For Research Use Only

Perilipin 1 Polyclonal antibody

Catalog Number:27716-1-AP 3 Publications

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Basic Information

Catalog Number:
27716-1-AP

Size:
600 ug/ml

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG26426

GenBank Accession Number:
NM_001145311

GeneID (NCBI):
5346

UNIPROT ID:
O60240

Full Name:
perilipin

Calculated MW:
56 kDa

Observed MW:
62-67 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:1000-1:8000
IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
IHC 1:200-1:800
IF-P 1:50-1:500

Applications

Tested Applications:
WB, IHC, IF-P, IP, ELISA

Cited Applications:
WB, IHC

Species Specificity:
human, mouse

Cited Species:
human, mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : 3T3-L1 cells, MCF-7 cells, NIH/3T3 cells, mouse liver tissue

IP : NIH/3T3 cells,

IHC : mouse brown adipose tissue,

IF-P : mouse brown adipose tissue,

Background Information

PLIN1, also known as Perilipin 1, PLIN, PERI, belongs to the perilipin family. PLIN1 is a hormonally-regulated phosphoprotein that encircles the lipid storage droplet in adipocytes and modulates adipocyte lipid metabolism (PMID: 2040638). PLIN1 is the major cAMP-dependent protein kinase substrate in adipocytes and, when unphosphorylated, may play a role in inhibiting lipolysis. PLIN1 is detected in adipocytes of white adipose tissue, visceral adipose tissue, and mammary gland (PMID: 27832861, 9521880). The deficiency of PLIN1 causes lipodystrophic syndromes, which disables the optimal accumulation of triglycerides in adipocytes that results in abnormal deposition of lipids in tissues such as skeletal muscle and liver. The storage of lipids in the liver leads to insulin resistance and hypertriglyceridemia (PMID: 21345103).

Notable Publications

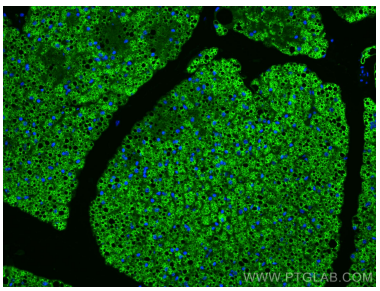
Author	Pubmed ID	Journal	Application
Taeko Ichise	38607021	Cells	IHC
Jiang Du	38158076	Metabolism	WB
Zi-Wei Yang	37542393	Hum Gene Ther	WB

Storage

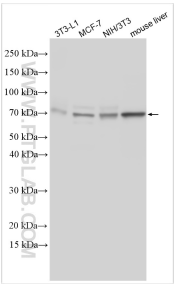
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

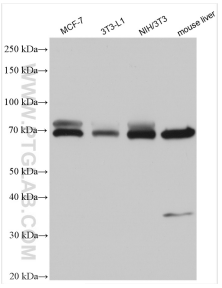
Selected Validation Data



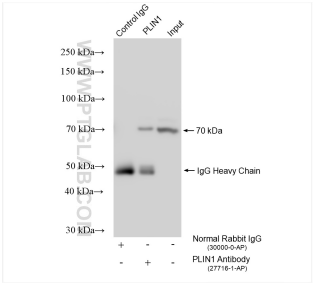
Immunofluorescent analysis of (4% PFA) fixed mouse brown adipose tissue using PLIN1 antibody (27716-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



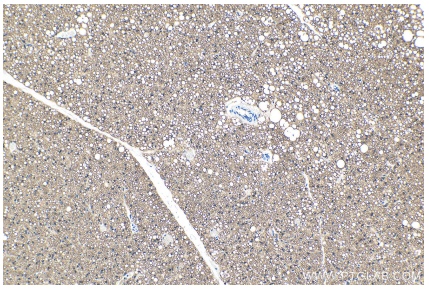
Various lysates were subjected to SDS PAGE followed by western blot with 27716-1-AP (Perilipin 1 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



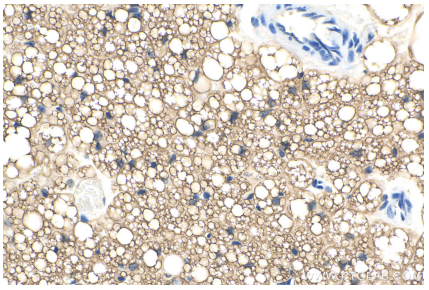
Various lysates were subjected to SDS PAGE followed by western blot with 27716-1-AP (PLIN1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



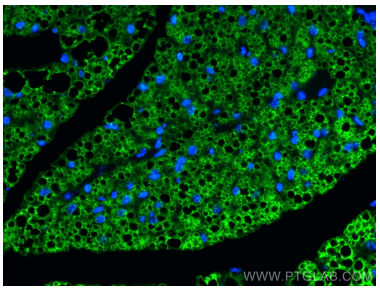
IP result of anti-Perilipin 1 (IP:27716-1-AP, 4ug; Detection:27716-1-AP 1:2000) with NIH/3T3 cells lysate 1505 ug.



Immunohistochemical analysis of paraffin-embedded mouse brown adipose tissue slide using 27716-1-AP (Perilipin 1 antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse brown adipose tissue slide using 27716-1-AP (Perilipin 1 antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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