

APOA5 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1037a

Specification

APOA5 Antibody - Product Information

Application	IHC, WB
Primary Accession	O6Q788
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1

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.

APOA5 Antibody - Additional Information

Gene ID 116519

Other Names

Apolipoprotein A-V, Apo-AV, ApoA-V, Apolipoprotein A5, Regeneration-associated protein 3, APOA5, RAP3

Dilution

IHC~~1/500 - 1/2000

WB~~1/500 - 1/2000

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.

APOA5 Antibody - 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 sorted to the trans-Golgi network

Tissue Location

Liver and plasma.

APOA5 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

APOA5 Antibody - Images

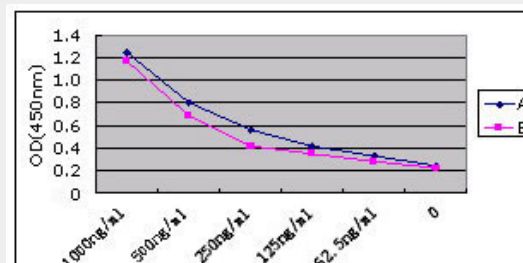


Figure 1: Sandwich ELISA using antibody pair to detect APOA5 protein.

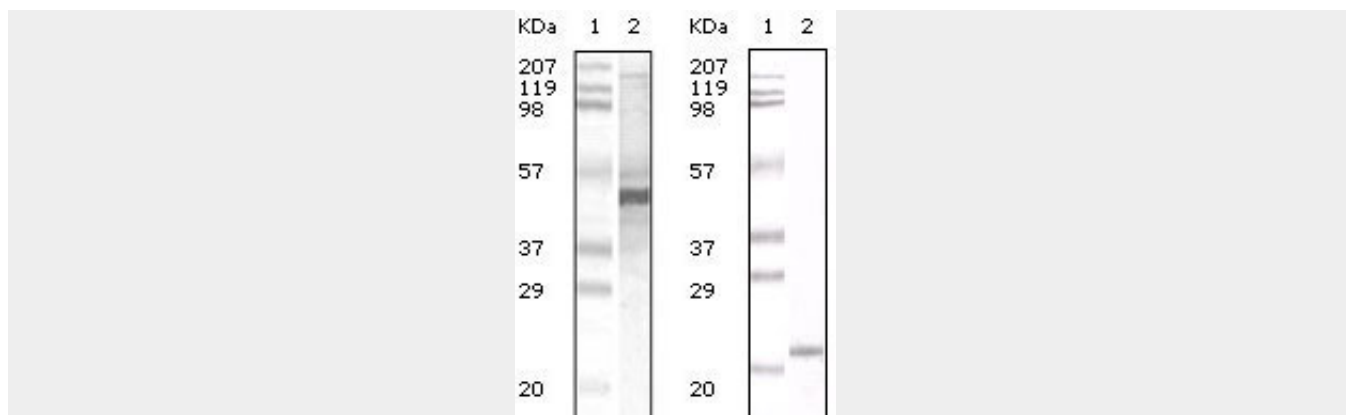


Figure 2: Western blot analysis using ApoA5 mouse mAb against human serum (A) and ApoA5 recombinant protein (B).

APOA5 Antibody - References

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