in sandwich ELISA format and could be potential reagents for the development of clinical diagnostic kits.
Immunogen	Purified recombinant fragment of human Apoa5 expressed in E. Coli.
Formulation	Purified antibody in PBS containing 0.03% sodium azide.

Additional Information

Gene ID	116519
Other Names	Apolipoprotein A-V, Apo-AV, ApoA-V, Apolipoprotein A5, Regeneration-associated protein 3, APOA5, RAP3
Dilution	WB~~1/500 - 1/2000 ICC~~N/A 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	APOA5 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	APOA5
Synonyms	RAP3
Function	Minor apolipoprotein mainly associated with HDL and to a lesser extent with VLDL. May also be associated with chylomicrons. Important determinant of plasma triglyceride (TG) levels by both being a potent stimulator of apo-CII lipoprotein lipase (LPL) TG hydrolysis and an inhibitor of the hepatic VLDL-TG production rate (without affecting the VLDL-apoB production rate) (By similarity). Activates poorly lecithin:cholesterol acyltransferase (LCAT) and does not enhance efflux of cholesterol from macrophages. Binds heparin (PubMed:17326667).
Cellular Location	Secreted. Early endosome. Late endosome. Golgi apparatus, trans-Golgi network. Note=In the presence of SORL1, internalized to early endosomes, sorted in a retrograde fashion to late endosomes, from which a portion is sent to lysosomes and degradation, another portion is sent to the trans-Golgi network
Tissue Location	Liver and plasma.

References

1．Pennacchio, L， Science 2001. 294, 169-173. 2．Prieur, X. J Biol Chem 2003. 278, 25468-25480.

Images

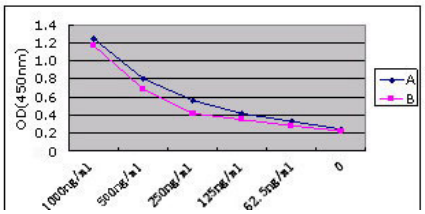

Figure 1: Sandwich ELISA using antibody pair to detect APOA5 protein.

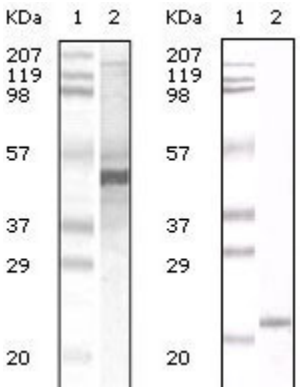

Figure 2: Western blot analysis using Apoa5 mouse mAb against human serum (A) and Apoa5 recombinant protein (B).