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Rabbit Anti-APOA1 antibody

SL0849R

Product Name:	APOA1
Chinese Name:	载LipoproteinA1抗体
Alias:	Apo-AI; ApoA I; ApoA-I; APOA1_HUMAN; Apolipoprotein A-I(1-242); Apolipoprotein A1; Apolipoprotein A 1; Apolipoprotein AI; Apolipoprotein A I; Brp14; Ltw1; Lvtw1; Sep1; Sep2.
文献引用 PubMed :	**Specific References(4)**|SL0849R has been referenced in 4 publications. **[IF=3.73]**Hibert P, Prunier-Mirebeau D, Beseme O, Chwastyniak M, Tamareille S, et al. (2013) Apolipoprotein A-I Is a Potential Mediator of Remote Ischemic Preconditioning. PLoS ONE 8(10): e77211**Rat**. PubMed:24155931 **[IF=2.91]**Liu, Qian, et al. "Proteomic Study on Usnic Acid-induced Hepatotoxicity in Rats." Journal of agricultural and food chemistry (2012).**WB;Rat**. PubMed:22758371 **[IF=1.75]**Wu, Chun-Yan, et al. "Comparative proteome analysis of abdominal adipose tissues between fat and lean broilers." Proteome Science 14.1 (2016): 9.**WB;Chicken**. PubMed:0 **[IF=1.38]**Zhang, Pengfei, et al. "Proteome analysis of egg yolk after exposure to zinc oxide nanoparticles." Theriogenology (2017).**WB;Chicken**. PubMed:28460670
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Pig,Cow,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-

	Cyt=1μg/TestIF=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:	28kDa
Cellular localization:	Secretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human APOA1:51-150/267
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:	PubMed
Product Detail:	This gene encodes apolipoprotein A-I, which is the major protein component of high density lipoprotein (HDL) in plasma. The protein promotes cholesterol efflux from tissues to the liver for excretion, and it is a cofactor for lecithin cholesterolacyltransferase (LCAT) which is responsible for the formation of most plasma cholesteryl esters. This gene is closely linked with two other apolipoprotein genes on chromosome 11. Defects in this gene are associated with HDL deficiencies, including Tangier disease, and with systemic non-neuropathic amyloidosis. [provided by RefSeq, Jul 2008] **Function:** Participates in the reverse transport of cholesterol from tissues to the liver for excretion by promoting cholesterol efflux from tissues and by acting as a cofactor for the lecithin cholesterol acyltransferase (LCAT). As part of the SPAP complex, activates spermatozoa motility. **Subunit:** Interacts with APOA1BP and CLU. Component of a sperm activating protein complex (SPAP), consisting of APOA1, an immunoglobulin heavy chain, an immunoglobulin light chain and albumin. Interacts with NDRG1. **Subcellular Location:** Secreted. **Tissue Specificity:** Major protein of plasma HDL, also found in chylomicrons. Synthesized in the liver and small intestine. The oxidized form at Met-110 and Met-136 is increased in individuals with increased risk for coronary artery disease, such as in carrier of the eNOSa/b genotype and exposure to cigarette smoking. It is also present in increased levels in aortic lesions relative to native ApoA-I and increased levels are seen with increasing severity of disease.

Post-translational modifications:
Palmitoylated.
Met-110 and Met-136 are oxidized to methionine sulfoxides.
Phosphorylation sites are present in the extracelllular medium.

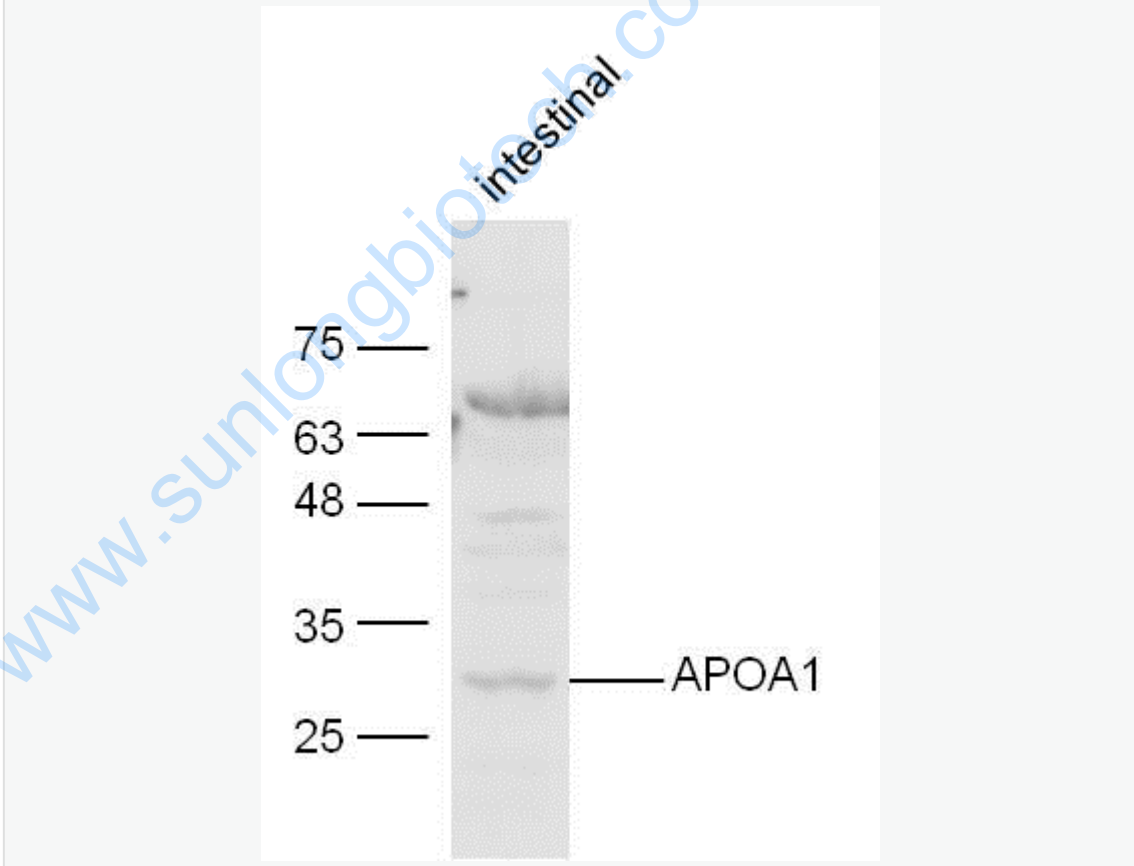
DISEASE:
Defects in APOA1 are a cause of high density lipoprotein deficiency type 2 (HDLD2) [MIM:604091]; also known as familial hypoalphalipoproteinemia (FHA). Inheritance is autosomal dominant.
Defects in APOA1 are a cause of the low HDL levels observed in high density lipoprotein deficiency type 1 (HDLD1) [MIM:205400]; also known as analphalipoproteinemia or Tangier disease (TGD). HDLD1 is a recessive disorder characterized by the absence of plasma HDL, accumulation of cholesteryl esters, premature coronary artery disease, hepatosplenomegaly, recurrent peripheral neuropathy and progressive muscle wasting and weakness. In HDLD1 patients, ApoA-I fails to associate with HDL probably because of the faulty conversion of pro-ApoA-I molecules into mature chains, either due to a defect in the converting enzyme activity or a specific structural defect in Tangier ApoA-I.
Note=A mutation in APOA1 is the cause of amyloid polyneuropathy-nephropathy Iowa type (AMYLIOWA); also known as amyloidosis van Allen type or familial amyloid polyneuropathy type III. AMYLIOWA is a hereditary generalized amyloidosis due to deposition of amyloid mainly constituted by apolipoprotein A1. The clinical picture is dominated by neuropathy in the early stages of the disease and nephropathy late in the course. Death is due in most cases to renal amyloidosis. Severe peptic ulcer disease can occurr in some and hearing loss is frequent. Cataracts is present in several, but vitreous opacities are not observed.
Defects in APOA1 are a cause of amyloidosis type 8 (AMYL8) [MIM:105200]; also known as systemic non-neuropathic amyloidosis or Ostertag-type amyloidosis. AMYL8 is a hereditary generalized amyloidosis due to deposition of apolipoprotein A1, fibrinogen and lysozyme amyloids. Viscera are particularly affected. There is no involvement of the nervous system. Clinical features include renal amyloidosis resulting in nephrotic syndrome, arterial hypertension, hepatosplenomegaly, cholestasis, petechial skin rash.

Similarity:
Belongs to the apolipoprotein A1/A4/E family.

SWISS:
P02647

Gene ID:
335

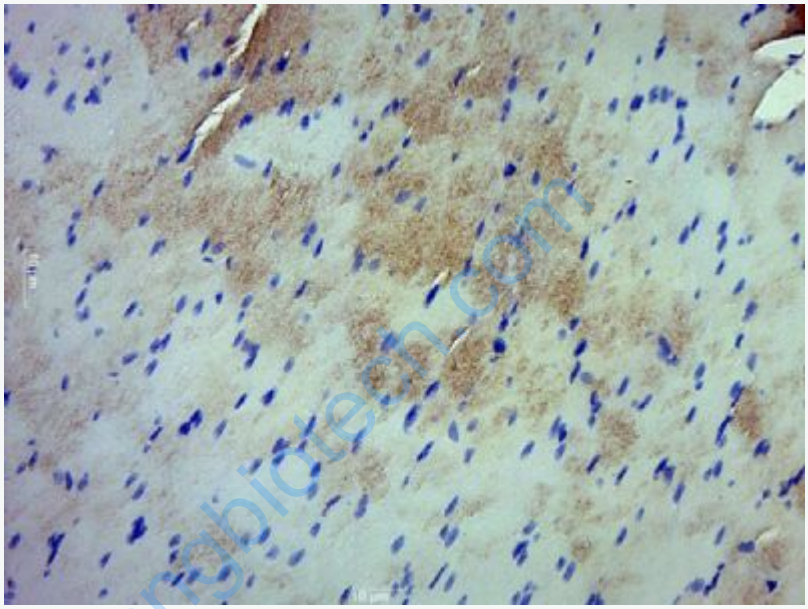
Database links:

	Entrez Gene: 335 Human Omim: 107680 Human SwissProt: P02647 Human Unigene: 93194 Human **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Picture:	 Sample: intestinal (Mouse) Lysate at 40 ug Primary: Anti-APOA1 (SL0849R) at 1/300 dilution

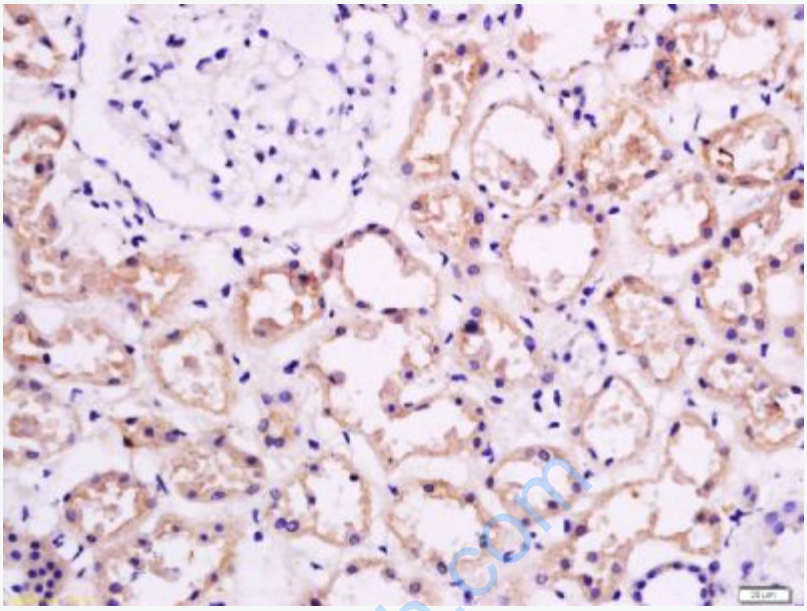
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 28 kD

Observed band size: 28 kD



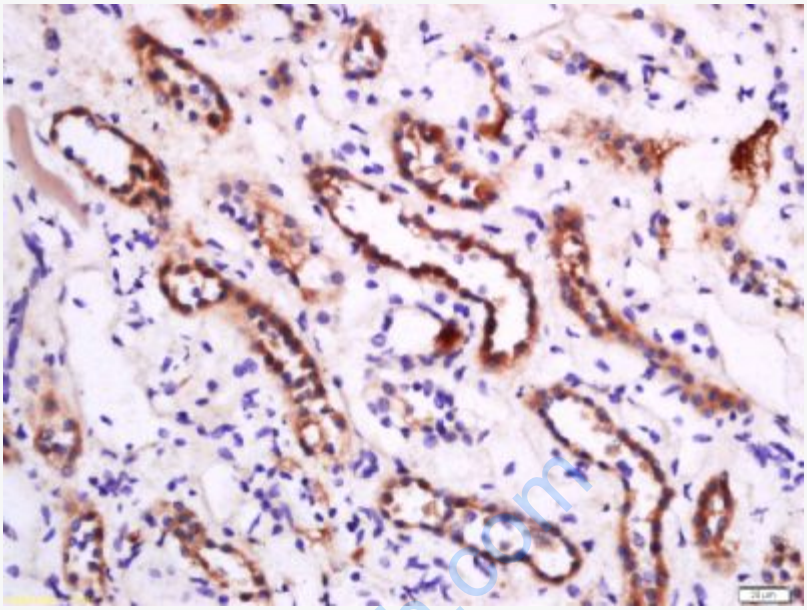
Paraformaldehyde-fixed, paraffin embedded (Rat skeletal muscle); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (APOA1) Polyclonal Antibody, Unconjugated (SL0849R) at 1:500 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



Tissue/cell: Human kidney tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

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℃ for 20 min;

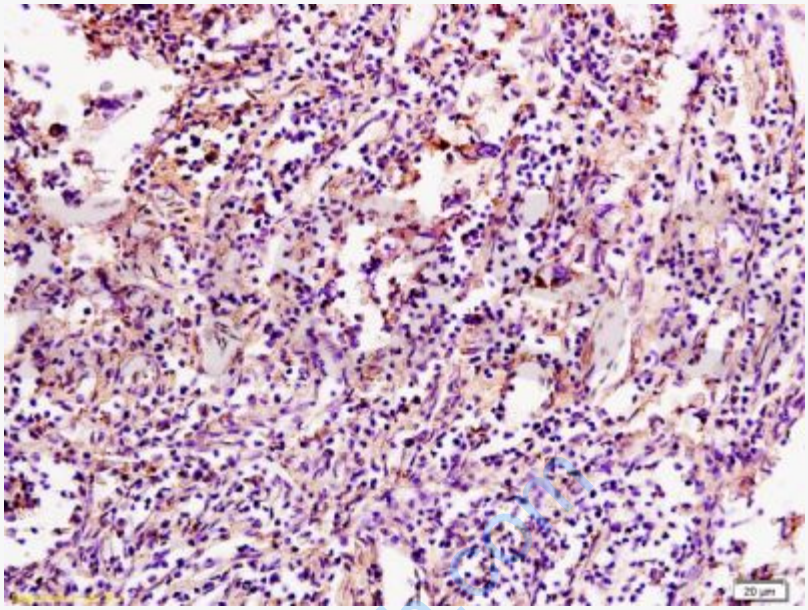
Incubation: Anti-APOA1 Polyclonal Antibody, Unconjugated(SL0849R) 1:400, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: human kidney tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

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℃ for 20 min;

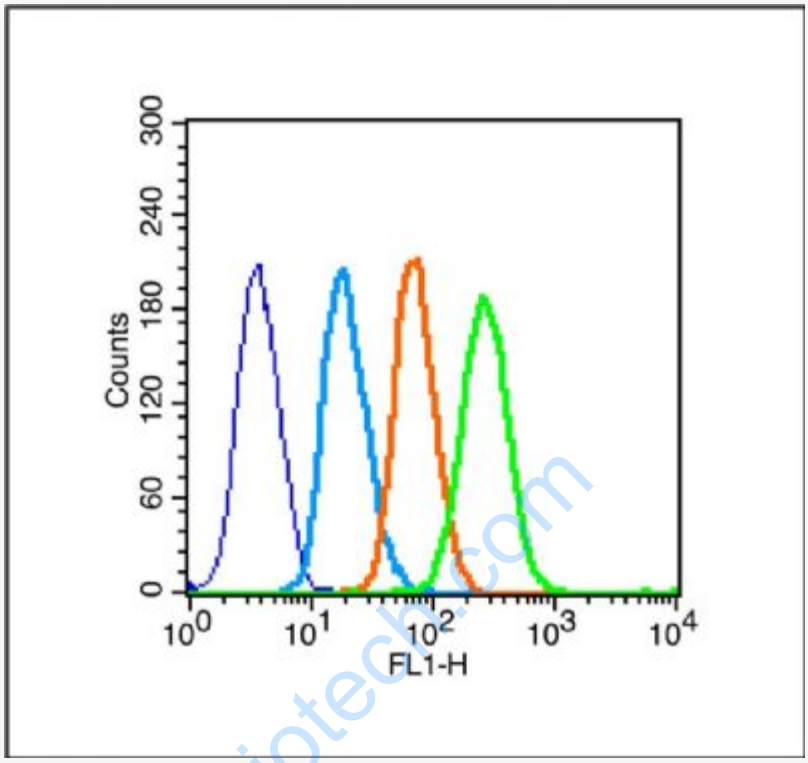
Incubation: Anti-APOA1 Polyclonal Antibody, Unconjugated(SL0849R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: chicken intestine tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

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℃ for 20 min;

Incubation: Anti-APOA1 Polyclonal Antibody, Unconjugated(SL0849R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Blank control (Black line): Raji (Black).

Primary Antibody (green line): Rabbit Anti-APOA1 antibody (SL0849R)

Dilution: 1μg /10^6 cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody (white blue line): Goat anti-rabbit IgG-PE

Dilution: 1μg /test.

Protocol

The cells were fixed with 70% ice-cold methanol overnight at -20℃ and then permeabilized with 0.1% PBS-Tween for 20 min at room temperature. Cells stained with Primary Antibody for 30 min at room temperature. The cells were then incubated in 1 X PBS/2%BSA/10% goat serum to block non-specific protein-protein interactions followed by the antibody for 15 min at room temperature. The

	secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.