

Goat Anti-APOA5 Antibody

Peptide-affinity purified goat antibody Catalog # AF1075a

### Specification

# **Goat Anti-APOA5 Antibody - Product Information**

Application Primary Accession Other Accession Reactivity Host Clonality Concentration Isotype Calculated MW WB <u>O6O788</u> <u>NP\_443200</u>, <u>116519</u> Human Goat Polyclonal 100ug/200ul IgG 41213

## **Goat Anti-APOA5 Antibody - Additional Information**

Gene ID 116519

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

Format

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

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** Goat Anti-APOA5 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### **Goat Anti-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:<a href="http://www.uniprot.org/citations/17326667" target=" blank">17326667</a>).

**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

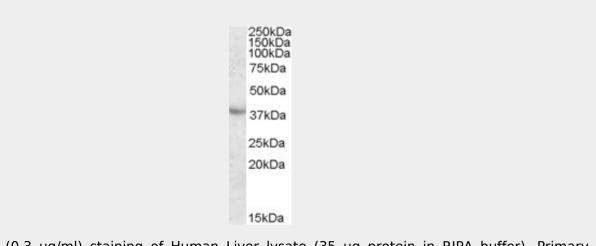
**Tissue Location** Liver and plasma.

## **Goat Anti-APOA5 Antibody - Protocols**

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

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

## Goat Anti-APOA5 Antibody - Images



AF1075a (0.3  $\mu$ g/ml) staining of Human Liver lysate (35  $\mu$ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

### Goat Anti-APOA5 Antibody - Background

The protein encoded by this gene is an apolipoprotein that plays an important role in regulating the plasma triglyceride levels, a major risk factor for coronary artery disease. It is a component of high density lipoprotein and is highly similar to a rat protein that is upregulated in response to liver injury. Mutations in this gene have been associated with hypertriglyceridemia and hyperlipoproteinemia type 5. This gene is located proximal to the apolipoprotein gene cluster on chromosome 11q23. Alternatively spliced transcript variants encoding the same protein have been identified.



## **Goat Anti-APOA5 Antibody - References**

Interactions between the APOA5 -1131T>C and the FEN1 10154G>T polymorphisms on {omega}6 polyunsaturated fatty acids in serum phospholipids and coronary artery disease. Park JY, et al. J Lipid Res, 2010 Aug 27. PMID 20802161.

Association of apolipoprotein A5 gene polymorphisms and serum lipid levels. Li YY, et al. Nutr Metab Cardiovasc Dis, 2010 Aug 12. PMID 20708914.

Association of the apolipoprotein A5 gene -1131 T>C polymorphism with fasting blood lipids: a meta-analysis in 37859 subjects. Zhao T, et al. BMC Med Genet, 2010 Aug 10. PMID 20696075. The apolipoprotein A5 (APOA5) gene predisposes Caucasian children to elevated triglycerides and vitamin E (Four Provinces Study). Guardiola M, et al. Atherosclerosis, 2010 Jul 15. PMID 20688329. Pharmacogenetic analysis of lipid responses to rosuvastatin in Chinese patients. Hu M, et al. Pharmacogenet Genomics, 2010 Oct. PMID 20679960.