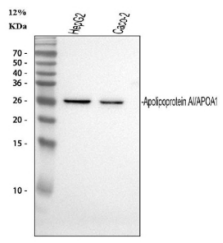
APOA1 Antibody 17G5 / HDL Apolipoprotein Antibody [clone 17G5] (FY12602)

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

Availability	1-2 days
Species Reactivity	Human
Format	Lyophilized
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1
Clone Name	17G5
Purity	Affinity-chromatography
Buffer	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
UniProt	P02647
Applications	ELISA: 1-5ug/ml (Capture) Western Blot: 0.25-0.5ug/ml
Limitations	This APOA1 Antibody 17G5 / HDL Apolipoprotein Antibody is available for research use only.



APOA1 Antibody 17G5 / HDL Apolipoprotein Antibody in HepG2 and CACO-2 Cells WB. Western blot testing of human HepG2 hepatocellular carcinoma and CACO-2 colorectal adenocarcinoma cell lysates with APOA1 Antibody clone 17G5 shows a predominant ApoA-I band at approximately 25 kDa in both samples. Lane 1: HepG2; Lane 2: CACO-2. Although the calculated molecular weight of mature ApoA-I is approximately 28 kDa, ApoA-I can exhibit anomalous migration during SDS-PAGE because of its amphipathic structure, consistent with the lower apparent molecular weight observed here.

Description

APOA1 Antibody 17G5 / HDL Apolipoprotein Antibody recognizes apolipoprotein A-I (ApoA-I), the major protein component of high-density lipoprotein (HDL) particles. Encoded by the APOA1 gene, ApoA-I is a secreted apolipoprotein with a central role in lipid transport and cholesterol homeostasis. The protein contains amphipathic alpha-helical regions

that enable interactions with phospholipids and contribute to the formation and structural organization of HDL particles.

ApoA-I is synthesized primarily by the liver and intestine and released into circulation, where it participates in reverse cholesterol transport. Lipid-poor ApoA-I interacts with the ATP-binding cassette transporter ABCA1 to acquire cellular cholesterol and phospholipids, generating nascent HDL particles. ApoA-I also serves as an important activator of lecithin-cholesterol acyltransferase (LCAT), which converts free cholesterol to cholesteryl esters and promotes HDL particle maturation. These functions make APOA1 an important target in studies of lipoprotein metabolism and cholesterol trafficking.

Beyond its structural role in HDL, ApoA-I has been investigated for its relationship to cardiovascular and metabolic biology. Changes in APOA1 expression or circulating ApoA-I concentrations have been associated with altered HDL metabolism, atherosclerosis, coronary artery disease, metabolic disorders, and inflammatory processes. ApoA-I-containing particles can influence cholesterol removal from macrophages and other peripheral cells, connecting HDL biology with mechanisms involved in vascular lipid accumulation and cellular cholesterol balance.

Clone 17G5 is a mouse monoclonal antibody generated against recombinant Apolipoprotein A-I. The APOA1 Antibody provides a clone-specific reagent for research examining ApoA-I protein expression and HDL-associated biology. Its recognition of a major HDL apolipoprotein makes it useful for studies involving cholesterol transport, lipoprotein formation, and metabolic regulation.

NSJ Bioreagents offers this HDL Apolipoprotein Antibody for researchers studying ApoA-I and the molecular processes governing lipid homeostasis. An APOA1 Antibody can help investigate the relationship between apolipoprotein expression, HDL biology, cholesterol transport, and metabolic function.

For a broadly validated polyclonal option, see our APOA1 Antibody / Apolipoprotein A1 Antibody page.

Application Notes

Optimal dilution of the APOA1 Antibody 17G5 / HDL Apolipoprotein 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 17G5.

Storage

After reconstitution, the APOA1 Antibody 17G5 can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

APOA1 antibody, Apolipoprotein A1 antibody, Apolipoprotein A-I antibody, ApoA-I antibody, ApoA1 antibody, HDL apolipoprotein antibody

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