

**Anti-Apolipoprotein C-III (GOAT) Antibody**  
**APOLIPOPROTEIN C-III Antibody**  
**Catalog # ASR5073****Specification****Anti-Apolipoprotein C-III (GOAT) Antibody - Product Information**

Host	Goat
Conjugate	Unconjugated
Target Species	Human
Reactivity	Human
Clonality	Polyclonal
Application	WB, IHC, E, IP, I, LCI
Application Note	Anti-Apolipoprotein antibodies have been tested in immunohistochemistry and used for indirect trapping ELISA for quantitation of antigen in serum using a standard curve, immunoprecipitation, immunohistochemistry, and for western blotting for highly sensitive qualitative analysis. When performing immunoblotting assays - do not block with blotto. Blotto formulations tend to contain apoLipoprotein Type C-III and will neutralize antibody activity.
Physical State	Liquid (sterile filtered)
Buffer	0.125 M Sodium Borate, 0.075 M Sodium Chloride, 0.005 M EDTA, pH 8.0
Immunogen	produced from apoLipoprotein Type C-III derived from human plasma
Preservative	0.01% (w/v) Sodium Azide

**Anti-Apolipoprotein C-III (GOAT) Antibody - Additional Information****Gene ID** 345**Other Names**  
345**Purity**

This product has been prepared by immunoaffinity chromatography using immobilized antigens followed by extensive cross-adsorption against other apoLipoproteins and human serum proteins to remove any unwanted specificities. Typically less than 1% cross reactivity against other types of apoLipoprotein was detected by ELISA against purified standards. This antibody reacts with human apoLipoprotein C-III and has negligible cross-reactivity with Type A-I, A-II, B, C-I, C-II, E and J apoLipoproteins. Specific cross reaction of anti-apoLipoprotein antibodies with antigens from other species has not been determined. Non-specific cross reaction of anti-apoLipoprotein antibodies with other human serum proteins is negligible.

**Storage Condition**

Store vial at 4° C prior to opening. This product is stable 4° C as an undiluted liquid. Dilute only

prior to immediate use. For extended storage mix with an equal volume of glycerol, aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing.

#### **Precautions Note**

This product is for research use only and is not intended for therapeutic or diagnostic applications.

### **Anti-Apolipoprotein C-III (GOAT) Antibody - Protein Information**

**Name** APOC3

#### **Function**

Component of triglyceride-rich very low density lipoproteins (VLDL) and high density lipoproteins (HDL) in plasma (PubMed:<a href="http://www.uniprot.org/citations/18201179" target="\_blank">18201179</a>, PubMed:<a href="http://www.uniprot.org/citations/22510806" target="\_blank">22510806</a>). Plays a multifaceted role in triglyceride homeostasis (PubMed:<a href="http://www.uniprot.org/citations/18201179" target="\_blank">18201179</a>, PubMed:<a href="http://www.uniprot.org/citations/22510806" target="\_blank">22510806</a>). Intracellularly, promotes hepatic very low density lipoprotein 1 (VLDL1) assembly and secretion; extracellularly, attenuates hydrolysis and clearance of triglyceride- rich lipoproteins (TRLs) (PubMed:<a href="http://www.uniprot.org/citations/18201179" target="\_blank">18201179</a>, PubMed:<a href="http://www.uniprot.org/citations/22510806" target="\_blank">22510806</a>). Impairs the lipolysis of TRLs by inhibiting lipoprotein lipase and the hepatic uptake of TRLs by remnant receptors (PubMed:<a href="http://www.uniprot.org/citations/18201179" target="\_blank">18201179</a>, PubMed:<a href="http://www.uniprot.org/citations/22510806" target="\_blank">22510806</a>). Formed of several curved helices connected via semiflexible hinges, so that it can wrap tightly around the curved micelle surface and easily adapt to the different diameters of its natural binding partners (PubMed:<a href="http://www.uniprot.org/citations/18408013" target="\_blank">18408013</a>).

#### **Cellular Location**

Secreted

#### **Tissue Location**

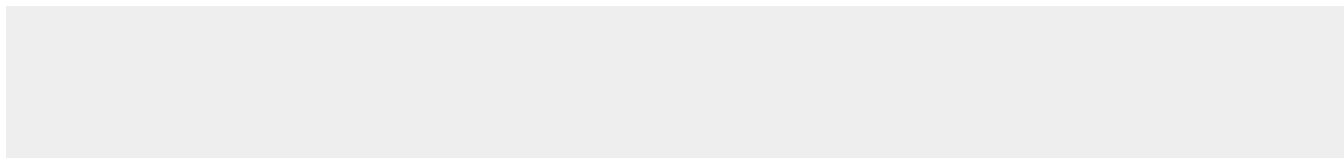
Liver..

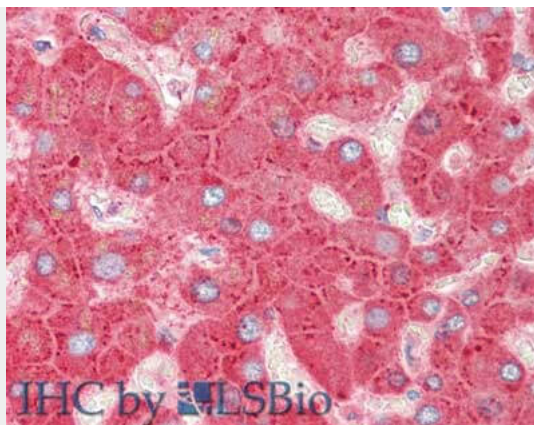
### **Anti-Apolipoprotein C-III (GOAT) Antibody - Protocols**

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](#)

### **Anti-Apolipoprotein C-III (GOAT) Antibody - Images**





Immunohistochemistry of goat anti-Apolipoprotein C-III antibody. Tissue: human liver. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: Apolipoprotein C-III at 2.5 µg/mL for 1 h at RT. Secondary antibody: Peroxidase goat secondary antibody at 1:10,000 for 45 min at RT. Staining: Apolipoprotein C-III as precipitated red signal with hematoxylin purple nuclear counterstain.

#### **Anti-Apolipoprotein C-III (GOAT) Antibody - Background**

Anti Apolipoprotein C-III antibody recognizes the gene product of APOC. Apolipoprotein C-III is a protein component of very low density lipoprotein (VLDL). APOC3 inhibits lipoprotein lipase and hepatic lipase; it is thought to inhibit hepatic uptake of triglyceride-rich particles. The APOA1, APOC3 and APOA4 genes are closely linked in both rat and human genomes. The A-I and A-IV genes are transcribed from the same strand, while the A-1 and C-III genes are convergently transcribed. An increase in apoC-III levels induces the development of hypertriglyceridemia. This antibody is suitable for cardiovascular research.