

Rabbit Anti-Apolipoprotein CII/APOC2 antibody

SL12497R

Product Name:	Apolipoprotein CII/APOC2
Chinese Name:	载LipoproteinC2抗体
Alias:	APC 2; APC2; Apo CII; APOC 2; ApoC II; apoC-II; APOC2; APOC2 protein; ApoCII; Apolipoprotein C II; Apolipoprotein C II precursor; ApolipoproteinCII; MGC75082;
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	9kDa
Cellular localization:	Secretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Apolipoprotein CII/APOC2:31-101/101
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	Apolipoproteins are protein components of plasma lipoproteins (1). The apolipoprotein C gene family encodes four homologous proteins designated apoC-I to -IV, which specifically modulate the metabolism of triglyceride-rich lipoproteins (2). The human apoC-I gene maps to chromosome 19q13.2 and is expressed primarily in the liver where it is activated when monocytes differentiate into macrophages (3,4). The human apoC-II

gene maps to chromosome 19q13.2 and encodes a 79 amino acid single chain protein that is a necessary cofactor for the activation of lipoprotein lipase, the enzyme that hydrolyzes triglycerides in plasma and transfers the fatty acids to tissues (5–7). The human apoC-III gene maps to chromosome 11q23 and encodes a protein that may delay catabolism of triglyceride-rich particles by inhibiting lipoprotein lipase and hepatic lipase (8). The human apoC-IV gene maps to chromosome 19q13.2 and encodes a 127 amino acid protein that is primarily expressed in the liver (9,10).

Function:

At least 9 distinct polymorphic forms of apolipoproteins are known. The apolipoproteins act as stabilizers of the intact lipoprotein particles. Quantitative measurements of HDL, LDL and VLDL particles in human serum are often used to estimate an individuals' relative risk of coronary heart disease. In addition, quantitative immunological measurements of certain apolipoproteins (especially A-1 and B) have been suggested to be more accurate estimators of coronary heart disease than measurements of lipoprotein particles (especially HDL and LDL). Apolipoprotein C-II (apoCII) is in found in chylomicrons (large lipoprotein particles absorbed from the gastrointestinal tract) and VLDL (large lipoproteins that are broken down to eventually form LDL). ApoCII activates the enzyme lipoprotein lipase, which hydrolyzes triglycerides and thus provides free fatty acids for cells.

Subcellular Location:

Secreted

Tissue Specificity:

Secreted in plasma.

DISEASE:

Defects in APOC2 are the cause of hyperlipoproteinemia type 1B (HLPP1B) [MIM:207750]. It is an autosomal recessive trait characterized by hypertriglyceridemia, xanthomas, and increased risk of pancreatitis and early atherosclerosis.

Similarity:

Belongs to the apolipoprotein C2 family.

SWISS:

P02655

Gene ID:

344

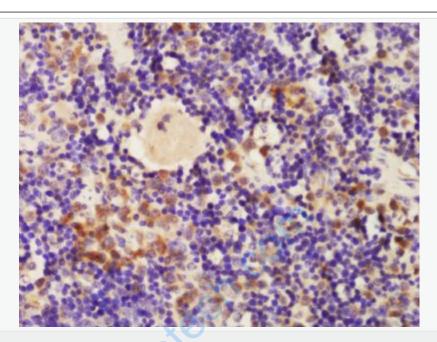
Database links:

UniProtKB/Swiss-Prot: P02655.1

Important Note:

This product as supplied is intended for research use only, not for use in human,

therapeutic or diagnostic applications.

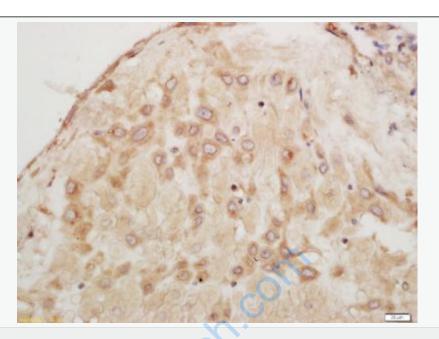


Picture:

Tissue/cell: mouse spleen tissue; 4% Paraformaldehyde-fixed and paraffinembedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min;

Incubation: Anti-APC 2 Polyclonal Antibody, Unconjugated(SL12497R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



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