

## Rabbit Anti-Perilipin 1 antibody

SL10779R

Product Name:	Perilipin 1
Chinese Name:	脂滴包被蛋白Perilipin-A抗体 A A A A A A A A A A A A A A A A A A
Alias:	Lipid droplet associated protein; Lipid droplet-associated protein; PERI; Perilipin;
	Perilipin-1; Perilipin 1; PerilipinA; Perilipin-A; PLIN; PLIN1; PLIN1_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Pig,Cow,Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000Flow-Cyt=5µg/Test
	not yet tested in other applications.
	optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	57kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human IFNAR2:331-430/522
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:	Perilipins, members of the PAT protein family (named after lipid droplet proteins
	Perilipin, Adipophilin, and TIP47) are found exclusively at the surface of lipid droplets
	in adipocytes and steroidogenic cells. They have been suggested to function as
	regulators of lipolysis and triacylglycerol storage within adipose tissue. Four distinct
	isoforms ranging from perilipin A (57 kDa) to perilipin D (26 kDa) have been identified
	and they share an identical amino terminal sequences, and contain 2-6 consensus
	protein kinase A (PKA) phosphorylation sites. Perilipin C and D have been detected

only in steroidogenic cells. Perilipin A is the most abundant form on the lipid droplets of adipocytes. The phosphorylation of perilipin by PKA, which is accompanied by the phosphorylation and translocation of hormone-sensitive lipase from the cytosol to the lipid droplets, promotes lipolysis. There is evidence for the presence of perilipin A in atheroma plaques suggesting that the protein may be involved in the development of therosclerosis by controlling as in adipocytes the hydrolysis of stored lipids.

### **Function:**

Modulator of adipocyte lipid metabolism. Coats lipid storage droplets to protect them from breakdown by hormone-sensitive lipase (HSL). Its absence may result in leanness.

Subunit: Interacts with ABHD5.

Subcellular Location: Lipid droplet. Note=Lipid droplet surface-associated.

Tissue Specificity: Adipocytes.

## Post-translational modifications:

Major cAMP-dependent protein kinase-substrate in adipocytes, also dephosphorylated by PP1. When phosphorylated, may be maximally sensitive to HSL and when unphosphorylated, may play a role in the inhibition of lipolysis, by acting as a barrier in lipid droplet.

#### **DISEASE:**

Defects in PLIN1 are the cause of familial partial lipodystrophy type 4 (FPLD4) [MIM:613877]. FPLD4 is a form of lipodystrophy characterized by loss of subcutaneous adipose tissue primarily affecting the lower limbs, insulin-resistant diabetes mellitus, hypertriglyceridemia, and hypertension.

Similarity:

Belongs to the perilipin family.

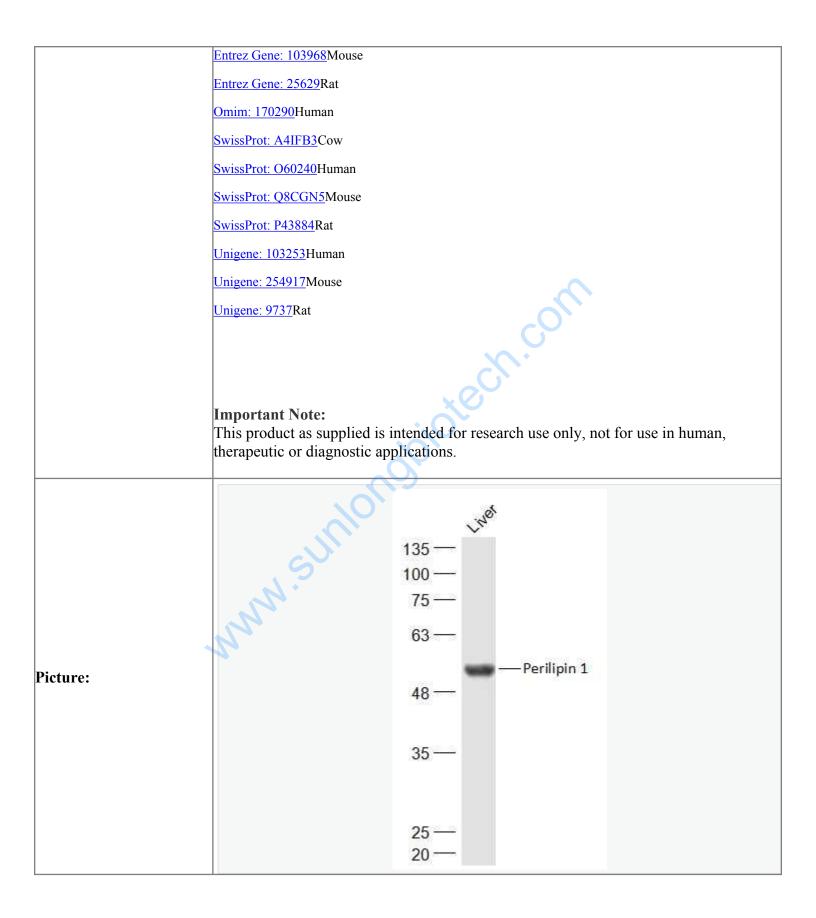
# SWISS: 060240

**Gene ID:** 5346

Database links:

Entrez Gene: 520598Cow

Entrez Gene: 5346Human



Sample:

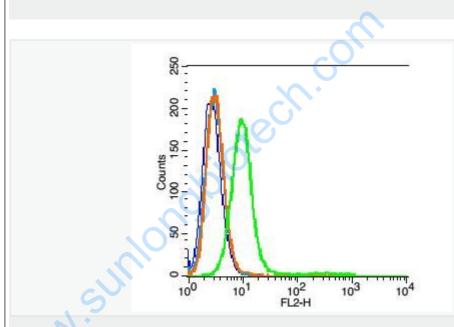
Liver (Mouse) Lysate at 40 ug

Primary: Anti-Perilipin 1 (SL10779R) at 1/500 dilution

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

Predicted band size: 57 kD

Observed band size: 57 kD



Blank control(blue):RSC96 Cells (fixed with 2% paraformaldehyde (10 min), then permeabilized with 90% ice-cold methanol for 30 min on ice).

Primary Antibody:Rabbit Anti- Perilipin 1 antibody(SL10779R), Dilution: 5µg in

100 µL 1X PBS containing 0.5% BSA;

Isotype Control Antibody: Rabbit IgG(orange) ,used under the same conditions ); Secondary Antibody: Goat anti-rabbit IgG-PE(white blue), Dilution: 1:200 in 1 X PBS containing 0.5% BSA.