



Rabbit Anti-Lipoprotein lipase antibody

SL1973R

Product Name:	Lipoprotein lipase
Chinese Name:	Lipoprotein脂酶抗体
Alias:	Lipoprotein lipase; LIPD; LIPL_HUMAN; LPL; LPL protein; EC 3.1.1; EC 3.1.1.34; HDLCQ11; LPL; LPL protein; MGC137861.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Pig,Cow,Rabbit,Sheep,Guinea Pig,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=0.2μg /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:	52kDa
Cellular localization:	cytoplasmicThe cell membraneSecretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human LPL:401-475/475
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:	Lipoprotein lipase (LPL) is the central enzyme in plasma triglyceride hydrolysis and is secreted by macrophages in the subendothelial space. Evidence has been provided that LPL produced by macrophages in the vessel wall exerts proatherogenic effects. The atherogenic effects of LPL have been mainly attributed to its ability to favor lipid accumulation within macrophages present in the atherosclerotic lesion. Recently, it has also been shown that LPL promote the development of atherosclerosis through

facilitation of monocyte adhesion to endothelial cells, stimulation of tumor necrosis factor alpha (TNF) secretion and induction of vascular smooth muscle cell proliferation.

Function:

Actin-binding protein. Plays a role in the activation of T-cells in response to costimulation through TCR/CD3 and CD2 or CD28. Modulates the cell surface expression of IL2RA/CD25 and CD69.

Subunit:

Homodimer. Interacts with APOC2; the interaction activates LPL activity in the presence of lipids. Interacts with GPIHBP1.

Subcellular Location:

Cell membrane; Lipid-anchor, GPI-anchor. Secreted. Note=Locates to the plasma membrane of microvilli of hepatocytes with triacyl-glycerol-rich lipoproteins (TRL). Some of the bound LPL is then internalized and located inside non-coated endocytic vesicles.

Tissue Specificity:

Detected in intestinal microvilli, hair cell stereocilia, and fibroblast filopodia, in spleen and other lymph node-containing organs. Expressed in peripheral blood T lymphocytes, neutrophils, monocytes, B lymphocytes, and myeloid cells.

Post-translational modifications:

Tyrosine nitration after lipopolysaccharide (LPS) challenge down-regulates the lipase activity.

DISEASE:

Defects in LPL are the cause of lipoprotein lipase deficiency (LPL deficiency) [MIM:238600]; also known as familial chylomicronemia or hyperlipoproteinemia type I. LPL deficiency chylomicronemia is a recessive disorder usually manifesting in childhood. On a normal diet, patients often present with abdominal pain, hepatosplenomegaly, lipemia retinalis, eruptive xanthomata, and massive hypertriglyceridemia, sometimes complicated with acute pancreatitis.

Similarity:

Belongs to the AB hydrolase superfamily. Lipase family. Contains 1 PLAT domain.

SWISS:

P06858

Gene ID:

4023

Database links:

[Entrez Gene: 280843](#)Cow

[Entrez Gene: 4023](#)Human

[Entrez Gene: 16956](#)Mouse

[Omim: 238600](#)Human

[SwissProt: P11151](#)Cow

[SwissProt: P06858](#)Human

[SwissProt: P11152](#)Mouse

[Unigene: 180878](#)Human

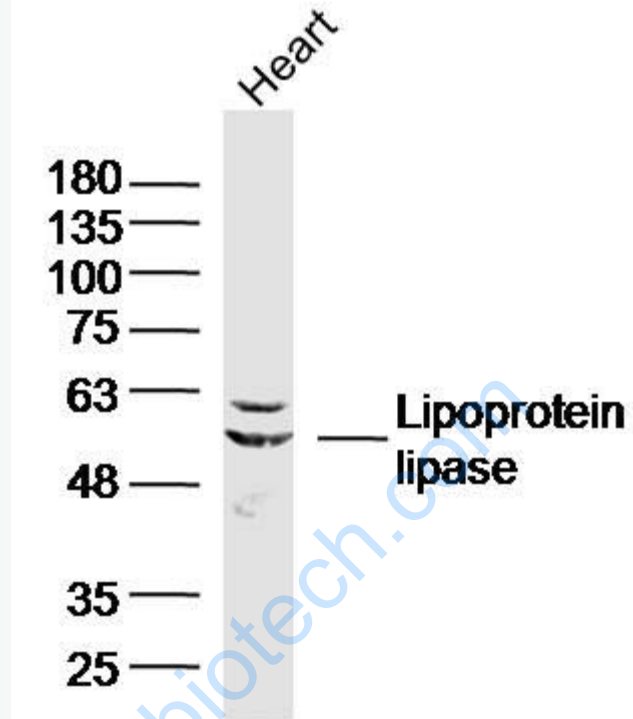
[Unigene: 1514](#)Mouse

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Lipoprotein脂酶(lipoprotein lipase, LPL)是甘油三酯降解为甘油和游离脂肪酸(FFA)反应的限速酶,是脂肪细胞、心肌细胞、骨骼肌细胞、乳腺细胞以及巨噬细胞等实质细胞合成和分泌的一种glycoprotein与机体的脂质代谢及肥胖与否密切相关.近年来研究认为:LPL可通过粘附作用,促进了单核细胞vascular endothelial cell及Tumour坏死因子(TNF)的分泌、血管平滑肌细胞增殖等因素,导致动脉粥样硬化的加重。

Picture:



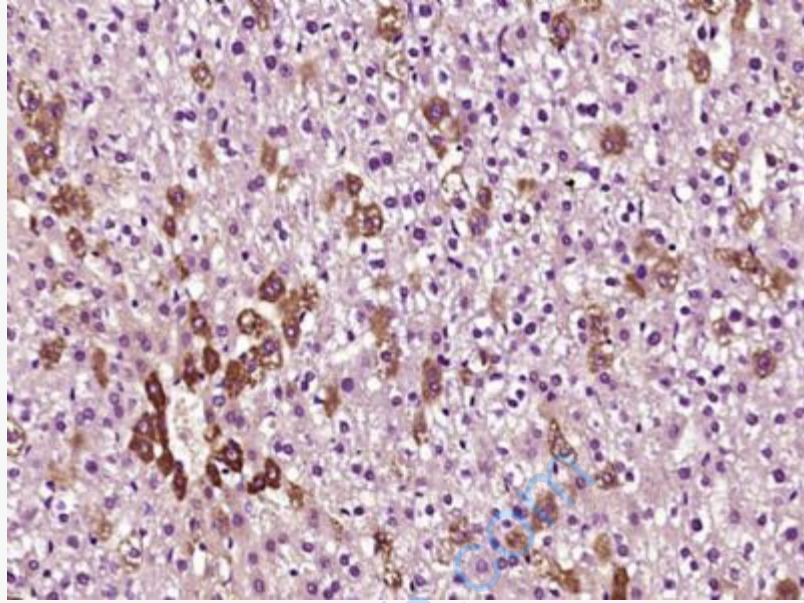
Sample: Heart (Mouse) Lysate at 40 ug

Primary: Anti-Lipoprotein lipase (SL1973R) at 1/300 dilution

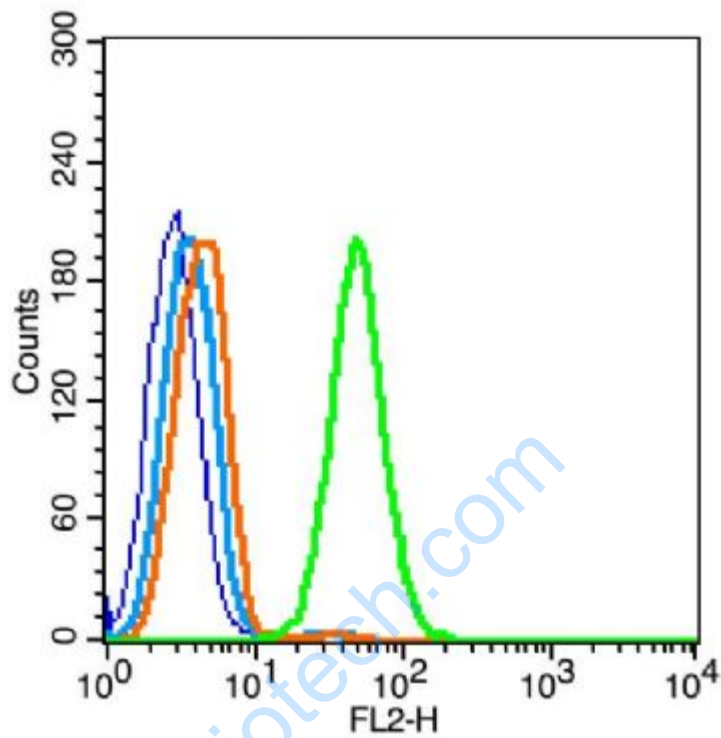
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 52kD

Observed band size: 55kD



Paraformaldehyde-fixed, paraffin embedded (Rat liver); 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 (Lipoprotein lipase) Polyclonal Antibody, Unconjugated (SL1973R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Blank control (blue line): raji (fixed with pre-warmed 4% paraformaldehyde for 30min at 37°C and then permeabilized with 90% ice-cold methanol for 30 min on ice)

Primary Antibody (green line): Rabbit Anti-Lipoprotein lipase antibody (SL1973R);
Dilution: 0.2µg /10⁶ cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody (white blue line): Goat anti-rabbit IgG-PE; Dilution: 1µg /test.