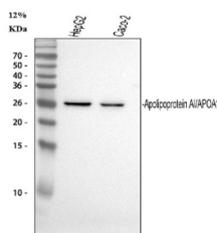


## APOA1 Antibody Mouse Monoclonal [clone 17G5] (FY12602)

Catalog No.	Formulation	Size
FY12602	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml	100 ug

[Bulk quote request](#)

<b>Availability</b>	1-2 days
<b>Species Reactivity</b>	Human
<b>Format</b>	Lyophilized
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal (mouse origin)
<b>Isotype</b>	Mouse IgG1
<b>Clone Name</b>	17G5
<b>Purity</b>	Affinity-chromatography
<b>Buffer</b>	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na <sub>2</sub> HPO <sub>4</sub> , 0.05mg NaN <sub>3</sub> .
<b>UniProt</b>	P02647
<b>Applications</b>	ELISA : 1-5ug/ml (Capture) Western Blot : 0.25-0.5ug/ml
<b>Limitations</b>	This APOA1 antibody is available for research use only.



Western blot analysis of APOA1 using anti-APOA1 antibody. Electrophoresis was performed on a 12% SDS-PAGE gel at 80V (Stacking gel) / 120V (Resolving gel) for 2 hours. Lane 1: human HepG2 whole cell lysates, Lane 2: human CACO-2 whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with mouse anti-APOA1 antibody at 0.5 ug/ml overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-mouse IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an ECL Plus Western Blotting Substrate with Tanon 5200 system. Western blot probed with anti-APOA1 shows a major band at ~25 kDa, lower than the predicted ~31 kDa, consistent with the known anomalous migration of the amphipathic APOA1 protein on SDS-PAGE.

### Description

APOA1 antibody recognizes Apolipoprotein A1, the principal protein component of high-density lipoprotein particles encoded by the APOA1 gene. Also referred to as Apolipoprotein A I and ApoA-I, this secreted plasma protein plays a central role in reverse cholesterol transport by mediating the removal of excess cholesterol from peripheral tissues to the liver for metabolism and excretion. APOA1 antibody is widely used in research focused on lipid metabolism, cardiovascular biology, and hepatic protein expression.

Apolipoprotein A1 is synthesized primarily in hepatocytes and intestinal enterocytes and is secreted into the bloodstream, where it associates with phospholipids to form nascent HDL particles. The protein contains amphipathic alpha-helical domains that enable lipid binding and interaction with ATP-binding cassette transporters such as ABCA1. Through activation of lecithin-cholesterol acyltransferase, ApoA-I facilitates cholesterol esterification and HDL maturation. APOA1 antibody supports investigation of these pathways in serum samples, liver tissue, and in vitro systems modeling lipid homeostasis.

Alterations in APOA1 expression and circulating ApoA-I levels have been associated with atherosclerosis, coronary artery disease, metabolic syndrome, and inflammatory disorders. Reduced HDL-associated ApoA-I concentrations are correlated with increased cardiovascular risk, whereas higher levels are generally considered protective in epidemiological studies. In addition to its lipid transport functions, Apolipoprotein A1 has been implicated in anti-inflammatory and antioxidant activities. Immunostaining typically demonstrates cytoplasmic localization in hepatocytes and extracellular distribution in vascular or plasma-associated compartments, consistent with its synthesis and secretion. This mouse monoclonal (clone 17G5) APOA1 antibody is suitable for detecting Apolipoprotein A1 in research applications investigating lipid transport, HDL biology, and liver-associated metabolic pathways.

## Application Notes

Optimal dilution of the APOA1 antibody should be determined by the researcher.

## Immunogen

E. coli-derived mouse Apolipoprotein A I recombinant protein (Position: D25-Q264) was used as the immunogen for the APOA1 antibody.

## Storage

After reconstitution, the APOA1 antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.